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## THE IMPACT OF SOCIAL CAPITAL ON POLITICAL PARTICIPATION OF SOCIAL MEDIA USERS IN POLAND

Research on participation of social media users has contributed to our understanding of modern citizenship, civic engagement, and contemporary public sphere. Despite a growing interest in participatory practices in social media little is known about the factors affecting political participation of social media users. Based on an online survey of 700 social media users in Poland, this study examines the relationship between social capital (defined at the individual level as a resource embedded in personal networks) and political participation. It has been established that there is a contradictory relationship between social capital and participatory activities of social media users. Apparently, differences between the resources that are only embedded in personal networks on the one hand, and those that can be mobilized for purposive actions on the other, matter when association between social capital and political participation is considered. Moreover, the presence of these resources significantly varies across different types of social relations (family, friends and acquaintances) of respondents engaged in different participatory actions.

**Keywords:** resources; social capital; social media; political participation

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### Wpływ kapitału społecznego na partycypację polityczną użytkowników mediów społecznościowych w Polsce

#### Streszczenie

Badania partycypacji politycznej użytkowników mediów społecznościowych przyczyniły się do lepszego poznania istoty współczesnego obywatelstwa, zaangażowania obywateli oraz sfery publicznej. Niewiele wiemy jednak na temat wpływu zasobów kapitału społecznego na partycypację polityczną użytkowników mediów społecznościowych. Bazując na wynikach badań online 700 użytkowników mediów społecznościowych w Polsce, artykuł ten koncentruje się na zależnościach między kapitałem społecznym (definiowanym na poziomie indywidualnym jako zasoby zakorzenione w sieciach personalnych), a partycypacją polityczną. Wyniki badań sugerują wielowymiarową zależność między zasobami a partycypacją użytkowników mediów społecznościowych. Istotne okazują się być różnice między zasobami, które są tylko zakorzenione w sieciach personalnych a tymi, które mogą zostać zmobilizowane przez respondentów. Efekt zasobów kapitału społecznego zależy również od typu relacji (rodzina, przyjaciele, znajomi), w których pozostają użytkownicy mediów społecznościowych w Polsce.

**Słowa kluczowe:** zasoby; media społecznościowe; kapitał społeczny; partycypacja polityczna

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## Introduction

The use of social media creates many opportunities for individuals to engage in civic and political life in the neighborhood (Baborska-Narozny, Stirling, & Stevenson, 2016), local or ethnic community (Schuschke & Tynes, 2016), and global society (Castells, 2012). The events of the Arab Spring, the Gezi Park protests, or the Black Lives Matter movement brought headlines pronouncing the positive role of social media in promoting social mobilizations, protests and revolutions. The results of different studies show that such platforms as Facebook, Twitter, or YouTube may produce positive democratic effects as they provide their users with tools improving the distribution of information, exposure to diverse opinions, dialogue between interested parties, and access to resources building up civil society (Bakshy, Messing, & Adamic, 2015; Dahlberg, 2007; Ellison et al., 2014). One positive consequence is that the costs of mobilization and coordination of civic and political actions decrease in terms of time and money investments (Earl & Kimport, 2009; Humphreys, 2016). Indeed, it can be hardly denied that social media become a part of contemporary communication landscape with proven ability to support civic and political actions at different levels of the political system.

However, some studies reveal the negative effects of digital communication, such as “polarization”, “echo chambers”, “filter bubbles” or “selective exposure”, which distort the users’ engagement and may produce results different from those expected. Some research findings indicate that social media make political participation distracted and fragmentary (Fuchs, 2014; Sunstein, 2007), hence less effective than traditional forms of political engagement. People immersed in online communication often become “flash activists”, “clicktivists” or “slacktivists” (Morozov, 2009) temporarily focused on clicking, commenting and sharing rather than voting or protesting. They are more likely to engage in public issues based on emotional identifications and rationales within technology platforms and applications (Bennet, 2012; Bennett & Segerberg, 2012); more inclined to be a part of multilayered, loosely coupled networks rather than formal, hierarchical organizations (Castells, 2009, 2012); more interested in new forms of political activity, such as mashups, remixes or parodies (Humphreys, 2016).

Although there is a vigorous debate on the role of social media in encouraging or discouraging political participation, it is rather generally accepted that users are subject to pressure imposed by social networks which may have an impact on their political activity. The size of personal networks and the quality and intensity of interactions with peers have been identified as factors behind individual propensity to become involved in politics (Gil de Zúñiga, Jung, & Valenzuela, 2012; McPherson, Smith-Lovin, & Brashears, 2006; Tang & Lee, 2013). A fundamental question, however, that so far has not been extensively

studied is whether the resources embedded and/or mobilized through personal ties may have an impact on decisions to participate in civic and political life. Previous studies exploring political participation in Poland focused on socio-demographic, institutional, structural, ideological or cultural factors behind political participation. Cześniak (2009) established that age, education, religious commitment, interest in politics, satisfaction with democracy influence voting behaviors of Poles, whereas Kotnarowski and Markowski (2014) found that voters satisfied with the economic situation are more willing to vote for incumbent party(s). In a quite similar vein, Tybuchowska-Hartlińska (2015) showed that people leaning towards the left prefer petitions, while those closer to the right tend to participate in local actions. Robertson (2009), whose research focused on youths in Poland and Romania, pointed on the relationship between participation in social networks and multiple socio-economic opportunities. She suggests that those more actively engaged in political organization had better access to diverse resources, however reversed causality is also possible.

Referring to previous research examining political participatory activities, this study evaluates the relationship between individual social capital and political participation of social media users in Poland using network and resource models (Burt, 2001; Coleman, 1988; Granovetter, 1973; Lin, 2001). Consequently, the analysis investigates the following research questions: (i) do resources embedded in and mobilizable from personal networks are associated with political participatory activities? (ii) whose resources (family, friends or acquaintances) are associated with political participation of social media users?

Uses of social media change and expand but not all contemporary internet services can be classified as social media. Although, early definitions (e.g. Kaplan & Haenlein, 2010) leaned towards a broad landscape of communication tools (e.g. blogs, collaborative projects), recently scholars point on (i) networking, (ii) public and (iii) personal communication as the core defining characteristics of social media (Meikle, 2016, p. 6). In keeping with the latest proposals, this study focuses on users with account(s) on social media platforms such as Facebook, Twitter, Instagram, NK popular in Poland. Individuals active on blogs, Wikipedia or other services using social mechanism(s) were not considered in this study.

### **Social capital and political participation**

The existing studies confirm the impact of social capital on political participation (La Due Lake & Huckfeldt, 1998; Klesner, 2007; Putnam, 1995, 2000; Teorell, 2003). Most of them suggest that the emergence of social capital is positively associated with political participation. Two remarks should be made

here: (i) there is no one generally agreed definition of political participation, (ii) social capital is usually defined as a “collective” rather than “individual” property. Political participation is an ambiguous term with multiple meanings accumulated over the last few decades of the development of social science. For example, Verba and Nie (1972) define political participation as “acts that aim at influencing the government, either by affecting the choice of government personnel or by affecting the choices made by government personnel”. Nelson (1979) and Barnes et al. (1979) point at an intention to influence either directly or indirectly political decisions at different levels of the political system. In a similar vein, Conge (1988) proposes that participatory action “supports or opposes state structures, authorities, and/or decisions regarding allocation of public goods.” For Dahlgren (2013) participation means “involvement with the political, regardless of the character or scope of the context; it therefore always in some way involves struggle.” The recent expansion of ICTs has broadened the modes of participatory activities of contemporary citizens. Young people, in particular, choose alternative ways of participation such as sharing, following, hacking or even trolling (Loader, Vromen, & Xenos, 2014). In some cases, political action merges with commercial and cultural practices (Humphreys, 2016), e.g. the use of Google Maps to express political discontent in Mexico, or political hip-hop in France or USA.

In order to analyze the relationship between social capital and political participation of social media users, this study employs Nan Lin’s theory of social resources (Lin, 1999, 2001; Lin & Dumin, 1986). Lin’s proposal incorporates the resource component highlighted in the concepts of social capital developed by Loury (1977), Bourdieu (1986), Coleman (1988) and De Graff & Flap (1988). Moreover, Lin’s theory supplements some network concepts that appear to be useful in the analysis of social capital in social media. For example, Granovetter’s (1973) “strength of weak ties” hypothesis suggests that structurally weak ties (e.g. acquaintances) are an effective source of information about potential jobs. Burt’s (2000) model revolving around the actor’s location in the network structure shows that social capital is a “function of brokerage across structural holes” defined as “an opportunity to broker the flow of information between people, and control the projects that bring together people from opposite sides of the hole”. In the same vein, Coleman (1988, 1990) proves that “closure”, defined as the network property of highly interconnected actors embedded in a small group or community, may be a source of social capital which “inheres in the structure of relations between persons and among persons”.

Lin (1999) approaches social capital as an individual property arising from social relations. Social capital is made of “resources embedded in a social structure that are accessed and/or mobilized in purposive actions” (Lin 2001, p.29). People who are better connected have better access to material and

symbolic resources and, consequently, have a higher social capital. He suggests that “actors (whether individual or corporate) are motivated by instrumental or expressive needs to engage other actors in order to access these other actors’ resources for the purpose of gaining better outcomes” (Lin, 2001). Thus, the ability to access and/or mobilize resources embedded in personal networks may be perceived in terms of structural advantage.

Importantly, Lin suggests that social capital is not in decline but gets embedded in social networks: “There is clear evidence that social capital has been on the ascent in the past decade: in the form of networks in cyberspace.” (2001, p. 211). He argues that the rise of social networks as repositories of social capital has an impact that goes beyond community and national boundaries. Digital tools enable individuals to access resources with little time and space constraints, while the global and inclusive character of cybercommunity allows them to reach particular resources that may not be accessible within the local community. However, the opportunity to access and mobilize resources from cyberspace is greater for actors in rich countries. Yet, the Arab Spring or Armenia’s “Electric Yerevan” protests indicate that actors from poor or developing regions are also able to effectively use social capital embedded in cybernetworks.

On this basis, it is assumed here that people get access and opportunity to mobilize capital from networks in cyberspace through social media platforms. Connections between relatives, friends, acquaintances and strangers on social media may deliver resources that affect purposive actions of their users. For example, voting behavior – an example of political action – may depend on the user’s ability to access (true or fake) information about candidates, revealed preferences of respected friends, or the results of the latest polls made available by a research company. In a similar vein, the decision to take part in a political protest may result from friends’ online declaration of participation in that event, or a direct request of a family member to join them. Ultimately, the shape of political action depends on multiple factors e.g. values, habits, institutions, history, culture. Many point out on the challenges accompanying the creation of a stable democratic system in Poland, where citizens engage and participate in the political domain. Markowski (2006), Markowski and Tucker (2010) put emphasis on the weakness and instability of the Polish party system. Paczynska (2005) showed that the pace of economic reforms has overtaken the growth of the middle class, the driving force behind political and civic activism. Czeńnik (2007) pointed on unemployment and relatively higher number of pensioners as the excluding factors from political participation. More recent evidence provided by Czeńnik (2014) suggests that the Smolensk Catastrophe did not significantly influence the political preferences of Poles but it enhanced existing social fractures and spurred the political mobilization of right-wing supporters. As a consequence, political participation in Poland is deeply affected

by polarization, social fractures and divisions within Polish society (Czeńnik & Grabowska, 2017). Thus, access and ability to mobilize resources embedded in personal networks may have an impact on political participation of social media users, however the specific Polish context cannot be left unconsidered.

### **Social media and political participation**

The existing literature on the relationship between social media and political participation is rather ambiguous. Most studies suggest that social media have an impact on political participation but critical factors behind this influence are not sufficiently explained. In her brilliant review, Boulianne (2015) provides a meta-analysis of 36 studies examining the relationship between social media use and participation. As she observes, more than 80% of coefficients are positive, but only half of them are statistically significant. However, she raises doubts about casual effects found in all analyzed cases. It is rather unclear whether and how social media influence political participation and civic engagement. Literature on the relationship between social media use and political participation includes at least three streams of research. The first of them focuses on the attributes and effects of social networks and their impact on political activity. For example, Gil de Zúñiga, Jung, and Valenzuela (2012) claim that the frequency and size of political discussion networks significantly predict political participatory behaviors of social media users. The greater the size of the peer network, the more civically and politically (online and offline) engaged are social media users in the U.S. In the same vein, Tang and Lee (2013) examine how network size and heterogeneity influence online and offline participation of Facebook users. They established that network structural heterogeneity – conceptualized as a combination of (i) openness to acquaintances and strangers, (ii) diversity of backgrounds, (iii) age diversity – among FB friends is a good predictor of offline political participation. Moreover, they suggest that network size has no significant impact on political participation, which contradicts the findings of Gil de Zúñiga, Jung, and Valenzuela.

The second line of research evaluates the impact of information accessed through social media on political participation. Bode (2012) demonstrates that transmission of information enhanced by intensive Facebook use leads to higher political engagement of undergraduate students. In this fashion, Skoric, Pan and Poor (2012) provide evidence that both production and consumption of information are positively associated with attendance of political rallies during the elections in Singapore. However, the effect is strong for users producing online content, and weak, but still significant, for those who only consume it. In contrast to these studies, Ceron (2015) suggests that information acquired

from social media is linked with lower trust in political institutions, which may have a negative impact on online and offline democratic deliberation. At the same time, consumption of news from media websites has a positive impact on political trust.

Finally, the third line of research focuses on social capital as a factor influencing or mediating political participatory activities. The relationship between Facebook use, social capital and political participation has been investigated by Valenzuela, Park and Kee (2009). They established that intensive Facebook use has a positive impact on social capital and participation among college students. Moreover, their study suggests that offline civic and political participation is related to online participatory activities. Likewise, Pandey, Gupta and Kim (2016) examined associations between social capital, Facebook use and political participation of post-graduate and doctoral students in India. Their findings confirm the impact of social media use on social capital and, in turn, on the respondents' political participation.

### **The impact of resources**

Yang and DeHart (2016) employed the position generator technique (Van der Gaag, Snijders & Flap 2008) to test the relationship between social media use, social capital and political participation of college students in the U.S. They found out that online social capital measured as access to resources provided by people with different occupations strongly predicts online political participation. Facebook use increases online social capital of college students. Then, in turn, social capital encourages their online political participation. In a similar vein, Lee (2006) demonstrates that social resources such as: (i) membership, (ii) social trust, (iii) political talk, and (iv) tolerance have an impact on political participation of U.S. citizens. Political participation was built by ten items related to various political activities (Lee, 2006, p.58). She found out that social trust is not related to the dependent variable, while membership and tolerance have a positive impact on political participation. At the same time, talks around political issues positively influence participatory activities, while social talks have a negative impact on the dependent variable. Building on this argument, it is expected here that participatory activities can be explained by understanding people's ability to access and mobilize resources to pursue them. It is therefore hypothesized that:

H1. users with a greater amount of social capital i.e. embedded and mobilizable resources in personal networks, are more involved in political participation.

Yet not all types of social ties are equally effective in encouraging (or discouraging) political participation of social media users. Research shows that

parents are the main source of political identification for children (Bronfenbrenner, 1979; Jennings & Langton, 1969). Political beliefs, attitudes and identities are strongly developed at the early stages of the socialization process, in which parents are the most important point of reference. However, this impact may decrease when children come under the influence of ‘significant others’ e.g. teachers, friends or co-workers. Quintelier, Hooghe and Badescu (2007) tested the intergenerational transmission of political attitudes and participation patterns in Belgium, Canada and Romania. They found out that the impact of parents on their children’s political participation patterns remains a strong factor affecting political socialization. These results may suggest that social media users look at their parents when they consider participatory activities such as voting or protesting. Likewise, Bond et al. (2012) conducted a mass-scale experiment on Facebook testing whether political behavior spreads through social media. This study suggests that offline strong ties are the major determinant of online mobilization. In other words, offline ties with family and friends have an online representation that explains the spread of information on social media. It is therefore expected that:

H2. the resources of relatives and friends – strong ties – are positively associated with political participation of social media users.

This hypothesis remains complementary to H1, however it narrows the relationship to strong ties only.

According to the results of a Polish study using the Resource Generator, the embedded resources of acquaintances (weak ties) that cannot be mobilized are perceived as a threat by individuals assessing their chances on the labor market (Batorski, Bojanowski, Filipek 2015). The negative impact turns into positive in the case of mobilizable resources accessible through acquaintance ties. The authors explain this twofold effect by the nature of weak ties, i.e. lesser frequency, durability and emotional engagement. However, labor market behaviors may not fit political reality as job seekers often consider others as competitors. In the political domain there are no such rare resources as jobs. Individuals take part in different political actions aiming to contribute to public welfare or build pressure on diverse political structures. Thus, social media users should perceive acquaintances (weak ties) as an information source (Bene, 2017) rather than a threat. Consequently, it is proposed that:

H3. there is a positive relationship between mobilizable resources of acquaintances – weak ties – and political participation of social media users (H3).



Thus, H3 supplements the idea proposed in H2 by testing the relationship between resources from the acquaintances network and political participation.

## Data and Methods

### Sample

The data for this study was collected between November and December 2015 using an online questionnaire (CAWI) conducted among 700 social media users in Poland. The respondents recruited for the survey had (a) an active account on at least one social media platform,<sup>1</sup> (b) a minimum six months' experience of using social media platforms, and (c) used them at least one hour a week. The aim was to exclude from analysis non-active users with little interest in social media. The sample was not random as there is no finite sampling frame of social media users in Poland for representative research. As a consequence, results cannot be generalized to the whole population due to non-probability sampling and idiosyncratic character of the study. The primary goal was to reach the information-rich cases for better understanding of political participation among social media users. Despite the lower level of reliability and higher research bias, purposive sampling may enable to identify interesting associations between variables. Such procedure is convergent with the logic of scientific discovery (refutability) and may contribute to better understanding of little-recognized phenomena. However, the distribution of variables indicates that the sample was not biased, as it was characterized by a diverse and rather justified distribution of certain features (e.g. age). The details of distribution of variables used in the study are presented in Table 1.

### Method

In accordance with Lin's theory, social capital has been measured in this project as an individual property of users active on social media. Undoubtedly, one of the best tools to measure social capital in general (Appel et al., 2014), and to diagnose resources embedded in personal networks in particular, is the Resource Generator proposed by Gaag and Snijders (2005). Developed subsequently to the Name Generator and the Position Generator (Lin & Dumin, 1986), this tool has been successfully applied in some previous research focused on social capital and political participation (Yang & De Haart, 2016). The Resource Generator is a survey instrument composed of two consistent parts

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<sup>1</sup> In order to avoid problems caused by the subjective perception of social media, the users were provided with a long list of different platforms and asked to mark those on which they were active; the list did not include blogs.

**Table 1.** Sample characteristics

Variable	Mean (sample)	SD (sample)
Age	38.54143	13.85887
Female	53%	N/A
Men	47%	N/A
Education	4.13571 (above secondary)	0.82704
Material situation	3.31 (1 very bad, 5 very good)	0.80745
Place of residence		
	N	%
Village	230	33
Town up to 50 000 residents	174	25
Town 50 001-100 000 residents	75	10
Town 100 001-500 000 residents	139	20
Town more than 500 000 residents	82	12
Education		
	N	%
Primary school	4	1
Junior high school	16	2
Basic vocational	126	18
Upper secondary	289	41
Tertiary	265	38

designed to measure resources in the personal networks of respondents. The critical distinction between the resources that are only present (embedded) in personal networks and those that can be mobilized for purposive actions is the essence of this method. Thus, the first part of the tool with the question “Do you know anyone who...” and a list of sixteen items provides information about the resources that are embedded in personal networks of the respondent. Accordingly, the second part with sixteen items built around the question “Do you know anyone who can...” refers to the resources that can be mobilized for purposive actions. A useful feature of the Resource Generator is that it can diagnose resources embedded in three circles of personal relations: family, friends and acquaintances (see: Appendix).

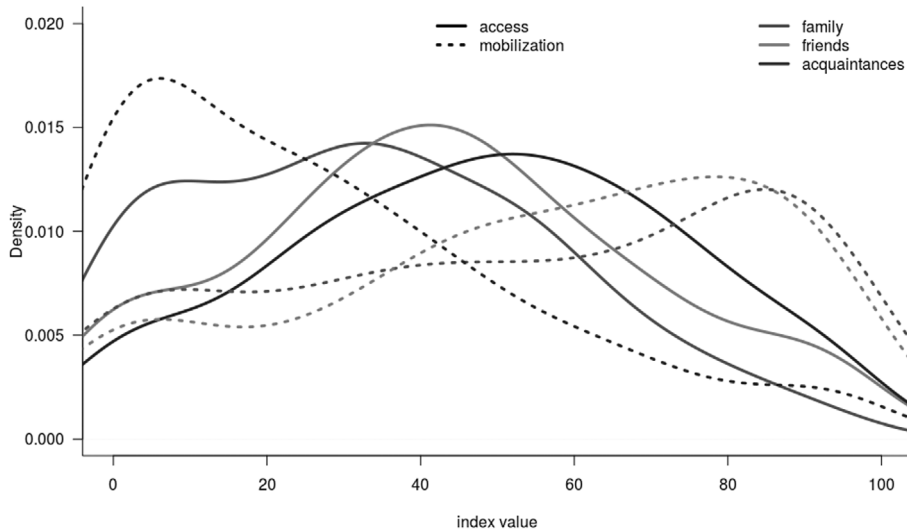
Items in both parts of the Resource Generator should directly or indirectly refer to the resources that may have an impact on political participation. Some more details on how to identify relevant resources can be found in the literature (Van Der Gaag, 2005; Van Der Gaag & Snijders, 2005). Basing on previous research focused on political participation, the following resources have been selected for further evaluation: recommendation, knowledge, support and material help. The items from both parts of the Resource Generator used in this research are matched with four selected resources (four items for each resource, thirty-two items in total).

### Variables

Basing on some previous research (Feezell, Conroy, & Guerrero, 2016; Ayers, 1999; Klesner, 2007), the following activities are considered here as indicators or political participation: (a) voting, (b) signing petitions, (c) attending protests or demonstrations, (d) contacting politicians, (e) attending local meetings. This means that new political practices such as remixes or parodies (Humphreys, 2016) are not evaluated here due to their ambiguous impact on political structures. Political participation items were measured on a 5-point Likert scale from “Strongly agree” (5) to “Strongly disagree” (1). The respondents were asked how close they felt to each of the five items (“Could you describe how close the following statements describe you?”). Cronbach’s alpha test indicated that one item – voting – needs to be excluded from the analysis due to its inconsistency with other political participation items. Such result appear to be consistent with prior research focused in political participation in Poland (Cześniak, 2007). As a result, the political participation indicator was further narrowed to four items summed into consistent index ranging from 4 points (non-active) to 20 points (the most active).

Social capital scales built on items from the Resource Generator are primary independent variables in this study. In order to identify latent traits (social capital) triggering the item responses, the Mokken scaling technique was used (Mokken, 1971). This technique is applicable to dichotomous item scores and it is related to non-parametric item response theory (IRT) models. Consequently, two scales were constructed: (a) a scale of resources available in personal networks, (b) a scale of resources mobilizable from personal networks. Each of these two scales was further split into three sub-scales referring to: relatives, friends and acquaintances (Graph 1). All scales were constructed on the basis of Ark’s (2007) algorithm of automated selection.

Additionally, the models presented below use the following control variables: age, education, place of residence (village, small/average/big city), and material situation. The proposed hypotheses were tested with OLS regression models (nested models) fitted with R (The R Core Team, 2016).

**Graph 1.** Resources Distribution

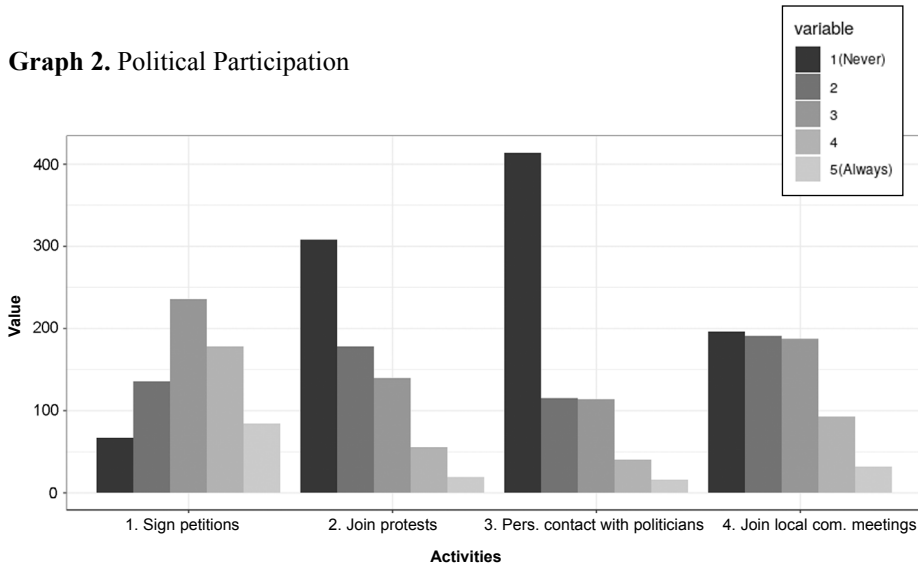
## Results

The average political participation score per respondent measured only for four items left after Cronbach's alpha test was at 9.26. The users mostly preferred to sign petitions (online or offline) and rather occasionally decided to contact politicians (Figure 2). The study included 364 females and 336 males, whose average age was 37. Almost 33% of them lived in the countryside, and 12% were residents of cities with the population of more than 500,000. At the same time, nearly 50% of users declared they had enough money to cover their current expenses, while 34% could afford extra expenditures. Male users tend to engage more in all activities except signing petitions. More details can be found in Graph 2.

Table 2 presents three nested OLS regression models fitted with political participation score as the dependent variable. Model 1 contains only control variables and shows that older respondents tend to be more politically active [ $p < 0.05$ ]. The aggregated contribution of resources is evaluated in Model 2. In Model 3 the variables representing embedded and mobilizable social resources were replaced with sub-scales built upon three social circles (family, friends, or acquaintances). Thus, three models nested in each other offer an insight into the relationship between control variables, social capital scales and political participation of social media users in Poland. The correlation matrix indicated that multicollinearity may occur between predictor variables (the highest value of

correlation between pair of variables reached 0.6). However, the VIF (variance inflation factor) test did not point on variables that should be removed from proposed regression models (the highest value reached 1.8).

**Graph 2.** Political Participation



As presented in Model 2, the effect of aggregated resources is twofold. Embedded resources, namely those that could be only identified in the respondent's personal network, are positively associated with political participation [ $p < 0.05$ ], while those perceived as mobilizable negatively related to the dependent variable [ $p < 0.05$ ]. The ambiguous effect of aggregated resources is further discussed in the next section of this article.

In order to test hypotheses 2 and 3, it is assumed that strong ties are those maintained with relatives and friends, while weak ones – with acquaintances (Granovetter, 1973, 1974). The embedded resources of both relatives and friends are positively associated with political participation [ $p < 0.05$ ]. However, this effect turns into negative when mobilizable resources of family members are evaluated. Therefore H2 is only partly confirmed. Surprisingly, the relationship between resources embedded in the acquaintance circle and the dependent variable is not significant. As a consequence, H3 focused on the effect of weak ties is rejected due to the insignificance of the tested relationship.

**Table 2.** Results of Regression Models, Dependent Variable: Political Participation (4 items)

	Model 1	Model 2	Model 3
(Intercept)	7.085*** (0.876)	7.064*** (0.937)	7.616*** (0.913)
age	0.037*** (0.010)	0.037*** (0.010)	0.038*** (0.010)
education	0.087 (0.160)	0.040 (0.159)	0.009 (0.152)
personal_resources	0.056 (0.096)	0.047 (0.095)	0.049 (0.091)
material_situation	0.091 (0.162)	0.076 (0.164)	0.086 (0.159)
res_embedded		0.111*** (0.028)	
res_mobilizable		-0.089*** (0.023)	
<b>family_embedded</b>			0.142*** (0.040)
<b>friends_embedded</b>			0.175*** (0.042)
acquaintances_embedded			-0.072 (0.038)
<b>family_mobilizable</b>			-0.159*** (0.030)
friends_mobilizable			-0.027 (0.035)
acquaintances_mobilizable			0.004 (0.035)
R-squared	0.039	0.062	0.145
F	5.575	6.564	10.606

\*\*\* less than or equal to 0.05

## Discussion

The study aimed to examine the relationship between resources embedded in personal networks and political participation of social media users in Poland. Indeed, the results suggest that these resources have a significant effect on the dependent variable. These results are in line with findings of Häuberer and Tatarko (2017) who studied relationship between cultural background, social networks and access to social capital among Czechs, Russians, Dagestans and Chechens. However, this study reveals that such an effect is not simple or straightforward. It varies depending on the ability to mobilize resources from personal networks and the type of relation through which the users access them.

As predicted in hypotheses, social capital defined as resources identified in personal networks of social media users are positively associated with their political participation. But there is a critical difference between the resources that are only embedded and those that can be mobilized for purposive action. The negative effect of mobilizable resources may suggest that the users get politically inactive when they realize that some valuable resources are easily accessible and they do not have to make any effort to get them. At the same time, non-mobilizable resources owned by others may encourage social media users to become active in order to create opportunities for future mobilizations. In other words, the existence of certain types of resources in personal networks along with an awareness that it is impossible to mobilize them through the existing connections seem to act as a reinforcing stimulus (Gray, 1990) that is positively related to political participation of social media users. Such mechanism appears to be partly convergent with the arguments of scholars proposing the “threat hypothesis”. As Miller and Krosnick (2004, p. 509) succinctly sum up “When people face threats of undesirable economic, social, or political changes in the future, they are especially likely to change their political behaviors in an effort to avert the threat”. Thus, non-mobilizable resources embedded in personal networks of peers may act as a specific stimulus associated with potential non-reward. If it is assumed that mobilizable resources sometimes defined as personal support are only an aspect of social capital (Van Der Gaag & Snijders, 2005) it could be concluded that H1 is only partly supported.

A similar twofold effect has been identified for strong ties, i.e. those with the relatives and friends of social media users. Again, resources only embedded in the family and friends networks are positively associate with political participation, while those that can be mobilized from the family circle are negatively related to the dependent variable. This effect is not significant for mobilizable resources available through friendship ties. Such contradictory effect may suggest that once social media users become convinced they are able to mobilize certain resources from the family their political participation decreases. Similar

dependence was established a long time ago by Banfield (1958) and defined as “amoral familism”. He proposed that people who exclusively trust their family are less engaged in civic and political life. In other words, those trusting that family resources can be mobilized may not be interested in political activities contributing to the welfare of the rest of society. Alesina and Giuliano (2011) found out that “amoral familism” is associated with the strength of ties – people with strong family ties are less politically active. They emphasize that “the more individuals rely on the family as a provider of services, insurance, transfer of resources, the lower is one’s civic engagement and political participation”. Therefore, the twofold effect of family resources appears to be consistent with the results of some earlier research focused on “amoral familism” and the effect of family ties on political participation. However, this explanation has a tentative, rather than an ultimate character. As a consequence, H2 is confirmed for friends and partly confirmed for family members.

Surprisingly, there is no significant relationship between resources embedded in the acquaintance ties and the dependent variable. This result contradicts previous research findings showing that weak ties may have a positive impact on the users’ decision to participate in different forms of political life (Shirky 2011; Tang and Lee 2013; Valenzuela, Correa, and Gil de Zúñiga 2017). The Arab Spring or Gezi Park protests in Turkey are good examples of political actions spurred by weak ties. It is therefore barely surprising that acquaintances or even strangers on social media may provide a stimulus for different participatory activities. However, it should be emphasized that generalized trust has remained low in Polish society since 1989 in comparison with other societies in Europe (Czapiński, 2015, 2008). The spectacular growth in prosperity over the last decades did not stimulate trust in other people in general, and did not produce the expected level of trust to institutions (Rychard, 2006; Sztompka, 2000). Distrust seems to be deeply embedded disease of communism (Rose, 1994) that is difficult to cure in Polish society. Scholars argue that country in which people are less trusting become more politically divided and economically unstable (Sangnier, 2013; Sztompka, 1996). Accordingly, no significant effect of resources from acquaintance ties appears to be more understandable when low level of trust and social capital is considered. As a consequence, H3 is not supported.

### **Limitations and Future Research**

This study is subject to a number of limitations. First, the sample used in this project was not random due to problems with the sampling frame mentioned above. As a consequence, the results cannot be projected to the entire population



of social media users in Poland (or elsewhere), but rather indicate interesting and prospective relations between variables used in this research. Future research conducted with random samples could bring more valuable and informative results providing an opportunity to generalize the identified dependencies.

Second, the selection of resources for the Resources Generator may be different depending on local culture or the set of activities selected as indicators of political participation. Although the Mokken scaling method helped to reduce the number of items to those strongly related to social capital (latent variables), future research projects should reconsider resources that could potentially affect political participation of social media users. The set of resources proposed here appeared to be useful but is not the ultimate one. The details on how to select resources for the Resource Generator tool are framed by the production function theory (Ormel 2002; Ormel et al. 1997).

Finally, the interpretation of results presented here might not be satisfactory for many readers. Therefore, it is reasonable to (i) extend future research by including new variables directly or indirectly related to social capital and political participation, (ii) combine quantitative and qualitative methods to find more exhaustive explanations of relations and dependencies identified in this study. It is also believed that research conducted in more than one country, on different samples would bring robust results that would help to adjust and improve the Resource Generator tool for political participation research.

## References

- Alesina, Alberto i Giuliano, Paola. 2011. *Family ties and political participation*. „Journal of the European Economic Association”, 9(5): 817-839.
- Appel, Lora, Punit Dadlani, Maria Dwyer, Keith Hampton, Vanessa Kitzie, Ziad A. Matni, Patricia Moore, Rannie Teodoro. 2014. *Testing the validity of social capital measures in the study of information and communication technologies*. „Information, Communication & Society”, 17(4): 398-416. DOI: <http://doi.org/10.1080/1369118X.2014.884612>.
- van der Ark, L. Andries. 2007. *Mokken Scale Analysis in R*. „Journal of Statistical Software”, 20(11): 1-19. DOI: <http://doi.org/10.18637/jss.v020.i11>.
- Ayres, Jeffrey M. 1999. *From the Streets to the Internet: The Cyber-Diffusion of Contention*. „The ANNALS of the American Academy of Political and Social Science” 566(1):132-143.
- Baborska-Narozny, Magdalena, Eve Stirling i Fionn Stevenson. 2016. *Exploring the Relationship Between a “Facebook Group” and Face-to-Face Interactions in “Weak-Tie” Residential Communities*. In „Proceedings of the 7th 2016 International Conference on Social Media & Society - SMSociety’16”. New York, USA: ACM Press: 1-8. DOI: <http://doi.org/10.1145/2930971.2930989>.

- Bakshy, Eytan, Solomon Messing i Lada Adamic. 2015. *Exposure to ideologically diverse news and opinion on Facebook*. „Science”, 348(6239)(): 1130–1132. DOI: <http://doi.org/10.1111/j.1460-2466.2008.00410.x>.
- Barnes, Samuel H., Max Kaase, Klaus R. Allerback, Barbara Farah, Felix Heunks, Ronald Inglehart, M. Kent Jennings, Hans D. Klingemann, Allan Marsh i Leopold Rosenmayr. (red.). 1979. *Political Action: Mass Participation in Five Western Democracies*. Beverly Hills, London: Sage. DOI: <http://doi.org/10.2307/2150095>
- Batorski, Dominik, Michal Bojanowski i Kamil Filipek. 2015. *Getting a Job: Resources and Individual's Chances on the Warsaw Labour Market*. „Polish Sociological Review” 192(4): 475–92.
- Bene, Marton. 2017. *Influenced by Peers: Facebook as an Information Source for Young People*. „Social Media + Society”, 3(2): 1–14. DOI: <http://doi.org/10.1177/2056305117716273>.
- Bennet, W. Lance. 2012. *The Personalization of Politics: Political Identity, Social Media, and Changing Patterns of Participation*. „The Annals Of The American Academy”, 644(November 2012): 20–39. DOI: <http://doi.org/10.1177/0002716212451428>.
- Bennett, W. Lance i Alexandra Segerberg. 2012. *The logic of connective action*. „Information, Communication & Society”, 15(5): 739–768. DOI: <http://doi.org/10.1080/1369118X.2012.670661>.
- Bond, Robert M., Christopher J. Fariss, Jason J. Jones, Adam D. I. Kramer, Cameron Marlow, Jaime E. Settle, James H. Fowler. . 2012. *A 61-million-person experiment in social influence and political mobilization*. „Nature”, 489(7415): 295–298. DOI: <http://doi.org/10.1038/nature11421>
- Boulianne, Shelley. 2015. *Social media use and participation: a meta-analysis of current research*. „Information, Communication & Society” (March): 37–41. DOI: <http://doi.org/10.1080/1369118X.2015.1008542>.
- Bourdieu, Pierre. 1986. *The Forms of Capital*. 46-58. W: J. G. Richardson (red.), *Handbook of Theory of Research for the Sociology of Education*. New York: Greenwood Press.
- Bronfenbrenner, Urie. 1979. *Contexts of child rearing: Problems and prospects*. „American Psychologist” 34(10): 844–850. DOI: <http://doi.org/10.1037/0003-066X.34.10.844>
- Burt, Ronald. S. 2000. *The Network Structure of Social Capital*. „Research in Organizational Behaviour” 22: 345–423.
- Burt, Ronald. S. 2001. *Structural Holes versus Network Closure as Social Capital*. 31-65. W: N. Lin, K. Cook, & R. Burt (red.), *Social Capital: Theory and Research*. New York: De Gruyter.
- Castells, Manuel. 2009. *Communication Power*. Oxford, New York: Oxford University Press.
- Castells, Manuel. 2012. *Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge, Malden: Polity Press.
- Ceron, Andrea. 2015. *Internet, News, and Political Trust: The Difference Between Social Media and Online Media Outlets*. „Journal of Computer-Mediated Communication”, 20(5): 487-503. DOI: <http://doi.org/10.1111/jcc4.12129>.

- Coleman, James Samuel. 1988. *Social Capital in the Creation of Human Capital James S. Coleman*. "American Journal of Sociology. Supplement: Organizations and Institutions" 94(1988): 94–120.
- Coleman, James Samuel. 1990. *Foundations of Social Theory*. Cambridge, London: The Belknap Press of Harvard University Press.
- Conge, Patrick J. 1988. *The Concept of Political Participation: Toward a Definition*. „Comparative Politics” 20(2): 241–249.
- Czapiński, Janusz. 2008. *Kapitał ludzki i kapitał społeczny a dobrobyt materialny. Polski paradoks*. „Zarządzanie Publiczne” 2(4): 5–28.
- Czapiński, Janusz. 2015. *Stan społeczeństwa obywatelskiego. Diagnoza Społeczna 2015, Warunki i Jakość Życia Polaków*. „Contemporary Economics” 9(4): 332–372. DOI: <https://doi.org/10.5709/ce.1897-9254.191.6>.
- Cześnik, Mikołaj. 2007. *Partycypacja wyborcza w Polsce. Perspektywa porównawcza*. Warszawa: Wydawnictwo Naukowe SCHOLAR.
- Cześnik, Mikołaj. 2009. *Voter Turnout Stability - Evidence From Poland*. „Polish Sociological Review” 165(1): 107–122.
- Cześnik, Mikołaj. 2014. *East European Politics & Societies In the Shadow of the Smolensk Catastrophe — The 2010 Presidential Election in Poland*. „East European Politics and Societies” 28(3): 518–539. DOI: <https://doi.org/10.1177/0888325414532492>.
- Cześnik, Mikołaj i Mirosława Grabowska. 2017. *Popękane polskie społeczeństwo jako pole badawcze – dane, fakty, mity*. „Przegląd Socjologiczny” 66(3): 9–43. DOI: <https://doi.org/10.26485/PS/2017/66.3/1>.
- Dahlberg, Lincoln. 2007. *Rethinking the fragmentation of the cyberpublic: from consensus to contestation*. „New Media & Society” 9(5): 827–847. DOI: <http://doi.org/10.1177/1461444807081228>.
- Dahlgren, Peter. 2013. *The Political Web: Media, Participation and Alternative Democracy*. Palgrave Macmillan. DOI: <http://doi.org/10.1057/9781137326386>
- De Graaf, Nan Dirk i Hendrik Derk Flap. 1988. *“With a Little Help from My Friends”: Social Resources as an Explanation of Occupational Status and Income in West Germany, The Netherlands, and the United States*. „Social Forces” 67(2): 452–472. DOI: <http://doi.org/10.1093/sf/67.2.452>.
- Earl, Jennifer i Katrina Kimport. 2009. *Movement societies and digital protest: Fan activism and other nonpolitical protest online*. „Sociological Theory” 27(3): 220–243. DOI: <http://doi.org/10.1111/j.1467-9558.2009.01346.x>
- Ellison, Nicole B., Rebecca Gray, CKiff Lampe, Andrew T Fiore. 2014. *Social capital and resource requests on Facebook*. „New Media & Society” 16(7): 1104–1121. DOI: <http://doi.org/10.1177/1461444814543998>.
- Feezell, Jessica T., Meredith Conroy, Mario Guerrero. 2016. *Internet use and political participation: Engaging citizenship norms through online activities*. „Journal of Information Technology and Politics” 13(2): 95–107. DOI: <http://doi.org/10.1080/19331681.2016.1166994>.
- Fuchs, Christian. 2014. *Social Media and the Public Sphere*. „TripleC” 12(1): 57–101.
- Gil de Zúñiga, Homero, Nakwon Jung, Sebastian Valenzuela. 2012. *Social Media Use for News and Individuals’ Social Capital, Civic Engagement and Political Parti-*

- „Journal of Computer-Mediated Communication” 17(3): 319–336. DOI: <http://doi.org/10.1111/j.1083-6101.2012.01574.x>.
- Granovetter, Mark. 1973. *The Strength of Weak Ties*. „The American Journal of Sociology” 78(6): 1360–1380. DOI: <http://doi.org/10.1086/225469>.
- Granovetter, Mark. 1974. *Getting a Job: A Study of Contacts and Careers*. Chicago and London: The University of Chicago Press.
- Gray, Jeffrey A. 1990. *Brain Systems that Mediate both Emotion and Cognition*. „Cognition and Emotion” 4(3): 269–288. DOI: <http://doi.org/10.1080/02699939008410799>.
- Häuberer, Julia i Alexander Tatarko. 2017. *Network composition, individual social capital and culture: Comparing traditional and post-modernized cultures*. „Sociological Research Online” 22(2): 1–20. DOI: <https://doi.org/10.5153/sro.4239>.
- Humphreys, Ashlee. 2016. *Social Media. Enduring Principle*. Oxford & New York: Oxford University Press.
- Jennings, Kent M. i Kenneth P. Langton. 1969. *Mothers Versus Fathers: The Formation of Political Orientations Among Young Americans*. „The Journal of Politics” 31(2): 329–358.
- Kaplan, Andreas M. i Michael Haenlein. 2010. *Users of the world, unite! The challenges and opportunities of Social Media*. „Business Horizons” 53: 59–68. DOI: <https://doi.org/10.1016/j.bushor.2009.09.003>.
- Klesner, Joseph L. 2007. *Social Capital and Political Participation in Latin America: Evidence from Argentina, Chile, Mexico, and Peru*. „American Research Review” 42(2): 1–32.
- Kotnarowski, Michał i Radosław Markowski, R. 2014. *Political preferences in times of crisis: Economic voting in the 2011 Polish elections*. „Acta Politica” 49(4): 431–461. DOI: <https://doi.org/10.1057/ap.2014.20>.
- La Due Lake, Ronald i Robert Huckfeldt. 1998. *Social Capital, Social Networks, and Political Participation*. „Political Psychology” 19(3): 567–584.
- Lee, Eunjung. 2006. *A Social Resource Model of Political Participation: Mass Media Use, Social Capital, and Political Participation*. Cornell University.
- Lin, Nan. 1999. *Building a Network Theory of Social Capital*. „Connections” 22(1): 28–51. DOI: <http://doi.org/10.1108/14691930410550381>.
- Lin, Nan. 2001. *Social Capital. A Theory of Social Structure and Action*. Cambridge, Malden: Cambridge University Press. DOI: <http://doi.org/10.1007/s13398-014-0173-7.2>.
- Lin, Nan i Mary Dumin. 1986. *Access to Occupations through Social Ties*. „Social Networks” 8, 365–385.
- Loader, Brian D., Ariadne Vromen, Michael A. Xenos. (red.). 2014. *The Networked Young Citizen: Social Media, Political Participation and Civic Engagement*. New York and London: Taylor & Francis. DOI: <http://doi.org/10.1080/1369118X.2013.871571>.
- Loury, Glenn C. 1977. A dynamic theory of racial income differences. 153–186. W: Phyllis A. Wallace i Annette M. LaMond (red.), *Women, Minorities, and Employment Discrimination*. Lexington MA: Lexington Books.

- Markowski, Radosław. 2006. *The polish elections of 2005: Pure chaos or a restructuring of the party system?* „West European Politics” 29(4): 814–832. DOI: <https://doi.org/10.1080/01402380600842452>
- Markowski, Radosław i Joshua A. Tucker. 2010. *Euroscepticism and the Emergence of Political Parties in Poland*. „Party Politics” 16(4): 523–548. DOI: <https://doi.org/10.1177/1354068809345854>.
- McPherson, Miller, Lynn Smith-Lovin, Matthew E. Brashears. 2006. *Social Isolation in America: Changes in Core Discussion Networks over Two Decades*. „American Sociological Review” 71: 353–375. DOI: <http://doi.org/10.1177/000312240807300610>.
- Meikle, Graham. 2016. *Social Media. Communication, Sharing and Visibility*. London and New York: Routledge.
- Miller, Joanne M. i Jon A. Krosnick. 2004. *Threat as a Motivator of Political Activism: A Field Experiment*. „Political Psychology” 25(4): 507–523.
- Mokken, Robert Jan. 1971. *A Theory and Procedure of Scale Analysis: With Application in Political Research*. Mouton, The Hague, Paris: Mouton & Co.
- Morozov, Evgeny. 2009. *The Brave New World of Slacktivism*. „Foreign Policy” (19.05).
- Nelson, Joan M. 1979. *Access to Power: Politics and the Urban Poor in Developing Nations*. Princeton University Press.
- Ormel, Johan. 2002. *Social production function (SPF) theory as an heuristic for understanding developmental trajectories and outcomes*. 353–379. W: Lea Pulkkinen i Avshalom Caspi (red.), *Paths to Successful Development. Personality in the Life Course*. Cambridge University Press. DOI: <http://doi.org/10.1017/CBO9781107415324.004>.
- Ormel, Johan, Siegwart Lindenberg, Nardi Steverink, Michael Vonkorff. 1997. *Quality of life and social production functions: a framework for understanding health effects*. „Social Science & Medicine” 45(7): 1051–63. DOI: [http://doi.org/10.1016/S0277-9536\(97\)00032-4](http://doi.org/10.1016/S0277-9536(97)00032-4).
- Paczynska, Agnieszka. 2005. *Inequality, political participation, and democratic deepening in Poland*. „East European Politics and Societies” 19(4): 573–613. DOI: <https://doi.org/10.1177/0888325405274929>.
- Pandey, Vidushi, Sumeet Gupta, Hee-Woong Kim. 2016. *Role of Social Media Usage and Social Capital in Citizen's Online Political Participation*. 1-19. W: *International Conference on Information Systems*. Dublin.
- Putnam, Robert D. 1995. *Bowling alone: America's declining social capital*. „Journal of Democracy” 6(1): 65–78. DOI: [http://doi.org/10.1016/S0362-3319\(02\)00190-8](http://doi.org/10.1016/S0362-3319(02)00190-8).
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, London, Toronto, Sydney, Singapore: SIMON & SCHUSTER. DOI: <http://doi.org/10.1007/s13398-014-0173-7.2>.
- Quintelier, Elle, Marc Hooghe, Gabriel Badescu. 2007. *Parental Influence on Adolescents' Political Participation: a Comparison of Belgian, Canadian and Romanian Survey Data*. W: *International Conference on Political Socialisation, Date: 2007/10/08-2007/10/10*: Örebro, Sweden.. [http://www.partirep.eu/sites/default/files/working\\_paper/document/1194812902.pdf](http://www.partirep.eu/sites/default/files/working_paper/document/1194812902.pdf). Dostęp: 22.03.2018.

- Robertson, Fiona Mary. 2009. *A study of youth political participation in Poland and Romania*. University College London.
- Rose, Richard. 1994. *Postcommunism and the Problem of Trust*. „Journal of Democracy” 5(3): 18–30. DOI: <https://doi.org/10.1353/jod.1994.0042>.
- Rychard, Andrzej. 2006. *Kapitał społeczny a instytucje. Wstępne rozważania*. 201–219. W: Henryk Domański, Antonina Ostrowska, Paweł B. Sztabiński (red.), *W środku Europy? Wyniki Europejskiego Sondażu Społecznego*. Warszawa: Wyd. IFiS PAN.
- Sangnier, Marc. 2013. *Does trust favor macroeconomic stability?* „Journal of Comparative Economics” 41(3): 653–668. DOI: <https://doi.org/10.1016/j.jce.2012.10.002>
- Schuschke, Joshua i Brendesha M. Tynes. 2016. *Online Community Empowerment, Emotional Connection, and Armed Love in Black Lives Matter Movement*. W: Sharon Y. Tettegah (red.), *Emotions, Technology, and Social Media*. Amsterdam, Boston, Heidelberg: Elsevier Inc.
- Shirky, Clay. 2011. *The political power of social media: Technology, the public sphere, and political change*. „Foreign Affairs” 90(1): 28–41. DOI: <http://doi.org/10.1080/1369118X.2012.670661>.
- Skoric, Marco M., Ji Pan, Nathaniel D. Poor. 2012. *Social Media and Citizen Engagement in a City-State: A Study of Singapore*. W: *Sixth International AAAI Conference on Weblogs and Social Media*. <https://www.aaai.org/ocs/index.php/ICWSM/ICWSM12/paper/view/4758/5108>. Dostęp: 25.03.2018.
- Stewart, Joseph J. i James F. Jr. Sheffield. 1987. *Does Interest Group Litigation Matter? The Case of Black Political Mobilization in Mississippi*. „The Journal of Politics” 49(3): 780–798.
- Sunstein, Cass R. 2007). *Republic.com 2.0*. Princeton and Oxford: Princeton University Press.
- Sztompka, Piotr. 1996. *Trust and Emerging Democracy: Lessons from Poland*. „International Sociology” 11(1): 37–62.
- Sztompka, Piotr. 2000. *Trust: A Sociological Theory*. Cambridge, New York, Port Melbourne: Cambridge University Press.
- Tang, Gary i Francis L. F. Lee. 2013. Facebook Use and Political Participation: The Impact of Exposure to Shared Political Information, Connections With Public Political Actors, and Network Structural Heterogeneity. *Social Science Computer Review*, 31(6): 763–773. DOI: <http://doi.org/10.1177/0894439313490625>.
- Teorell, Jan. 2003. *Linking Social Capital to Political Participation: Voluntary Associations and Networks of Recruitment in Sweden*. „Scandinavian Political Studies” 26(1): 49–66.
- The R Core Team. 2016. *R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing*. <https://cran.r-project.org/doc/manuals/r-release/fullrefman.pdf>. Dostęp: 21.11.2018.
- Tindall, David B. i Jeffrey J. Cormier. 2008. *Gender, Network Capital, Social Capital, and Political Capital: The Consequences of Personal Network Diversity for Environmentalists in British Columbia*. 282–307. W: Nan Lin i Bonnie H. Erickson (red.), *Social capital: an international research program*. Oxford & New York: Oxford University Press. DOI: <http://doi.org/10.1177/0094306110386886cc>.

- Tybuchowska-Hartlińska, Karolina. 2015. *Partycypacja polityczna w polsce*. „Political Preferences” (10): 51–70.
- Valenzuela, Sebastián, Teresa Correa, Homero Gil de Zúñiga. 2017. *Ties, Likes, and Tweets: Using Strong and Weak Ties to Explain Differences in Protest Participation Across Facebook and Twitter Use*. „Political Communication” 35(1): 117–134.
- Valenzuela, Sebastián, Namsu Park, Kerk F. Kee. 2009. *Is There Social Capital in a Social Network Site?: Facebook Use and College Students’ Life Satisfaction, Trust, and Participation*. „Journal of Computer-Mediated Communication” 14(1): 875–901. DOI: <http://doi.org/10.1111/j.1083-6101.2009.01474.x>.
- Van Der Gaag, Martin. 2005. *Measurement of individual social capital*. Amsterdam: F&N Boekservices.
- Van Der Gaag i Martini Tom A. B. Snijders. 2005. *The Resource Generator: social capital quantification with concrete items*. „Social Networks” 27(1): 1–29. DOI: <http://doi.org/10.1016/j.socnet.2004.10.001>.
- Van der Gaag, Martin, Tom A. B. Snijders, Henk Flap. 2008. *Position Generator Measures and Their Relationship to Other Social Capital Measures: 27-49*. W: *Nan Lin i Bonnie H. Erickson (red.), Social capital: an international research program*. Oxford & New York: Oxford University Press. DOI: <http://doi.org/10.1177/0094306110386886cc>
- Verba, Sidney i Norman H. Nie. 1972. *Participation in America: Political Democracy & Social Equality*. *Public Opinion Quarterly*. University of Chicago Press. DOI: <http://doi.org/10.2307/2063216>.
- Yang, Hongwei i Jean L. DeHart. 2016. *Social Media Use and Online Political Participation Among College Students During the US Election 2012*. „Social Media + Society” 2(1): 1–18. DOI: <http://doi.org/10.1177/2056305115623802>.