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Postprint / Postprint

Zeitschriftenartikel / journal article

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Empfohlene Zitierung / Suggested Citation:

Popa, S. A., Theocharis, Y., & Schnaudt, C. (2016). From seeing the writing on the wall, to getting together for a bowl: direct and compensating effects of Facebook use on offline associational membership. *Journal of Information Technology & Politics*, 13(3), 222-238. <https://doi.org/10.1080/19331681.2016.1194241>

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From seeing the writing on the wall, to getting together for a bowl: Direct and compensating effects of Facebook use on offline associational membership

Sebastian Adrian Popa, Yannis Theocharis, and Christian Schnaudt

ABSTRACT

Research concerned with a decline of associational involvement has examined whether the use of social networking sites, such as Facebook, may reinvigorate or crowd out involvement in civil society. Yet, previous studies have not systematically investigated possible effects of Facebook use on associational membership. We posit that the effects of Facebook use are twofold: Facebook stimulates associational membership directly through its inherent networking features and indirectly by compensating for the lack of traditional mobilizing factors, such as social trust and internal efficacy. Relying on a probabilistic sample of German participants aged 18-49, our findings show that Facebook users are more likely to be members of voluntary associations and that Facebook use increases the likelihood of associational membership even for individuals with low levels of social trust and internal efficacy. Instead of crowding out offline associational involvement, Facebook use stimulates membership in voluntary associations, thus contributing to the vitality of civil society.

KEYWORDS

Associations; Facebook; organizations; social capital; social media

In democratic countries the science of association is the mother of science; the progress of all the rest depends upon the progress it has made (de Tocqueville, 1965 [1840] p. 118).

Membership in voluntary associations, one of the most basic forms of involvement in civil society, has long been heralded as central to a strong community and a healthy democracy (de Tocqueville, 1965 [1840]; Putnam, 2000). Classic and contemporary democratic theory (Fung, 2003; Mill, 2008; Rousseau, 1762/1994) has posed that participation in civil society can provide individuals with the necessary competencies for participation in public life, and research has shown that community involvement can produce norms and civic skills that are subsequently crucial for democratic engagement (Howard & Gilbert, 2008; McFarland & Thomas, 2006; Putnam, 2000).

In the last two decades, two important developments have deeply affected both thinking and research about the state of associational involvement as a social practice, and its consequences for a healthy democracy. The first has been the diagnosis of a decline in associational involvement in America (Putnam, 2000). The second has been the rise of the Internet, and more recently, social networking sites (SNSs) such as Facebook—widely adopted social technologies that have been found to encourage social interaction, participation, and group formation online, and assist in the maintenance of existing social ties (Gil De Zúñiga, 2012; Valenzuela, Park, & Kee, 2009; Xenos & Moy, 2007).

In light of Putnam's alarming calls not only about the decline in associational membership but also about the role TV and new media such as the Internet have played in it (cf. Putnam, 2000, chap. 13), a central endeavor in the literature has been to better understand the impact of Internet use—and more recently the interactive Web 2.0- based SNS—on the vitality of community life (Gil De Zúñiga, 2012; Jensen, Danziger, & Venkatesh, 2007; Kittilson & Dalton, 2011; Nie & Erbring, 2000; Pasek, More, & Romer, 2009). Following up on Putnam's warning that individual absorption and preoccupation with new information and communication technologies may be replacing civic activities such as community involvement, the main question of interest here is whether online activities indeed “crowd out” offline

community involvement, thus leading to the (further) devitalization of civil society (including, for example, a decline in organizational involvement, club meeting attendance, etc.—Putnam, 2000, pp. 48-64), or rather strengthen it by providing additional means for mobilization.

Despite having offered indispensable insights into the relationship between SNS use and various forms of civic engagement, previous studies have focused exclusively on direct effects of SNS use, thus neglecting its possible indirect effects and compensating role for more “traditional” antecedents of offline civic involvement, such as social trust and internal efficacy. What is more, previous studies have usually measured civic involvement through a single question about one's past engagement with a civic group, or through indexes that combine different elements of political and/or civic activities (for an overview, see Boulianne, 2015), but not with the standard measure of civic involvement asking for individuals' membership in a variety of voluntary organizations and associations (see, *inter alia*, Van Deth, 2008, pp. 160-161; Van Deth & Kreuter, 1998, pp. 136-137). Finally, previous studies have assumed uniform effects of SNS use on civic involvement, not taking into account possibly varying relationships between SNS use and engagement in different types of offline organizations and associations. Specifically, although the question of whether membership in leisure and political organizations can have a similarly beneficial effect for democracy is a remarkably important one in the literature dealing with the associational membership offline, literature on social media has neglected this distinction. This is an important omission when considering that Facebook is first and foremost a tool for socialization and entertainment, and much less so a political tool, a characteristic which potentially makes the platform much friendlier to those pursuing activities related to leisure-oriented groups (e.g., leisure vs. political organizations).

Against this background, and following previous literature documenting Facebook's embedded functions for community building and its capacity to facilitate interactions and strengthen ties between individuals (Gil de Zuniga & Valenzuela, 2010), our research addresses the question of whether Facebook can have a beneficial effect on offline associational involvement by prompting users to continue pursuing community interests that may have been acquired online into the offline realm. The present study contributes to the extant literature by investigating whether Facebook use, as one prominent specimen of SNS use, is positively related to offline membership in leisure and political organizations. In addition, it analyzes possible indirect effects of SNS use on offline associational membership by examining whether Facebook use can compensate for a lack of social trust and internal efficacy as “traditional” precursors of offline civic engagement. We pursue these questions by moving away from the well-researched vibrant social media culture of the United States (for a similar argument, see Rains and Brunner, 2015) by looking at the rather unusual case of Germany. Despite enjoying one of the highest rates of Internet penetration in Europe, Germans are notoriously skeptical about social media, with social media penetration being among the lowest in Europe (Kemp, 2014). Given that the Germans' intense preoccupation with privacy is generally considered to be the main reason behind the lack of social media adoption (clearly a cultural rather than a technological reason) (The Economist, 2013), we suspect that, especially when it comes to issues of trust, Germans may prove more resilient to effects potentially originating from Facebook use. Finally, in contrast to the well-educated student samples found in most existing studies (for an overview, see Boulianne, 2015), the data for our analysis is based on a probabilistic sample allowing for broader inferences to be made.

The remainder is structured as follows: We first review the literature on the importance of associational involvement for a vibrant civil society and a healthy democracy and discuss the role of social trust and internal political efficacy as “traditional” antecedents of associational membership. Subsequently, we elaborate on the direct effects Facebook use exerts on associational membership and present additional arguments about its compensating capacities. Having outlined our data and methodological approach, we finally present the results of our study and provide a discussion of the implications of our findings.

Membership in voluntary associations, social trust, and internal political efficacy

Alexis de Tocqueville's work has been pivotal in studying the importance of a vibrant associational life for a healthy democracy. Ever since de

Tocqueville, claims about the pivotal role of associations in making democracy work have been echoed in numerous studies and investigations (see, inter alia, Almond & Verba, 1963; Maloney & Roßteutscher, 2007; Maloney & Van Deth, 2010; Putnam, 1994, 2000). Membership in voluntary associations is supposed to contribute to the cultivation of democratic habits and civic skills (Warren, 2001, p. 70-77) by enabling people to discuss and formulate opinions about social and political issues, and feel that their actions can have a meaningful impact. Associational membership also serves as a vehicle through which people can voice their views to local political authorities (Jensen et al., 2007, p. 40).

In light of voluntary associations' attributed ability to function as “schools of democracy,” considerable research has been devoted to understanding which factors can account for citizens' membership in voluntary associations. In this study, we concentrate on social trust and internal political efficacy as two main and long-established antecedents of membership in voluntary associations identified in previous research (Allen & Rushton, 1983; Roßteutscher, 2008, p. 210-211; for a review, see Smith, 1994).

Still, it has to be noted that much of the broader literature studying social capital and associational involvement argues (or assumes) that both social trust (Paxton, 2007; Stolle & Rochon, 1998) and internal political efficacy (Almond & Verba, 1963, p. 265) are consequences rather than antecedents of membership in voluntary associations (Parry, Moyser, & Day, 1992; Putnam, 1994, 2000). However, whereas especially Robert Putnam as the main proponent of social capital theory has argued that “causation runs mainly from joining to trusting” (Putnam, 1995, p. 666), others have posited “that people join voluntary organizations because they trust others, rather than the other way round” (Newton, 1999, p. 17). So far, empirical research has not provided any definite answer concerning the causal direction between social trust and political efficacy, on the one hand, and membership in voluntary associations, on the other. Existing research shows tight reciprocal relationships between civic engagement and trust and although some studies find that the connection is stronger from civic participation to interpersonal trust rather than the reverse (Brehm & Rahn, 1997, p. 1017), most empirical evidence hints at the presence of self-selection effects, that is, it is first and foremost individuals who possess high levels of social trust and efficacy who disproportionately become members of voluntary associations; distrusters and less efficacious individuals usually refrain from membership in voluntary associations (Maloney & Van Deth, 2010, p. 239; Rothstein & Stolle, 2008, p. 277).

Following these insights, it thus appears more likely that trusting and efficacious people tend to be members of voluntary associations in the first place, and less plausible “that people are trusting [or efficacious] because they have learned this attitude in their voluntary organizations, although membership may reinforce pre-existing levels of trust [and efficacy]” (Newton, 2001, p. 207).

Why should social trust and internal political efficacy increase one's likelihood of being a member in voluntary associations? Social trust encourages membership based on the individual's belief that one can successfully work with others to produce desired outcomes. As Roßteutscher (2008, p. 210) argues,

Trust is a precondition of any kind of collective behaviour. Without trust, there simply is no civic engagement... [O]nly when I am convinced that my associates will behave trustworthily, and that they will contribute to the common goal, ... I will engage in collective action. I must also believe that they will not cheat me or leave me to do the work all alone. Without these preconditions I will not be prepared to join a collective endeavour.

Internal political efficacy is a long-standing predictor of civic and political participation (Acock & Clarke, 1990, p. 87; Anderson, 2010, p. 59; Campbell, Gurin, & Miller, 1954). It is defined as individuals' subjective evaluations of their own potential to influence (political) processes (for the origins of the concept, see Balch, 1974; Campbell et al., 1954, p. 187), and encourages membership due to the individual's self-perception that their competence can initiate change or solve problems through involvement in collective endeavors (see also Maloney & Van Deth, 2010, p. 239). Furthermore, in light of previous research showing that task-specific efficacy, such as internal political efficacy, is closely related to a general sense of self-efficacy (Littvay, Weith, & Dawes, 2011;

Rapley, 2001; Seeman & Seeman, 1983), we expect that possible effects of internal political efficacy are not limited to actions and behaviors within purely political contexts, but also extend to less politicized contexts given that internal political efficacy is supposed to reflect and entail components of a more general sense of efficacy as well. After all, without the subjective feeling that one's own actions can have a meaningful impact when it comes to bringing about change or solve collective action dilemmas, individuals will most likely refrain from membership in voluntary associations in the first place. Accordingly, the first two hypotheses to be tested in the empirical part of our study can be formulated as follows:

H1a: The higher a person's social trust, the more likely it is that this person will be a member of voluntary associations.

H1b: The higher a person's internal political efficacy, the more likely it is that this person will be a member of voluntary associations.

Facebook's impact on associational membership

Why would Facebook have an effect on associational involvement and why would one focus on Facebook rather than other SNS or microblogs such as Twitter, LinkedIn, or Myspace? Extensive research on the socializing effects of Facebook and its impact on social capital provides strong grounds for suspecting that Facebook can have a direct effect on associational membership. Facebook has a number of embedded functions (some aimed exclusively at community building and more “institutionalized” interactions within the context of groups and communities that other SNS and microblogs do not offer) that, at least theoretically, make its use conducive to stimulating offline associational involvement. Specifically:

First, and most relevant, Facebook has its own group creation/group joining function based on which people with common interests can meet online. Through this function, which is absent from, for example, microblogs such as Twitter or video-sharing sites such as YouTube, one can identify with others online, form a sense of belonging, and connect through discussion, collaborative effort, and content exchange, which may result in feeling connected to a community and subsequently lead to offline engagement (Shirky, 2008). Barack Obama's campaign for the 2008 presidency relied heavily on community building through SNS, subsequently mobilizing people to participate in the offline campaign-related meetups (Gibson, 2009; Kreiss, 2012). Furthermore, it has been argued that individual social and political initiatives that were created on Facebook subsequently gained traction in the offline realm as well. Most famously, extensive protest involvement during the 2011 Egyptian revolution is said to have emanated from the “We are all Khaled Said” Facebook group (Tufekci & Wilson, 2012). Along similar lines, but operating in a more top-down manner, in addition to groups, Facebook also offers “Pages,” that is, profiles built around a topic of interest that may include anything from local businesses and organizations to brands, products and celebrities. Pages, whose currency of popularity is “likes,” typically gather larger, but often nominal, membership than groups by focusing more on the top-down promotion of content and events, and secondarily on communication among members (which is the predominant rationale behind group creation).

Second, Facebook contributes to identity construction by enabling diverse channels for interpersonal feedback and peer acceptance (most prominently through “the Wall”) (Park, Kee, & Valenzuela, 2009; see also Valenzuela et al., 2009). Peer acceptance in social networking sites is a strong predictor of life satisfaction (Valkenburg, Peter, & Schouten, 2006), and—contrary to other social media platforms—Facebook is particularly conducive to strengthening friendship and acquaintance ties. This may lead people—especially more introvert ones—to gain confidence and join groups first online and subsequently offline.

Third, Facebook cannot only fulfill users' informational needs by functioning as their preferred news platform (Bachmann & De Zuniga, 2013; Gil De Zúñiga, 2012; based on recent studies this property of Facebook's is also shared by Twitter, see Barthel, Shearer, Gottfried, & Mitchell, 2015).

Through the “News Feed” function, it can expose them to mobilizing information that arrives as part of the diverse menu of information appearing routinely on the main Facebook page (Tang & Lee, 2013), and even to group pressure by displaying recent social or political activities one's friends have engaged in (Bond et al., 2012). The information obtained through Facebook's News Feed may encourage and stimulate Facebook users to get involved in the offline realm as well.

Fourth, Facebook can satisfy people's entertainment and recreation needs, enabling them to join groups and events related to their personal interests and hobbies even beyond the mere online sphere (Ekstrom & Östman, 2013; Theocharis & Quintelier, 2016).

On top of these four theoretical considerations, previous research has laid the ground for investigating Facebook's effect on associational membership. Facebook use has been found to facilitate new and maintain established face-to-face relationships among college students (Ellison, Steinfield, & Lampe, 2007; Skoric, Ying, & Ng, 2009; Valenzuela et al., 2009; Vitak et al., 2011). Moreover, recent research shows that Facebook use fosters collaborative and collective practices online (Boyd & Ellison, 2007; Shirky, 2008), especially among young people (Ekstrom & Östman, 2013; Kahne, Lee, & Freezel, 2013).

Although extant research using young adult samples has shown that it can clearly be the case that previously civically active people who selfselect into using Facebook may be the ones who benefit the most from its online civic opportunities (Baumgartner & Morris, 2010; Theocharis & Quintelier, 2016), all of the above-mentioned aspects substantiate the argument that Facebook use has the potential to stimulate and mobilize for membership in offline voluntary associations. Although our data do not allow us to investigate whether Facebook use has a causal effect, thus creating associational membership, we are able to examine whether an effect exists at all and advance research by looking at the type of organizations that may be benefiting the most. Following previous research on social capital that has pointed to the crucial distinction between leisure-oriented and politically oriented voluntary associations (Wollebaek & Selle, 2003, p. 72, 84; Stolle & Rochon, 1998; see also Van Deth & Kreuter, 1998), an important question raised here is whether both types of associations will be equally associated with Facebook use. The above discussion shows clearly that some activities on Facebook serve entertainment or recreational purposes, while others are activities with a societal or political scope. In light of this very diverse menu of possible activities on Facebook, ranging from purely leisure-oriented activities such as online gaming to clearly political ones such as discussions in the “We are all Khaled Said” Facebook group (Ghonim, 2012), we contend that Facebook use should be positively related to membership in both leisure-oriented and politically oriented voluntary associations alike. This proposition can be further substantiated by extant theoretical work arguing that the arrival of Web 2.0 platforms such as Facebook have dramatically reduced engagement costs in high-threshold activities (Bimber, Flanagin, & Stohl, 2012; Shirky, 2008). Whereas in the offline realm the costs (in terms of required competencies and effort) associated with being a member of political associations are presumably much higher than for being a member in leisure groups,¹ being a member of an offline voluntary association via Facebook substantially reduces engagement costs for any type of voluntary association (be it leisure-oriented or politically oriented). Therefore, we argue that Facebook use will have a positive effect on associational membership irrespective of the concrete type of voluntary association.

H2: Facebook users are more likely to be members of voluntary associations than nonusers.

Facebook's compensating role for the lack of social trust and internal efficacy

If Facebook has a positive effect on associational membership, we are interested in further unpacking this effect by examining how Facebook use may be moderating the effects of social trust and internal political efficacy, two core antecedents of associational membership. We expect that the mobilizing functions of Facebook, which may include acquaintance, discussion, and collaboration with previously unknown

others, are more likely to benefit exactly those who lack more “traditional” mobilizing factors such as social trust and feelings of internal political efficacy. Put differently, whereas people with relatively high levels of social trust and internal efficacy have a high propensity of being a member in voluntary associations by default, those who lack social trust and internal efficacy might compensate for this lack and become mobilized for membership in offline voluntary associations through Facebook use. Of course, one may imagine that Facebook use can complement rather than compensate for high levels of social trust and internal efficacy. Still, we envisage this as a less likely scenario for at least two reasons.

First, considering the generally low (average) levels of associational involvement as documented in previous research (cf. Almond & Verba, 1963), it can reasonably be argued that people with relatively high levels of social trust and internal efficacy are by default closer to the rather low ceiling of associational involvement. Hence, in their case we expect that the positive association between Facebook use and associational membership should be less strong, or even nonexistent. Second, the mobilizing features of Facebook can be thought of as functional equivalents for social trust and internal efficacy as traditional antecedents of associational membership. Facebook use can overcome traditional barriers of trust formation by creating a virtual environment where prerequisites of associational involvement, such as collaborative and collective practices or interpersonal feedback and peer acceptance, can exist in the absence of traditional social trust (Boyd & Ellison, 2007; Ellison, Vitak, Gray, & Lampe, 2014; Park et al., 2009). For example, Brundidge and Rice (2009) have shown that Facebook groups and profiles allow for the emergence of political discussions among people who disagree, particularly through the connection of two persons who have a “friend” in common. What is more, within the online environment of Facebook, users might be willing and able to join online groups even if they lack a feeling of internal efficacy that would be required for joining offline voluntary associations.² Given that the necessary competencies for—as well as the costs and efforts of—using Facebook and joining Facebook groups are much lower than for offline associational involvement, even people lacking a sense of internal political efficacy might first become involved online, get exposed to the mobilizing features of Facebook, and subsequently become members of offline voluntary associations as well. Therefore, our third hypothesis states:

H3: Facebook use will moderate the effects of social trust and internal political efficacy on associational membership.

H3a: The effect of social trust on associational membership will be stronger for Facebook nonusers than Facebook users.

H3b: The effect of internal political efficacy on associational membership will be stronger for Facebook nonusers than Facebook users.

In less technical terms, we thus expect that Facebook users with low levels of social trust and internal efficacy, respectively, are more likely to be members of voluntary associations than Facebook nonusers with equally low levels of trust and efficacy.

Facebook's features of influence

If, as we hypothesize, Facebook use has an effect on associational membership—be it a direct or a compensating one—a more fine-grained analysis of the exact features through which Facebook exerts its mobilizing effects would be insightful. Much of the recent literature has focused on two core mobilizing features, namely network embeddedness, that is, expanding one's network of friends online (usually operationalized through the number of Facebook friends)—which has been shown to be positively linked with offline participation (Gil de Zuniga & Valenzuela 2010), and users' exposure to mobilizing information (e.g., about elections and protest events) distributed by issue groups or Facebook peers (Bond et al., 2012; Enjolras, Steen-Johnsen, & Wollebaek, 2013; Tang & Lee, 2013; Tufekci & Wilson, 2012).

Hence, we expect a difference in the propensity of being a member of voluntary associations between Facebook users with different levels of network embeddedness and exposure to mobilizing information. Because those users with

relatively fewer friends and less exposure to information are (conceptually) closer to the profile of Facebook nonusers, we expect them to be less likely to be members of voluntary associations than Facebook users with comparatively higher levels of network embeddedness and exposure to mobilizing information. Accordingly, we are able to assess Facebook's mobilizing potential in more detail by testing the following hypothesis:

H4a: The higher the number of Facebook friends, the more likely it is that a Facebook user will be a member of voluntary associations.

H4b: The greater the exposure to mobilizing information on Facebook, the more likely it is that a Facebook user will be a member of voluntary associations.

Data and measurement

The data used in this study comes from a probabilistic sample of adults aged 18–49 in Germany's state of Baden-Württemberg. The final response rate was 16%,³ which is acceptable considering the younger target groups (as a comparison, the response rate for the phone survey of the German general population in the European Election Studies 2009 is around 20%). Participants were surveyed in October and November of 2011. This was seven months after the Baden-Württemberg state election and long after the vibrant mobilizations around the infamous Stuttgart 21 project—which drew thousands of protesters to the streets of Stuttgart—and therefore a relatively quiet period, politically speaking. We also note that Facebook membership in Germany has not gone up radically since the time the study was conducted, with Facebook members increasing from 22.6 million to 28 million, which is comparatively much lower than most other European countries and the United States. Although the data were initially not collected for the purpose of the present study, they contain an extensive battery of items measuring associational membership, social trust, internal political efficacy, and (various features of) Facebook use, making it a unique resource for testing the empirical appropriateness of our hypotheses. Still, we need to caution the reader that due to an oversample of non-Facebook users, we cannot claim the data to be representative for the adult population aged 18 to 49 in the state of Baden-Württemberg.⁴

Nevertheless, the data set at hand is based on a probabilistic sample selected through Random Digit Dialing (RDD), making it a superior source of analysis, especially in comparison to student samples that have been mostly employed in previous studies on the effects of social media on similar attitudes. Therefore, our study goes one step further in identifying the effects of Facebook use in the general population. Last but not least, the study adds to our existing knowledge about the effects of Facebook use by moving away from the well-researched, vibrant social media culture of the United States, focusing on Germany, a country notoriously skeptical about social media. Although Internet penetration in Germany is among the highest in Europe, and 97% of Germans surf the Internet at least 30 minutes per day, social media use is among the lowest in Europe (Kemp, 2014). Given that the Germans' intense preoccupation with privacy is generally considered to be the main reason for the lack of social media adoption (clearly a cultural rather than a technological reason), we suspect that, especially when it comes to issues of trust, Germans may prove more resilient to effects potentially originating from Facebook use. Hence, Germany establishes an interesting and, so far, less studied case for testing our propositions, which may qualify previous findings and add to our existing knowledge mostly stemming from the U.S. context.

Concerning the creation of our dependent variable, our survey included a question battery asking respondents if they are “a member of one of the following organizations”: church or religious; sports or leisure-oriented; arts, music, or educational organizations; labor unions; political parties, environmental; youth; professional; charitable/ humanitarian; peace/antiwar; and antiglobalization organizations. In the interest of comparability with other international studies, the question is an expanded adaptation of the classic questionnaire item asked in the World Values Survey (1995/2014). In order to investigate whether these items

reflect the previously mentioned distinction between leisure-oriented and politically oriented associations (Wollebaek & Selle, 2003, p. 72), we performed an analysis of dimensionality. Given the binary nature of our items for associational membership, we performed a factor analysis based on a tetrachoric correlation matrix using principal factor extraction with oblique rotation techniques.⁵ The results of our factor analysis indicate (Table 1) a two-dimensional solution essentially reflecting a distinction between (a) membership in leisure-oriented organizations (sports, arts, and youth organizations) and (b) membership in political organizations (labor unions; political parties; environmental, professional, humanitarian, and peace organizations).⁶ These results are in line with earlier theoretical discussions about different types of voluntary associations (cf. Warren, 2001, pp. 72, 76) and also reflect findings from previous empirical studies trying to classify qualitatively different types of associations (cf. Roßteutscher & Van Deth, 2002, p. 20-24).

Based on the factor structure evident from Table 1, we subsequently created two distinct dependent variables by summing up the respective items for membership in leisure and political organizations. However, given the distributional properties of the resulting scales (most of the respondents in our sample are either nonmembers or members in just one single organization; the concrete figures being 85% for leisure organizations and 86% for political

Table 1. The structure of associational membership (factor analysis).

	Factor 1 (political organizations)	Factor 2 (leisure organizations)
Religious org.		
Sports or recreational club		.58
Arts, music, or cultural org.		.49
Labor union	.32	
Political party	.48	
Environmental org.	.56	
Youth org.		.65
Professional org.	.42	
Humanitarian org.	.54	.36
Peace/antiwar org.	.87	
Explained variance	.89	
N	537	

Notes. Principal axis factor analysis with oblique promax rotation, pattern matrix, factor loadings <.30 not displayed. Due to correlated factors, the amount of explained variance represents the total explained variance of both factors before rotation. Correlation between factors: $r = 0.06$.

organizations),⁷ we finally created two binary dependent variables, each indicating whether a respondent is a member in a leisure or political organization or not (see supplementary materials, Appendix 1 for complete description of all dependant and independent variables). Thus, in the empirical analysis to follow, we make use of two dummy-coded dependent variables representing membership in two different types of voluntary associations (leisure vs. political organizations).

Because it might be argued that Facebook use itself could be part of a broader latent dimension that is reflective of civically active people in general (Baumgartner & Morris, 2010), we rerun the factor analysis described earlier by also including the item for Facebook use. The results of this sensitivity check are straightforward: Facebook use does not load on any of the two established dimensions reflecting membership in leisure or political organizations (see supplementary materials, Appendix 2). This result constitutes evidence that Facebook use is conceptually different from membership in voluntary associations.

Results

The empirical analysis is carried out taking into account the distinction between membership in political and leisure organizations. Separate logistic regression models are run for each of the two dependent variables. The analysis will proceed in two steps. In a first step, we will concentrate on the difference between Facebook users and nonusers and investigate Facebook's general mobilizing potential. To be more specific, we will test whether Facebook users have a higher propensity to be members of voluntary associations in comparison to nonusers. In the second step, we take advantage of a data set stemming from a second wave of the study to examine whether the hypothesized mechanisms through which Facebook is supposed to exert its mobilizing potential (network embeddedness and exposure to information) indeed foster membership in voluntary associations.

The first step of the analysis is presented in Models 1 through 3 (Table 2), showing the direct and moderating effects of Facebook use on membership in leisure organizations, and Models 4 through 6 (Table 3), depicting the effects of Facebook use on membership in political organizations.^{8,9}

Table 2. Determinants of membership in leisure associations (logistic regression).

	Model 1	Model 2	Model 3
Intercept	-1.718***	(0.537)	-2.448***
Trust	1.501***	(0.547)	2.943***
Efficacy	1.274**	(0.546)	1.173**
Facebook	0.366*	(0.198)	2.053***
Female	-0.037	(0.196)	-0.085
Married	0.186	(0.203)	0.174
Education	-0.302	(0.520)	-0.123
Age	-0.262	(0.381)	-0.380
Heavy Internet use	0.484*	(0.252)	0.454*
TrustXFacebook			-3.123***
EfficacyXFacebook			
N	497	497	497
AIC	677.232	671.385	678.797

Notes. *p < 0.1; **p < 0.05; ***p < 0.01; logit coefficients, standard errors in parentheses.

Table 3. Determinants of membership in political associations (logistic regression).

	Model 4	Model 5	Model 6
Intercept	-1.937***	(0.545)	-2.111***
Trust	0.785	(0.556)	1.128
Efficacy	1.204**	(0.549)	1.177**
Facebook	-0.101	(0.199)	0.336
Female	-0.035	(0.198)	-0.045
Married	-0.008	(0.203)	-0.011
Education	-0.188	(0.522)	-0.141
Age	1.286***	(0.387)	1.256***
Heavy Internet use	-0.006	(0.253)	-0.015
TrustXFacebook			-0.800
EfficacyXFacebook			
N	497	497	497
AIC	669.676	671.163	667.919

Notes. *p < 0.1; **p < 0.05; ***p < 0.01; logit coefficients, standard errors in parentheses.

The results of Model 1 and Model 4, which describe the unconditional effects of our variables of interest (Facebook use, social trust, and internal efficacy), mostly support our first two hypotheses. We note that, as hypothesized, the antecedents of associational membership have a positive and statistically significant effect. Internal political efficacy has a strong positive effect on both the propensity to be a member of leisure and political associations.¹⁰ To be more specific, individuals having a maximum level of efficacy are on average approximately 3.5 times more likely to be members of both leisure and political associations than those having the lowest level of efficacy. This translates into an increase of approximately 27 percentage points in the probability to be a member of leisure and political associations¹¹ for people having the maximum levels of efficacy. Social trust has a similar effect, but only in the case of leisure associations. An individual with zero trust has a 22% probability to be a member of leisure associations compared to a 55% probability for the same person having the maximum value of trust. All in all, the results confirm the role of social trust and internal political efficacy as precursors for associational membership. However, we need to note that internal efficacy seems to have a more important role because it is a relevant predictor for membership in both types of associations (providing full support for H1b), while social trust only has an impact on membership in leisure organizations (providing only partial support for H1a).

Focusing on our main variable of interest, Facebook use, we can again notice a different impact between the two different types of associations. In the case of leisure associations, as hypothesized, Facebook has a positive and statistically significant effect. The predicted probability to be a member of leisure associations is nine percentage points higher for Facebook users (47%) compared to nonusers (38%).¹² At the same time, the unconditional effect Facebook has on the

probability to join political associations is close to zero and statistically insignificant. Thus, H2 only receives confirmation with regard to leisure associations. These findings are consistent with recent literature emphasizing that Facebook is particularly conducive for leisure activities (Kahne et al., 2013; Theocharis & Quintelier, 2016), and less so for development of public orientations (Ekström, Olsson, & Shehata, 2014). Accordingly, the distinction between different types of organizations is not only important given the values they nurture (Almond & Verba, 1963, p. 254; de Tocqueville, 1965 [1840]; Stolle & Rochon, 1998), but our results also show that the skill sets that encourage somebody to be a member of an organization differ between political and leisure associations: whereas membership in leisure organizations is positively associated with trust, internal efficacy, and Facebook use, membership in political organizations is a function of internal efficacy.

Turning to the test of H3, Facebook also moderates the effects of social trust and internal efficacy. In the case of leisure associations, Model 2 and Model 3 in Table 2 show that this moderating effect is only present in the case of social trust,¹³ while the interaction between Facebook use and internal efficacy fails to reach statistical significance. Figure 1 helps us to interpret the interaction effect accurately.

In the case of the effect of social trust on the probability to join a leisure association, we can clearly see that using Facebook makes a difference. The probability of Facebook users to join a leisure association is constant across all trust levels. Yet, Facebook users are 40 percentage points more likely (significant at $p < 0.05$) to be members than nonusers with similarly

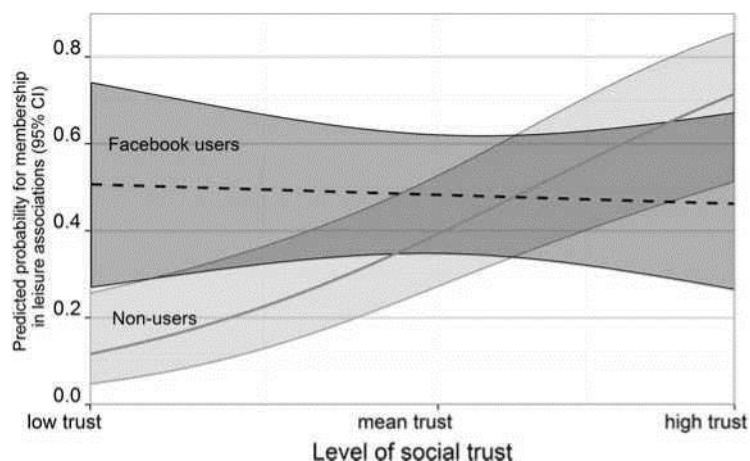


Figure 1. Predicted probabilities for membership in leisure associations.

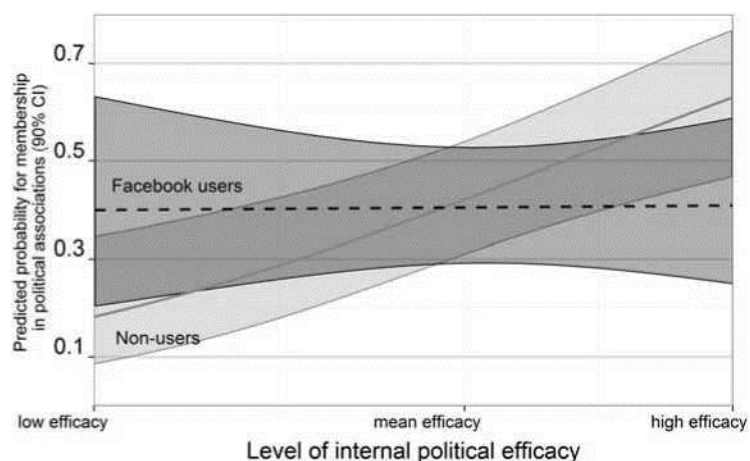


Figure 2. Predicted probabilities for membership in political associations.

low values of trust. Hence we can indeed conclude that Facebook use can compensate for low levels of social trust when it comes to membership in leisure associations. As previously mentioned, this might be a result of two different mechanisms. On the one hand, Facebook can overcome traditional barriers of trust formation. On the other hand, we can also talk about a ceiling effect, as Facebook use cannot further increase the propensity to join a leisure association in the case of those who are already very likely to be members (i.e., those with high levels of trust).

Moving to Facebook's moderating role when it comes to membership in political organizations, we can only observe a moderating effect in the case of political efficacy (see Models 5 and 6 and see Figure 2).¹⁴ It is important to note that even if the confidence intervals in Figure 2 overlap, this does not imply lack of statistical significance. Nonoverlapping confidence intervals are only a sufficient but not a necessary condition for statistical significance (Afshartous & Preston, 2010). Both the statistical significance and strength of the interaction should be assessed based on results presented in Model 6; Figure 2 is only indicative for interpreting the mechanism behind this interaction. Analogous to the interaction displayed in Figure 1, we note that the probability of Facebook users to join political associations is basically the same irrespective of their levels of political efficacy. In this case as well we can speak of a compensation effect. For nonusers we can clearly see a substantial impact of political efficacy on the propensity to be a member of political organizations, while this effect practically disappears in the case of Facebook users. Furthermore, we do not detect a statistically significant difference between Facebook users with low efficacy values and nonusers with high efficacy values, supporting the “compensation” argument. In sum, then, H3a yields support only for membership in leisure organizations, while H3b receives confirmation for membership in politically oriented associations only.¹⁵

In the second step of our analysis, we investigate the exact features of Facebook that are positively linked to membership in voluntary associations. For this purpose, we make use of a second wave of the study in which 249 respondents (only Facebook users) were reinterviewed after six months. The important feature of this second wave is that it includes items that measure both network embeddedness (operationalized as number of Facebook friends; see Appendix 1 for full description) and exposure to mobilizing information (operationalized based on two items asking respondents whether they had been exposed to information about political and social activities via Facebook, see Appendix 1 for full description).¹⁶ Due to the reduced sample size, we only focus on the unconditional effects of the two mobilizing features of Facebook.¹⁷ The results presented in Table 3 bring partial support to H4a and H4b. To be more specific, these two features of Facebook exhibit (again) different effects depending on the type of organization.

In Models 7 and 8 (see Table 4),¹⁸ we notice that network embeddedness has a statistically significant impact on the propensity to be a member of leisure associations only (providing partial support for H4a). Substantively speaking, this implies that an individual having more than 300 friends is 4.3 times more likely to join a leisure organization compared to an individual having 10 friends or less. Thus, just by having a large network of online friends, individuals appear to be more likely to be members of leisure organizations offline. This finding is also in line with the proposition of Verba et al. (1995, pp. 15-16), stating that isolation from recruiting networks is a main factor for why people do not become active in politics. Transferring their insights to the present study, people with relatively fewer friends on Facebook are presumably less likely to

Table 4. Determinants of membership in voluntary associations, Facebook users (logistic regression).

	Model 7		Model 8	
	Leisure associations		Political associations	
Intercept	-4.504***	(1.417)	-4.142***	(1.419)
Network embeddedness	1.449*	(0.814)	-0.263	(0.857)
Mobilizing information	0.010	(0.884)	1.552*	(0.909)
Trust	1.691	(1.182)	2.492*	(1.321)
Efficacy	4.101***	(1.366)	1.825	(1.268)
Female	1.387***	(0.500)	-0.334	(0.470)
Married	0.229	(0.491)	-0.262	(0.504)
Education	-0.508	(1.206)	0.826	(1.208)
Age	-0.430	(0.881)	2.486***	(0.960)
Heavy Internet use	0.268	(0.679)	-0.697	(0.667)
N	113		113	
AIC	153.81		152.20	

Notes. *p < 0.1; **p < 0.05; ***p < 0.01; logit coefficients, standard errors in parentheses.

be members of voluntary associations simply because “nobody asked.” The plausibility of this mechanism is further supported when we consider that most people use Facebook for entertainment- and friendship-driven purposes (Kahne et al., 2013; Theocharis & Quintelier, 2016), hence the chance to engage in such activities via Facebook is directly linked to the size of one's online network. Turning to the impact of exposure to mobilizing information, we observe that this feature of Facebook only exerts a positive and statistically significant effect on the propensity to be a member of political organizations (providing partial support for H4b). Respondents who mentioned that they acquired information about social and political activities and also participated in such activities after they learned about them on Facebook are 4.7 times more likely to be members of political associations than respondents who did not use Facebook for these purposes. The mechanism behind this effect is straightforward: once people learn about social and political activities on Facebook, they are more likely to join the associations that organize them. It also needs to be noted that the lack of a significant effect of this mechanism in the case of the propensity to be a member of leisure organizations is not too surprising when we consider that the question wording is specifically oriented toward social and political activities and does not mention leisure or entertainment. 19

Discussion

Acknowledging that the socializing potential of SNS may be beneficial for democracy and social and political involvement, recent research has extensively studied Facebook's effects on democratic attitudes and behaviors. Although extant research has demonstrated Facebook's role in affecting the development and maintenance of social capital, it has paid less attention to Facebook's effects on associational membership— one of the cornerstones of a vibrant civil society. What is more, by solely focusing on direct effects, previous studies have neglected possible indirect effects of Facebook use on civic engagement.

Our study complements and advances recent studies showing that Facebook has generally beneficial effects for society and democratic engagement (Bode et al., 2013; Bond et al., 2012; Ellison et al., 2007; Gil De Zúñiga, 2012), using the less well-researched case of Germany. Specifically, our findings not only show that Facebook has a positive effect on offline associational involvement, but that it can actually compensate for a lack of social trust and internal efficacy when it comes to membership in voluntary associations. Interestingly, however, Facebook's direct effects on associational membership are not uniform across different types of associations. As our results indicate, Facebook use first and foremost increases one's propensity of being a member in leisure- oriented rather than political organizations. Even more revealing are the moderating effects Facebook use exerts on associational membership. We present evidence showing that Facebook use compensates for a lack of social trust and internal efficacy as traditional precursors of associational involvement. Apparently, the comparatively lower competencies, costs, and efforts required for becoming active in the online sphere may facilitate membership in offline associations even for individuals having low levels of social trust and internal political efficacy. Our confidence that the compensation effect of Facebook use is not an artifact is reinforced by the fact that we did not detect any relations between social trust and internal efficacy on the one hand, and Facebook use on the other (see Appendix 8). This finding suggests that the conditional/indirect effect of Facebook use is not a result of some inherent characteristics of Facebook users (i.e., higher levels of social trust and internal efficacy), which would rather point to a mediation effect (i.e., that social trust and internal efficacy are positively related to Facebook use, which in turn favors associational membership), and therefore strengthens the validity of our claims.

Still, Facebook's compensating potential does not apply to all types of voluntary associations equally. Facebook use compensates for a lack of social trust when it comes to membership in leisure organizations, while in the case of politically oriented organizations it compensates for the lack of political efficacy. Last but not least, our study sheds some more light on the concrete mechanisms through which Facebook affects membership: Facebook users who are embedded in a greater network of online friends and are more often exposed to mobilizing information online have a

higher propensity to be members of voluntary associations in the offline realm. These results suggest that Facebook use extends individuals' recruitment networks, which in turn increases one's likelihood of being asked for offline engagement as well.

In light of these results, our study contributes to extant literature in a number of ways. First, it uses a probabilistic sample, which, irrespective of the oversample of non-Facebook users, is remarkably close to the population characteristics, and thus represents an improvement over the convenience exploratory samples of most previous studies. Second, and related to the previous points, our study moves the research focus from the American context to the less explored European, non-English-speaking domain, using Germany, a country whose population is notoriously skeptical about social media. The fact that Facebook is found to have a positive effect on associational membership in the more “reluctant” case of Germany should strengthen our confidence in Facebook's effects on democratic attitudes and behaviors in general. The finding also implies that as German users gradually overcome their reluctance to join Facebook, the platform may prove to be beneficial for their involvement in associations, with those politically inefficacious standing to benefit the most. Importantly, this means that Facebook may have a gradual but positive impact on civic life by benefiting organizations of very different types, or by leading to the creation of new online groups or communities of interest that expand offline. Third, our study complements existing research investigating Facebook's link with the formation and maintenance of social capital. Although a number of studies have used voluntary engagement in matters concerning the community as a dependent variable (Gil de Zúñiga et al., 2012), our study takes this research one step further by offering a more refined measure that takes into consideration the different associations individuals may engage in. By showing that Facebook's direct and moderating effects on associational membership are not uniform across leisure-oriented and politically oriented organizations, we highlight the need for refined theoretical reasoning concerning Facebook's possible impact on democratic engagement in general. This finding is linked to the fourth contribution of the present study, the investigation of how Facebook use moderates the relationship between social trust, political efficacy, and associational membership. Our findings highlight the previous omission by showing that the moderating role of Facebook with regard to membership in different types of associations depends on the concrete, “traditional” precursor of associational involvement that is compensated for. Finally, we are able to identify specific features of Facebook use that are positively associated with associational membership, namely network embeddedness and exposure to mobilizing information. Although in this case, due to the small N, the results of our analysis should be taken with a grain of salt, it represents a first step toward pinpointing the specific aspects of Facebook use that encourage associational membership and in more general terms the formation of social capital.

Although our findings allow us to shed some light on the effects of Facebook on associational involvement, we caution against several caveats. The most important limitation of this study is that by relying on cross-sectional data, it does not allow for causal inferences. Thus, our results should be interpreted with caution, especially in light of the already troublesome and long-standing debate over the (causal) interrelation between social trust, efficacy, and associational membership in the offline realm (Newton, 1999). Furthermore, we cannot fully dismiss alternative causal paths between Facebook use and associational membership (e.g., voluntary associations could induce individuals to make use of Facebook, or there might be a latent factor that lies behind both Facebook use and membership in voluntary associations). In this study, we have provided plausible theoretical arguments for why Facebook use should facilitate membership in voluntary associations, and outlined specific mechanisms through which Facebook use may exert its mobilizing potential. It remains to be determined by future studies using longitudinal designs and panel data whether such theoretical arguments regarding mobilizing effects still hold. Besides, we do not claim that using Facebook induces individuals to become members of voluntary associations *in any deterministic sense*. Rather, our argument states

that Facebook, through its inherent networking features, has the potential to mobilize individuals for membership in voluntary associations, and thus should increase Facebook users' propensity to be members of offline voluntary associations. Still, being aware of potential endogeneity problems inherent in our study and the analysis of cross-sectional data in general, we sought to provide solid arguments for making the causal path between Facebook use and associational membership a plausible and theoretically informed option. All in all, the results of our study indicate that Facebook use does not crowd out offline involvement. Rather, it appears to stimulate and facilitate offline associational membership, thus contributing to the vitality of civil society and democracy.

Acknowledgments

The authors would like to thank Jan W. van Deth for reading and commenting on an earlier version of the manuscript. Also, many thanks go to the participants of the 4th Annual General Conference of the European Political Science Association panel, "Information Technologies and the Study of Political Communication," as well as to the journal's anonymous reviewers, for their valuable comments and suggestions.

Notes

1. For example, organizing a demonstration in an activist group entails higher hurdles than playing football in an amateur sports club.
2. Recent psychological studies even offer some support for a "social compensation" explanation of the relationship between introversion and Facebook use (Moore & McElroy, 2012).
3. The full technical report of the polling company (Sozialwissenschaftliches Umfragezentrum GmbH) is available on request.
4. We note, however, that we compared the characteristics of our sample (age, gender, education, and marital status) with the micro-census data of the Baden-Württemberg state from 2011 for people between 18 and 49 and did not find any substantial deviations. All in all, our sample contains slightly less educated and younger, more married, and female individuals (see Appendix 4).
5. We excluded membership in antiglobalization organizations (because there was only one respondent in our sample indicating membership) and "other" organizations (because this type of organization represents a quite heterogeneous category) from the dimensional analysis.
6. The item for membership in religious organizations exhibited relatively low loadings ($<.30$) on either factor and was thus excluded from the analyses. Not surprisingly, religious organizations appear to be very different in nature compared to leisure or political organizations (Wollebaek & Selle, 2003, pp. 73-74). In addition, the tax system in Germany requires individuals to declare whether they belong to any recognized religion. Therefore, because a positive answer in the tax declaration can potentially be interpreted as formal membership in a church, it is not clear if all respondents interpreted the question about membership in church or religious organizations in the same way as for the remaining items on membership. This provides an additional argument for not considering it in the empirical analyses to follow.
7. See also Figures A1.1 and A1.2 in Appendix 1.
8. Models including income yield very similar results, but given the high proportion of item missing from this variable (around 25%), we chose not to include income in our final models.
9. Using count models reveals a very similar pattern of results (see Appendix 3). Still, because 85% of the cases are either nonmembers or members in just one single organization, we opt for the results of the binary logistic models.
10. This finding is also in line with our earlier argument that internal political efficacy reflects and entails components of a more general sense of efficacy and thus its effects should extend even beyond purely political contexts.
11. All predicted probabilities were computed while keeping all other variables constant (the mean value was used for continuous variables, while 0 was used for dummy variables).
12. The predicted probabilities are computed by using simulations based on the normal distribution of coefficients presented in Table 2, Model 1, while keeping all continuous variables at their mean and all categorical variables at zero.
13. The results were almost identical when the two interactions were simultaneously included in the model.
14. This is rather expected because in this case the main effect of social trust did not reach statistical significance (see Model 4). The results were almost identical when the two interactions were simultaneously included in the model.
15. It is important to note that weighting the data based on population characteristics (see Appendix 5) and using propensity matching to correct for model dependency (see Appendix 6), reveals a very similar pattern of results leading to the same substantive conclusions.
16. We need to note that due to item missing (mainly due to the fact that respondents refused to respond to the battery of interest), our final sample drops to 123 cases.
17. Running model specifications including interaction terms in logistic models with the sample size at hand

does not yield reliable estimates due to the high number of joint conditions with no or very few cases, but see note 19.

18. In this case the small N did not allow for the use of count models.
19. Although the small sample size is far from being ideal for interpreting interaction effects in logistic models, a further analysis suggests that exposure to mobilizing information also corresponds with our argument about Facebook's compensating role. More specifically, Facebook users showing lower levels of social trust in combination with higher exposure to relevant information on Facebook have a similar propensity to be members of leisure associations as respondents with the reversed combination of social trust and exposure to mobilizing information. Similarly, Facebook users exhibiting lower levels of internal political efficacy and higher exposure to relevant information on Facebook have a similar propensity to be members of political organizations as respondents with the reversed combination of internal efficacy and exposure to mobilizing information (see Appendix 7).

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