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(SOCIAL) MEDIA USE AND NEWS: NEWS USAGE PATTERNS AND THEIR EFFECTS ON POLITICAL PARTICIPATORY BEHAVIOR

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Introduction

Mass media use is a crucial determinant of political participatory behavior, which is true both for "traditional" news media as well as for online media. For example, studies have shown a positive relationship between reading newspapers or television news use and political efficacy and engagement (e.g. Eveland & Scheufele, 2000; Moeller, de Vreese, Esser, & Kunz, 2014; Norris, 1996; Zhang & Chia, 2006). However, critical voices have argued that media use provokes political distrust and cynicism and thus ultimately leads to decreased participatory behavior (e.g. McBride, 1998; Putnam, 1995). In the context of online media and the simultaneous utopian and dystopian imaginaries of the internet for civic engagement, the debate about the impact of news media use on political participation and efficacy continues. While some authors emphasize the adverse effects (e.g. Kraut et al., 1998), latest studies find positive effects of online news use in general as well as of social media news use in particular (e.g. Bode, Vraga, Borah, & Shah, 2014; Esser & de Vreese, 2007; Gil de Zúñiga, Jung, & Valenzuela, 2012). Just recently, Boulianne (2015) conducted a meta-analysis of research on social media use and participation and found more than 80% of the coefficients to be positive, indicating a positive relationship between social media use and participation in civic and political life.

Our goal is to study the relationship between general news use and political participatory behavior more thoroughly and to investigate the effects of different news usage patterns. We define *political participatory behavior* as online and offline forms of political participation that, for example, include discussing political issues, commenting political news on social networking sites (SNS) or participating in petitions. Since we assume that device use is associated with specific information needs (e.g. Humphreys, von Pape, & Karnowski, 2013), we not only focused on participants' use of different media for learning and obtaining further information about news events but also on the devices (e.g. TV, laptop, smartphone) that are used for these tasks.

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Method

Our study is based on original survey data collected in December 2014 in Germany. Quota sampling was used to recruit a total of 190 participants that were selected according to the Allensbach Media Market Analysis (AWA) whose findings are representative of the German-speaking resident population. Quotas were assigned on the basis of sex, age, educational level and smartphone or tablet ownership.

Participants ranged in age from 18 to 87 years (M = 50.29, SD = 18.77), 52.1 % were female. 31.1 % of the surveyed Germans own a smartphone, 14.2 % own a tablet and 13.2 % own both devices. General news use frequency is high, with 73.7 % using news several times per day.

Besides sociodemographic characteristics and general news use frequency, measures included (1) *learning about* news events as well as (2) *obtaining further information* about news events using different media types like newspapers, radio, TV and their associated websites or SNS, news or messenger apps (5-point Likert-type scale from 1 [never] to 5 [very frequently]). We also asked participants how frequently they use specific (3) *devices* to perform these tasks, including radio, TV, newspaper, laptop, desktop computer and smartphone or tablet. (4) *Political participatory behavior* was assessed by asking participants about the frequency of eight different on- and offline activities that, for example, included discussing political issues, reading, commenting or sharing political news on SNS and participating in petitions.

Results

First, an exploratory factor analysis (EFA) was conducted on all items regarding (1) learning about news events; (2) obtaining further information and the (3) use of devices to identify *news usage patterns*. Factors were extracted using the generalized least squares method. Since we expected the factors to be correlated, oblique methods are more appropriate than orthogonal ones (cf. Morrison, 2009). Hence, the factors were rotated using the "promax" option in SPSS. Examination of the scree plot suggested a six-factor solution with a clean separation between the scales (see Table 1). To identify *participation patterns*, we used the same approach and conducted an EFA on the eight (4) political participatory behavior items. This time, examination of the scree plot suggested a three-factor solution (see Table 2).

To investigate the factors that influence political participatory behavior we conducted hierarchical regression analyses with the three identified behavioral patterns as dependent variables (see Table 3). Regarding (I) participation via SNS, results suggested three main influences: The usage pattern "SNS & Laptop" showed the strongest influence (β = .77, t(185) = 10.79, p < .001), followed by age (β = .19, t(185) = 2.50, p < .05) and the usage pattern "Smartphone & Apps" (β = .13, t(185) = 2.19, p < .05). Gender, educational level or the other news usage patterns had no significant or meaningful effect. Overall, the model explains 56.9% variance of participation via SNS (see also Table 3). (II) Participation via personal discussions on the other hand could not be explained to the same extent by the tested variables (R^2 = .17, F(9,176) = 3.96, p < .001). Nevertheless, three significant predictors

emerged: Gender (β = -.24, t(185) = -3.34, p < .01) as well as the usage patterns "SNS/Laptop" (β = .24, t(185) = 2.43, p < .01) and "Newspaper" (β = .17, t(185) = 2.25, p < .05). Hence, males are more likely to participate via personal discussions about political news as well as people that show usage patterns associated with newspaper and SNS/laptop use for news consumption. Finally, (III) participation via petitions could be predicted by the usage patterns "SNS/Laptop" (β = .28, t(185) = 2.92, p < .01) and "Desktop" (β = .18, t(185) = 2.39, p < .05) as well as educational level (β = .20, t(185) = 2.83, p < .01) and gender (β = .20, t(185) = 2.89, p < .01). Females are more likely to participate via petitions as well as people who have a higher educational level and show usage patterns associated with news use on a stationary computer or via SNS/laptop. Overall, the model explains 24.2 % variance of participation via petitions (see also Table 3).

Discussion

First, the results of our EFA of news usage patterns provide evidence that the German population has relatively stable patterns of news consumption: Favored media and devices are generally used for *both* learning about news events and obtaining further information about them. Once people have found their personal media/device of choice, they seem to stick to it ("single-media use", cf. Westlund & Färdigh, 2015).

Second, studying the relationship between the identified news usage patterns and political participatory behavior revealed several influences on participation. While it is not surprising that *participation via SNS* can mainly be predicted by news usage patterns associated with SNS/laptop use, smartphone use and age (i.e. the older, the more participation), *participation via personal discussions* is also influenced by the "SNS/Laptop" usage pattern as well as by using newspapers for news consumption and gender (i.e. males tend to participate more in political discussions). *Participation via petitions* is once more connected with online news use as suggested by the influence of the usage patterns "SNS/Laptop" and "Desktop". Besides, female gender and educational level were positively associated with this participation form.

Taken together, our results suggest a) that news usage—and especially online news usage—has a distinct influence on participation and b) that political participatory behavior should not be treated as a whole since different kinds of participation are influenced by different factors (as already suggested by e.g. Beaufort & Seethaler, 2014). Future studies should continue taking this into account by not only differentiating between different kinds of media/news use but also between various levels and forms of political engagement.

However, it should be noted that our study is not without limitations. Since most of the variables uncovering political participatory behavior are explicitly or implicitly related to online or SNS use, the identified relevance of usage patterns related to new media might at least partially be an artifact of the measurements. While we can conclude that online news consumption indeed matters for forms of online participation, it certainly would be valuable to address other "offline" forms of participation more thoroughly.

Tables

Table 1 Factor Analysis of News Usage Patterns

Item	Smartphone & Apps	Radio	TV	Newspaper	SNS & Laptop	Desktop
Learning: News Apps	.97					
Learning: Messenger Apps	.72					
Learning Device: Smartphone/Tablet Further information:	.93					
News Apps Further information:	.96					
Messenger Apps Further inf. Device:	.70 .93					
Smartphone/Tablet Learning:	.93					
Radio Learning Device:		.96 .96				
Radio Further information:		.80				
Radio Further inf. Device: Radio		.71				
Learning: TV			.87			
Learning Device: TV			.87			
Further information: TV			.78			
Further inf. Device: TV			.71			
Learning: Newspapers				.90		
Learning Device: Newspapers				.76		
Further information: Newspapers				.81		
Further inf. Device: Newspapers				.69		
Learning: SNS					.84	
Learning Device: Notebook/Laptop					.60	
Further information: SNS					.85	
Further inf. Device: Notebook/Laptop					.55	
Learning Device: Notebook/Laptop						.91
Further inf. Device: Notebook/Laptop			0.40			.95
Eigenvalues Note: Bold items indica	6.62	4.19	2.19	2.06	1.56	1.42

 $\it Note$: Bold items indicate factor loadings >.50. Total variance accounted for 75.2 %.

Table 2 Factor Analysis of Political Participatory Behavior

Item	(I) Participation via SNS	(II) Participation via Personal Discussions	(III) Participation via Petitions
Reading news on SNS	.75		
Sharing news on SNS	.89		
Commenting news on websites or SNS	.86		
Posting political content on SNS	.93		
Retelling political news (conversations)		.91	
Discussing political news (conversations)		.89	
Participating in petitions			.88
Participating in online petitions			.78
Eigenvalues	3.48	1.52	1.14

Note: Bold items indicate factor loadings >.50. Total variance accounted for 76.6 %.

Table 3 Hierarchical Regression Analyses Predicting (I) Participation via SNS, (II) Participation via Personal Discussions and (III) Participation via Petitions

	(I) Participation via	(II) Participation via	(III) Participation via
	SNS	Personal Discussions	Petitions
Stable Factors (1. Step)			
Age	46***	.00	26***
Gender ¹	.08	24**	.19**
Education ²	.02	.14*	.21**
Explained Variance (%) News Usage Patterns (2. Step)	21.4%***	8.3%**	15.6%***
Age Gender ¹ Education ²	.19*	.20	.01
	.06	24 **	.20 **
	00	.12	.20 **
Smartphone & Apps Radio	00 .13 * 01	.12 .09 .04	.08 .10
TV	04	.01	.04
Newspaper	06	. 17 *	.00
SNS & Laptop	.77***	. 24 *	.28**
Desktop	.06	.07	.18*
Add. Explained Variance (%) Overall Explained Variance (%) F value (Overall Model)	35.5% ***	8.5% **	9.1%**
	56.9% ***	16.8% ***	24.7%***
	25.83	3.96	6.40

Note: Method = Enter; Coefficients are standardized Beta values; df = 9, 176; ¹ Dummy-Coding (0 = male, 1 = female); ² Dummy-Coding (0 = no A level, 1 = A level); * p < .05; ** p < .01; *** p < .001

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