

NEW MEDIA AND CULTURE

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Selective Exposure on Polish Political and News Media Facebook Pages

Abstract: Increasing numbers of citizens rely on social media to gather both political and non-political information. This fact raises questions about belief formation and belief updating in the social media setting. Using Facebook data on users' behaviour in Poland in 2017, I test the hypothesis that individuals tend to like content that confirms their beliefs. I measure the political preferences of nearly 1.4 million users who were active on the main political and news media pages and classify them as being supporters of certain political organisations or as being politically unaffiliated. Based on the principles of analytical sociology, I construct a theoretical model that may explain the results. According to the model, users tend to like posts from only one source of information. There are also statistically significant differences in the news media preferences of supporters of different political organisations. They are prone to like posts published by sources that accord with their views. The model also correctly predicts that politically unaffiliated users choose media outlets that are considered unbiased or less biased. The results support the hypothesis that users of social media prefer exclusive or near-exclusive sources of information.

Keywords: selective exposure, social media, echo chamber, beliefs, news media

Introduction

In Poland, Facebook is the most popular social media platform, with 14 million users ('[Europe Internet Usage Stats: Facebook Subscribers and Population Statistics](#), 2017). According to survey data, it is a primary source of information for 5% of adult Poles (7% of Internet users, [Feliksiak 2017](#)). This proportion does not appear particularly impressive, especially when compared to the 45% of adult US citizens for whom Facebook is a source of information, and the two-thirds of Americans who reported that they obtained their news from social media ([Shearer & Gottfried 2017](#)). However, it is important to note the difference in the wording of the survey questions. In the Pew Research Center survey ([Shearer & Gottfried 2017](#)), the question included unintentional and even rare contact with the news. The question posed by the Public Opinion Research Center ([Feliksiak 2017](#)) was inclined towards intentional and frequent use of Facebook. It is possible that the share of Polish citizens who unintentionally obtain news from Facebook is actually higher.

In light of these statistics, it is important to raise the question of patterns of use of social media and, furthermore, of the formation of beliefs based on the information acquired there. The internet and more recently social media in particular have made obtaining news an almost effortless and cost-free activity, making access to information especially easy. However, the manner in which the information is acquired is personalised. Internet users themselves decide what topics they follow, how much information they want to obtain, and what sources to select ([Gainous & Wagner 2013: 3–11](#); [Pariser 2012](#); [Sunstein 2017: 1–30](#)).

Furthermore, every choice and every entry in Google, Facebook, Twitter, YouTube, Instagram, and the like are analysed by algorithms. Their aim is to improve the way of acquiring information on the internet and select content that matters most to the users (*'Using Qualitative Feedback to Show Relevant Stories'* 2016). However, this may backfire. The information is selected by algorithms and individuals may indeed obtain what they in fact need; however, they do not obtain other information that may also be important, such as the points of view of others, or topics they would not choose to follow themselves. This may lead to the creation of filter bubbles (Bakshy, Messing, & Adamic 2015). Such a situation reduces the amount of information shared and the common experiences that are required for the mutual comprehension of not only political opponents but also of average citizens (Sunstein 2017: 1–30). If we add homophily to such personalisation and filter bubbles (Lazarsfeld & Merton 1954) we can observe echo chambers—situations in which individuals are surrounded by like-minded others and media that provide evidence that confirm one's beliefs rather than challenging them. Together, all these phenomena may lead to a strengthening of beliefs, the adoption of more extreme ones, and polarisation. Consequently, it may endanger social cohesion and lead to social conflict (DiMaggio, Evans, & Bryson 1996; Hunter 1992; Maes & Bischofberger 2015).

Before I present research questions, it is important to define the core notion of this article—selective exposure. I understand it not only as that 'people select their exposure along the line of their political predispositions' (Lazarsfeld, Berelson, & Gaudet 1948: 164), but also as a general pattern of selecting and ignoring content. I consider it, as Levy (1987) has suggested, as 'a process of non-random selection of media-related alternatives' (p. 268). However, there is also another important issue at stake. As mentioned before, the information that is acquired on Facebook or another source of information is not always intentionally chosen. Based on their previous behaviour, Facebook's algorithms suggest personalised content to users. Therefore selection may be active (users select information), a matter of intended or unintended individual choices, or passive (users are exposed to information), a matter of being introduced to content selected by algorithms (Guess 2016).

The aim of this article is to investigate how internet users acquire news on Facebook. The questions that arise are:

- 1) From how many (Facebook page) sources do Facebook users like posts?
- 2) What kind of sources do users select? Do they prefer one-sided sources (news media that explicitly or implicitly favour one side of the political spectrum), unbiased sources (general-interest intermediaries, i.e. mass media that provides '(...) shared experiences and exposure to diverse topics and ideas for millions (...); Sunstein 2017: 19), or several diverse but one-sided sources (i.e. both right and left-leaning media)?
- 3) Are there differences between politically engaged and unengaged users in terms of their news source preferences and the number of sources they choose?

Theoretical Perspective

Many studies indicate that people tend to select information that confirms their beliefs (e.g. Garrett 2009; Hart et al. 2009; Iyengar & Hahn 2009; Klayman & Ha 1987; Knobloch-

Westerwick & Kleinman 2012; Lodge & Taber 2013; Messing & Westwood 2014; Sears & Freedman 1967; Stroud 2011). There are also many explanations from different perspectives for the phenomena of selective exposure (for a recent discussion see Knobloch-West-erwick 2015). To answer research questions, I employ a sociological model that refers to the framework of analytical sociology. One of the core notions of this perspective is that of the *mechanism*. Following Gambetta, I define this as:

[...] hypothetical causal models that make sense of individual behaviour. They have the form, “Given certain conditions K, an agent will do x because of M with probability p.” M refers either to forms of reasoning governing decision making (of which rational choice models are a subset) or to subintentional processes that affect action both directly (as impulsiveness) or by shaping preferences or belief. (2005: 102)

Analytical sociology is not particularly strict in defining what motivates people to perform a certain action. From this perspective, the causes of actions may be both rational and emotional. In my model, I principally make use of the work of two scientists—Raymond Boudon (for the rational component) and Jon Elster (for the emotional component).

According to Raymond Boudon’s cognitivist model, social actions can be explained by transsubjective reasons: “behaviour is rational when it can be explained by a sentence beginning ‘X had good reasons for doing Y, because...’, without risking objections, and without oneself having the feeling of having said something incongruous” (1997: 255). Transsubjective reasons are those that would be considered valid by most people were they in the same situation as the individuals whose actions we want to explain (Boudon 2001: 153; Hamlin 2002: 59). Boudon distinguishes three types of reasons: consequential (instrumental rationality), axiological (axiological rationality or Weberian *wertrationalität*) and cognitive ones (cognitive rationality; Boudon 1989, 1998, 2001: 66–68; Manzo 2014).

I assume that there are two main types of reasons behind the selection of certain news sources. The first is rational—individuals want to be informed and they select sources that correspond with their interests. They may merely want to be knowledgeable or up-to-date, or may want to be able to topics to discuss with family, co-workers, friends, and others. The second type of reason is cognitive. Individuals select sources that are considered credible and that they have strong—non-instrumental—reasons for believing in it. According to Sztompka (2007: 166–188), credibility concerns a belief that depends on the meeting of individuals’ expectations. In the case of news media, there are several non-instrumental reasons for considering a source credible. The footage may resonate with individuals’ worldviews, and it may be recommended or used by people the user agrees with, respects, or whose judgement the reader trusts (*epistemic authorities*). In addition, the source may socially have proved to be credible by a large audience or by the large number of likes its Facebook posts receive (Kruglanski 1989; Li & Suh 2015; McKnight & Kacmar 2007; Messing & Westwood 2014; Rydgren 2009; Visser, Holbrook, & Krosnick 2008; Wells, Reedy, Gastil, & Lee 2009).

The instrumental component of the model needs to be completed. In light of empirical data, it would be far too risky to claim that people tend to be highly informed. According to Simon (1956), it would be more acceptable to say that they aim to be satisfactorily informed and use as little effort as possible.

If the above logic of action is true (individuals select sources that correspond with their interests and are credible; they want to be informed well enough and minimise the

resources they expend), it is likely that *Facebook users do not react to posts published on many Facebook pages—the number is close to one* (hypothesis H1).

In Poland there is a variety of media and political pages one can follow and react to their posts. However, a user has a great selection of sources of information but insufficient resources (e.g. time) or motivation to use all of them. Thus, there is a need for selection. I consider two cases. Firstly, some users support a certain political option, therefore they may want information to match their interests and to be acquired from the sources that resonate with their beliefs. According to instrumental reasons, the most rational action for users would be to find the smallest number of sources that politically leans in the same directions as themselves and fulfil their needs of being informed. Secondly, the possible actions for users who are not politically active on Facebook (I define them as users who do not like posts published on Facebook pages run by political organisations and their leaders) are different, and their motivations are harder to identify based on data I use in this study. There are various impossible to assign reasons why someone does not like political posts, such as not being interested in what political parties and leaders communicate, or desire to hide one's political views from Facebook friends. On the one hand, some of them may have in fact specified political preferences but be not active on political Facebook pages. On the other hand, some of them may want to objectify information they acquire and therefore either like posts published by sources that are perceived by them as the least biased or like posts published by at least two opposing but biased sources. Due to instrumental reasons those users rather like posts published by one unbiased source of information than two opposing but biased sources, since such an action requires fewer resources. Consequently (H1-1), it is expected that *there are no differences in the number of sources where politically active and politically inactive users like posts*.

Although finding reasons for social actions is a useful strategy for explaining social actions, human beings are also motivated by emotions. Though his thought is focused on the theory of rationality, Boudon admits that affective causes are important (1997: 4–5, 2011; Cherkaoui 2014; Manzo 2014). I fill this gap between rationality and emotions with the model of emotional choice described by Elster (2009). In this model, cognition (beliefs) may generate emotions that have consequences for behaviour. A detailed description of the model is beyond the scope of this article. With the aim of this article in mind, I incorporate into the model one of the mechanisms most frequently described by Elster (2015)—cognitive dissonance reduction.

Cognitive dissonance may be defined as an 'emotional state evoked by the existence of cognitions that are in a dissonant relationship' (Harmon-Jones 2012: 187). This unpleasant emotion motivates people to reduce the discrepancies between cognitions (Festinger 1962). In the case of the behaviour of Facebook users, this forms the background for two more hypotheses.

H2-1. Users who are not politically engaged (i.e. users who do not like posts published on political pages) tend to choose media that are not explicitly associated with any political party.

According to the model I described above there are users who want to be satisfactorily informed and avoid being politically biased (we may refer in their case to non-directional

motivational effects on cognition; Kruglanski 1999). Liking posts published by right- or left-leaning media may evoke dissonance between one's belief that one is being unbiased and supporting biased sources. It is probable that in order to reduce or avoid dissonance, they choose content that is published by general interest intermediaries whose role it is to present a wide range of topics and views (Sunstein 2017: 84). For the reasons described for hypothesis H1, there is a higher probability that they would choose one objective source, than two biased, opposing sources of information.

H2-2. Users who are politically engaged (who like posts published on political pages) choose news media that are in line with the views presented by the political parties they support.

This hypothesis is consistent with the theoretical model on two points: users choose a source that is—according to them—the most informative and that does not evoke cognitive dissonance. It is therefore probable that the users select sources that publish content that is coherent with their beliefs.

To test the hypotheses, I analyse the liking patterns of Facebook users. I consider a 'like' under a published post as an expression of a positive attitude towards the source or content that is viewed (Quattrociocchi, Scala, & Sunstein 2016). Therefore, based on the like pattern, it is possible to ascertain which news sources are preferred by Facebook users.

Selective exposure on Facebook has been studied from several perspectives. An, Quercia and Crowcroft (2013) have shown that Facebook users tend to share articles that accord with their views and do not share articles they do not agree with. Jacobson, Myung, and Johnson (2016) found that participants in Facebook discussions share a small number of common information resources, which supports the hypothesis that political discussion on this platform is segregated by political orientation. On the other hand, Matuszewski (2018b, 2018a), who investigated comments written on Polish political parties' and political leaders' Facebook pages, found evidence that hyperlinks to news media used by participants in a discussion are politically diversified. However, in this study differences were calculated between comments written on Facebook pages without recognition of political preferences of their authors. Thus, it is possible that individuals shared biased links but—because of political heterogeneity of commenters on a given page—they were exposed to diverse topics and opinions. The extensive study of Schmidt et al. (2017) provides evidence of selective exposure. They collected for six years' worth of data on Facebook users' interactions with pages and concluded that users tend to limit their exposure to a small number of news sources (the more active the user is, the fewer the sources) and are segregated into distinctive communities. Quattrociocchi, Scala, and Sunstein (2016) arrived at the similar conclusions investigating users' likes and comments on science and conspiracy theory pages. Additionally, Bakshy, Adamic, and Messing (2015) showed that Facebook users choices more that Facebook algorithm reduce exposure to attitude-challenging information.

The results of such studies do not always confirm the action of the mechanism of selective exposure on Facebook. Messing and Westwood (2014) indicated that information about social endorsement is more important in the selection of content than is the source of political affiliation. Beam, Hutchens, and Hmielowski (2018) analysed three-wave panel

data collected during the 2016 US presidential election and found that Facebook users are more likely to follow news that both confirms and challenges their beliefs; they did not find evidence that use of Facebook news results in polarisation.

Only a small number of these studies analysed the interactions of users with posts published on pages. The advantage of this method is that it does not rely on people's self-reporting and does not result from an experimental setting, but rather relies on users' behaviour (unaffected by the awareness of being observed). I have not found studies that analyse Facebook data and the tendency to follow confirmatory political information in a multi-party political system, in which there are more complex possibilities to form politically homogeneous structures.

Data and Methodology

The data was collected automatically by means of the Facebook GRAPH API from the 1st January 2017 to the 31st December 2017. The database comprises Facebook users' public behaviour—likes and comments—on two types of pages. The first is the pages of the main Polish political parties and their leaders (18 pages).¹ The criterion for selection was support of more than 1% in public opinion polls during the research period. The second type is the pages of the most frequently cited news media in Poland, according to the Institute of Media Monitoring. The list comprises 48 Facebook pages.²

The original dataset consisted of users who liked posts published on above-mentioned pages, but it was reduced to eliminate some types of users. The first type is users who are relatively seldom active (in the sense of liking posts) on selected pages. The causes of their low level of activity may be various. They may be disinterested in the latest events or political news. They may also have liked one or a few posts impulsively or because the post was displayed to them as a paid advertisement. The other type is users who are very active though only for a very short period. It may be the case that they are paid to support posts published on a certain page; alternatively, they may be bots created for a brief campaign on social media. In all the above examples, there is a common denominator—the problematic users (both very active and rather inactive) liked posts for only a short period in 2017. Therefore, of the total number of users in the database (1,851,357), I singled out

¹ 1) Civic Platform, and Grzegorz Schetyna, 2) Democratic Left Alliance, and Włodzimierz Czarzasty, 3) Freedom, and Janusz Korwin-Mikke, 4) Kukiz '15 Movement and Paweł Kukiz, 5) Law and Justice, Beata Szydło (till 11.12.2017, when she was replaced by Mateusz Morawiecki), and Mateusz Morawiecki (since 11.12.2017), 6) Modern Party, Ryszard Petru (till 25.11.2017, when he was replaced by Katarzyna Lubnauer), and Katarzyna Lubnauer (since 25.11.2017), 7) Polish Peoples' Party and Władysław Kosiniak-Kamysz, 8) Together Party (no official leader).

² ASZdziennik.pl, Bankier.pl, DoRzeczy, Dziennik Wschodni, dziennik.pl, FAKT24.pl, Forbes.pl, Forsal.pl, Gazeta Bankowa, Gazeta Giełdy i Inwestorów Parkiet, Gazeta Polska, Gazeta Wyborcza, Gazeta.pl, gazetaprawna.pl, Gość Niedzielny, INN Poland, Interia Fakty, Krytyka Polityczna, Money.pl, Nasz Dziennik, Natemat.pl, Newsweek Polska, Niezależna.pl, Onet Wiadomości, Polityka, Polsat News Dwa, pilsatnews.pl, Prawo co dnia Rzeczpospolita, Puls Biznesu, Radio Maryja, Radio TOK FM, RMF24.pl, Rzeczpospolita Ekonomia&Rynek, Salon24.pl, se.pl, Telewizja Republika, TVN24, tvp.info, Tygodnik Lisickiego, Tygodnik NIE, Tygodnik Powszechny, Tygodnik Sieci, Tygodnik Solidarność, wGospodarce.pl, WIDEO natemat.pl, WP Wiadomości, wPolityce.pl, WPROST.

only those who were active for longer than one month (1,398,148; they pressed the ‘Like’ button 30,491,492 times).

It is important to note that the database does not comprise a sample of users in terms of the statistical theory of sampling. I conducted the analysis only on users who were active on Facebook pages. This means that they were not randomly selected by the researcher; rather they selected themselves for the research. This self-selection mechanism implies some restrictions on the analysis. The results cannot be generalised to the whole population of citizens, Internet users, or even Facebook users. However, the findings are legitimate for the nearly 1.5 million active users who were investigated.

To test hypotheses, I used logistic regression analysis. The dependent variable is information concerning whether users liked at least one post published by a given media outlet (0—the user has never liked a post published on the media’s page; 1—the user has liked at least one post). I observed 48 media Facebook pages, and therefore the analysis consists of 48 different models.

The list of independent variables consists of 1) information on whether the user liked at least one post on a political Facebook page (‘Politically Active—Likes’; 1—‘Yes’, 0—‘No’), 2) information on whether users left at least one comment on a political Facebook page (‘Politically Active—Comments’; 1—‘Yes’, 0—‘No’), 3) the number of posts liked on the political actors’ pages, and 4) political preferences. The first three variables are different measures of political engagement. The first one is a dichotomous variable that classifies users as politically active on Facebook pages or not, based on their liking history. The second variable also shows political activity on Facebook but in terms of commenting posts published by political organisations and their leaders. Since writing a comment requires more time and effort than liking posts, I assume that users who do it are more engaged in politics than those who just like posts. The third variable is continuous and shows how many times a user liked posts published on political pages. I assume that there may be a correlation between this activity and emotional engagement. The last variable was calculated separately for each political actor (there were eight such variables in the models). This involves the number of posts liked on the given political party’s page or on its leader’s page (posts published by a party or its leader were considered as one source) divided by the total number of liked posts published on all political pages. For example, let us assume that a user liked 100 posts published on Beata Szydło’s (40 posts), [Prawo i Sprawiedliwość] Law and Justice’s (35 posts), and Paweł Kukiz’s (25 posts) pages. This means that his or her preference for Law and Justice equals $40 \text{ (Szydło)} + 35 \text{ (Law and Justice)} / 100 \text{ (total)} = 0.75$; and a preference for Kukiz’s page equals $25 \text{ (Kukiz)} / 100 \text{ (total)} = 0.25$. The preference variable in the model was changed to a dichotomous one. There are no ready-to-use standards for acknowledging that there is a distinguishable preference for one source. For example, it is difficult to say whether the person who liked 40 posts of X’s out of her total of 80 (preference equals 0.5) has a higher preference for X than another user who liked 51 posts of his total of 100 (preference equals 0.51). I made an assumption that results between 0.45 and 0.55 are considered to be close to 0.5 (Kruschke [2014: 336–339] refers to this as ROPE—*range of practical equivalence*). Thus, users have a distinctive preference for just one political source of information if their score is above 0.55.

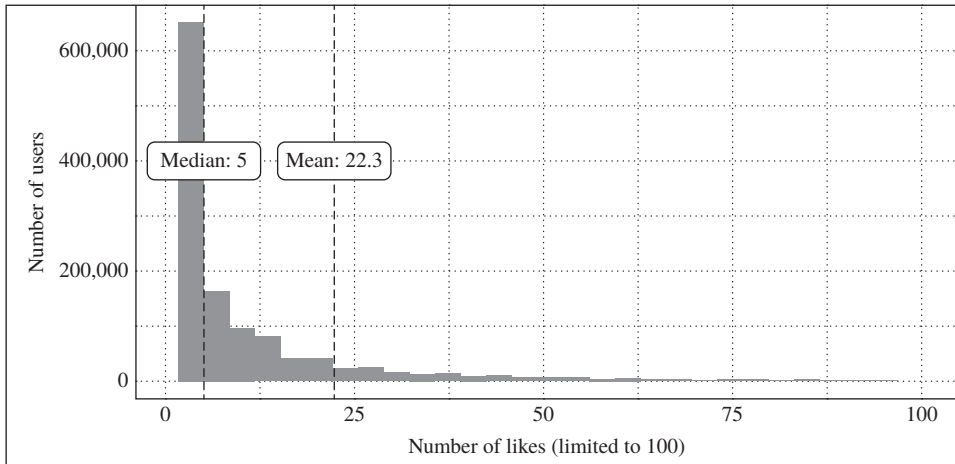
Results

Basic Statistics

In 2017, there were 1,398,148 users in the analysed dataset, who were active on all selected Facebook pages. In total, they clicked on the ‘Like’ button 30,491,492 times, which means that the average number of likes per user is 22.3. However, the distribution of these data is right-skewed (the median is 5), and the standard deviation is 106.9 (see Fig. 1). The person with the highest score liked 35,771 published posts (i.e., on average, 98 likes per day), but half of the users (51%) liked fewer than six posts and 99% of them liked fewer than 291 posts. According to these data, the situation in which liking posts is a part of a daily routine is extremely rare. Most of the users do it sporadically.

Fig. 1

Distribution of likes



Number of Sources of Information

Calculating the number of sources of content that was liked by users requires certain assumptions. Taking the time span in its entirety into consideration may lead to erroneous results. For example, an individual might like content published on page A every week and only once that year like a post published on page B. It would be an overinterpretation to claim that the individual used two sources of information. To avoid such situations, I first calculated the number of sources of information for everyone in each month separately and then calculated the average number of monthly sources used by each individual.

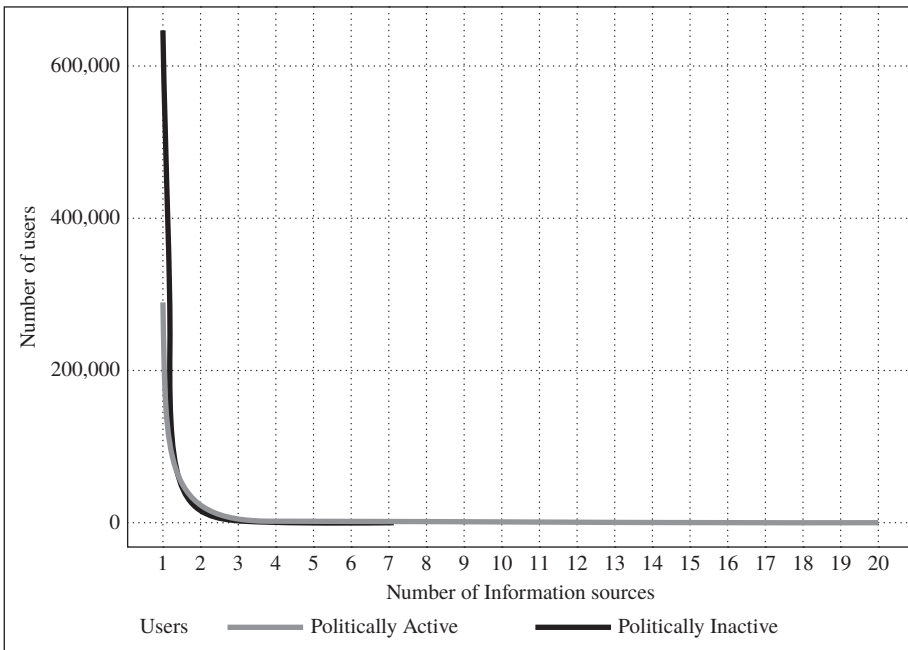
The mean number of information sources is 1.28 (SD = 0.68) and the median is 1. This means that monthly the users on average liked posts from one news media or political party. Of the users, 32.4% (442,926) liked posts published by more than one source, 7% (95,012) liked posts published by more than two sources, and 2.6% (35,134) liked posts published by more than three sources. The maximum number of Facebook pages on which users were

active is approximately 20 (six users). These results accord with hypothesis H1 (*Facebook users do not react to posts published on many Facebook pages—the number is close to one*).

As expected in hypothesis H1-1 (*there are no differences in the number of sources where politically active and politically inactive users like posts*), the data show (see Fig. 2 and Table 1) that there is no substantial difference in average number of sources where posts were liked between users who liked posts on political parties’ pages and those who only liked news media pages (mean_{Politically active} – mean_{politically inactive} = 0.31 (median), 95% HDI: 0.302–0.315; however, because the large dataset was used the difference is statistically significant)³. Approximately 17% of politically active users have a higher monthly average number of sources where posts were liked than do inactive users. This means that regardless of their political activity (liking posts published on political pages) most users choose only one source of information, either political or news media (see Fig. 2 and Table 1).

Fig. 2

Distribution of the average number of monthly information sources



Selective Exposure

The results of the logistic regression analysis demonstrate that the source of information liked depends on political preferences (eight dichotomous variables), political engagement

³ To calculate this number I used Bayesian approach (Albert 2009). The prior difference was N(0,10), which means I assumed that there are no differences (mean = 0), but also my certainty is low (standard deviation = 10). Results: median = 0.32, 95% HDI (-1.68–2.22).

Table 1
Statistics—monthly use of news sources

	Mean	Median	SD	Std. Err.
Politically Active	1.46	1	0.94	0.00129
Politically Inactive	1.15	1	0.41	0.00044
Total	1.28	1	0.68	0.00058

(liking and commenting on political pages), and the frequency of likes and comments on political pages. However, 48 models with 11 independent variables give 528 predictor results. Presenting all of them in the main text of this article would render it incomprehensible; therefore, they can be found in the appendix (Table 2). Here, I describe only the principal findings.

Users who liked at least one post published on a political leader's or party's page were more likely also to like posts published by news media. The odds ratios were statistically significant above 1 in case of 39 of the 48 news pages (models). However, liking political posts reduced the odds ratios in the case of *ASZdziennik* (a satirical website), *Dziennik Wschodni* (a regional news website), *Fakt24* (a tabloid), *gazeta.pl* (a news portal), *TVN24* (a television news channel). In four cases the odds ratios were insignificant. They include *Forbes* (economically oriented press), *Gazeta Giełdy i Inwestorów Parkiet* (economically oriented press), *Gość Niedzielny* (a Catholic news weekly run by metropolitan curia in Katowice) and *se.pl* (a tabloid).

Similar results were obtained in the case of users who wrote at least one comment on a political page. The odds ratios of users liking posts published by news media if they had written such a comment was significantly above 1 in 41 of the 48 cases. As with the previous example, the odds ratios were significantly below 1 in the cases of *ASZdziennik* and *TVN24*. Commenting on political pages did not change the odds ratios of liking posts published by *Dziennik Wschodni*, *Forbes*, *Gazeta Bankowa* (economically oriented press), *Gość Niedzielny*, and *Polsat News 2* (news television).

These results suggest that activity (i.e., liking and commenting) on political pages significantly increases the probability of liking posts published by almost all major news media. The odds ratios also provide further information:

- The models with these results suggest that the media for which the models were constructed produce content that is liked more often by politically unengaged users than by engaged ones. This refers to *TVN24*, *ASZdziennik* (both liking and commenting on political pages were statistically significant), *Dziennik Wschodni*, *Fakt24*, *gazeta.pl*.
- According to the data, users who are not politically engaged prefer more entertaining news (*ASZdziennik*, *Fakt24*; the results for the last tabloid in the sample—*se.pl*—were statistically insignificant) and the largest news media Facebook pages: *TVN24* with 1.3 million fans and *gazeta.pl* with 0.7 million fans in June 2018. These two media are in 1st and 3rd position, respectively, in the fan ranking of the selected pages (2nd position belongs to *FAKT24*).

The main question in this article is whether users are selectively exposed to Facebook content. The empirical data suggest that there are substantial differences between users who prefer different political sources.

Compared to other users, those who preferred posts published by *Paweł Kukiz*, the *Kukiz'15 Movement*, *Janusz Korwin-Mikke*, or the *Freedom Party* were unlikely to like posts published on nearly any of the other analysed media pages (in some cases, the odds ratios were statistically insignificant. For *Kukiz'15*, these comprise *Gazeta Bankowa*, *Gazeta Giełdy i Inwestorów*, and *Salon24*. For the *Freedom Party* they consist of *Gazeta Giełdy i Inwestorów Parkiet* and *Polsat News 2*).

In the cases of other politically engaged users, I observed the following patterns:

- Users who preferred posts published by the *Modern Party*, *Ryszard Petru*, or *Katarzyna Lubnauer* were more likely than others to like posts published by *ASZdziennik*, *Forbes*, *Gazeta.pl*, *Gazeta Bankowa*, *Gazeta Giełdy i Inwestorów*, *Gazeta Wyborcza*, *Gazeta Prawna*, *INN Poland*, *NaTemat.pl*, *Newsweek Polska*, *Polityka*, *Radio TOKFM*, *TVN24*, and *Tygodnik Powszechny*.
- Users who preferred posts published by *Law and Justice*, *Beata Szydło*, or *Mateusz Morawiecki* were more likely than others to like posts published by *Gazeta Bankowa*, *Gazeta Polska*, *Gość Niedzielny*, *Nasz Dziennik*, *niezależna.pl*, *Radio Maryja*, *Salon24.pl*, *TVP Info*, *Tygodnik Republika*, *Tygodnik Lisickiego*, *Tygodnik Sieci*, *Tygodnik Solidarność*, *wGospodarce.pl*, and *wPolityce.pl*.
- Users who preferred posts published by *Civic Platform* or *Grzegorz Schetyna* were more likely than others to like posts published by *Fakt24*, *gazeta.pl*, *Gazeta Wyborcza*, *NaTemat.pl*, *Newsweek Polska*, *Onet Wiadomości*, *Tygodnik Polityka*, *Radio TokFM*, *TVN24*, *Tygodnik Powszechny*, and *WP Wiadomości*.
- Users who preferred posts published by the *Polish Peoples' Party* or *Władysław Kosiniak-Kamysz* were more likely to like posts published by *Dziennik Wschodni* and *Polsat News 2*.
- Users who preferred posts published by the *Together Party* were more likely to like posts published by *ASZdziennik.pl*, *Forsal*, *Gazeta Wyborcza*, *Gazeta Prawna*, *Krytyka Polityczna*, *Tygodnik Polityka*, *Radio TokFM*, *Tygodnik NIE*, and *Tygodnik Powszechny*.
- Users who preferred posts published by the *Democratic Left Alliance* or *Włodzimierz Czarzasty* were more likely to like posts published by *FAKT24.pl*, *Gazeta.pl*, *Gazeta Wyborcza*, *Interia Fakty*, *NaTemat.pl*, *Newsweek Polska*, *Onet Wiadomości*, *Tygodnik Polityka*, *TVN24*, *Tygodnik NIE*, and *WP Wiadomości*.

In most cases, when the odds ratios are not statistically significant above 1, they are statistically significant below 1. This means that preferences for a certain political source of information are associated with preferences for certain news media—one of them is more likely to be chosen, and the others are less likely to be chosen.

The differences are easier to comprehend if we divide the users into four groups: those who preferred the government party's Facebook pages (*Law and Justice*, *Beata Szydło*, and *Mateusz Morawiecki*), those who preferred centrist opposition (*Civic Platform*, *Grzegorz Schetyna*, the *Modern Party*, *Ryszard Petru*, *Katarzyna Lubnauer*, the *Polish People's Party*, and *Władysław Kosiniak-Kamysz*), those who preferred leftist opposition (the *Democratic Left Alliance*, *Włodzimierz Czarzasty*, the *Together Party*), and those who preferred anti-establishment parties and organisations (*Kukiz'15*, *Paweł Kukiz*, the *Freedom Party*, and *Janusz Korwin-Mikke*). The classification based on the social perception of parties on left-right axis in Poland in 2015 according to Polish National Elec-

tion Study (Kwiatkowska, Cześniak, Żerkowska-Balas, & Stanley 2016) and political programmes.

There is not even one news source whose posts are liked with odds ratios higher than 1 by those who prefer the government party's pages and opposition or anti-establishment parties' pages. This means that pro-government users and others liked totally different content compared to other users. The group that preferred anti-establishment party's and organisation's posts were likely not to like posts published by any influential news media in Poland. Users who preferred opposition parties' posts shared some common sources of information:

- The odds ratios of liking *Gazeta Wyborcza*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, the *Together Party*, and the *Democratic Left Alliance*.
- The odds ratios of liking *Gazeta.pl*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Democratic Left Alliance*.
- The odds ratios of liking *Na Temat*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Democratic Left Alliance*.
- The odds ratios of liking *Newsweek*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Democratic Left Alliance*.
- The odds ratios of liking *TVN24*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Democratic Left Alliance*.
- The odds ratios of liking *Tygodnik Polityka*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Together Party*.
- The odds ratios of liking *Radio TokFM*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Together Party*.
- The odds ratios of liking *Tygodnik Powszechny*'s posts were above 1 for users who preferred the *Modern Party*, *Civic Platform*, and the *Together Party*.
- The odds ratios of liking *ASZdziennik*'s posts were above 1 for users who preferred the *Modern Party* and the *Together Party*.
- The odds ratios of liking *FAKT24*'s posts were above 1 for users who preferred *Civic Platform* and the *Democratic Left Alliance*.
- The odds ratios of liking *Onet Wiadomości*'s posts were above 1 for users who preferred *Civic Platform* and the *Democratic Left Alliance*.
- The odds ratios of liking *WP Wiadomości*'s posts were above 1 for users who preferred *Civic Platform* and the *Democratic Left Alliance*.
- The odds ratios of liking *Tygodnik NIE*'s posts were above 1 for users who preferred the *Together Party* and the *Democratic Left Alliance*.

There are also news sources that are liked only by people with certain preferences. Users who preferred *Law and Justice* were more likely than others to like content published by right-leaning media (*Gazeta Polska*, *Gość Niedzielny*, *Nasz Dziennik*, *Niezależna.pl*, *Radio Maryja*, *Salon24*, *TVP Info*, *TV Republika*, *Tygodnik Lisickiego*, *Tygodnik Sieci*, *Tygodnik Solidarność*, *wgospodarce.pl*, and *wpolityce.pl*). Users who preferred *Civic Platform* were more likely to like the Facebook page of *Wideo NaTemat* (a subpage of *NaTemat*). Users who preferred the *Modern Party* were more likely to like economically oriented pages (*INN Poland*, *Forbes*, *Parkiet*, and *Gazeta Prawna*). Users who preferred the *Together Party* were more likely to like an economically oriented page (*Forsal*) and left-leaning media outlet (*Krytyka Polityczna*).

Hypothesis H2-2 [*Users who are politically engaged (who like posts published on political pages) choose news media that are in line with the views presented by the political parties they support*] has strong support in the case of users who prefer the governing party. They are more likely than others to like posts published by news media that explicitly identify themselves as right-leaning. More problematic is the case of other politically engaged users. There are only two news media that openly describe themselves as left-leaning (*Tygodnik NIE* and *Krytyka Polityczna*) and in both cases their posts are liked more often by people who also liked leftist opposition pages (except *Krytyka Polityczna* and the Democratic Left Alliance, in which case the result was statistically insignificant; it may also suggest that *Krytyka Polityczna*'s posts are liked by very specific group of electorate affiliated mostly with the Together Party). The rest of the media on the list (as well as those with the largest audience) do not explicitly define themselves according to an axis of political orientation. The line between being a general interest intermediary and a media outlet that supports centrist parties (with a small right or left bias) is rather thin. It is visible in the data results. The distinction between media liked by users who prefer leftist or centrist opposition is not easy to find. These users mostly like the content of the same groups of media outlets. Therefore, the main line of distinction is between users who prefer the government party's pages and those who prefer opposition parties' pages.

The last finding is that users who prefer anti-establishment parties' posts tend not to like the publications of any of the listed news media. A probable explanation for this is that this is related to the strong aversion of the leaders of the Freedom Party and Kukiz'15 to mainstream media, which are considered part of the establishment. Therefore, their likely supporters may choose other, niche media, YouTube channels, and the like that were not among those selected for this study.

Discussion

The findings show that the average Facebook user is not particularly active in terms of liking posts on official Facebook pages run by political leaders, parties, or news media (mean user's number of likes in a year = 22.3). However, the distribution of these data is right-skewed (the median is 5, and the standard deviation is 106.9). Additionally, most users (67.6%) like posts published by only one source of information. Therefore, average users appear to react sporadically to political and news media pages, and these interactions are usually limited to just one source. Users who interact with a number of diversified news media or political pages are rare. This supports the thesis that average users are not especially involved in obtaining information and, as such, are politically fairly unsophisticated (Berelson, Lazarsfeld, & McPhee 1954: 307–310; Dalton 2013: 16–18).

Those who did not like content published on political pages were most likely to like posts published by two news media: *gazeta.pl* and *TVN24* (see Table 2, column 'Politically active—likes'). It means that *gazeta.pl* and *TVN24* are probably a source for information by those who prefer posts published by oppositional parties (Civic Platform, the Modern Party, and Democratic Left Alliance) and also for individuals who are not active on political pages. In other words, these pages' publications are found attractive by only one side of

a political debate, and also they are most likely to be chosen by those who do not express their political preferences as they were measured in this paper. In fact, those two pages had the highest number of active users among all pages selected to this study (see [Table 3](#)). Such result is in contradiction to hypothesis H2-1 [*Users who are not politically engaged (i.e. users who do not like posts published on political pages) tend to choose media that are not explicitly associated with any political party*]. I found four possible explanations of it, but they cannot be tested due to lack of necessary data. First, it is possible that above media outlets are considered as the least biased, so they evoke the lowest cognitive dissonance. However, the odds ratios in [Table 2](#) suggest that there are other, less politically affiliated pages than gazeta.pl and TVN24, and therefore this explanation is probably false. Second, they are selected as credible, because they are perceived as the least politically biased but also because of their strong position both as offline and online media. In such case kind of Mathew effect may apply ([Merton 1968](#)). Users choose the media outlet which is considered credible, because the footage may resonate with their (users') worldviews, and because it has a large number of offline readers/watchers/listeners, Facebook fans or its Facebook posts receive many likes. In other words, there is a proof of credibility by social corroboration ([Messing and Westwood 2014](#)). In this case, the strong offline and online position of gazeta.pl and TVN24 may attract more users. Third, users defined by me as politically inactive have in fact political preferences for oppositional parties that were not expressed in the behaviours measured in this study. However, such a possibility requires another study, since it is impossible to verify it using the data I have. Fourth, my assumptions behind hypothesis 2-1 may be wrong and different mechanisms than the reduction of cognitive dissonance and the one expressed in the second point are responsible for this situation.

The logistic regression results suggest that political preferences that are expressed by liking patterns strongly differentiate the selection of news media. Users with certain political preferences prefer news media that are in line with their political orientation. Consequentially, they tend to exist in small bubbles where their beliefs are confirmed rather than challenged ([Barberá, Jost, Nagler, Tucker, & Bonneau, 2015](#); [Flaxman, Goel, & Rao 2016](#); [Iyengar & Hahn 2009](#); [Messing & Westwood 2014](#); [Quattrociocchi et al. 2016](#); [Sunstein 2001, 2017](#)). It is also noteworthy that users who belong to different communities (politically inactive, supporters of the opposition, government supporters, and supporters of anti-establishment organisations) rarely interact with content that is liked in other communities. This has several consequences.

First, there is the technical site of selective exposure. Facebook and other social media platforms are technological environments that use recommendation systems. This means that all behaviour (likes, comments, shares, time spent reading a post) are analysed by algorithms that suggest content that is more suitable for users (['Building a Better News Feed for You | Facebook Newsroom' 2016](#); [Pariser 2012](#)). This fact is of the utmost importance for understanding belief updating in social media.

In analytical sociology, the actions are undertaken by individuals with certain abilities, preferences and beliefs, though this occurs in a given situation ([Hedström & Bearman 2009: 8–16](#)). According to [Elster \(2015\)](#), social action is the outcome of a process of twofold filtering. The individual first investigates the possibilities of action with reference to physical, economic, legal, psychological and other constraints. If a social situation makes only

one form of action possible, it is a case of strong social determinism. If more options are available, the second process of filtering occurs—the choice is made in relation to the individual's motivational structure (Flecha, Gómez, & Puigvert 2003: 100; Hedström & Udehn 2009: 33). Facebook users can technically choose to view and like whatever page or public post they want. However, Facebook suggests the most suitable content to them—information that, with high probability, confirms their existing beliefs. In other words, what they see, and what is more likely to be liked, is heavily dependent on the situation. It is thus not only that users may tend to choose sources they like and that meet their expectations; they may also continue to select them (Slater 2007). They are also more likely to view and like them because they are more frequently exposed to them on their newsfeed (Bakshy et al. 2015).

Second, in his classic work, Lasswell wrote that 'Democracy depends on talk' (1941: 81). However, to make such a discussion relevant and productive (e.g. to gather majoritarian support for political reforms), it is important that citizens have some shared experiences (Mutz 2006; Sunstein 2009: 5–6). Data from Polish Facebook suggest that users tend to use exclusive or near-exclusive sources of information and that they may lack this common ground. This was particularly true for government supporters who had odds ratios significantly below 1 for all general interest intermediaries (Sunstein 2017: 84). On social media, the very same event may be presented in quite different ways that are in the interests of certain media or political organisations. Therefore, those who gain information in relatively closed information systems obtain information different from that obtained by users of other information systems. Consequently, beliefs of users in separated information 'bubbles' are different. Furthermore, the differences may increase, because the beliefs are strengthened by subsequent, confirmatory evidence inside information system. The behaviour patterns observed may lead to polarisation and, consequently, to the weakening of social cohesion and the stability of the democratic system (Barberá 2015; Dixit & Weibull 2007; Maes & Bischofberger 2015).

There is also another side to these data. They demonstrate that users liked certain posts that are published by sources (both biased and unbiased) that accord with their views; however, one cannot distinguish whether users actively select this content or were exposed to it. Assuming that there is a possibility that (for example, due to the political heterogeneity of their Facebook friends) users see information that challenges their views, the empirical results show that it is seldom liked. The decision not to like something on Facebook may also be considered a form of selective avoidance (Weeks, Ksiazek, & Holbert 2016) as it consequently reduces the probability of being further exposed to such information.

This study has certain limitations that need to be considered. First, social media and cyberspace are not the only information environment for citizens. Although the number of individuals in Poland who use mainly Facebook for political news has increased to approximately 5% (Feliński 2017), most citizens still use other sources of information, such as the traditional press, television, internet sites, and people around them with whom they converse (Weeks et al. 2016). This research may be considered complementary to analyses of selective exposure in traditional media (see Knobloch-Westerwick 2015, for a detailed discussion). Second, the relationships between liking media posts and other activities on social media presented here are not causal. It has not been resolved that political prefer-

ences have an impact on news media selection or that media selection has to impact on political preferences.

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Table 2
The logistic regression results

Dependent variables Liking posts published by:	Independent variables (Odds ratios)											Politically active—Comments	Politically active—likes	Number of likes
	Users who preferred posts published on:						Leftist opposition's pages			Anti-establishment organization's and party's pages				
	Government party's pages		Centrist opposition's pages		Leftist opposition's pages		Together Party	Kukiz'15	Freedom Party					
1	2	3	4	5	6	7	8	9	10	11	12			
Gazeta Wyborcza	0.055**	1.883**	1.751**	0.536**	1.311**	1.757**	0.059**	0.048**	1.003**	1.607**	1.221**			
gazeta.pl	0.227**	1.657**	1.538**	0.7**	1.829**	0.988	0.16**	0.121**	1.002**	0.79**	1.084**			
natemat.pl	0.051**	1.649**	1.364**	0.529**	1.407**	0.629**	0.055**	0.034**	1.003**	3.124**	1.386**			
Newsweek Polska	0.042**	1.748**	1.631**	0.427**	1.177**	0.682**	0.058**	0.053**	1.003**	2.351**	1.314**			
TVN24	0.2**	1.546**	1.518**	0.595**	1.304**	0.542**	0.211**	0.19**	1.002**	0.57**	0.977*			
Tygodnik Polityka	0.06**	1.133**	1.613**	0.563**	1.011	2.892**	0.078**	0.073**	1.003**	1.656**	1.208**			
Radio TOK FM	0.03**	1.505**	1.307**	0.418**	0.84**	1.606**	0.039**	0.026**	1.003**	3.786**	1.736**			
Tygodnik Powszechny	0.046**	1.222**	1.239**	0.828*	0.954	3.601**	0.055**	0.031**	1.003**	1.85**	1.206**			
ASZdziennik.pl	0.065**	0.592**	1.596**	0.409**	0.442**	5.473**	0.313**	0.47**	1.002**	0.785**	0.9**			
FAKT24	0.721**	1.412**	0.6**	0.817*	1.794**	0.093**	0.255**	0.148**	1.002**	0.452**	1.109**			
Onet Wiadomości	0.381**	1.473**	0.861*	0.58**	1.166*	0.197**	0.136**	0.098**	1.002**	1.605**	1.487**			
WP Wiadomości	0.648**	1.22**	0.655**	0.567**	1.36**	0.195**	0.248**	0.115**	1.002**	1.634**	1.561**			
Tygodnik NIE	0.025**	0.53**	0.852*	0.303**	2.027**	3.14**	0.131**	0.325**	1.002**	1.725**	1.636**			
WIDEO natemat.pl	0.078**	1.459**	0.842*	0.374**	0.8**	0.423**	0.141**	0.072**	1.003**	3.345**	1.569**			
INN Poland	0.203**	0.573**	1.273**	0.736	0.489**	0.951	0.409**	0.327**	1.002**	1.411*	1.482**			
Forbes	0.272**	0.44**	1.372**	0.523*	0.239**	0.587**	0.439**	0.602**	1.002**	1.099	1.036			
Gazeta Giełdy i Inwestorów Parkiet	0.641	0.29*	1.963**	0	0.444	0.755	0.629	0.88	1.001**	0.884	1.411*			
Gazeta Prawna	0.435**	0.608**	1.034	0.612	0.57*	1.402	0.277**	0.225**	1.002**	1.97**	2.286**			
forsal.pl	0.344**	0.134**	0.498**	0.354*	0.307**	1.44*	0.515**	0.471**	1.002**	3.316**	2.554**			
Krytyka Polityczna	0.017**	0.653**	1.003	0.342**	0.919	12.724**	0.036**	0.032**	1.003**	2.067	1.296**			

	1	2	3	4	5	6	7	8	9	10	11	12
Gazeta Polska		5.468**	0.033**	0.015**	0.07*	0.015**	0.039**	0.486**	0.153**	1.003**	4.681**	2.071**
Gość Niedzielny		5.053**	0.12**	0.058**	0.394**	0.099**	0.068**	0.64**	0.279**	1.002**	0.988	1.048
Nasz Dziennik		10.95**	0.05**	0.051**	0	0	0.044*	0.443*	0.209**	1.002**	1.959*	1.261*
nieszalezna.pl		3.982**	0.076**	0.032**	0.035**	0.07**	0.013**	0.523**	0.167**	5.13**	1.631**	1.004**
Radio Maryja		8.419**	0.032*	0	0.142*	0.04**	0.008**	0.299**	0.111**	1.003**	3.045**	1.375**
salon24.pl		2.338**	0.096**	0.114**	0.435	0.474*	0.206*	0.692	0.225**	1.001**	4.227**	3.049**
tvp.info		2.714**	0.276**	0.152**	0.273**	0.286**	0.078**	0.635**	0.219**	1.004**	1.532**	1.619**
Telewizja Republika		3.725**	0.043**	0.026**	0.084**	0.07**	0.018**	0.684**	0.286**	1.004**	2.594**	1.538**
Tygodnik Lisickiego		2.565**	0.048**	0.039**	0.124**	0.057**	0.044**	0.694**	0.301**	1.004**	3.968**	1.718**
Tygodnik Sieci		3.366**	0.061**	0.031**	0.072**	0.077**	0.021**	0.668**	0.248**	1.004**	3.423**	1.573**
Tygodnik Solidarność		4.151**	0.06**	0.011**	0.107*	0.115**	0.059**	0.651*	0.096**	1.002**	5.38**	2.12**
wGospodarcę.pl		1.662*	0.085**	0.033**	0.313	0.067**	0.087**	0.269**	0.124**	1.002**	7.646**	2.424**
wPolityce.pl		3.999**	0.059**	0.023**	0.04**	0.077**	0.026**	0.58**	0.159**	1.003**	4.729**	1.922**
Bankier.pl		0.233**	0.144**	0.656**	0.15**	0.16**	0.446**	0.437**	0.677**	1.002**	2.492**	1.878**
Do Rzeczy ^a		2.09**	0.013**	0	0	0.064**	0	0.559*	0.245**	1.002**	7.362**	2.466**
dziennik.pl		0.339**	0.693*	0.607*	0.401*	0.977	0.559*	0.127**	0.047**	1.002**	8.316**	2.674**
Dziennik Wschodni		0.754*	0.689*	0.551**	1.289	0.66*	0.475**	0.663**	0.509**	1.001**	0.617**	1.022
Gazeta Bankowa		1.318	0.157	0	0	0	0	0.351	0.235*	1.001	8.427*	1.932
Interia Fakty		0.929	0.894	0.625**	0.743*	1.029	0.318**	0.37**	0.164**	1.002**	1.757**	2.055**
money.pl		0.439**	0.503**	0.856	0.612*	0.555**	0.372**	0.349**	0.273**	1.002**	2.768**	2.102**
Polsat News Dwa		0	0	0.368	4.029	0.74	0.662	0.072	0	0.973	68.271*	1.833
Polsat News		0.31**	0.955	0.655**	0.486**	0.673**	0.417**	0.234**	0.15**	1.003**	2.649**	1.9**
Rzeczpospolita "Prawo co dnia" ^b		0.451**	0.412**	0.851	0.765	0.697*	0.859	0.324**	0.261**	1.002**	2.092**	1.161*
Puls Biznesu		0.333**	0.316**	1.108	0.239*	0.25**	0.663*	0.354**	0.395**	1.002**	2.043**	1.478**
RMF24.pl		0.524**	0.911	0.542**	0.476**	0.674**	0.15**	0.329**	0.166**	1.002**	1.545**	1.485**
Rzeczpospolita "Ekonomia i rynek"		0.331**	0.156**	0.946	0.341	0.514*	0.475*	0.301**	0.345**	1.002**	3.618**	2.308**
se.pl		0.577**	0.821*	0.435**	0.409**	0.928	0.114**	0.309**	0.288**	1.002**	1.084	1.844**
Wprost		0.414**	0.603**	0.519**	0.354**	0.666**	0.346**	0.302**	0.184**	1.003**	2.877**	1.676**

*p < 0.05, **p < 0.001

Grey coloured cells are the preferences with the results significantly above 1

^a Tygodnik Lisickiego and Do Rzeczy are in fact two different Facebook pages of the same weekly opinion magazine.

^b The main Facebook page of the newspaper "Rzeczpospolita" is dziennikrzeczpospolita. As a result of the error, the data was collected from two pages of the newspaper dedicated to economic and legal issues (ekonomia and prawocodnia). Due to restrictions on access to the data that Facebook introduced in February 2017, it was impossible to fix this error and I decided to leave these pages in the analysis.

Table 3

Number of people who liked posts published on political and media pages

id	Page	Number of active users	id	Page	Number of active users
1	ASZdziennik.pl	76,321	33	Platforma Obywatelska	41,259
2	Bankier.pl	5,228	34	Polityka	67,667
3	Beata Szydło	32,421	35	Polsat News Dwa	9
4	DoRzeczy	708	36	polsatnews.pl	24,629
5	Dziennik Wschodni	10,374	37	Polskie Stronnictwo Ludowe	1,899
6	dziennik.pl	849	38	Prawo co dnia Rzeczpospolita	2,720
7	FAKT24.pl	155,796	39	Prawo i Sprawiedliwość	35,898
8	Forbes.pl	16,694	40	Puls Biznesu	4,403
9	Forsal.pl	1,870	41	Radio Maryja	4,200
10	Gazeta Bankowa	45	42	Radio TOK FM	22,356
11	Gazeta Giełdy i Inwestorów Parkiet	844	43	Razem	24,235
12	Gazeta Polska	2,136	44	RMF24.pl	11,724
13	Gazeta Wyborcza	133,553	45	Ryszard Petru	41,231
14	Gazeta.pl	255,858	46	Rzeczpospolita Ekonomia i Rynek	664
15	gazetaprawna.pl	1,621	47	Salon24.pl	654
16	Gość Niedzielny	25,941	48	se.pl	12,242
17	Grzegorz Schetyna	16,036	49	Sojusz Lewicy Demokratycznej	26,844
18	INN Poland	4,878	50	Telewizja Republika	60,048
19	Interia Fakty	13,835	51	TVN24	348,904
20	Janusz Korwin-Mikke	193,061	52	tvp.info	70,691
21	Katarzyna Lubnauer	443	53	Tygodnik Lisickiego	25,269
22	Krytyka Polityczna	14,462	54	Tygodnik NIE	18,644
23	Kukiz '15	146,018	55	Tygodnik Powszechny	38,870
24	Money.pl	6,074	56	Tygodnik Sieci	38,462
25	Nasz Dziennik	1,133	57	Tygodnik Solidarność	1,315
26	Natemat.pl	45,343	58	wGospodarce.pl	486
27	Newsweek Polska	100,248	59	WIDEO natemat.pl	15,442
28	Niezalezna.pl	11,260	60	Władysław Kosiniak-Kamysz	4,537
29	Nowoczesna	13,073	61	Włodzimierz Czarzasty	772
30	Onet Wiadomości	35,892	62	WP Wiadomości	44,474
31	Partia Wolność	31,436	63	wPolityce.pl	6,887
32	Paweł Kukiz	130,756	64	WPROST	30,137