News Podcast Use, Press Freedom, and Political Participation: A Cross-National Study of 38 Countries

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This study investigates the use and effects of news podcasts on online and offline political participation, based on a global survey of news consumers from 38 countries. The results demonstrate that political participation, both online and offline, is directly affected by news podcast use. Online discussion around news mediated the relationship between the use of news podcasts and both online and offline political participation. Furthermore, the study found that people living in countries with lower levels of press freedom tended to use news podcasts more, and that the level of press freedom had a direct influence on both online and offline participation across nations. This article advances the literature on news podcasts and their role in facilitating discussions around news and political participation by contextualizing news podcast use in a global context.

Keywords: communication mediation model, news discussion, news podcast, political participation, press freedom, secondary data analysis

Podcasting is increasingly becoming a global trend (Aufderheide, Lieberman, Alkhallouf, & Ugboma, 2020; Newman & Gallo, 2019; Sang, Lee, & Park, 2020). According to the 2019 Reuters Institute Digital News Report, 36% of the global news population accessed a podcast in the previous month (Newman, Fletcher, Kalogeropoulos, & Nielsen, 2019), with varying degrees of popularity in different regions of the world. In some countries, such as Turkey (79%), Mexico (57%), and South Korea (53%), more than half of

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the population accessed podcasts, while in some European countries, such as the United Kingdom (21%), the Netherlands (21%), and Germany (21%), only about 20% of news consumers accessed podcasts (Newman et al., 2019).

Unlike radio programs, podcasts enable the possibility of serving an almost infinite number of interests and covering various perspectives as "new forms of storytelling" (Newman & Gallo, 2019, p. 6). Immersive storytelling techniques (Dowling & Miller, 2019) and intimacy through personal narrative (Lindgren, 2016) are also factors that contribute to podcasts' prominence. Podcast listening requires a more "active process," given that it involves listening intently (Newman & Gallo, 2019, p. 9), rather than passive listening.

Focusing on the democratic potential associated with news podcasts, a growing body of research has found that using podcasts to consume news is related to individuals' political participation (e.g., Chadha, Avila, & Gil de Zúñiga, 2012; Kim, Kim, & Wang, 2016; Lee, 2021; Park, 2017a). However, relatively little is known about the impact of podcast use on online and offline political participation in a global context. The current study addresses this gap in the literature, relying on the 2019 Reuters Institute Digital News Report (Newman et al., 2019) data from 38 countries.

In doing so, this study builds on the citizen communication mediation model, testing the model's explanatory power in the context of news podcast use. Following Gil de Zúñiga, Diehl, Huber, and Liu's (2019) line of thought, we contend that considering both structural and individual factors together is critical to advancing our understanding of the relationship between the use of news podcasts and political participation. We examined individual-level variables, including news podcast use, political discussion, and online and offline political participation. As a structural factor, we used the press freedom index as a country-level indicator for press freedom that might influence news podcast use and political participation.

Literature Review

Trust in News Media and News Podcast Use

As gatekeepers of political and public affairs and watchdogs of power, the news media are known to play a central role in the functioning of contemporary democracy (Kovach & Rosenstiel, 2007). Yet, trust in news media is required for news media to contribute to a healthy democracy. Trust in the news media is an important predictor of citizens' news consumption, reception of information, and participation in politics and public affairs (Tsfati & Cappella, 2003). Thus, it would not be a stretch to argue that democracy thrives on the public's trust of news media.

Unfortunately, citizens' trust in traditional media has been eroding globally during the last few decades. Recent survey results have revealed that people's distrust in news media has increased in various national contexts (Newman et al., 2019). News media have been accused of fostering cynicism by providing overly negative political coverage (e.g., Cappella & Jamieson, 1997), and more recently, news media have been observed to even (un)intentionally deliver false information worldwide. Such decreased trust in news media has been found to be a reason that citizens avoid traditional news media and turn to nontraditional

news media (Goyanes, Ardèvol-Abreu, & Gil de Zúñiga, 2021; Ladd, 2012; Tsfati & Cappella, 2003), suggesting the displacement of mainstream media for nonmainstream media.

Moreover, a study conducting cross-national analyses found that "with some significant national variation—those with low trust in the news media are more likely to prefer non-mainstream news sources" (Fletcher & Park, 2017, p. 1294). Complicating the matter, another cross-national study conducted by Kalogeropoulos, Suiter, Udris, and Eisenegger (2019) found a positive relationship, not negative, between trust in news and using nonmainstream news sources. While it seems clear that news trust is related to nonmainstream media use in general, recent studies' results seem to suggest that a different pattern may be taking place currently; thus, its relationship needs to be further examined.

While puzzling, recent studies' results are not too surprising considering the rapidly transforming news media environment. That is, the boundaries between mainstream and nonmainstream have become blurred. For example, podcasts, a digital-born medium primarily produced and developed by independent media operators and even ordinary citizens, have now become an important means for mainstream media to reach audiences (Newman & Gallo, 2019) and for professional journalists to create and consolidate their personal brands (Rojas-Torrijos, 2018, as cited in Rojas-Torrijos, Caro-González, & González Alba, 2020). As demonstrated by the success of the news podcast *The Daily* by *The New York Times,* there is a growing interdependence between older and newer news media, rather than displacement. Following this trend, the mixed findings on the relationship between news media trust and how much it matters for the use of nonmainstream news media are understandable.

Citizen Communication Mediation Model:
Press Freedom, News Discussion, and Political Participation

The influence of news consumption on citizens' political attitudes and behaviors that are fundamental to a democratic society is significant. Scholars have focused on how news use contributes to encouraging people's civic and political participation (Choi, 2016; Gil de Zúñiga et al., 2019; Shah, Cho, Eveland, & Kwak, 2005). To understand this relationship more thoroughly, McLeod and his colleagues (2001) applied the orientation-stimuli-orientation-response (O-S-O-R) model proposed by Markus and Zajonc (1985) and created the communication mediation model, which posits that media indirectly affect attitudes and behaviors through other cognitive variables.

One of the cognitive variables that mediate the relationship between news media use and political participation is citizens' cognitive processes, such as understanding and perceptions of the political world (e.g., Shah et al., 2005). In this model, news use promotes learning about political facts, encourages elaboration (Eveland, Hayes, Shah, & Kwak, 2005), and ultimately provides a resource for political discussion. Defined as "episodes of political conversation and discussion that take place between the non-elite members of a political community" (Schmitt-Beck, 2008, p. 341), the act of talking with others is found to raise awareness about societal problems (Mutz, 2006), increase political learning (Meirick & Wackman, 2004), and ultimately encourage one's political participation. Since the early work by Lazarsfeld, Berelson, and Gaudet (1944), numerous studies have found strong empirical evidence of the mediating role of political

discussions in mobilizing people to engage in political participation (Gil de Zúñiga et al., 2019; Min, 2015; Shah et al., 2005).

The communication mediation model has been modified to examine the role of political discussion as a mediator between news use and political participation. In the modified model, called the citizen communication mediation model (Shah et al., 2005), discussion is key to the relationship between news use and political participation. Today, the citizen communication mediation model is particularly relevant as online media create more opportunities for political discussions to emerge.

The online communication environment has allowed people to overcome time and space constraints of offline discussions, which had inhibited many possible political discussions. The anonymity of online communication, which primarily involves written modes of expression, has been known to provide a less intimate discussion environment to encourage those who had been afraid to speak out in an offline discussion environment (Wu & Atkin, 2018). In addition to anonymity, easier forms of online expression, such as a simple click of "like" (Kim, 2014), have been created to overcome the barriers of written communication. Furthermore, online media have allowed people to communicate with others beyond their own social or geographical networks, facilitating diverse topics of political discussions (Papacharissi, 2004).

Not only has the Internet created more opportunities for political discussions to emerge, but it has also further created a greater range of political activities. With the rising role of the Internet, more and more political activities are moving online (Gil de Zúñiga, Veenstra, Vraga, & Shan, 2010). Specifically, the lowered costs of online expressive participation have allowed more frequent participation—such as contacting politicians through e-mails or signing petitions online—that was not easily exercised in an offline environment (Gil de Zúñiga, Puig-I-Abril, & Rojas, 2009). Expressive uses of the Internet are associated with both online and offline civic participation, and they complement each other (Nah & Yamamoto, 2017).

Globally, relatively little attention has been paid to podcasts' influence on listeners' political participation. Most studies have focused on one country (Chadha et al., 2012; Kim et al., 2016; Lee, 2021; Lee & Kuem, 2012; Min, 2015; Song, 2012). Studies have found that political news podcasts have proved to be especially effective in facilitating the young generation's involvement in political activities (Lee & Ryu, 2013; Song, 2012). The motivation to listen to political news podcasts was revealed as an important factor in determining users' political participation (Lee & Kuem, 2012). This suggests that the reasons people listen to news podcasts may have different impacts on the types of political participation. In fact, Min's study (2015) further showed that political news podcasts promoted both offline and online political discussion, while only online political discussion facilitated political participation in the South Korean presidential election in 2012. Lee's study (2021) showed that political discussion played a role in mediating the relationship between using news podcasts and participating in political activities. Taken together, the results of the current literature demonstrate the need to further examine the relationship between news podcast use and its effects on political participation while considering the mediating role of political discussion in this process.

In addition, it seems important to take macro-level variables, such as a country's overall freedom of the press, into account when investigating how this relationship may differ across countries. Studies have

shown that freedom of the press, which indicates the level of liberty, openness, and independence of the country's news media, is related to individuals' news media use (Ahmed & Cho, 2019; Wei, Lo, Xu, Chen, & Zhang, 2014) and their political participation (Gil de Zúñiga et al., 2019; Schoonvelde, 2014). In particular, Wei and colleagues' research (2014) showed that individuals in countries with higher levels of press freedom were found to use mobile news less than those in countries with lower levels of press freedom. A similar tendency was found regarding the relationship between news podcast use and freedom of the press. According to one study based on the data from the 2020 Reuters Institute Digital News Project, news podcasts were least popular in the United Kingdom among the surveyed 40 countries, with only 6% of news consumers listening to news podcasts; in contrast, almost half (49%) of Turkish news consumers listened to news podcasts (Sang et al., 2020). The United Kingdom and Turkey represent countries with two extreme levels of press freedom—the United Kingdom being relatively free with the press, and Turkey less so.

Furthermore, a recent cross-national comparative study conducted by Gil de Zúñiga and colleagues (2019) showed that press freedom is positively related to political participation and that it moderates the relationship between political discussion and participation (Gil de Zúñiga et al., 2019). The positive relationship between political discussion and participation was found to be strongest in countries with lower levels of press freedom, suggesting the need to consider how context influences this relationship. Based on the discussion presented earlier, our study formulated the following hypotheses and research questions (Figure 1):
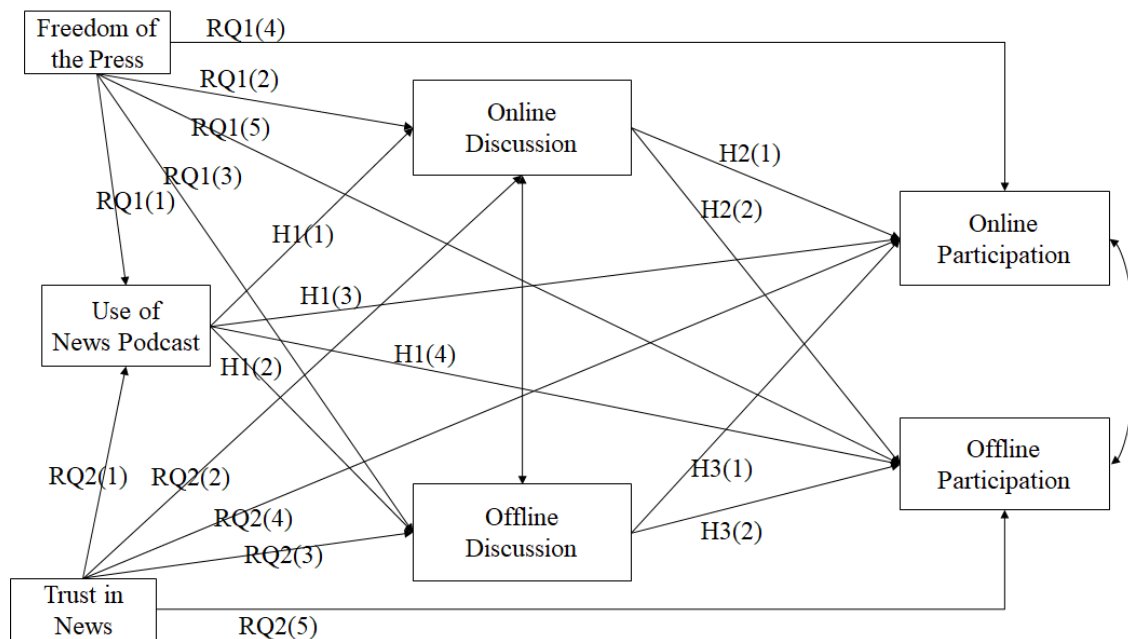

Figure 1. Conceptual model of the study.

RQ1:   Is press freedom related to (1) the use of news podcasts, (2) online discussion around news, (3) offline discussion around news, (4) online political participation, and (5) offline political participation?

RQ2:   Is trust in news related to (1) the use of news podcasts, (2) online discussion around news, (3) offline discussion around news, (4) online political participation, and (5) offline political participation?

H1:   Use of news podcasts will be positively related to (1) online discussion around news, (2) offline discussion around news, (3) online political participation, and (4) offline political participation.

H2:   Online discussion around news will be positively related to (1) online and (2) offline political participation.

H3:   Offline discussion around news will be positively related to (1) online and (2) offline political participation.

RQ3:   Will the relationship between the use of news podcasts and online and offline political participation be mediated by online news discussion and offline news discussion?

RQ4:   Is the relationship between press freedom and online and offline political participation mediated by the use of news podcasts and online discussion around news and offline discussion around news?

RQ5:   Is the relationship between trust in news and online and offline political participation mediated by the use of news podcasts and online discussion around news and offline discussion around news?

Methodology

Data and Sample

The data used for individual-level variables analyzed in this study are from a global survey of news consumption executed in 38 countries by the Reuters Institute Digital News Report 2019 project. The global survey was conducted by YouGov using an online questionnaire at the end of January/beginning of February 2019. Those who did not consume news in the past month were excluded from the sample because this was a study on news consumers. More than 70,000 online news consumers participated in the global survey.

Following a data-cleaning process, the final sample consisted of 57,388 respondents from 38 countries. This study, which focuses on the impacts of podcast news, dichotomized the respondents into those who had not listened to any type of podcast in the last month (n = 46,164) and those who had listened to a news, politics, or international events podcast (n = 11,224) in the last month. We excluded participants who had used podcasts for purposes other than news and those who had missing responses for variables of interest. At the country level, this resulted in 1,500+ respondents in each country (M = 1,510.21, Min = 554, and Max = 1,775).

Dependent Variables and Mediators

Online and Offline Discussion Around News and Online and Offline Political Participation

We measured online and offline discussion around news as mediators, and online and offline political participation as dependent variables. The question "During an average week in which, if any, of the following ways do you share or participate in news coverage?" had multiple options. Among the options, we considered "Talk online with friends and colleagues about a news story (e.g., by e-mail, social media, messaging app)" as online discussion around news, and "Talk with friends and colleagues about a news story (face to face)" as offline discussion around news. Online political participation was measured using the following item: "Vote in an online poll via a news site or social network." Offline political participation was measured using the following item: "Take part in a campaign or group based around a news subject." All responses were coded as binary outcomes (0 = no, 1 = yes).

Independent Variables

Podcast Use for News

We considered 57,388 participants; 11,224 reported listening to a podcast about news, politics, international events in the last month, and the other 46,164 participants indicated that they had not listened to a podcast in the last month.

To use the categorical variable as the binary variable, we coded the participants who used podcasts for news as 1, and participants who did not use podcasts as 0.

Trust in News

The level of agreement (1 = *disagree*, 5 = *agree*) about the statement "I think I can trust most news most of the time" was measured as trust in news.

Press Freedom

For the country-level variable of the study, we used data from the 2019 World Press Freedom Index provided on the Reporters Without Borders (Reporters Sans Frontières; RSF) home page (Reporters Without Borders, n.d.). According to the RSF, the freedom of the press in 180 countries was estimated by pooling expert responses to an 87-question survey devised by the RSF that focused on seven criteria: "pluralism," "media independence," "environment and self-censorship," "legislative framework," "transparency," "infrastructure," and "abuses."[1] The original index (range: 1–100) indicates that a smaller score corresponds to greater freedom of the press. In the current study, however, we reversed the scores (100—raw score) for clear interpretation of data. That is, in the current study, higher scores indicate a higher level of freedom of the press (M = 76.12, SD = 11.19).

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[1] See https://rsf.org/en/index-methodologie-2013-21?year=2019&data_type=general

Because we had 38 countries as country-level variables, as a preliminary analysis, we examined the relationship between five levels of press freedom by country and the current study's mediators (online and offline discussions around news) and outcomes (online and offline political participation), controlling for other predictors (podcast use for news and trust in news). As the statistical analysis, the multiple logistic regression analysis was used because level of press freedom, podcast use for news, and outcomes (online and offline discussion around news, and online and offline political participation) were categorical variables, but a predictor, trust in news, was a continuous variable. We dummy-coded the five levels of press freedom, grouping variables (i.e., good situation, satisfactory situation, problematic situation, difficult situation, and very serious situation) into five binary variables, and we conducted regressions to get results from all the comparisons. Table 1 shows the results of all analyses.[2]

According to the results (see Table 1), online discussion around news showed no significant difference across five levels of press freedom, while other variables— offline discussion around news, online political participation, and offline political participation—had significant differences across the five levels. Specifically, in terms of offline discussion around news, even though the number of participants who did not engage in offline discussion was consistently larger than the number of participants who did engage in offline discussion, the proportions of participants who engaged in offline discussion around news in countries at the good situation (36.5%) and satisfactory situation (37.6%) levels were significantly lower than in countries at the levels of problematic situation (39.9%) and difficult situation (39.5%). Regarding online political participation, the difficult situation level countries (16.1%) had significantly lower proportions of online political participation than countries in the good situation (16.7%), satisfactory situation (16.7%), and problematic situation (17.1%) categories. Finally, regarding offline political participation, people living in the satisfactory situation level countries (5.3%) showed a significantly higher level of engagement than those living in countries that had difficult situation (4.9%) and very serious situation (4.2%) levels.

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[2] Appendix A provides the frequencies of outcomes (online and offline discussion around news, and online and offline political participation) by country. The appendix can be viewed here: https://osf.io/3ja82/?view_only=232d986d4d454cc18c50b33f23e6d6af

Table 1. Results of Preliminary Analysis Between Predictors and Outcomes (N = 57, 388).

Levels of Situations	N (%)	Online Discussion (%)	Offline Discussion (%)	Online Participation (%)	Offline Participation (%)
Good (1)	13,505 (23.5)	Yes = 2,397 (17.7)	Yes = 4,935 (36.5)	Yes = 2,253 (16.7%)	Yes = 693 (5.1)
		No = 11,108 (82.3)	No = 8,570 (63.5)	No = 11,252 (83.3%)	No = 12,812 (94.9)
Satisfactory (2)	23,214 (40.5)	Yes = 4,093 (17.6)	Yes = 8,735 (37.6)	Yes = 3,866 (16.7)	Yes = 1238 (5.3)
		No = 19,121 (82.4)	No = 14,479 (62.4)	No = 19,348 (83.3)	No = 21,976 (94.7)
Problematic (3)	12,612 (22.0)	Yes = 2,254 (17.9)	Yes = 4,905 (38.9)	Yes = 2154 (17.1)	Yes = 6272 (5.0)
		No = 10,358 (82.1)	No = 7,707 (61.1)	No = 10,458 (82.9)	No = 11,985 (95.0)
Difficult (4)	6,372 (11.1)	Yes = 1,199 (18.8)	Yes = 2,519 (39.5)	Yes = 1,027 (16.1)	Yes = 315 (4.9)
		No = 5,173 (81.2)	No = 3,853 (60.5)	No = 5,345 (83.9)	No = 6,057 (95.1)
Very serious (5)	1,685 (2.9)	Yes = 279 (16.6)	Yes = 641 (38.0)	Yes = 256 (15.2)	Yes = 70 (4.2)
		No = 1,406 (83.4)	No = 1,044 (62.0)	No = 1,429 (84.8)	No = 1,615 (95.8)
Comparison test[a]			1 vs. 2, 1 vs. 3 1 vs. 4, 2 vs. 3 2 vs. 4	1 vs. 4, 2 vs. 4 3 vs. 4	2 vs. 4, 2 vs. 5

Note. Good situation level (Group 1) consists of Belgium, Denmark, Finland, Ireland, the Netherlands, Norway, Portugal, Sweden, and Switzerland. Satisfactory situation level (Group 2) consists of Australia, Austria, Canada, Czech Republic, France, Germany, Italy, South Korea, Romania, Slovakia, South Africa, Spain, Taiwan, the United Kingdom, and the United States. Problematic situation level (Group 3) consists of Argentina, Chile, Croatia, Greece, Hong Kong, Hungary, Japan, and Poland. Difficult situation (Group 4) consists of Brazil, Bulgaria, Malaysia, Mexico, and Turkey. Very serious situation level (Group 5) consists of Singapore.
[a] Multiple logistic regression was used to control other predictors, podcast use for news, and trust in news. We reported only significant comparisons.

Control Variables

News Interest

Interest in news was measured with the question: "How interested, if at all, would you say you are in news?" The raw scores (ranged from 1 to 5) were measured as 1 (*extremely interested*) versus 5 (*not at all interested*). We reversed the raw score to 1 (*not at all interested*) to 5 (*extremely interested*).

Interest in Politics

Interest in politics was measured with the question: "How interested, if at all, would you say you are in politics?" The raw scores were measured as 1 (*extremely interested*) versus 5 (*not at all interested*). We reversed the raw score to 1 (*not at all interested*) to 5 (*extremely interested*).

Mainstream News Consumption

To control for the use of mainstream news consumption, we included the binary variable with the question: "You say you've used these sources of news in the last week; which would you say is your main source of news?" The participants were asked to select only one among 11 suggested options as a main source of news.[3] When the participants selected "Television news bulletins or programs," "24-hour news television channels," "Radio news bulletins or programs," "Printed newspapers," or "Printed magazines," we considered them as having used mainstream media as their main news source (coded as 1). On the other hand, if participants chose any other option related to websites/apps, social media, or blogs, they were coded as 0, having not used mainstream media as a main news source.

Internet Penetration

In addition to the variables at the individual level, we also considered the proportion of Internet use at the country level as a control variable. The latest available data for all 38 countries were from 2017. We used the International Telecommunication Union's data. The range was from 0 to 100, with a higher score indicating a higher level of Internet use in the country.

The results of descriptive analysis for all the variables of the study are summarized in Table 2 (for categorical variables) and Table 3 (for continuous variables).

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[3] "(1) Television news bulletins or programs, (2) 24-hour news television channels, (3) Radio news bulletins or programs, (4) Printed newspapers, (5) Printed magazines, (6) Websites/apps of newspapers, (7) Websites/apps of news magazines, (8) Websites/apps of TV and radio companies, (9) Websites/apps of other news outlets, (10) Social media, and (11) Blogs." Given that the participants were asked to select only one option, there is no overlap between the responses.

Table 2. Variables of Interest Included in the Study (N = 57,388).

Variables	Frequency (%)
Gender	
Male	27,379 (47.7)
Female	30,009 (52.3)
Income	
Low	1,2512 (21.8)
Medium	24,386 (42.5)
High	12,296 (21.4)
Education	
No formal education	477 (0.8)
Early childhood	136 (0.2)
Primary education	1,688 (2.9)
Lower secondary	6,744 (11.8)
Upper secondary	19,165 (33.4)
Postsecondary	6,797 (11.8)
Short-cycle tertiary education	4,770 (8.3)
Bachelor's or equivalent level	11,220 (19.6)
Master's or equivalent level	5,579 (9.7)
Doctoral or equivalent level	812 (1.4)
Mainstream consumption	
No	24,612 (42.9)
Yes	32,776 (57.1)
Online discussion	
No	47,166 (82.2)
Yes	10,222 (17.8)
Offline discussion	
No	35,653 (62.1)
Yes	21,735 (37.9)
Online political participation	
No	47,832 (83.3)
Yes	9,556 (16.7)
Offline political participation	
No	54,445 (94.9)
Yes	2,943 (5.1)
Use of news podcasts	
No	46,164 (80.4)
Yes	11,224 (19.6)

Table 3. Variables of Interest Included in the Study (N = 57,388).

Variables	Min	Max	*M*	SD
Freedom of the press	47.19	92.18	76.45	11.08
Age	18.00	99.00	47.59	15.64
Interest in news	1.00	5.00	3.74	0.86
Interest in politics	1.00	5.00	3.16	1.10
Trust in news	1.00	5.00	3.14	1.03
Percentage of Internet use	56.17	97.10	81.00	11.07

Statistical Analysis

We conducted path analysis within structural equation modeling to assess the relationship among freedom of the press, news podcast use, online and offline discussion around news, and online and offline political participation. To estimate the path models, lavaan package (Rosseel, 2012) was used with R software (RStudio Team, 2020).

Because the outcomes were binary variables, logistic path analysis was used. To handle the categorical outcomes under path analysis, the mean- and variance-adjusted weighted least squares (WLSMV) estimator was used (Brown, 2006). Because the outcomes were binary variables (yes or no), the coefficients of direct effects were interpreted as probability of being "yes" compared with "no." That is, positive coefficients indicated that the higher level of predictors was associated with a higher chance of being "yes" (coded as 1) as compared with "no" (coded as 0). For the indirect effects, we used the bootstrapping technique with 1,000 resampling (Preacher & Hayes, 2008).

Results

First, direct effects (see Figure 2 and Table 4) of press freedom on use of news podcasts, online political participation, and offline political participation proved statistically significant. They indicated that as the country level of freedom of the press increased, news podcast use ($\beta = -0.191$, $p < .001$) decreased, whereas online political participation ($\beta = 0.021$, $p < .05$) and offline political participation ($\beta = 0.028$, $p < .05$) among individuals in that country increased. Respondents from countries with lower press freedom were more active in using news podcasts. The results answered the first research question (RQ1): Freedom of the press is negatively related to the use of news podcasts, but positively related to online and offline political participation.

Second, the results indicated that trust in news had no significant relation to any variables of interest when freedom of the press and use of news podcasts were included in the model simultaneously.

Third, the direct effects of news podcast use on online discussion around news ($\beta = 0.075$, $p < .001$), online political participation ($\beta = 0.057$, $p < .001$), and offline political participation ($\beta = 0.042$, $p < .01$) were positive and significant, but on offline discussion around news was not significant ($\beta = -0.013$, $p > .05$). H1 was partially supported.

Finally, online discussion around news had a positive relation to online political participation (β = 0.280, p < .001) and offline political participation (β = 0.313, p < .001). Offline discussion around news also had a positive relation on online political participation (β = 0.178, p < .001) and offline political participation (β = 0.035, p < .001) (see Figure 2 and Table 4). All the results were statistically significant, and H2 and H3 were supported.
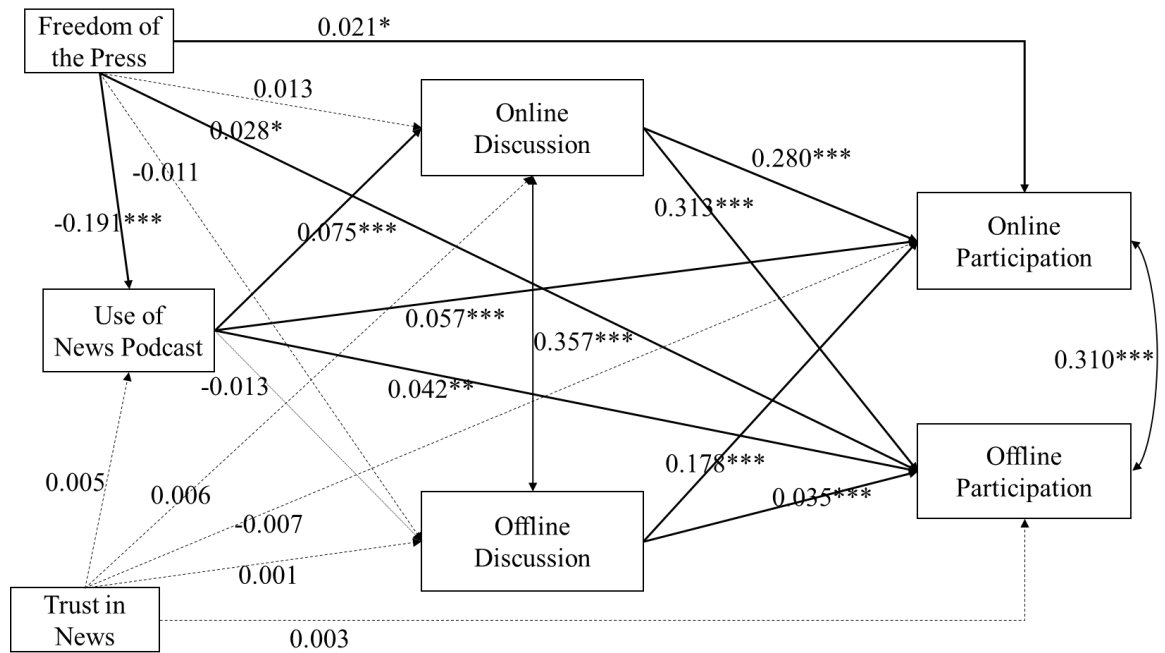

Figure 2. Results of path analysis.

Note. All control variables are included in the model, but not present in the figure for simplification.

Table 4. Results of Direct Effects With the Control Variables.

	Paths		Unstd. Est.	SE	Std. Est.	p value
Gender	→	Use of news podcasts	−0.092	0.014	−0.040	.000
Age	→	Use of news podcasts	−0.016	0.000	−0.218	.000
Education	→	Use of news podcasts	0.038	0.004	0.059	.000
Income	→	Use of news podcasts	0.002	0.010	0.001	.843
Interest in news	→	Use of news podcasts	0.171	0.011	0.128	.000
Use of the Internet	→	Use of news podcasts	−0.001	0.001	−0.009	.195
Interest in politics	→	Use of news podcasts	0.261	0.009	0.247	.000
Mainstream use	→	Use of news podcasts	−0.022	0.014	−0.010	.112
Trust in news	→	Use of news podcasts	0.006	0.007	0.005	.374

Freedom of the press	→	Use of news podcasts	−0.020	0.001	−0.191	.000
Gender	→	Online discussion	−0.023	0.014	−0.012	.091
Age	→	Online discussion	0.000	0.000	−0.005	.478
Education	→	Online discussion	−0.004	0.004	−0.007	.311
Income	→	Online discussion	0.002	0.010	0.002	.813
Interest in news	→	Online discussion	−0.001	0.011	−0.001	.949
Use of the Internet	→	Online discussion	0.000	0.001	−0.004	.632
Interest in politics	→	Online discussion	−0.009	0.009	−0.009	.328
Mainstream use	→	Online discussion	0.011	0.014	0.006	.414
Trust in news	→	Online discussion	0.006	0.007	0.006	.392
Freedom of the press	→	Online discussion	0.001	0.001	0.013	.127
Use of news podcasts	→	Online discussion	0.066	0.010	0.075	.000
Gender	→	Offline discussion	0.009	0.012	0.004	.465
Age	→	Offline discussion	−0.001	0.000	−0.010	.129
Education	→	Offline discussion	0.004	0.004	0.007	.238
Income	→	Offline discussion	0.004	0.009	0.003	.622
Interest in news	→	Offline discussion	0.002	0.009	0.001	.861
Use of the Internet	→	Offline discussion	−0.002	0.001	−0.026	.000
Interest in politics	→	Offline discussion	0.012	0.008	0.013	.123
Mainstream use	→	Offline discussion	0.028	0.012	0.014	.016
Trust in news	→	Offline discussion	0.000	0.006	0.000	.978
Freedom of the press	→	Offline discussion	−0.001	0.001	−0.011	.117
Use of news podcasts	→	Offline discussion	−0.011	0.009	−0.013	.198
Gender	→	Online political participation	0.001	0.014	0.001	.932
Age	→	Online political participation	0.000	0.000	0.002	.768
Education	→	Online political participation	0.002	0.004	0.004	.563
Income	→	Online political participation	0.016	0.010	0.012	.104
Interest in news	→	Online political participation	0.002	0.011	0.002	.818
Use of the Internet	→	Online political participation	0.001	0.001	0.011	.173
Interest in politics	→	Online political participation	0.001	0.009	0.001	.913
Mainstream use	→	Online political participation	0.009	0.014	0.004	.517
Trust in news	→	Online political participation	−0.007	0.007	−0.007	.323

			Unstd. Est.	SE	Std. Est.	p
Freedom of the press	→	Online political participation	0.002	0.001	0.021	.012
Use of news podcasts	→	Online political participation	0.050	0.010	0.057	.000
Online discussion	→	Online political participation	0.280	0.010	0.280	.000
Offline discussion	→	Online political participation	0.178	0.009	0.178	.000
Gender	→	Offline political participation	0.026	0.020	0.013	.185
Age	→	Offline political participation	0.001	0.001	0.013	.216
Education	→	Offline political participation	0.004	0.006	0.007	.517
Income	→	Offline political participation	0.035	0.014	0.025	.014
Interest in news	→	Offline political participation	−0.012	0.015	−0.010	.443
Use of the Internet	→	Offline political participation	−0.001	0.001	−0.006	.574
Interest in politics	→	Offline political participation	−0.006	0.013	−0.007	.628
Mainstream use	→	Offline political participation	0.041	0.019	0.020	.035
Trust in news	→	Offline political participation	0.003	0.010	0.003	.764
Freedom of the press	→	Offline political participation	0.003	0.001	0.028	.021
Use of news podcasts	→	Offline political participation	0.037	0.014	0.042	.010
Online discussion	→	Offline political participation	0.313	0.013	0.313	.000
Offline discussion	→	Offline political participation	0.035	0.013	0.035	.008

Note. Unstd. Est. = Unstandardized Estimates, SE = Standard Error, Std. Est. = Standardized Estimates.

Using the bootstrapping technique, we further tested the indirect effects of use of news podcasts on online and offline political participation via online and offline discussions around news (RQ3); the indirect effects of press freedom on online and offline political participation via news podcast use, and online and offline discussions around news (RQ4); and the indirect effects of trust in news on online and offline political participation via news podcast use, and online and offline discussions around news (RQ5).

In terms of the relationship between news podcast use and online and offline political participation, online discussion around news was mediated, and the coefficient was significant. We found positive indirect effects of news podcast use on online political participation via online discussion around news (95% CI [0.013, 0.024]). The use of news podcasts had indirect effects on offline political participation via online discussion around news (95% CI [0.014, 0.023]). The results answered RQ3, indicating that online discussions around news serve as mediators in the relationship between the use of news podcasts and online and offline political participation.

The relationship between press freedom and online discussion around news was significantly mediated by news podcast use (95% CI [−0.002, −0.001]). In addition, as the serial mediation, the relation between press freedom and online political participation was mediated by use of news podcasts and online discussion around news (95% CI [−0.001, −0.001]). The relation between freedom of the press and offline political participation was also mediated by use of news podcasts and online news discussion (95% CI [−0.002, −0.001]). For RQ4, we conclude that the use of news podcasts and online discussion around news have serial mediation effects on the relationship between press freedom and online and offline political participation. The results are provided at Table 5.

Finally, all the indirect effects between trust in news and online and offline political participation mediated by the use of news podcasts and online discussion around news and offline discussion around news were not significant.

Table 5. Results of Indirect Effects With Bootstrapping (95% CI).

Paths	Est.	Lower CI	Upper CI
News podcast - Online discussion - Online political participation	0.018	0.013	0.024
News podcast - Online discussion - Offline political participation	0.020	0.014	0.023
Freedom of the press - News podcast - Online discussion	−0.001	−0.002	−0.001
Freedom of the press - News podcast - Online discussion - Online political participation	−0.001	−0.001	−0.001
Freedom of the Press - News podcast - Online discussion - Offline political participation	−0.001	−0.002	−0.001

Note. Only significant indirect effects are reported in this table. Number of bootstrapping iterations = 1,000.

Discussion and Conclusion

Given the recent revival of audio-centered media, this study examined the use of news podcasts and their influence across different nations. Specifically, the study analyzed the role of individuals' trust in the news media and a country's level of press freedom as they relate to leading citizens to news podcasts, and in turn how this use of news podcasts influenced both online and offline discussions around news and online and offline political participation. Results of the analyses indicate several important findings.

We found that the use of news podcasts positively affects people's online discussion around news, as well as online and offline political participation across nations. This finding is in line with many of the

previous studies that have found that news media use is important in motivating people's civic and political participation as well as news discussion. More important, the results of this study demonstrate that online discussions influenced both online and offline participation; this finding differed from that in a previous study (Gil de Zúñiga et al., 2010), which found online news use to influence only online political participation. Even though the use of podcast news did not affect offline discussion around news, it is important to note that online discussion is highly associated with offline discussion and that offline discussion around news ultimately encourages both online and offline participation.

The study results strongly support the claim that news use—whether mainstream or not—is likely to help democracy in terms of mobilizing people. However, in this study, when mainstream news consumption was controlled for, the use of news podcasts did not influence people's offline discussion around news. The findings show that digital media such as podcasts can influence online discussion and participation as well as offline political participation, suggesting that those who are active in online discussion are likely to be active in political activities as well. As McHugh (2017) argued, podcasts are increasingly becoming "a powerful socio-political force: from crime to social justice, they are changing the debate on some of the key issues of our times" (para. 1), and they are becoming a strong motivator for podcast consumers to become engaged in political activities (Chadha et al., 2012; Lee & Kuem, 2012; Lee & Ryu, 2013; Min, 2015; Song, 2012).

Previous studies have shown that use of non-mainstream news is related to lower levels of trust in news (Kalogeropoulos et al., 2019). In our study, trust in news did not show a significant relationship with variables of interest, including use of news podcasts. Although the relationship between trust and news podcast use was not statistically significant, the positive direction of the relationship could partly reflect the unclear division between mainstream and non-mainstream media, at least as it pertains specifically to the changing role of news podcasts in the broader field of journalism. Given that news podcast listeners tend to turn to podcasts that are palatable to their viewpoint (Kim et al., 2016; Sang et al., 2020), the democratic potential of news podcasts as new forms of storytelling should be examined further around the ways in which they are created and consumed.

Press freedom was found to have a negative relationship with news podcast use. In countries like the United Kingdom, with higher levels of press freedom, people consumed fewer news podcasts, whereas people in countries with relatively lower levels of press freedom, including Hong Kong, Mexico, and Turkey, were found to use news podcasts more often. Even countries with political and cultural similarities show differences in the use of news podcasts (Sang et al., 2020). Our findings show that press freedom can partially account for those differences. Similar to the findings of Wei et al. (2014), which revealed the negative relationship between the level of press freedom and consuming news via mobile phones, our study shows that the lack of press freedom in some countries creates a need for news podcasts for content that is not provided by mainstream news media. It is clear that at least in some parts of the world, news podcasting is creating complementary or alternative opportunities that can lead audiences to engage in politics. The current study used mainstream news media consumption as a control variable; thus, it seems reasonable to argue that news podcasts may be considered an important news source for those who live in a more controlled news media environment. Future research that attempts to examine the role of nonmainstream media needs to consider country-level factors such as press freedom.

The influence of press freedom goes beyond the level of news media use. The results of the study demonstrate that press freedom directly and indirectly influences both online and offline political participation. The study's findings show that the higher the degree of freedom of the press, the higher the political participation both online and offline. According to the results of preliminary analysis, which focuses on the relationship between the level of press freedom and online/offline discussion and online/offline political participation, people in countries such as Finland and Norway, where press freedom is considered high, are less likely to engage in talking about news with friends and colleagues than people in countries where press freedom is satisfactory, problematic, or difficult (see Table 1). However, when press freedom was included in the model with other predictor variables, the relationship between press freedom and online/offline discussion around news was not statistically significant (see Figure 2). The study suggests that when exploring the relationship between news media use and political participation, a country's press freedom as a structural factor needs to be considered, with particular attention paid to whether and how it works with the news media, as well as news discussion and participation.

It is important to stress that a country's level of press freedom directly influenced online and offline political participation and indirectly influenced online and offline political participation via online discussion around news. The relationship between the level of press freedom and online and offline political participation was mediated by the use of news podcasts and online discussion around news. This demonstrates the democratic potential of news podcasts, which can serve as a complementary source of news. News podcasts seem to exert significant influence on people's interpersonal online discussions. As Park (2017b) aptly noted, "Podcasting is opening up a new journalism environment for an increasingly active and motivated audience" (p. 1160).

This study is distinguished in several ways from previous studies that tested the citizen communication mediation model. As noted, our study tested the citizen communication mediation model based on survey data from 38 countries. To our knowledge, only a few studies have examined the model across different countries. In our study, the degree of press freedom in different countries was included as a predictor variable, and the study proved the importance of considering a country's press freedom as a structural factor when examining the relationship between news media use and political participation. In addition, very few studies testing the citizen communication mediation model have focused on the relationship between news podcast use and political participation. The present study addresses this gap in the literature.

Several limitations should be considered when interpreting the findings of the study. First, this study analyzed data from 38 countries—a sizable sample, but well short of the 180 countries globally.[4] When interpreting the results, caution should be exercised, and a detailed understanding of each country's unique sociocultural and political environments needs to be considered. Second, at the country level, we included the level of press freedom as a main variable of the study, but future studies should take other factors into account to gain a more holistic picture of news podcast use and political participation. Although this study empirically shows the significant role of press freedom in influencing political participation, little is known about what factors cause differences in news podcast consumption across countries. Sociocultural and

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[4] The 2019 World Press Freedom Index included 180 countries.

contextual understandings of each country's media and political environments are needed to better understand the relationships between news podcast use and political participation. Third, in this study, single items were used in measuring dependent variables and mediator variables because we used a secondary data set. There was no significant relationship between the use of news podcasts and offline discussion around news. This finding needs to be interpreted with caution. Ideally, both political participation and discussion around news should be measured with multiple items to capture an array of political behaviors and interpersonal conversations about news with different groups of people, including strangers and family members. We were only able to focus on interpersonal conversations about news among friends and colleagues. For future studies, we recommend the use of multiple items to measure discussion around news as well as political participation.

Notwithstanding these limitations, this study sheds light on our understanding, from a global perspective, of the relationship between news podcast use and online and offline political participation. Using data from a large sample, our study also demonstrates the necessity of conducting more nuanced research on the relationships between news media trust, press freedom, and political participation in today's complex media environments. Confirming the citizen communication model's explanatory power in a multicountry context, this study establishes the groundwork for future comparative studies.

References

Ahmed, S., & Cho, J. (2019). The roles of different news media use and press freedom in education generated participation inequality: An eight country comparative analysis. *Journal of Broadcasting & Electronic Media, 63*(3), 566–586. doi:10.1080/08838151.2019.1653100

Aufderheide, P., Lieberman, D., Alkhallouf, A., & Ugboma, J. M. (2020). Podcasting as public media: The future of U.S. news, public affairs, and educational podcasts. *International Journal of Communication, 14*, 1683–1704.

Brown, T. (2006). *Confirmatory factor analysis for applied research*. New York, NY: Guildford Press.

Cappella, J., & Jamieson, K. (1997). *Spiral of cynicism: The press and the public good*. Oxford, UK: Oxford University Press.

Chadha, M., Avila, A., & Gil de Zúñiga, H. (2012). Listening in: Building a profile of podcast users and analyzing their political participation. *Journal of Information Technology & Politics, 9*(4), 388–401. doi:10.1080/19331681.2012.717481

Choi, J. (2016). Differential use, differential effects: Investigating the roles of different modes of news use in promoting political participation. *Journal of Computer-Mediated Communication, 21*(6), 436–450. doi:10.1111/jcc4.12176

Dowling, D. O., & Miller, K. J. (2019). Immersive audio storytelling: Podcasting and serial documentary in the digital publishing industry. *Journal of Radio & Audio Media, 26*(1), 167–184. doi:10.1080/19376529.2018.1509218

Eveland, W. P., Hayes, A. F., Shah, D., & Kwak, N. (2005). Understanding the relationship between communication and political knowledge: A model comparison approach using panel data. *Political Communication, 22*, 423–446. doi:10.1080/10584600500311345

Fletcher, R., & Park, S. (2017). The impact of trust in the news media on online news consumption and participation. *Digital Journalism, 5*(10), 1281–1299. doi:10.1080/21670811.2017.1279979

Gil de Zúñiga, H., Diehl, T., Huber, B., & Liu, J. H. (2019). The citizen communication mediation model across countries: A multilevel mediation model of news use and discussion on political participation. *Journal of Communication, 69*(2), 144–167. doi:10.1093/joc/jqz002

Gil de Zúñiga, H., Puig-I-Abril, E., & Rojas, H. (2009). Weblogs, traditional sources online and political participation: An assessment of how the Internet is changing the political environment. *New Media & Society, 11*(4), 553–574. doi:10.1177/1461444809102960

Gil de Zúñiga, H., Veenstra, A., Vraga, E., & Shan, D. (2010). Digital democracy: Reimagining pathways to political participation. *Journal of Information Technology & Politics, 7*(1), 36–51. doi:10.1080/19331680903316742

Goyanes, M., Ardèvol-Abreu, A., & Gil de Zúñiga, H. (2021). Antecedents of news avoidance: Competing effects of political interest, news overload, trust in news media, and "News Finds Me" perception. *Digital Journalism*. Advance online publication. doi:10.1080/21670811.2021.1990097

Kalogeropoulos, A., Suiter, J., Udris, L., & Eisenegger, M. (2019). News media trust and news consumption: Factors related to trust in news in 35 countries. *International Journal of Communication, 13*, 3672–3693.

Kim, J. W. (2014). Scan and click: The uses and gratifications of social recommendation systems. *Computers in Human Behavior, 33*, 184–191. doi:10.1016/j.chb.2014.01.028

Kim, Y., Kim, Y., & Wang, Y. (2016). Selective exposure to podcast and political participation: The mediating role of emotions. *International Journal of Mobile Communication, 14*(2), 133–148. doi:10.1504/IJMC.2016.075021

Kovach, B., & Rosenstiel, T. (2007). *The elements of journalism: What newspeople should know and the public should expect*. New York, NY: Three Rivers Press.

Ladd, J. M. (2012). *Why Americans hate the media and why it matters*. Princeton, NJ: Princeton University Press.

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1944). *The people's choice: How the voter makes up his mind in a presidential election*. New York, NY: Duell, Sloan & Pearce.

Lee, C. (2021). News podcast usage in promoting political participation in Korea. *Athens Journal of Mass Media and Communications, 7*(2), 107–120. doi:10.30958/ajmmc.7-2-2

Lee, C., & Ryu, S. J. (2013). The effect of 'Nanun KKomsuda' on the political socialization of high school and university students: Focusing on political interest, political efficacy, political knowledge, and political participation. *Journal of Communication Science, 13*(3), 490–526.

Lee, J., & Kuem, H. (2012). A study on the impacts of using politics podcasts on on/off-line political participation: Focused on motives for using politics podcasts by the users in their 20s, political psychology variables and on/off-line political participation variables. *Korean Journal of Journalism & Communication Studies, 56*(5), 163–189.

Lindgren, M. (2016). Personal narrative journalism and podcasting. *Radio Journal: International Studies in Broadcast & Audio Media, 14*(1), 23–41. doi:10.1386/rjao.14.1.23_1

Markus, H., & Zajonc, R. B. (1985). *The cognitive perspective in social psychology*. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (pp. 137–229). New York, NY: Random House.

McHugh, S. (2017, August 31). Truth to power: How podcasts are getting political. *The Conversation*. Retrieved from https://theconversation.com/truth-to-power-how-podcasts-are-getting-political-81185

McLeod, J. M., Zubric, J., Keum, H., Deshpande, S., Cho, J., & Stein, S. (2001, August). *Reflecting and connecting: Testing a communication mediation model of civic participation*. Paper presented to the Communication Theory and Methodology Division, AEJMC, Washington, DC.

Meirick, P. C., & Wackman, D. B. (2004). Kids voting and political knowledge: Narrowing gaps, informing votes. *Social Science Quarterly, 85*(5), 1161–1177.

Min, Y. (2015). Political satire and participatory citizenship: Effects of political podcasts on political participation. *Korean Journal of Broadcasting & Telecommunication Studies, 29*(3), 36–69.

Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*. New York, NY: Cambridge University Press.

Nah, S., & Yamamoto, M. (2017). Civic technology and community building: Interaction effects between Integrated Connectedness to a Storytelling Network (ICSN) and Internet and mobile uses on civic participation. *Journal of Computer-Mediated Communication, 22*(4), 179–195. doi:10.1111/jcc4.12189

Newman, N., Fletcher, R., Kalogeropoulos, A., & Nielsen, R. K. (2019). *Reuters Institute Digital News Report 2019*. Retrieved from https://reutersinstitute.politics.ox.ac.uk/sites/default/files/inline-files/DNR_2019_FINAL.pdf

Newman, N., & Gallo, N. (2019). *News podcasts and the opportunities for publishers*. Oxford, UK: Reuters Institute for the Study of Journalism, Oxford University.

Papacharissi, Z. (2004). Democracy online: Civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society, 6*(2), 259–283. doi:10.1177/1461444804041444

Park, C. S. (2017a). Citizen news podcasts and engaging journalism: The formation of a counter-public sphere in South Korea (Report). *Pacific Journalism Review, 23*(1), 245–262. doi:10.24135/pjr.v23i1.49

Park, C. S. (2017b). Citizen news podcasts and journalistic role conceptions in the United States and South Korea. *Journalism Practice, 11*(9), 1158–1177. doi:10.1080/17512786.2016.1224682

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. doi:10.3758/BRM.40.3.879

Reporters Without Borders. (n.d.). *2019 World Press Freedom Index*. Retrieved from https://rsf.org/en/ranking/2019

Rojas-Torrijos, J. L., Caro-González, F. J., & González Alba, J. A. (2020). The emergence of native podcasts in journalism: Editorial strategies and business opportunities in Latin America. *Media and Communication, 8*(2), 159–170. doi:10.17645/mac.v8i2.2699

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1–36. Retrieved from https://www.jstatsoft.org/v48/i02/

RStudio Team. (2020). RStudio: Integrated development for R. RStudio, PBC, Boston, MA. Retrieved from http://www.rstudio.com/

Sang, Y., Lee, J. Y., & Park, S. (2020). *Podcast trends and issues in Australia and beyond: Global perspectives*. Canberra, Australia: News & Media Research Centre, University of Canberra. doi:10.25916/sgv0-qh32

Schmitt-Beck, R. (2008). *Interpersonal communication*. In L. L. Kaid & C. Holtz-Bacha (Eds.), *Encyclopedia of political communication* (Vol. 1, pp. 341–350). Los Angeles, CA: SAGE Publications.

Schoonvelde, M. (2014). Media freedom and the institutional underpinnings of political knowledge. *Political Science Research and Methods, 2*(2), 163–178. doi:10.1017/psrm.2013.18

Shah, D. V., Cho, J., Eveland, W. P., Jr., & Kwak, N. (2005). Information and expression in a digital age. Modeling Internet effects on civic participation. *Communication Research, 32*(5), 531–565. doi:10.1177/0093650205279209

Song, I. (2012). The effects of 'Naneun Ggomsuda' on college students' political knowledge, political self-efficacy, and political participation. *Journal of Political Communication, 27*, 101–147. doi:10.35731/kpca.2012..27.004

Tsfati, Y., & Cappella, J. N. (2003). Do people watch what they do not trust? Exploring the association between news media skepticism and exposure. *Communication Research, 30*(5), 504–529. doi:10.1177/0093650203253371

Wei, R., Lo, V. H., Xu, X., Chen, Y. N. K., & Zhang, G. (2014). Predicting mobile news use among college students: The role of press freedom in four Asian cities. *New Media & Society, 16*(4), 637–654. doi:10.1177/1461444813487963

Wu, T. Y., & Atkin, D. J. (2018). To comment or not to comment: Examining the influences of anonymity and social support on one's willingness to express in online news discussions. *New Media & Society*, *20*(12), 4512–4532. doi:10.1177/1461444818776629