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(Eds.)



# BUBBLES IN V4

The Phenomenon of Social Bubbles  
and their Impact on Facebook Users

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# Bubbles in V4

## The Phenomenon of Social Bubbles and their Impact on Facebook Users

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We are living in the era of fake news and misinformation. Its influence is stronger than we have ever thought, having a severe impact on the future of the society, as well as the voter turnout. Nevertheless, it is just the beginning. The main strength of fake news lies in the ability to adapt to the perceptions of internet users. It fits into the underlying stereotypes and prejudices of online users. At the same time, fake news is difficult to combat due to the ability to live without coordination and to hide in social bubbles and closed community groups. This has an influence on users' behaviour without the outside world noticing it. Fake news and disinformation are becoming a powerful weapon for extremists, foreign forces and third parties willing to influence the development of regions, countries or international organisations. This negative news is also changing the behaviour of individuals in societies that are becoming increasingly polarised. Societies are turning away

from mainstream politics and media and they are becoming less critical to the content they consume. This is caused by the fact that social media and the Internet are becoming hardly regulated and provide a space for anonymity with its positive and negative effects. The internet has the ability to create closed ideological communities that share their beliefs among their followers and oppose any alternative narratives. In this respect, social bubbles are a potential threat to social cohesion and democracy.

The main aim of the book is to contribute to the understanding of how social bubbles in the online sphere are created, in what way they influence users' behaviour and how they can expand or amplify. We have focused on the potential impact of these bubbles on society. We would like to open up a space for policy dialogue on how social manipulation should be combated within, as well as beyond the virtual environment. The results of our research are meant to positively promote integration and inclusion in society.

This publication is based on research on social bubbles in the online space conducted in countries of the Visegrad Group, i.e. the Czech Republic, Hungary, Poland and Slovakia, and supported by the International Visegrad Fund.

The research consists of two parts: qualitative - through focus groups and quantitative - through a questionnaire survey. The results from the qualitative research conducted within social networks (Facebook communities) using focus

groups method laid the foundations for the next phase, i.e. quantitative research among Facebook users coming from the four countries. A total of eight focus groups were selected according to predetermined criteria, taking place in each country. The aim of the research is to find out what opinions the members of the Facebook (FB) groups attach to and how they form these groups (by sharing common opinions, norms and values, through interactions in the FB group, conscious opposition to other groups, etc.). We also sought to identify what are the shared opinions, attitudes and values with the members of the group, what the users think, what unites them, why they joined the group, and how active they are in them. And finally, we wanted to find out how the members of the Facebook groups work with information on social networks.

As for qualitative research, we have established research design for quantitative survey, i.e. we predetermined preliminary categories of Facebook users according to their activity level, media consumption, sense of belonging etc.

Through the survey, we collected a set of data that may be useful for understanding patterns of engagement in social media communities and participants' attitudes toward their own engagement in these online communities. This is important because further research is needed for political sociologists, policy analysts and civil society educators to be able to come up with innovative ways of political engagement within the digital sphere that do not further 'fragment' societies, and thus threaten citizens' equal participation in democracy and the public sphere.

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## Chapter I

### The Importance of Social Bubbles Research

Social (or filter) bubbles played a significant role in the spread of disinformation during the Brexit referendum, the 2016 US presidential election, the migration crisis in Europe, the COVID-19 pandemic disinformation, the 2021 United States Capitol attack, and Russian aggression on Ukraine in 2022. The list is not exhaustive, but it includes the most famous events that significantly influenced the development of the second and third decades of our millennium.

The fake news and disinformation affect all areas of our lives and have a significant impact on the political processes in the country. Their dissemination on the Internet and, in particular, on social networks, makes the existence of so-called social (or filter or opinion) bubbles visible, while acting as an invisible and almost impermeable border between parts of the society that differ culturally, socially, or politically. The diversity of information disseminated is limited, since the members of these bubbles reinforce each other's attitudes and opinions. This contributes to social polarisation, distancing oneself from people who share different views, attitudes, and values.

The mentioned effects of the use of social media are based on the deepening of polarisation in society, the

growth of populism, radicalisation, and extremism. Much of the research that examines the relationship between social media and changes in society is conducted in the West. Nevertheless, the consequences of the phenomenon can also be observed in Central Europe, where the research has not progressed much. If the phenomenon has the potential to influence such fundamental events, studying it is essential to understand the social dynamics of our region.

### **How are social bubbles formed?**

Social bubbles are formed by a group of people who share similar values and opinions. Within this social bubble, they discuss and exchange information in accordance with their beliefs. The emergence of the social bubbles on social media is mostly the result of two factors: the intervention of social networking algorithms that create ‘filter bubbles’ and psychological aspects.

### **Social media algorithms**

The phenomenon of ‘filter bubbles’ was introduced by Eli Pariser (2011). He defined the filter bubbles as “the personal and unique universe in which we all live online.” The clustering of like-minded social media users is encouraged by the social media companies themselves because it contributes to maximisation of profits, which is the corporations’ goal. The key point of this mechanism is that by connecting people with the same interests, they are more likely to spend more time on social networks. The interest of social media is to keep the user’s attention for as

long as possible, since in direct proportion to the time spent on social networks, the probability of seeing the ads that make social media profitable increases.

Social media use different strategies to surround the user with content that is in line with their philosophy. Algorithmic filtering is one of the consequences of the personalisation of Internet search results and content on social networks. For example, a recommendation mechanism will offer the user a profile of a person with whom they share common friends or a post that they are both likely to like. The problem with algorithms lies in their broad complexity and low transparency, making it impossible to understand the key that regulates the information that reaches users. Although Eli Pariser's theory offers a logical explanation for the polarising potential of social media, it is often criticised for lack of evidence (Zuiderveen et al. 2016).

The intervention of social media algorithms undoubtedly plays an important role but it is only one of the many factors having an impact on the emergence of social bubbles and does not receive more attention in this paper. Our ambition is rather to explore the aspects that create people's predisposition to join groups on social media. It has been shown that the influence of cognitive biases is more important in the formation of social bubbles than the influence of algorithms (Del Vicario et al. 2016).

### **Psychological aspects**

The formation of social bubbles can also be studied

from a psychological perspective. Although social networks offer a wide variety of groups with different ideological backgrounds, the users tend to choose one that matches their beliefs. This behaviour is based on a) homophily, i.e. the tendency of individuals to associate with people who are similar to the individual (McPherson et al. 2001); b) selective exposure, i.e. the tendency to accept information that reinforces the individual's existing views and to avoid conflicting information (Stroud 2010); c) confirmation bias; d) disconfirmation bias; e) false consensus, and f) group polarisation.

Based on these considerations, it can be assumed that social networks create a space where users are reinforced in their opinions as a result of maintaining contact with similar people and the content they consume.

### **Homophily**

Homophily is based on the idea that people are likely to form social relationships with other people, who are similar to them. The perceived similarity may be based on social and economic status, other factors of background, or shared attitudes (Koivula et al. 2019). Homophilic responses are defined as all responses from the in-group. Heterophilic interactions include interactions across different groups. Homophilic behaviour on social networks is not an exception; similarly, individuals tend to surround themselves with like-minded people in everyday life. Whereas heterophilic interactions are more likely to occur

in so-called “weak ties”, such as casual communication with a stranger, homophilic interactions occur in so-called “strong ties”, such as between friends or in long-term collaborations, where individuals are assumed to have a strong influence on each other (Barberá 2015).

These findings have implications for analysing the role of homophily in the emergence of social bubbles. Our hypothesis was that an aspect of homophily contributes significantly to the emergence of social bubbles. On the other hand, the fact that there are not necessarily only strong ties between social media users, could lead to heterophilic interactions and exposure to diversified content (Bakshy et al. 2012). However, we do not observe such a scenario. The degree of homophilic interactions depends on the strength of ties between users, which varies across social networks.

The study by Yarchi et al. (2021) showed that the occurrence of homophilic ties on social networks was more likely than the occurrence of heterophilic ties. However, homophilic ties were not equally dominant but varied by type of social network. For example, the prevalence of homophilic ties on Twitter was as high as 90%, while only 75% on Facebook. Surprisingly, Facebook emerged as the social media with the lowest overall rate of homophilic interactions. This is still a high percentage of homophilic interactions to be conducive to bring like-minded people together, and thus having a potential to form social bubbles.

## **Selective exposure effect**

The probability of rational decisions increases by acquiring as much information as possible that is relevant to the decision. Since human information processing capacities are limited and comparison of all existing information is not possible, selective exposure may occur. This effect is reinforced by the information boom (Mutz and Young 2011), which represents a sharp increase in the amount and multiplicity of available information. Selective exposure makes it possible to avoid information overload that according to Hilbert (2012), reduces human productivity.

The process of selective exposure, according to Williams et al. (2016) consists of three parts:

- selective exposure through which the individual tries to avoid communicating information that is not in line with his or her view;
- selective perception occurs when confronted with conflicting information, whereby it is either ignored, or modified by the individual to fit into his or her existing frame of knowledge;
- selective retention is the forgetting of information that does not correlate with the individual's perceptions.

The selective exposure effect is based on so-called cognitive dissonance theory, which claims that people are

more likely to be exposed to content congruent with their experience because it contributes to cognitive coherence, which is important for human cognition. The impact of discordance on cognition has been studied by Festinger (1957). Cognitive dissonance is a condition induced by cognitive structures (i.e., beliefs, attitudes, expectations) that are inconsistent with each other. These induce unpleasant feelings or tensions. Since cognitive dissonance is unpleasant for an individual and he or she tries to minimise negative emotions, it motivates him or her to achieve consonance. The latter is achieved by managing cognitive structures - by replacing, omitting, adding or suppressing some information. From the other perspective, we could say that people pay more attention to information that is congruent with their opinion because it gives them confidence that their judgments are correct (Harmon-Jones and Mills 2019).

### **Confirmation bias**

Confirmation bias refers to the phenomenon where people (mis)interpret information in a way that confirms their hypotheses regardless of whether they are correct (Schulz-Hardt et al. 2000). It is a subset of selective exposure in the sense that it is an active process of remembering only the information that allows one to come to an immediate conclusion. Understanding and connecting information in the context of our prior beliefs are already present when making decisions or acquiring new knowledge. This is one of the reasons why information that supports people's beliefs

is more likely to reach them. This effect is even stronger when emotionally coloured (Jonas et al. 2001).

### **Disconfirmation bias (or prior belief effect)**

This refers to the fact that arguments that do not match our previous beliefs are considered weaker and take longer to be accepted. Thus, the way we see the evidence is not unbiased. As for the confirmation bias, information accompanied by emotion influences the degree and form of perceptual distortion (Edwards and Smith 1996). This phenomenon can cause an inability to reach a common consensus between individuals or groups of people with different attitudes because other evidence (which supports their particular claims) will be subjectively more important and relevant to both parties (Mirga and Hřčková 2019).

### **False consensus effect**

This term refers to a significant overestimation of public opinion in support of one's views (Mullen et al. 1985). It is one of the social biases, where other people are expected to share our views, leading to an illusion of a common consensus. It is the idea that we think that others think the same as we do, even though they often do not. The study of Ross, Greene, and House (1977) pointed to another finding, namely that we think of people with opposing attitudes as abnormal.

### **Group polarisation**

Social psychology research on conformity has concluded

that an individual tends to conform to the dominant view in a group (Ash 1955). Group polarisation is the tendency of people to make more extreme decisions in a group (or after a group discussion) than was the average of individuals' decisions before the group discussion, in the sense of radicalising their original attitudes (Isenberg 1986). This phenomenon can be caused by the influence of the social environment, such as the lack of diversification of opinions in a group or the tendency of individuals without a strong opinion to subscribe to the position preferred by the majority (Sunstein 2002).

Another possible explanation for group polarisation is the risk shift phenomenon, whereby people are more likely to act riskier in a group than individually because there is a diffusion of responsibility for the decision (Myers 1982). Typical settings where group polarisation occurs are, for example, religious or political movements. Extreme cases where each side asserts its truths are terrorist groups or rivals in war (Sunstein 2002).

### **What impact can social bubbles have on society?**

The observed findings on social bubbles have important implications for society, as ideological bubbles from the online environment spill over into the reality in which we live. The role of the “transmitter” is represented by us, the people. In the position of the user, we let all the effects mentioned above influence us. This tends to intensify our beliefs about our truth, which are still harmless in the

online environment. However, the real effects on society come when we return to the offline world.

Intense conviction of one's truth is problematic for two reasons. Firstly, if truth has a subjective meaning for each person, we lose the common ground that is essential for problem-solving. Secondly, the more intense the belief in subjective truth is, the less effectively we can communicate. Therefore, the problem of intense beliefs about subjective truth arises when interacting with another person, which is a confrontation with another truth. The effect of an intense conviction of one's truth, in which we are affirmed by a group with a similar sense of truth, can be observed in society as radicalisation. This results in an inability to communicate between these camps, which we can describe as polarisation.

The rise in popularity of social networking has many implications. For the first time in history, anyone can become an author and disseminator of news. The information we share on social networks is often subject to control and is instantly accessible to anyone and anywhere in the world. Such conditions create an ideal environment for the spread of disinformation, hoaxes and fake news, which undoubtedly pose a great challenge to humankind. The biggest challenges are the polarisation and radicalisation of the society.

## **Polarisation**

The term polarisation refers to a state, as well as a process. In the latter meaning, social polarisation is the process whereby the attitudes of individuals belonging to given communities towards a certain type of problem, are differentiated. People who share a similar identity concentrate at imagined opposite poles. Social polarisation is usually defined as the extent of disagreement that arises between communicating parties (DiMaggio et al. 1996).

According to Tewksbury and Rittenberg (2012: 133), we can speak of three levels of polarisation. In the first level (polarisation of news exposure) - people are assigned to homogeneous opinion groups on the basis of the information they are exposed to. The second (public-affairs knowledge) - groups' knowledge about public events differs according to the information they have been exposed to. The third (polarisation of opinion) - groups form an opinion about public events but each reaches a different conclusion because they are based on different assumptions. At this point, there is a shift of groups from the centre of opinion to the opposing sides.

The ideal conditions for polarisation are provided by the online space, where opinion groups represent groups on social networks. In the first place, the user becomes a member of a group, with the choice of the group being influenced by the personalised 'feed' that he or she is exposed to. Secondly, the group member receives knowledge about

a public cause but its presentation is ideologically coloured in accordance with the group's values. Thirdly, there is a moment when the same event is evaluated diametrically differently by members of two different groups.

Some studies have concluded that over time, high-ranking politicians begin to move away from the centre of opinion, while at the same time, they become more strongly defined from one another (Prior 2013). Bougher (2017) argued that the degree of political polarisation is lower among citizens than among politicians. Based on this finding, it is plausible to believe that social polarisation is caused by political polarisation because the political arena offers predominantly polarised options (Hetherington and Weiler 2009).

The key concept of polarisation is identification. Group membership is based on a sense of belonging, shared identity and solidarity. By building a common image of the group there is also a demarcation from other groups. Mutual distancing and the construction of 'us and them' camps lead to the accentuation of differences and the reinforcement of rivalries (Tewksbury and Rittenberg 2012). As a consequence, groups lack mutual tolerance and understanding for opposing views. A dangerous consequence of this phenomenon is the tendency of some groups to polarise in a way that can lead to extremism, hatred, and violence (Sunstein 2007). The phenomenon of group polarisation described above contributes to the reinforcement of views in social bubbles, with the spiral

of polarisation becoming ever larger due to ever stronger identification with the group. Society is fragmenting into groups of like-minded people who are moving away from each other (Tewksbury and Rittenberg 2012).

### **The impact of polarisation on the quality of democracy**

Some authors (Bruns 2019) argue that the influence of echo chambers and filter bubbles is vastly overestimated and the result of a wider moral panic about the role of online and social media in society. However, the information bubble phenomenon may pose a serious threat to democracy because of its disruption of the process of social debate, which is an integral part of democracy. As emphasised by Pariser (2011: 8), functioning of modern democracy requires that citizens can also perceive current events and things happening around them with the eyes of others, so that common facts can be relied upon. In bubbles, parallel but separate universes are offered instead. Applying filters that separate us from people with different views can therefore lead to a simplified or false picture of the world around us, in which we are unable to spot emerging threats.

Social bubbles may foster and deepen the polarisation of society. Polarisation leads to the disintegration of society into groups. Because these groups are closed and do not communicate with each other, the incentive to start a debate is reduced. Even if one starts, it is difficult for the participants to engage in dialogue because the individual members of the groups enter the debate with different

starting points. It is very difficult to reach a consensus in such circumstances.

People tend to lose the need to confront their views, and thus become an easy target for those using disinformation to manipulate. Therefore bubbles significantly increase the vulnerability of a divided society to propaganda, disinformation and fake news. Since we are not looking for the truth but only for confirmation of our own views, we will believe anything, as long as it conforms to our political sympathies.

Public debate is also important because it is a means of control between citizens and government. The decisions that the government makes can be indirectly influenced by citizens by engaging in public debate, which has the potential to change the views of elected representatives. A fruitful debate is motivated by the existence of a plurality of views and conflicts that, nevertheless, contain the possibility of reaching a consensus.

We could observe this situation not only at the time of dramatic electoral battles in particular Visegrad countries but also during the Covid-19 pandemic and the Russian aggression against Ukraine. Social networks have become battlefronts where the camps of supporters of opposing parties have passed each other by means of lies - alternative facts, hoaxes and disinformation theories.

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## Chapter II

### **Research on The Phenomenon of Social Bubbles on Facebook in Visegrad Countries**

Research on social bubbles in Central European countries is still in its infancy (Matuszewski, Szabó 2019). In addition to rather publicist contributions (Sadouskaya-Komlach 2018) and theoretical studies (Mirga, Hrčková 2019), the research on social bubbles, mostly carried out in the context of diploma theses, is rarely followed through. For example, some studies explore the hypothesis of whether we can observe the phenomenon of social bubbles but do not further contextualise these findings with other social phenomena we observe, and do not explore the potential relationship between them. Furthermore, if any research on social bubbles exists, it is conducted in individual countries, thus lacking comparative studies.

We can, therefore, argue that our research offers a solid foundation for a better understanding of the issue and its regional specificities. Data obtained by the questionnaire survey in all four participating countries are robust and, above all, comparable. In the following part, we will present basic results regarding the characteristics of the research sample and respondents' activity on the internet and social networks.

In total, 4831 respondents from Czechia, Hungary,

Poland and Slovakia over the age of 15 completed the online questionnaire, of which 2373 were men and 2458 women. Exactly a quarter of the questionnaires were filled from each country. The selection of respondents also reflected the administrative division of all four countries; thus, respondents from all 47 higher territorial administrative units were represented in the survey.

The age groups were approximately evenly distributed but the highest age groups were slightly underrepresented. Nevertheless, it reflects the characteristics of social network users in general. Thus, the least represented group is the 65+, which in fact reflects the proportion of people in this age group actively using the Internet. For example, the proportion of Czech people over 65 using the Internet has risen to 40% in 2020 (Czech Statistical Office 2020). In Poland, only 40% of seniors (65-74 years old) use the Internet. As for the age group of 75+ the figure falls to 13% (Public Opinion Research Center 2021). The proportion of people over 65 in all Visegrad countries who actively use social networks is even lower.

Regarding the level of education, the sample also differs from the general population in particular countries, as we addressed 38,3% persons with higher education, whereas in the entire population of the Czech Republic, it was only approximately 19%, in Hungary 22%, in Poland 24% (2014) and 18% in Slovakia have reached this level of education (OECD 2021). Respondents with primary education form the smallest group in our sample (5,4% in sample) and the

vast majority of those with primary education falls into the age category 15-24 years. Practically, all of them are still students. Almost half of the respondents declared that they had completed secondary education with the state exam (matura/maturita).

Moreover, the research participants were asked to indicate their level of education and current life situation, meaning whether they are employed, students, retirees, etc. 56% of the respondents stated that they were employed, 12,5% of them were students, and 22% were economically inactive (retired, unemployed, etc.). In the table below, the sample according to the specified control characteristics is presented.

**Table 2.1 The research sample according to the predetermined control characteristics.**

<b>SEX</b>	Men	49,1
	Women	50,9
<b>AGE</b>	15-24 years	18,3
	25-34	23,8
	35-44	23,1
	45-54	15,9
	55-64	13,4
	65 and more	5,5
<b>EDUCATION</b>	Primary	5,4
	Secondary without <i>Maturita</i> exam	11
	Secondary with <i>Maturita</i> exam	45,2
	Tertiary	38,3
<b>STATUS</b>	Employed	55,9
	Self-employed	5,9
	Unemployed	5,3
	Retired	10,1
	Unable to work due to long standing health problems / disability pensioner	2,3
	Student	12,5
	Fulfilling domestic tasks	4,2
	Other	3,8

*Note: N=4831. Figures in percentages.*

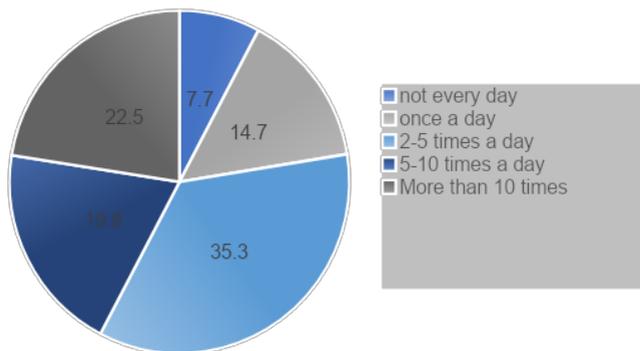
### **Activity in the online space**

In our research, we focused on Facebook, which is the most frequently used social network in the Visegrad group.

Facebook is used by at least half of the population over the age of 13 and its page ranks among the top three most visited websites in the countries (DigitalReportal 2021). Moreover, more than 90% of Facebook users access it via mobile phones. We can thus argue that a relatively large number of users have almost unlimited and uninterrupted access to their Facebook profiles.

Our survey confirms the high frequency of social network usage. Half of the respondents report that they check their profile daily up to five times, 20% do so 5 to 10 times a day, whereas 22,5% enter the Facebook page more than 10 times a day. Only 8% of the respondents do not check their account on a daily basis (see figure 1 below).

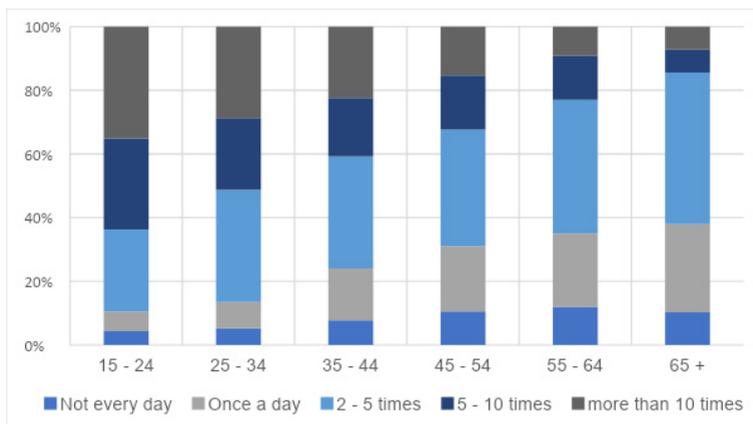
**Figure 2.1 Number of visits to own social media account per day**



*Note: N=4831. Data in percentages.*

The values for particular age category are significantly different. The data confirm that the youngest users spend more time on Facebook, as shown in figure 2 below.

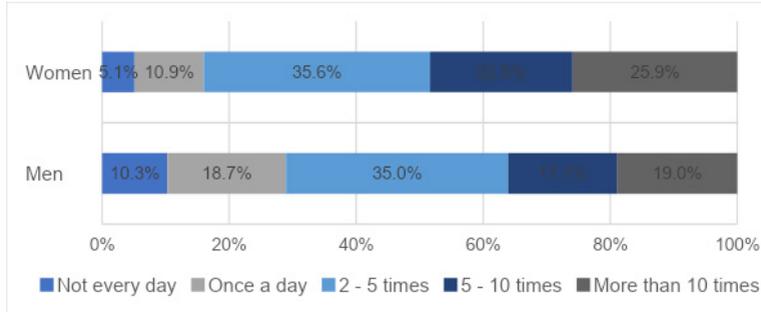
**Figure 2.2 Number of visits to own social media account per day – differences between age groups**



*Note: N=4831.*

We have also observed differences between men and women on this issue, with women visiting Facebook more often, as shown in the figure below.

**Figure 2.3 Number of visits to own social media account per day – gender differences**

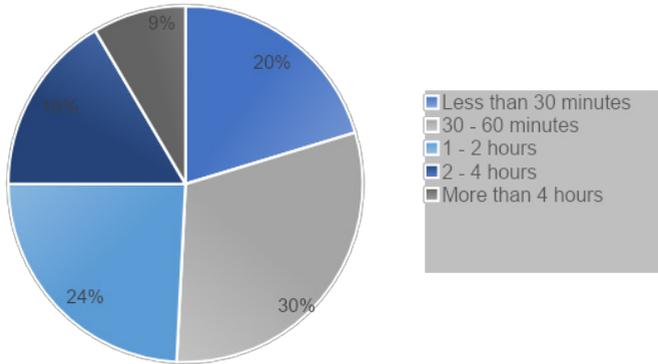


*Note: N=4831.*

The number of visits is also clearly related to the time spent on social networks. Figure 4 below shows how much time respondents spend on their Facebook accounts on a daily basis. One fifth of the respondents stated they spent up to half an hour a day on social media. A third of them spend up to an hour a day on Facebook. 24% report spending between one and two hours on their Facebook account, and one of four respondents admit to spending more than two hours a day on Facebook. The data regarding the number of daily visits to Facebook pages clearly corresponds with the declared time spent on the network, given that the average time per visit to Facebook pages in all four countries was between 12 and 14 minutes based on Similarweb data (DigitalReportal 2021).

**Figure 2.4 Daily time spent on Facebook account**

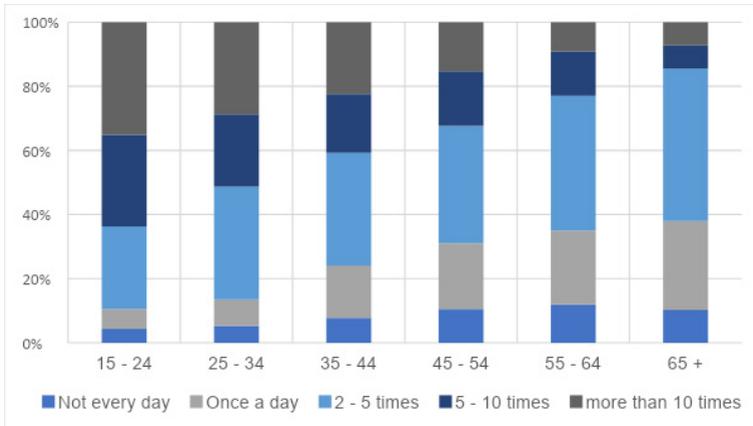
8



*Note: N=4831. Figures in percentages.*

Within this question, it is also interesting to observe differences between genders and age groups. Unsurprisingly, young people tend to spend more time on social networks. As illustrated in the Figure below, 62% of young people aged 15-24 spend more than an hour a day on Facebook.

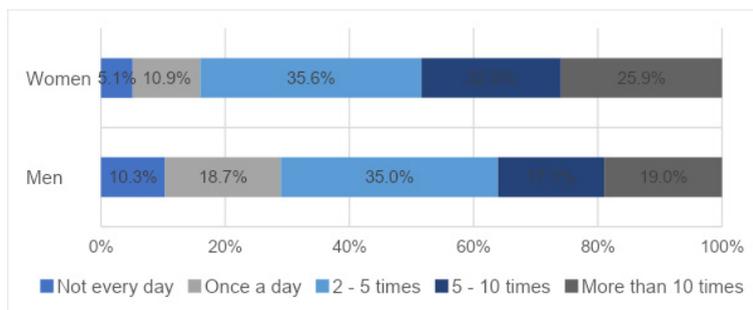
**Figure 2.5 Daily time spent on Facebook account – differences between age groups**



*Note: N=4831.*

The declared daily time spent on Facebook is significantly longer for women, as the Figure below shows.

**Figure 2.6 Daily time spent on Facebook account – differences between genders**



*Note: N=4831.*

Within this question, some differences between respondents from individual countries may be observed. It turns out that Czech respondents report much less time spent on Facebook, as indicated in the table below.

**Table 2.2 Daily time spent on Facebook account – country differences**

Country	Less than 30 minutes	30 - 60 minutes	1 -2 hours
Czechia	34,2	33,6	19,7
Hungary	16	32,6	25,3
Poland	17,2	30	25,5
Slovakia	14	25,6	26,4

*Note: N=4831. Figures in %.*

As for Czechia, we can notice a significant decline in the use of Facebook especially among the youngest people (15-24 years) – more than 70% of the respondents claim that they spend less than an hour on Facebook, which is 33% lower than the number for this age category for the whole group. We assume that this follows a long-term trend of young people leaving Facebook, while moving to other social networks like Instagram, for example (Pew Research Center 2018).

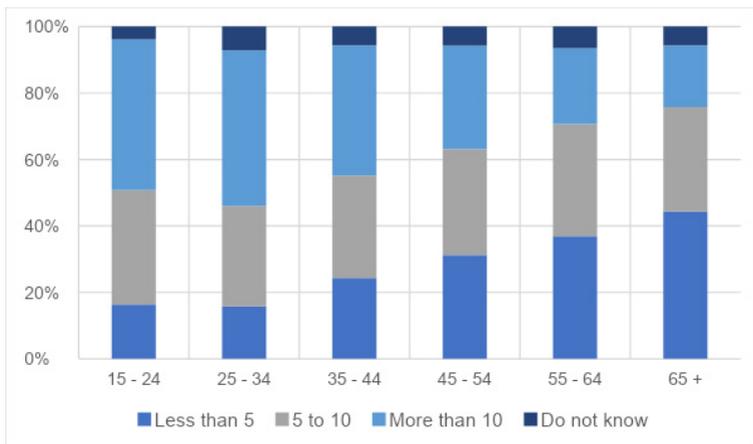
Indeed, Facebook respondents report that they use other social networks. 56% of them use Instagram, 17% have a LinkedIn profile, and 17% use Twitter. The latter is more common in Poland (28%), whereas in Slovakia, only one out of ten declare usage of this network. There are noticeable differences between age groups: 87% of the youngest respondents (15-24 years) use Instagram and 24% use Twitter. For seniors (65+) the figures are 27% and 16%, respectively.

Nevertheless, we were mainly interested in how active Facebook users are on this network. At first, we asked them about how many groups they had joined, and secondly, we were interested in the level of their activity in terms of commenting, sharing or liking.

As far as the number of Facebook groups is concerned, 25% of respondents are members of no more than five groups, a third report membership in 5 to 10 groups, and 37,5% declare having joined more than 10 groups. In

general, younger users are members of more Facebook communities, with the exception of the youngest age category from Czechia mentioned above. Almost half of the respondents aged 15-34 report being members of more than ten groups. For seniors (65+), 19% report such a high number of groups, as illustrated in the next figure.

**Figure 2.7 Facebook group membership – number of groups by age group**

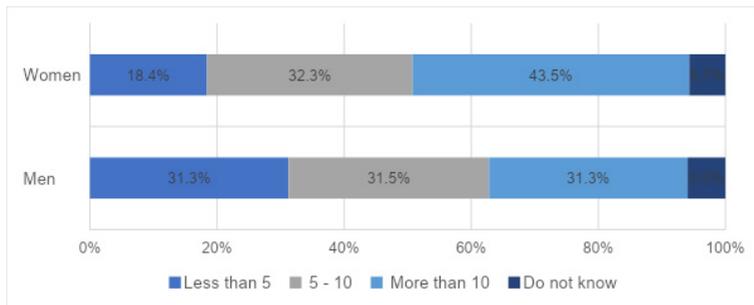


*Note: N=4831.*

In regard to the time spent on Facebook, we observe analogous differences between men and women in group membership (see figure 8 below). Respondents from Hungary declare the highest involvement in Facebook

communities - 46.5% are members of more than ten groups and only 17% report membership in less than five groups. As for Poland and Slovakia, approximately a quarter report membership in five groups and 36% report membership in more than ten groups. As far as the results in the Czech Republic are concerned, they are evenly distributed in thirds.

**Figure 2.8 Facebook group membership – number of groups by gender**



*Note: N=4831.*

From previous qualitative research, we have predetermined preliminary categories of Facebook users according to their level of activity. The table below shows how respondents identify themselves with these categories.

**Table 3.2 Typology of Facebook users by age groups**

Type of user	Whole sample	15-24	25-34	35-44	45-54	55-64	65+
Passive user	20,1	20,5	20	19,4	21,9	20,7	15,9
Scroller/browser	19,9	23,4	21,2	21,3	16,6	17,6	12,5
Liker (only)	22,6	30,6	24	20,7	19,2	17,2	21,2
Commenter (friends' posts)	9,9	4,6	7,5	9,8	12,5	14,2	21,2
Commenter (various posts)	4,9	4,2	4,9	4,2	3,9	6,8	8
Active user (likes, comments, posts) – own wall	11,1	8,7	11,4	11,1	13,1	11,7	11
Active user (likes, comments, posts) – variously in FB	8,6	4,7	8,8	10,1	9,7	9,6	9,1

*Note: N=4831. Figures in percentages. “None of the above characteristics” account for 100% of the responses.*

Based on the results of the survey, we are able to draw several conclusions. One in five Facebook users considers him or herself a passive member. It seems that the youngest users (15-24) are more likely to simply browse Facebook pages without further interaction or just give likes. These forms of activity, together with the declared passivity, are registered in 75% of the youngest respondents. For those over 55 years of age, the figure is 55.5%. Seniors (65+) are more likely to interact by commenting and liking, especially on the posts of their friends.

In the next section we take a look at the issue of membership in Facebook groups in a more detailed way.

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## **Chapter III**

### **Facebook Groups - Membership**

Online environment has become a natural part of our daily lives and has a significant impact on our preferences and opinions. Facebook groups and other online communities define our online world, and have been becoming more prevalent in our lives. They allow us to create more, in our opinion, meaningful communities, which wouldn't be possible in the offline sphere, and the COVID pandemic even accelerated this worldwide engagement.

According to the latest data worldwide, Facebook is the most used social media platform with more than 2.8 active users. 1.8 billion people use Facebook groups every month. From this perspective, Facebook is still the largest social media platform based on the number of its daily active users. For this reason, we need to pay attention and to focus on the impact of this social media platform. We need to explain how it changes our daily lives, analyse the way we consume information, as well as its impact on our perception of reality.

Building communities and groups is natural for humans. Even if we are not directly engaged with each other, the online world makes it possible to cross the natural boundaries and time shifts, or even engage people

from different angles and corners of the world. Such possibilities are influential, since they play a crucial role when it comes to forming our opinions, perceptions and attitudes about the world we live in. The main purpose of this chapter is to analyse the impact of Facebook groups, according to their size, type of group, membership and activities of Visegrad active users, and to give a more complex - general view of the online community in Central Europe, particularly in Czech Republic, Hungary, Poland and Slovakia.



## **Facebook communities and groups in Visegrad countries**

To be able to understand the impact of Facebook communities and their potential for social change, we need to observe this social phenomenon from different perspectives, theory included. How do we actually define an online community? The easiest way is to open any type of dictionary and search for the most suitable word. The Cambridge Dictionary, for example, defines “community” as the “people living in one particular area of people who are considered as a unit because of their common interest, social groups or nationality”. But what about the online world? Are there the same limits and measures defining the social interaction of people and their behaviour? The question is complex, and the answer is “yes” and “no” at once. It was already proved by tons of research that the way we interact in online world actually does not match our personal (offline) social position, but (there is always the but), the online engagement has the potential to influence the off-line world, if an individual is exposed to the effect of the online world for a long period of time. It may be fun, but we are all exposed, and for more than too long now, not to pay attention to the effects and impact that the online world has had, has, and will have on our daily lives. Back to the definition of the online community. The best and the shortest that we found was the definition of Ignite Real time which puts it direct and simply: “Just 3 words sum up the online community: people, collaboration and content”.

What kind of people in Visegrad countries, and in each particular society, are willing to interact together? Our surveys confirmed that the most common users are younger people, active users that are within more than 10 Facebook groups.

**Table 3.1 Membership in the Facebook Groups in Visegrad Countries**

	Czech republic	Hungary	Poland	Slovakia	Total
Less than 5	31.3%	16.8%	26.0%	24.8%	24.7%
Between 5 - 10	31.4%	32.1%	32.5%	31.8%	31.9%
More than 10	30.8%	46.5%	36.2%	36.5%	37.5%
I do not know	6.5%	4.6%	5.3%	6.9%	5.8%

*Source: own online survey 2021*

An online (Facebook) community is created around a particular topic or for a particular purpose. The users come together and join to get information, advice, quick answers, support, etc. In general, the majority of the active users in Visegrad societies enter Facebook groups that are related to their hobbies or dedicated to their local/regional communities and belongings. Greater part of the active users also enters online communities that are dedicated to entertainment or fun. But as the topic becomes more “serious” or personal, the users lose the tendency to join such online communities. Of course, exceptions are always present. This could be seen as a signal of non-personal affiliation to the online world and tendency to separate the personal life, opinion, and inner circle from the online world.

Nevertheless, this could change in the future, and become a new trend in online participation and engagement.

**Table 3.2 Type of Membership of users in the Facebook Groups in Visegrad Countries.**

	Czech republic	Hungary	Poland	Slovakia	Total
Groups related to	79.6%	63.4%	68.9%	83.4%	73.9%
Local or regional	55.2%	57.5%	59.6%	50.2%	55.6%
Entertainment groups	24.1	39.6%	34.3%	39.1%	34.3%
Groups for people	23.1%	24.2%	33.3%	25.6%	27.0%
Religious groups	2.2%	3.8%	7.7%	5.8%	4.9%
Political groups	8.0%	12.9%	17.8%	8.5%	11.8%
Groups with common	13.5%	25.9%	17.3%	21.7%	19.6%
Groups for friends	21.5%	36.1%	31.8%	32.8%	30.5%
Groups related to	26.1%	23.7%	31.0%	19.4%	25.1%
Fan clubs	28.5%	25.1%	23.2%	15.2%	23.0%
Other	6.1%	10.2%	6.2%	4.9%	6.8%

*Source: own online survey 2021*

In general, the size of the group does not matter. More or less, the activity of users within the Facebook group depends on the type of the group, and their identification with a particular group(s) of which they are members. Facebook users enter the online community for a purpose, focus groups confirm that one of the main reasons is “to gain profit”. These users tend to be active only if their activity leads to some profit - social, economical - earning money, promotion, and etc.

The sense of belonging to a focus group and their identification within is connected also with the time spent on Facebook and within the Facebook online group/

community, including their own engagement inside these groups.

According to the online survey, more than 1/3 of Facebook users visit their online accounts 2 up to 5 times per day (see the table 03). As for Slovakia, the users claim to visit their social media accounts even 10 times per day.

**Table 3.3 General engagement of users at their social media accounts in Visegrad Countries.**

	Czech republic	Hungary	Poland	Slovakia	Total
Not every day	12.7%	6.7%	5.4%	5.9%	7.7%
Once a day	18.2%	10.7%	13.3%	16.5%	14.7%
2-5 times per day	34.9%	38.4%	37.1%	30.9%	35.3%
5-10 times per day	18.3%	20.9%	21.9%	18.2%	19.8%
More than 10 times per day	15.9%	23.3%	22.2%	28.5%	22.5%

*Source: own online survey 2021*

Within the time spent, it is also interesting to observe the differences between particular age groups. Unsurprisingly, young people tend to spend more time on their social media accounts. Of course, the type of the media has to be taken into account. Both research - qualitative and quantitative - were focused on the Facebook users, so the analysis might have its limits, and some observations are limited to our perception and current knowledge. However, it is certain, since we copied the latest trends from the fact that the younger generation is spending less time on Facebook,

leaving this social media for others more appealing to them (Instagram, TikTok).

**Table 3.4 Daily time spent of users at their social media accounts in Visegrad Countries.**

	Czech republic	Hungary	Poland	Slovakia	Total
Less than 30 minutes	34.2%	16.0%	17.2%	14.0%	20.3%
30-60 minutes	33.6%	32.6%	30.0%	25.6%	30.4%
1-2 hours	19.7%	25.3%	25.5%	26.4%	24.2%
2-4 hours	8.4%	18.0%	17.3%	22.1%	16.4%
More than 4 hours	4.1%	8.2%	10.0%	11.9%	8.5%

*Source: own online survey 2021*

The age gap is also visible in the frequency of time spent on social media accounts. As the users become older, they tend to spend less time on their accounts, which is influenced by the ability to operate in the online environment and their digital skill. For example, the members of the young generation aged 15-24, spend more than 10 times more per day on their own social media accounts in comparison to 7,2% people aged 65 and more.

Nonetheless, we were interested in how active Facebook users in Visegrad countries are, what are their daily habits, how their expectations are to be involved, and what motivates them to be active. In general, our aim is to uncover the digital social identity of Facebook groups users, and how it differs (if) from their off-line activities and from their off-line identity.

The image of oneself, which the individual creates by his or her activity on social networks (virtual social identity), including membership in Facebook groups, is associated with various motivations. Apart from motives related to values and interests, there are also pragmatic ones, such as using the social network (Facebook) as a working tool, or the fact that the user of social networks wants to understand a different opinion group and engage in solving problems (such as climate change, animal protection). Therefore, the user becomes a member of FB groups with which he or she does not agree in terms of opinion and value orientation. Nevertheless, our virtual image is also determined by less conscious factors (often forgotten in time), such as inertia. Some participants in the focus groups admitted that they had no idea how to unsubscribe from the group, or that they had no significant reason to unsubscribe, so they passively remained being members.

Firstly, to be able to characterise the digital social identity of Facebook users, we need to know their inner motivation for engaging into these online groups, their activities inside these groups, and last but not least, the purpose or reason for their willingness to remain in these online groups. Our motives and assumptions are based on the fact that social media facilitates the formation of social identity bubbles that reinforce shared identities, relying on the information shared within the bubbles. The social identity bubble reinforcement model (known in the academia as IBRM) seeks to understand human motivation and social

psychological aspects of the existence of online social bubbles. According to the IBRM, the expanded possibilities for communication and formation of social bubbles inside the online environment allows individuals - users - to search for social interactions with others who share and validate their identities. In general, this process of identity-driven online use can lead to creating identity bubbles, which are, according to the scholars, manifested by 3 elements:

- a. Identification with the online group - social identification,**
- b. Interaction homophily - tendency of users to interact with like-minded people in the environment, and to form like-minded social groups,**
- c. Information bias - a reliance on like-minded information on social media.**

According to the results obtained from the focus groups in all Visegrad countries, the majority of users believe that their engagement in these social online groups gives them a special advantage, for example to be informed about the topics they search for, to be updated on current situation about their friends circle, or to gain profit from their engagement (to sell something, find a job, apartment, etc.).

Another area of research was the question of how the form of activities is reported by members of FB groups. During the interviews, some participants actually reflected their behaviour on Facebook and within individual groups

for the first time. Based on the analysis, the following forms of non-activity in Facebook groups can be defined:

1. **Declared passive users** - these users are the most passive users of Facebook and Facebook groups. They do not react; they do not comment. They do not actively contribute to groups or share anything on their profile. Some groups are muted so they do not appear in the feed.
2. **Observers (active or silent)** - these users are mostly in the position of observation, they are rather passive, consuming the content. They scroll, read posts and rarely resort to any activity. However, they have an overview of what is happening, even if they do not react to the post.
3. **Those who „like“** - the activity of these users ends with the so-called likes. They do not go further in their reactions by, for example, writing a comment or creating their own post to the group.
4. **Commentators** – this group consists of more active Facebook users. They express their position in the comments below the post. Usually, however, they do not make contributions for themselves.
5. **Active members** - the greatest activity is shown by the founders of the groups - they post contributions, solve problems within groups, write comments, and thus express their opinions. The results also show that the users are more active in interest groups. Some of the research participants

also encourage extremist views or, in general, views with which they disagree and want to express their disagreement.

**Passive users**

**Scroller / browser**

**Liker (only)**

**Commenter (friends' post)**

**Commenter (various post)**

**Active user (likes, comments, posts) own wall**

**Active user (likes, comments, posts) variously in FB**

It would be premature to draw conclusions from this data, but it seems that the youngest users are more likely to simply browse Facebook pages, without further interaction, or just give likes. These forms of activity, together with the declared passivity, register more than 80% of the youngest respondents in all Visegrad societies. For those over 55 years old (and even over 65 years old), a different pattern is followed. Seniors are more likely to interact through commenting and giving likes under friends posts or “inside” their own Facebook wall (claimed by more than 21% of all Visegrad users over the age of 65).

**Table 3.5 Types of Users**

<i>Type of user</i>	<i>Czech Republic</i>	<i>Hungary</i>	<i>Poland</i>	<i>Slovakia</i>	<i>Total</i>
<i>Passive user</i>	<b>20%</b>	<b>19.7%</b>	<b>15.6%</b>	<b>24.5%</b>	<b>20.1%</b>
<i>Scroller/browser</i>	<b>17.8%</b>	<b>23.8%</b>	<b>20.0%</b>	<b>18.1%</b>	<b>19.9%</b>
<i>Liker (only)</i>	<b>23.9%</b>	<b>19.0%</b>	<b>22.0%</b>	<b>25.6%</b>	<b>22.6%</b>
<i>Commenter (friends' posts)</i>	12.5%	9.6%	10.0%	7.7%	9.9%
<i>Commenter (various posts)</i>	2.8%	6.7%	5.1%	4.9%	4.9%
<i>Active user (likes, comments, posts) – own wall</i>	15.4%	9.6%	11.7%	7.8%	11.1%
<i>Active user (likes, comments, posts) – variously in FB</i>	5.1%	9.2%	12.6%	7.6%	8.6%

In general, all Facebook (group) users have a tendency to limit their online activities to minimum, which was also proved within the focus group. The tendency was not to discuss topics among strangers, and those with different standpoints. That could also be seen as a side effect of a social bubble. In other words, there is a tendency not to present their personal opinion among a wider (online) community.

**Table 3.6 The general online activity of FB users in Visegrad countries.**

	<b>Not at all</b>	<b>Few times per month</b>	<b>Few times per week</b>	<b>Every day</b>	<b>Several times a day</b>
<i>On own Facebook Wall</i>	9.6%	26.0%	21.9%	<b>27.1%</b>	15.4%
<i>Browse in own FB groups</i>	8.9%	<b>27.3%</b>	<b>29.7%</b>	<b>22.6%</b>	12.5%
<i>Put likes under the post of friends</i>	6.8%	<b>30.1%</b>	<b>32.2%</b>	19.3%	11.6%

<i>Put likes under posts of other members of FB groups</i>	12.6%	<b>33.3%</b>	<b>29.0%</b>	15.2%	9.8%
<i>Write comments under posts of friends</i>	<b>22.7%</b>	<b>43.6%</b>	21.4%	8.5%	3.8%
<i>Write comments under various post in FB groups</i>	<b>29.4%</b>	<b>38.7%</b>	20.5%	7.4%	3.9%
<i>Create own posts on own wall</i>	<b>36.1%</b>	<b>43.9%</b>	14.2%	4.1%	1.8%
<i>Create posts in various FB groups</i>	<b>41.9%</b>	<b>38.7%</b>	13.4%	4.2%	1.7%
<i>Joining FB groups</i>	19.9%	<b>65.3%</b>	9.4%	3.6%	1.7%

In general, when we analyse the online activity of Facebook users in Visegrad countries, we need to state that their online life is minimised to their own circle and their own “wall”. The tendency to be visible among others is shrinking. Online FB users do not have the tendency to be very active on Facebook groups in general, they do not even have the tendency to engage with likes or comments under various posts in the FB groups. On the contrary, 65.3% of them join new FB groups, but on a monthly basis.

We can say that the majority of the online users have the tendency to protect their online activity when it comes to presenting their personal views. They rather choose to be observers of what happens in the online world, then actively engage in creating and responding to the content they find. It mirrors the results from focus groups, where they

confirm that they are unconscious about interacting with other users, and to present their own opinions. They also state it is more secure not to interact because it may have a negative impact on themselves, to be blackmailed under the comments, to be punished because of their opinion, or to be excluded from the online community. This is a crucial observation which we should pay attention to, since it might be connected with the negative consumption and avoiding reaction to various disinformation, fake news and hate speech. The tendency of people not to interact and just consume the information flow is a negative trend with an impact on the whole society, unabling people to interact or question the reality around them.

The other observation, when it comes to **the activity** of the Facebook user, is the fact that their activity within the online environment mirrors their motivation of engagement. One of the basic questions was for what meanings the users attach to Facebook groups. It turned out that these meanings intertwine with the motivation for group membership. Firstly, we clarify the individual meanings that emerged from the data:

A. Some of the focus groups participants understand the Facebook group as a **COMMUNITY**, i.e., a group of similarly value-oriented people with whom they feel a certain closeness and agreement in value orientation, religion and way of life (for example, they perceive the group

as a community of believers or supportive professional community, etc.).

B. Some of the users see the membership in the FB group is an expression of a **POLITICAL ATTITUDE**. Participants become members of a group primarily to express their civic attitudes, whether close to conservative, liberal or other values. This meaning overlaps to a certain extent with the previous category. It depends on whether the members of the Facebook groups declare close proximity to each other, which is then the basis for the perception of the group as a community.

C. Facebook participants also perceive membership in FB groups as a **SOURCE OF INFORMATION AND INSPIRATION**. The information usually concerns leisure time but some respondents use the FB groups as a source of information related to their work or labour market in general. The information related to leisure time has the nature of various inspirations, advice and tips, but also sharing experiences with products (reviews), cooking recipes, etc. This meaning can also be associated with the so-called broadening of the horizon. However, the participants in FB groups are also looking for links for further education or job advice (including sharing experiences with a job position or employer). The term “information” is understood very broadly (not only news, but also general overview of what is happening in the area, among their friends or a wider circle

of acquaintances). Some respondents already attribute the role of news channels to Facebook.

D. Participants in the focus group also attribute the importance of **ENTERTAINMENT** and **RELAXATION** to membership in Facebook groups. There are no conflicts of opinion in these groups, nothing has to be solved in any inconvenience. Some groups are perceived primarily as a source of amusement. Interestingly, the same group may be perceived differently by its members - for one it is a source of entertainment, for another it is an expression of pride and political opinion.

E. For some participants, the FB groups have the major importance in relation to **WORK**. There are various kinds of groups important for work, including professional groups, perceived as a source of different opinions, but also contacts in the field, leading to networking. They are used when it comes to searching for information, job offers, various job recommendations, as well as for personal promotion or promotion of brands and products. Some participants in the survey state that Facebook has the greatest importance to them precisely in terms of promotion. Participants in these groups perceive the added value of sharing and solving problems. It can also be a useful platform for sharing expertise on a given topic.

F. **PRAGMATIC** groups are a designation for those FB groups in which the members are present in order to solve a current problem - for example, to sell or buy something, to find rental housing and the like. It is interesting that even if the problem is solved and membership in the group is no longer needed, the participants do not leave them.

According to online survey and focus groups outputs, motivations for membership are strongly linked to the meaning of particular Facebook groups. This is also visible in the categories emerging from the analysis, which represent the basic motivations for group membership (and are largely identical to the previous ones):

1. **Community** - this motivation for membership is rooted in the desire to be part of the community, to find out if people in the community solve similar problems and also to know what is happening in the community and how it is evolving over time (in terms of opinion and also in terms of number of members). The community symbolises friendship, sharing the same beliefs. It is also a safe place to share thoughts and feelings, a place where people can consult with each other. Being part of a Facebook group also means supporting the community.

2. **Dissatisfaction** with the political situation is an expression of dissatisfaction with politics, its representatives and mainstream opinion.

3. **Information and inspiration** - in this category, it is surprising that research participants claim they obtain information from FB groups that, according to their words, they would not be able to find elsewhere or otherwise, be able to obtain. It is also interesting that these groups act as news media.

4. **Entertaining, rest group, non-confrontational** - this motivation is related to the desire to have fun on social networks, some actors are aware that it may be a bit of a waste of time, but they cannot help themselves (guilty pleasure).

5. **Work** - for some participants it turned out to be the basic motive not only to be in the group, but also on Facebook in general. They have a high reflection on what principles Facebook is based on and how to use FB groups for their own or corporate benefit. On the contrary, they spend free time outside social networks.

6. **Inertia or “I do not know how to leave the group”** - during the interviews, some respondents reflected that they remain in the groups only out of inertia, they have lost meaning for them (for example due to obsolescence of the topic or thematic diversion), but they remain in the group because they do not know how to leave it.

In our research, we were also interested in whether members of FB groups **feel any sense of belonging to the group**. The result shows four types of thinking about the social bond between members of the FB group:

- **Togetherness** - refers to groups where members feel united by a strong bond in values (this may include faith, political movements or lifestyles). Of course, members of one group may perceive it differently.

- **Closeness of opinion and interest proximity** - this feeling is associated with a certain proximity or professional closeness, closeness to lifestyle, but it is not a strong bond in the field of values.

- **Feelings of difference** - Some research participants feel a certain difference with group membership, which distances them from the group. They also point to the internal differentiation of large groups.

- **Without a close connection** - the members reflect that they are in numerous groups where people do not know each other and therefore do not feel close to them. This includes one-time pragmatic groups, where one enters for a purpose, but no longer counts on them.

## **Paradox of Social Bubbles**

A lot was said about the motivations and activities inside the online environment, Facebook, and Facebook groups in general. Sometimes, the mixed research surveys show various paradoxes of the participants, rooted in their socialisation process, inside their society, and inside their perceptions of reality.

According to the statements of all Facebook group members, they see a clear division between the offline and online life, not only for them, but also for all the users in the online world. We conducted various classical stereotypes of differences between online vs offline behaviour, as:

- People are more negative in the online world.
- People do not have limits and barriers when communicating online because they feel safe, secure, and anonymous.
- People feel more comfortable in online discussion because they have time to think about their answers, comments and questions.

The next paradox that was uncovered during the focus groups was the user's opinion towards social bubbles, Facebook groups and their position within the online society. Members of focus groups are affiliated with their

groups, they see them as a crucial tool for education, information, communication, and promotion. They also associate Focus groups with a community of people that are “together because of their human cohesion”. On the contrary, members of the social bubbles are not willing to communicate and react on other users’ comments, since they believe that the online world is too radical and offensive, too polarised, and that there is no reason to comment or react even when something is happening because it makes no difference and does not bring any value.

The third paradox is related to the inevitability of Facebook groups. A lot of focus group members complained about how they try to restrict the time spent on social media, while the practical purposes that motivate them to join Facebook groups prevent them from quitting Facebook. Often, via Facebook groups, they are able to find the necessary information, connections, and expertise that would not be accessible otherwise. Facebook groups have become so rooted into the social and communicative aspects of our everyday lives.

The fourth paradox concerns so-called implicit moderation. The abundance of and accessibility to information and content often turns into information overflow and confusion, rendering social media outlets ‘implicit moderators’ of information that social media users rely on for their news and information consumption. Such

‘moderation’ is rooted in algorithms and strengthens social bubbles.

The last but not least uncovered paradox, according to the focus group, was called social bubbles self-awareness. Discussants often talk about the danger of being enclosed in “social bubbles” or “information bubbles”. Yet the only ones mentioning they take up efforts to join groups outside of their declared views, were members of the “Exclusive society”.

### **And what about curiosities?**

Discussion is often aggression. This was the most common statement in the focus groups discussion reflecting actual behaviour in the online environment of Facebook users in Visegrad countries. In fact, this should be seen as a global trend that may be visible all over the world. People have a feeling that the online environment is becoming more vulgar and violent. Furthermore, while discussants claim that the social/information bubbles are not constructive to societal debate or dialogue, many reveal their frustration with the level of aggression and anger present in the discussions on Facebook. Many report avoiding getting involved in the conversation out of fear of being attacked or judged.

Political content moving out of Facebook? Allegedly, a lot of Facebook groups formerly focusing on political discussion are now transferring to Twitter and other social media platforms. This, as one discussant puts it, could be related to the changes in Facebook policy of handling content and increased censorship. Some reported the censorship rules to be arbitrary/silly.

Memes as communication. Some discussants report that they do not only look for news articles and information on social media, but that they can find out about whether something important/controversial happened when they see memes about a particular topic on multiple Facebook groups and outlets. That prompts them to learn more about the details of the event or story.

Facebook group lingo. Among some communities, a special language emerged that is related specifically to the activity in Facebook groups. For example, the word “lurkować”, coming from English “to lurk”, signifies passive consumption of content in Facebook groups, scrolling, liking things, but not engaging in producing or responding to content in an active way.

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## **Chapter IV**

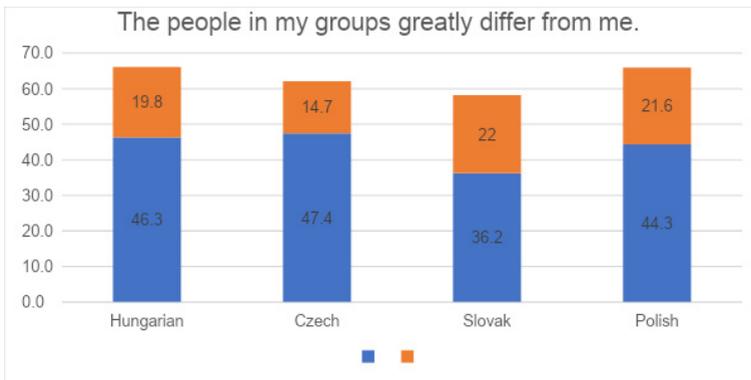
### **Social Identification of Facebook Users**

#### **Formation of self-identity bubbles**

In order to investigate the extent to which Facebook facilitates the formation of identity bubbles, it was crucial to look at how members of Facebook groups perceive other members in relation to themselves, as well as how they perceive the groups and their roles in relation to their identities. On a scale of one to seven, respondents were asked to rate to what extent they agree (number seven being 'strongly agree') or disagree (number one being 'strongly disagree') with provided statements. During the data analysis, the seven options were divided into two main groups (agree and disagree) as shown in the figures below. To enhance accuracy, providing a neutral option (which refers to neither agree nor disagree) was essential. However, for the sake of convenience and greater clarity, we have decided to focus on the two above-mentioned groups only, omitting the neutral option answers.

The first four questions (from which this paper highlights three) aimed to find out what kind of people users tend to surround themselves with within the online space - whether respondents perceive fellow Facebook group members

as similar, or rather as different from themselves. Based on the findings, respondents in all four countries tend to disagree with the statement ‘The people in my groups greatly differ from me’ (Figure 4.1). In the Czech Republic, overall disagreement was about three times more common (47.4%) than agreement (14.7%). The Czechs were followed by the Hungarians and Poles, by which disagreement was slightly more than twice as common as agreement. Judging by their responses, the Slovaks were relatively more divided, with disagreement reaching an overall score of 36.2% and agreement reaching 22%.



*Figure 4.1*

One of the most shocking results appeared under the statement ‘I am quite similar to the people in my group (Figure 4.2)’ in terms of difference amongst the four

countries. In stark contrast to Hungary, where the most common answer was disagree (44.8%) as compared to agree (23.3%), followed by the Czech respondents, amongst whom disagree was still the most common answer (36.4%) as compared to agree (25%), in Poland and Slovakia the most popular answer was agree. In the case of Poland, the gap between the two options was the greatest, with disagree being the most popular response (40%) as compared to agree (24.6%).

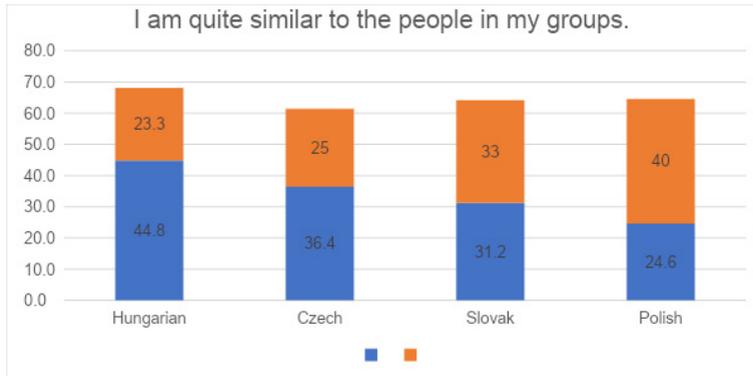
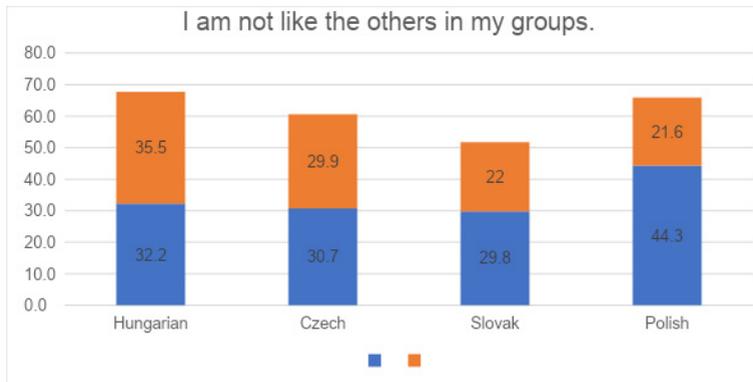


Figure 4.2

Another interesting contrast emerged amongst the four countries, when they had to respond to a more provocative statement, that is 'I am not the same like the others in my group' (Figure 4.3). The results in Slovakia and Hungary were more or less similar, with disagree being a slightly more common answer than agree, and in the Czech

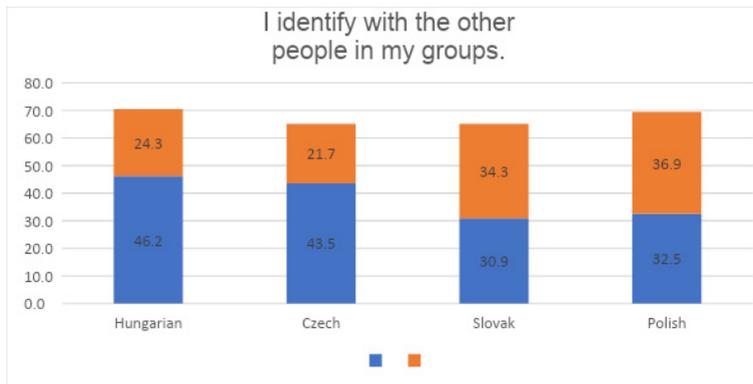
Republic, neither agree nor disagree was found to be a more significantly common answer than others. Interestingly, results in Poland are rather distinct, as the most common answer was disagree (44.3%) as compared to agree (21.6%). In other words, the dominant perception amongst the Polish respondents – contrary to the statement – is that, to a certain extent, they do believe that they are the same as other members in their online communities.



*Figure 4.3*

The following four questions focused on the relationship between the respondents' self-identity and the groups they are part of. Again, three questions will be highlighted, starting with how respondents were found to have related themselves to the other people in their groups. Findings show that members of online communities in Poland and Slovakia are more likely to identify themselves with their

fellow group members. That is quite the contrary in the Czech Republic and Hungary where the respondents were more likely to disagree when asked whether they could identify with other people in their groups (Figure 4.4). Polish respondents were the most likely to agree with the statement - with agree options reaching an overall 36.9% compared to disagree (32.5%), followed by Slovakia with agree options receiving an overall 34.3% compared to disagree (30.9%). In Hungary, disagree options reached an overall 46.2% compared to 24.3% agree, followed by the Czech Republic where the options for disagree were overall slightly less common (43.5%) than in Hungary. Yet the options in the Czech Republic for agree were also slightly less common (21.7%) when compared to the Hungarian results in this category. However, while in Slovakia and Poland more people tend to agree, the gap between disagree and agree was much smaller than the gap in the case of Hungary and the Czech Republic, where disagree was around twice more common than agree.



*Figure 4.4*

Moreover, our aim was also to find out to what extent respondents identify with their groups in general (Figure 4.5). Showing similar patterns to the former question, the most common answer was disagree in Hungary and the Czech Republic as opposed to Poland and Slovakia, where the most common answer was agree. The Hungarians proved to identify with their groups the least, with 42.6% in disagree and 28% in agree, followed by the Czechs with 38.6% in disagree and 27.4% in agree. However, in comparison with the former question, Poles and the Slovaks opted for the agree options much more frequently. In Slovakia, agree options were chosen more than twice as frequently (40.6%)

than disagree options (23.9%), and in Poland 42.1% agree and 27% disagree, thus showing almost the exact opposite of the data received in Hungary.

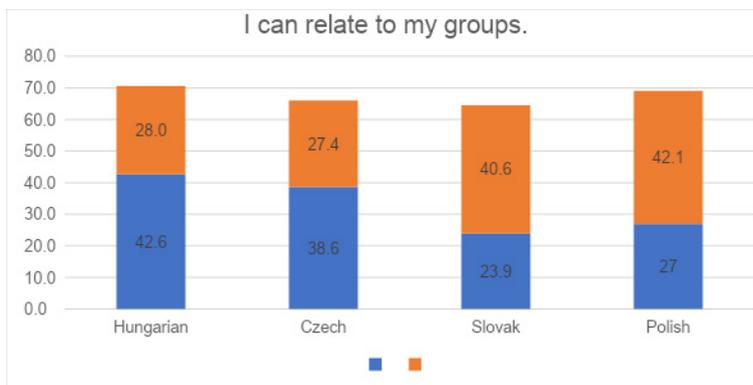
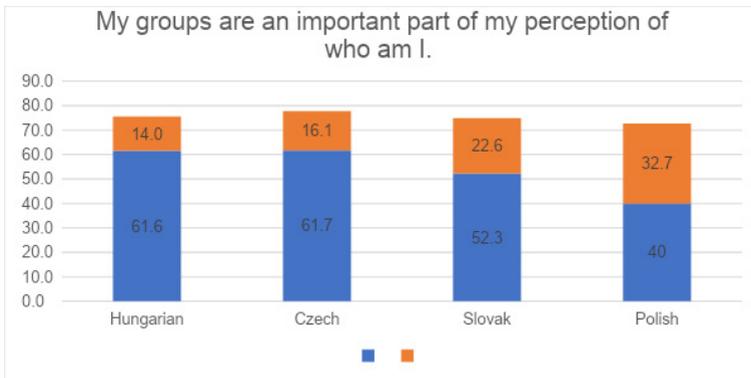


Figure 4.5

Finally, the respondents were asked whether they find their groups to be important to their sense of who they are. In all four countries, people tended to find groups to be rather unimportant when it comes to defining their self-identities (Figure 4.6). The Hungarians and the Czechs were more likely to disagree with the statement that groups are important to the sense of who they are - with the options for disagree gaining an overall of 61.8% in comparison with agree options (14%) in Hungary, and 61.7% and 16.1% respectively in the Czech Republic. They were followed by Slovakia where the most common answer was still disagree (52.3%) as compared to agree (22.6%). The gap

between the two options was the narrowest amongst Polish respondents, with the overall of 40% for disagree and 32.7% for agree. Therefore, online communities could be seen as if they played a relatively more important role for Polish respondents in terms of self-identity in comparison to respondents from other three countries.

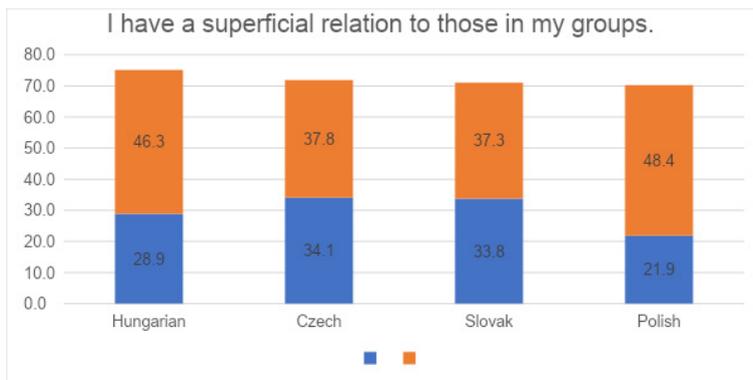


*Figure 4.6*

The following set of questions focused on how people evaluate their relations to others in the online groups which they are members of. Before discussing the findings in more detail, we would like to highlight the observation we have made based on the results. First of all, most respondents generally felt that they have superficial relationships with other members of their online communities, and that they

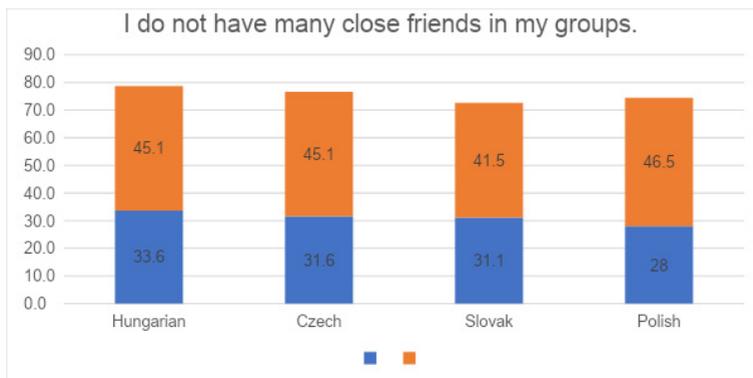
do not have many close friends in such groups. On the other hand, most respondents disagreed both with the statement that they cannot really empathise with the others, as well as with the one stating that they don't care about the other people in their online groups. Hence, such results reveal a general contradiction. Although it is more common for people to feel that their relationship with others is only superficial, and that they do not have close friends in their groups, most respondents claimed to be caring and empathetic towards one another.

With regards to the first question (Figure 4.7), the majority of Poles agreed that their relationship with other members was superficial when compared to the respondents from the other three countries, with the overall agreement with the statement being more than twice as common (48.4%) than disagreement (21.9%). Poland was followed by Hungary, the Czech Republic and Slovakia. In the latter two, respondents were more divided as the gap between agreement and disagreement was narrow, suggesting that amongst the Czechs and the Slovaks there are more people who perceive their relationship with others in their group as less superficial than in Poland and Hungary.



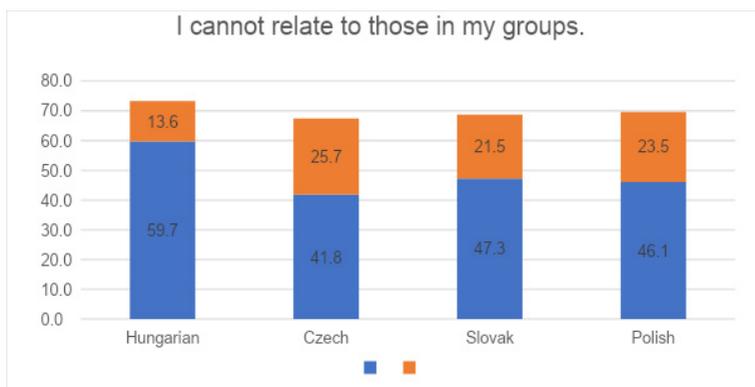
*Figure 4.7*

Similar trends appeared when observing the data based on the answers to the second question. Here, we explored how one feels about their fellow group members (Figure 4.8). Again, the respondents in Poland and Hungary tended to agree with the statement more - meaning that they do not have close friends - in comparison to the respondents from the other countries. However, it is also worth mentioning that participants in Hungary and Poland were generally more divided than in the case of the previous question. In Poland, agreement reached an overall of 46.5% compared to 28% of people who disagreed - followed by Hungary, the Czech Republic and lastly Slovakia. Additionally, the distinction between the responses of Poles and Hungarians as compared to the responses of the Czechs and the Slovaks were less pronounced than previously.



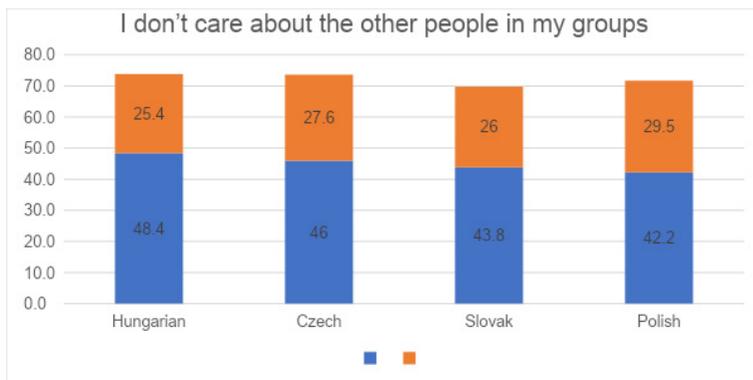
*Figure 4.8*

Regarding the third question about the extent to which one is able to show empathy towards another in their groups, Hungarians were the most prone to claim that they can empathise with their fellow group members, followed by the Slovaks, Poles and the Czechs. (Figure 4.9) In Hungary, overall disagreement with the statement that one cannot really empathise with their group members was no less than four times more common (59.7%) than agreement (13.6%). In Slovakia, disagreement was slightly less than twice as common (47.3%) as agreement, in Poland 46.1% disagree and 23.5% agree, and 41.8% and 25.7% respectively amongst the Czech respondents. These results so far already indicate that although respondents feel rather unattached to other people in their groups, most of them feel that they are able to empathise with one another.



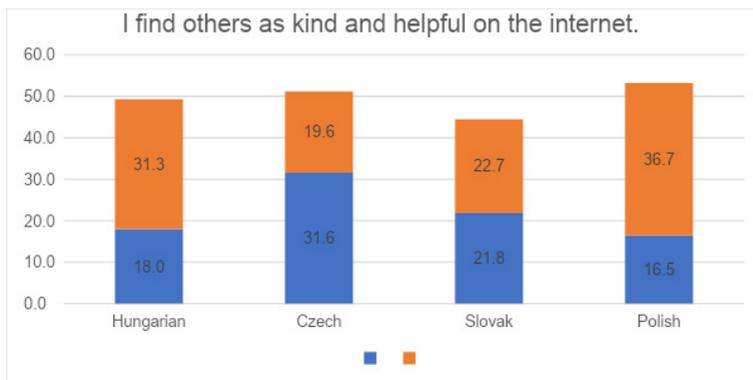
*Figure 4.9*

Finally, Hungarians were found to be the most prone to disagree once again with the statement ‘I don’t care about the other people in my groups’, followed by the Czechs, the Slovaks, and Poles. (Figure 4.10) In Hungary, the overall disagreement was twice as common (48.4%) as the agreement (25.4%). In the case of Poland, where the overall score of disagreement reached 42.2% and agreement 29.5%, the gap was relatively the biggest. Consequently, while Hungarians feel the most dissatisfied with their relationship to others, they are the ones claiming most frequently that they do care about others and can empathise with them. Responses from Slovakia and the Czech Republic appeared to be the least inconsistent when compared to Poland and Hungary.



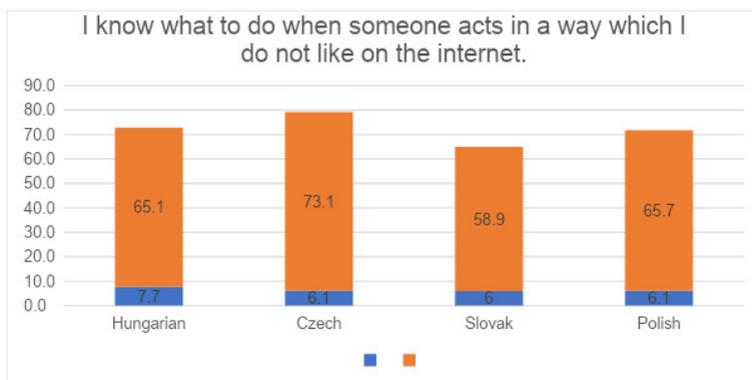
*Figure 4.10*

Having asked about the helpfulness of Internet users, only half of the respondents could answer the question properly. The other half did not provide us with an answer or chose the neutral option (Figure 4.11). Among respondents, Polish and Hungarian respondents perceive the Internet users as kinder (H - 31.3%, P - 36.7%) than the Slovaks (22.7%) and the Czechs (19.6%).



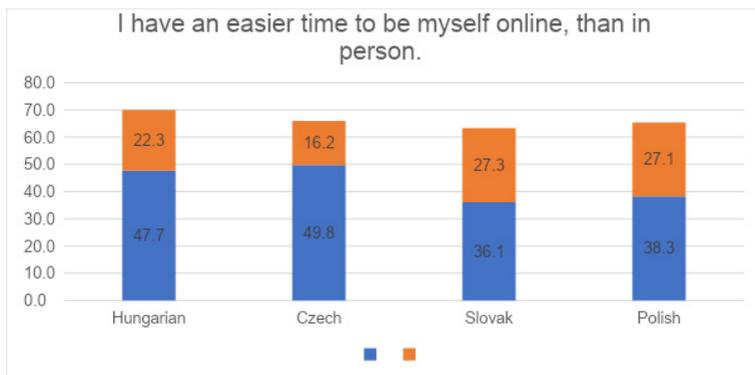
*Figure 4.11*

In case of social media literacy, the respondents seemed to be confident with regards to their Internet appearance: 58.9 - 73.1% of them claimed that they know what to do when someone acts inappropriately (Figure 4.12). However, we can see that Slovakia is lagging behind the others, and a quarter of the V4 society does not know how to act in these situations, which could be perceived as rather alarming.



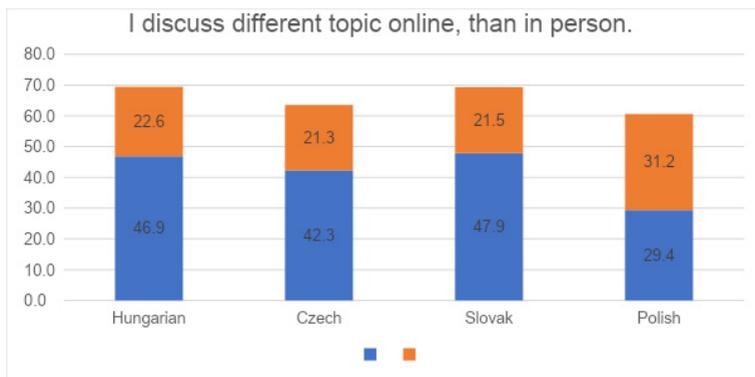
*Figure 4.12*

V4 citizens still prefer to spend their time offline. The next graph shows that 36 - 49% of the respondents do not think that it is easier to be themselves in person (Figure 4.13). Only 16 - 27% claimed that they had found it easier to be themselves on the Internet. However, we can see that Hungarian (47.7%) and Czech (49.8%) people tend to prefer the offline method in comparison to Slovak (36.1%) and Polish (38.3%) citizens who opted for the online world.



*Figure 4.13*

Regarding the topic of the discussions, opinions of the V4 citizens seem to differ slightly (Figure 4.14): while Hungarians (46.9%), the Czechs (42.3%) and the Slovaks (47.9%) do not think that they would talk about different topics online, Polish respondents answered rather differently. Only 29.4% of Polish people claimed that they discuss different topics online in comparison to their in person conversations, whereas 31.2% of them agree with quite the opposite.



*Figure 4.14*

With regards to the question of anonymity, results vary (Figure 4.15 and 4.16). The majority of the respondents from every country believe that anonymity could foster strong opinions and feelings, however they do not think it is possible to express their contradictory thoughts in an anonymous forum. Based on the obtained data, we could conclude that everyone is of the opinion that anonymity could support radical views, but more people think that it is not true for them. Only among Polish people more respondents claimed that anonymity could help to express their contradictory views (40.7%).

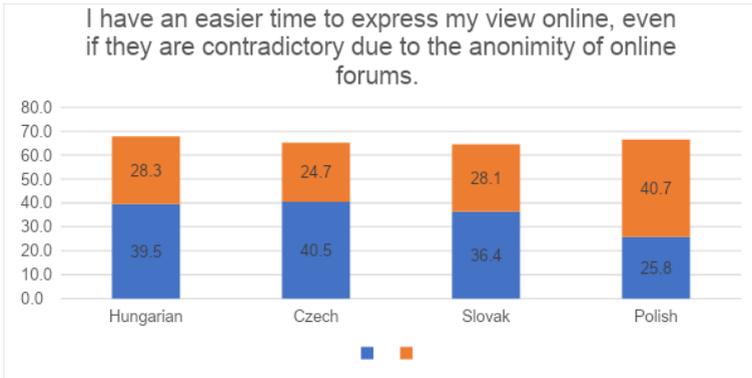


Figure 4.15

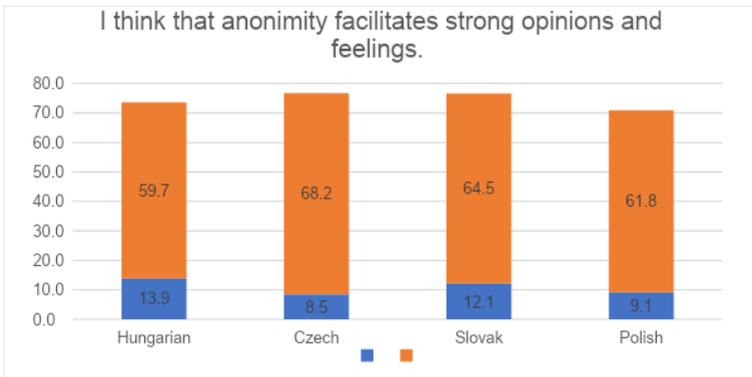
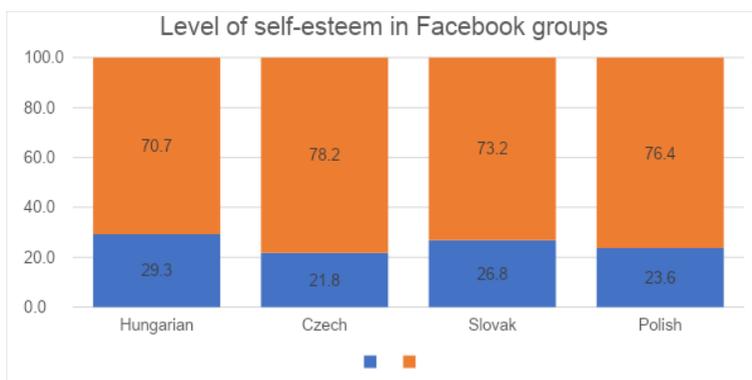


Figure 4.16

## The confidence on Facebook

We asked the Facebook-users how confident they feel on this social media platform. We observed this feeling within three different aspects: **self-esteem**, **self-confidence** and **self-consciousness**. Although they may seem to be the same, the data obtained from the respondents vary in each category.

We can say that the **self-esteem** of the V4 Facebook users (Figure 4.17) is rather high and more-less at the same level in all countries: the most people who consider their self-esteem as high is in the Czech Republic (78.8%), whereas the lowest number can be observed in Hungary (70.7%).



*Figure 4.17*

When it comes to **self-confidence** (Figure 4.18), the percentage of “low answers” increases, with a range of 24.2% (Poland) to 36% (Slovakia). It seems that people’s evaluation of their own worth is higher than their confidence - meaning that they feel that they are right but they are not sure about it. We also can see that Polish people perceive themselves as more confident in comparison to those from other V4 countries.

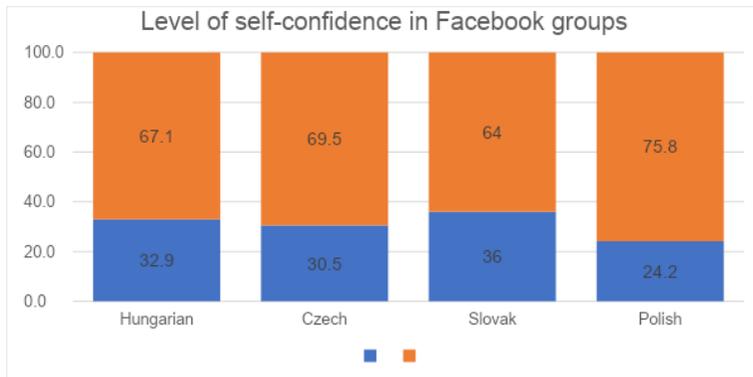
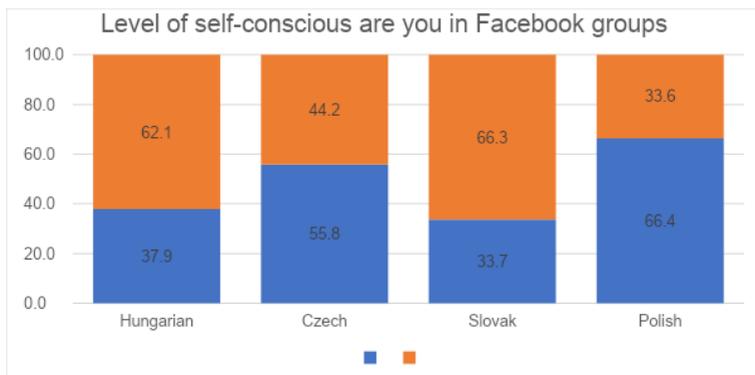


Figure 4.18

The most divisive numbers may be observed in the case of self-consciousness (Figure 4.19): while we cannot see a huge difference with regards to **self-consciousness** in Hungary (62.1 % of the “high answers”) and in Slovakia (66.3 % of the “high answers”), these numbers tend to be much worse among Czech (44.2%) and Polish (33.6%) people.



*Figure 4.19*

Based on these data, we can see that there are three separate levels when it comes to users' minds: they feel – or want to feel – that they are right, however some of them do not know it for sure, and even more of them are not sure about themselves as a whole. This could explain why more people on the Internet tend to remain in smaller and isolated groups: they need to receive confirmation from other group members which makes them feel that their opinion is the right one – as they thought and hoped.

## **Difference between a group member and a stranger from social media**

In the following section, we would like to analyse whether a group-membership could contribute to building trust or not. We asked two sets of the same three/ four questions six questions - the first set focusing on whether one would like to do personal activities with a member from a Facebook-group which they are a member of as well, whereas the second set of questions focusing on activities done with a stranger with whom the respondent has just met online. We asked the questions separately, so the respondents did not have to choose between the two persons, just specify how much they would like to do the exact activity with the exact person.

**Firstly**, (Figure 4.20 and 4.21) we asked whether they were willing to invite them into their home. We can see that there is a little difference between group members and strangers: more people are willing to invite a group member to their home than a stranger, though. This could support the assumption that group cohesion exists and people trust the group members more. However, the number of 'willing' respondents is small even in the case of group members. We also can see that Polish people are more open to invite people to their homes, whether it is a stranger or a group member.

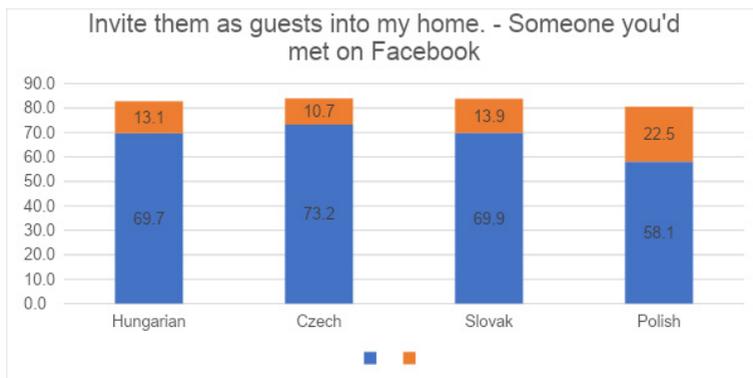


Figure 4.20

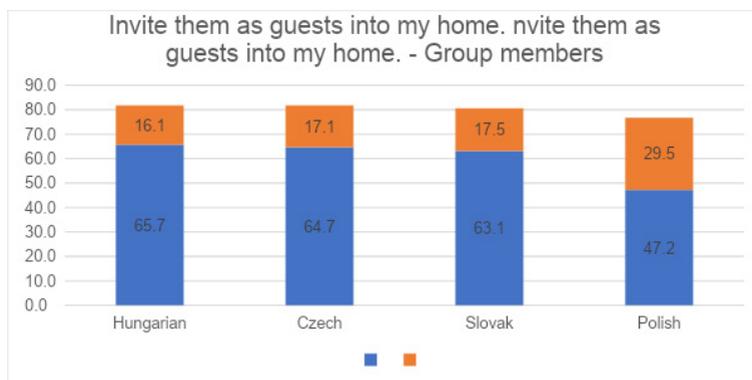


Figure 4.21

**In the second question**, we asked them if they were willing to discuss important problems with group members (Figure 4.22) or with strangers (Figure 4.23). We can see that the opinions within V4 countries are rather divided. Regarding the question about group members, the Hungarian, Czech and Slovak societies are quite similar: 36 - 40% of the respondents are willing to discuss such a topic, while 34 - 39% do not want to. However, Polish people seem to be more open, just like in the previous question - with 47.5 % willing to discuss a problem but with only 23.9% not willing to.

On the other hand, the responses are rather different when it comes to a stranger whom the respondent has just met on Facebook. The Czech and Polish answers are quite the same, the difference is within the margin of error in both data. However, Hungarian and Slovak people seem to be less open with strangers: while 36.1% (HU) and 37.6% (SVK) would like to talk about how to resolve problems with group members, these numbers are 24.7% (HU) and 29% (SVK) in the case of strangers.

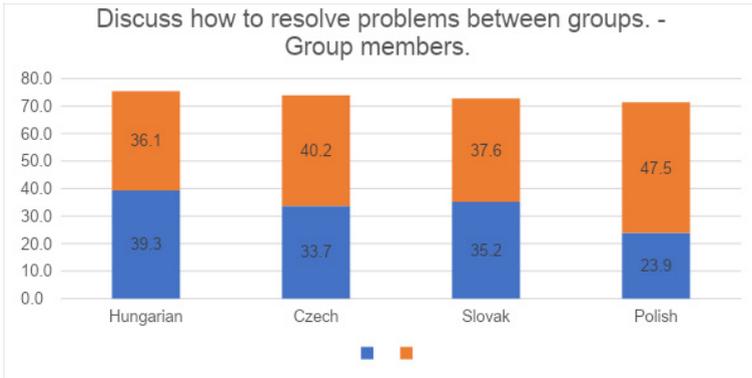


Figure 4.22

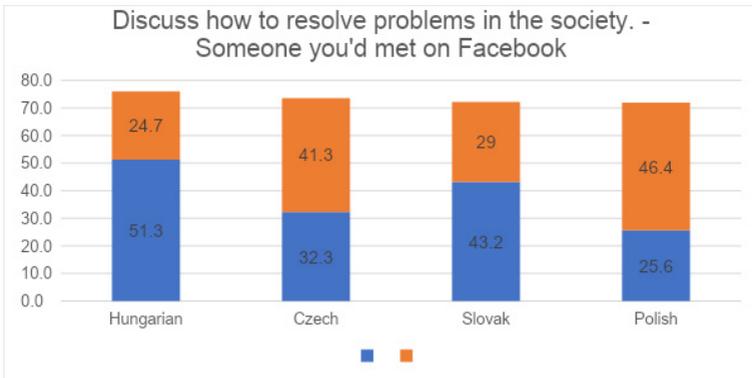


Figure 4.23

When we observe the willingness to date, which the respondents were to deal with in **the third question**, we can see that respondents are more likely to go out with a group member than a stranger (Figure 4.24 and 4.25). That is an interesting finding because the dating process in the 21st century is often based on the date-apps such as Bumble or Tinder, but people still seem to trust more those people who are in the same group as them.

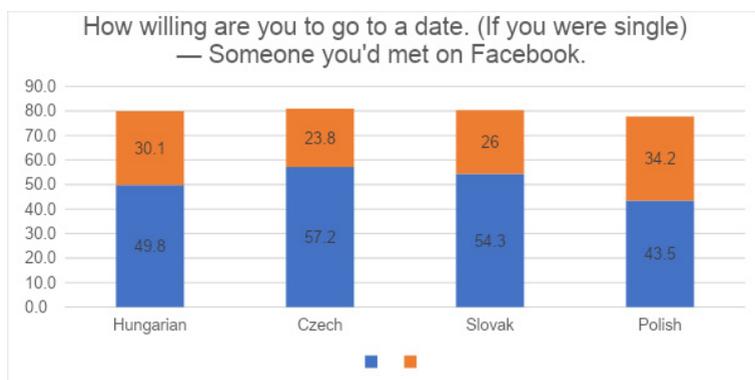


Figure 4.24



*Figure 4.25*

**In the fourth question**, we asked about conflicts - specifically the willingness of people to call someone out for saying a hurtful “joke” about another group. In this case, we can see that people do not like to deal with it, rather let it be in the online space (Figure 4.26 and 4.27). Czech people are the exception, though - in comparison to other V4 countries, it is more likely that the Czechs would start a conflict with both a group member and a stranger, with half of the respondents willing to call out the person. This number is hardly 25% in other countries. The most conflict avoiders are from Hungary and we can see that Polish people would rather have a fight in a group (49.5%) than with a stranger (22.1%).

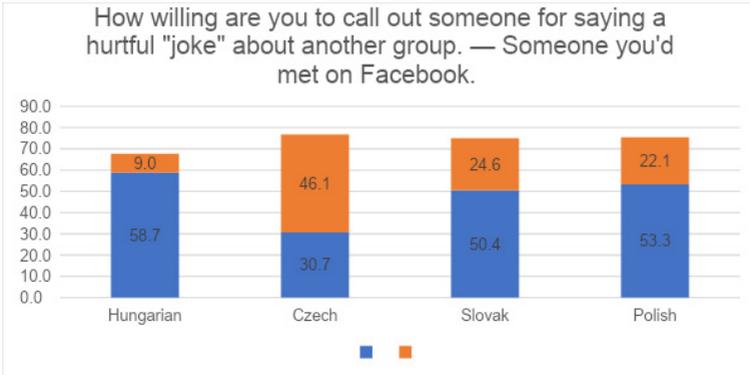


Figure 4.26

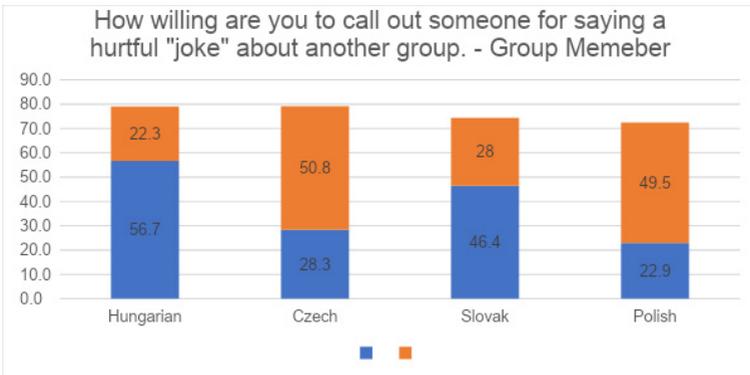


Figure 4.27

## People like me – who are the most pleasant community for us

The bubble effect is based on the fact that we like to talk about the things that we like and in a way that we like, and want to hear the same opinions as ours. The following questions try to analyse these tendencies.

Hungarians (54.5%) and Czechs (49.1%) do not seem to think that Facebook communities are part of their identity, whereas Slovak (39%) and Polish (29%) people are of a slightly different opinion. This diversity is observable in the pride of belonging to a Facebook group as well. (Figure 4.28 and 4.29).

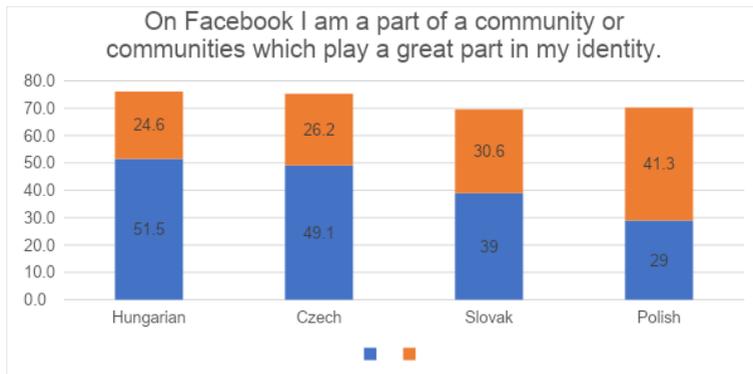
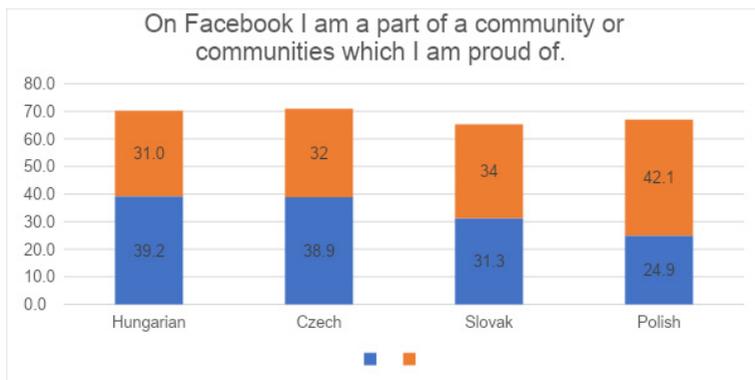


Figure 4.28



*Figure 4.29*

In the next section, we can observe that people do like to talk to those with the same interests or the same attitude (Figure 4.30 and 4.31). The Visegrad Group is quite similar in this sense, maybe responses of Hungarians are more atypical, however, we could say that the bubble effect is present in the whole region. Based on the numbers, we could say that people prefer talking to actually similar people rather than ‘just’ people with similar interests. That means people want to hear their own opinions rather than talk about their favourite topics. The subjects are not as important as the attitude that the partner represents in the communication.

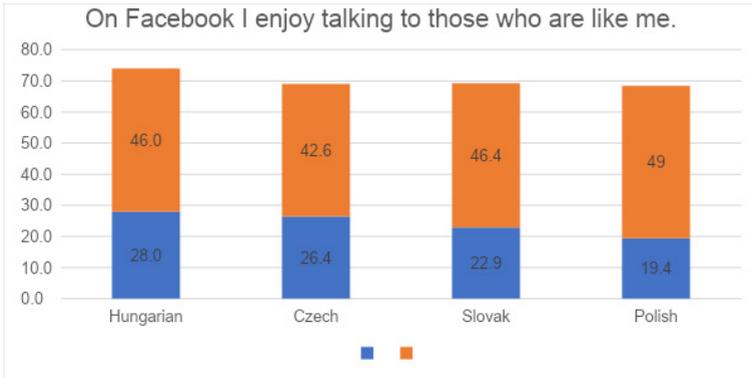


Figure 4.30

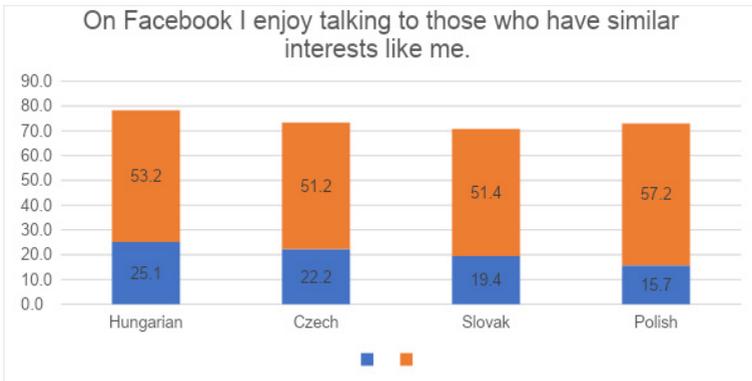
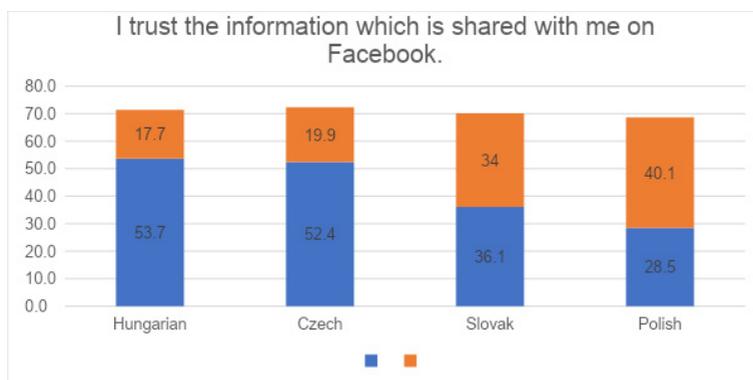


Figure 4.31

The cleavage between the V4 countries is conspicuous with regards to the trust in the information on Facebook (Figure 4.32): Hungarians (53.7%) and Czechs (52.4%) seem to be more sceptic in comparison to Slovak (36.1%) and Polish people (28.5%). Overall, we could say that people do not tend to trust the information on Facebook, which could be a sign of media literacy. However, if we considered the rest of the data, it would also show the, let's say, power of the bubbles - meaning, people do not trust information in general, but they would rather unconditionally accept the news from their bubbles.



*Figure 4.32*

The last question within this section (Figure 4.33) shows that Polish people think that people on Facebook are like them (43.1%), followed by Slovaks (22.2%), Czechs (16.6%) and Hungarians (13.1%). Based on these findings, we can see that people seem to be sceptical about others, and do not think that others are like them. The reason for that could be their ego (meaning that they want to believe that they are unique) and the fact that people remember more those who are against their opinions and perceive them as a crowd, whereas they see their supporters as a small group which is being attacked.

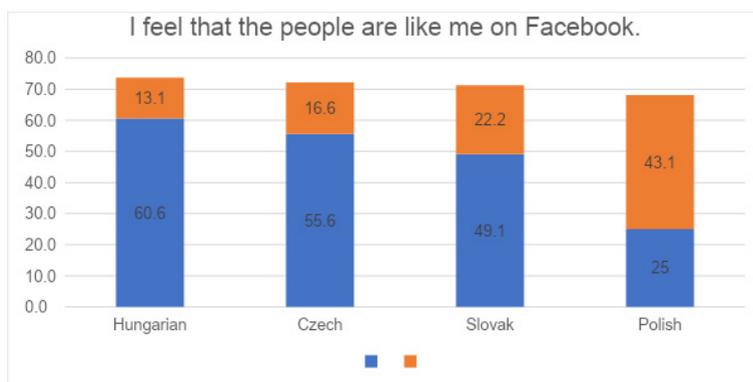


Figure 4.33

All in all, we may see that people do not believe that Facebook plays a big role in their lives. They want to perceive their personalities as unique, free from bubbles and mass manipulation. Based on the aforementioned findings, it seems that Visegrad citizens want to avoid negative consequences of social media, stay out of the conflicts, and live in their bubbles, even without the recognition of these bubbles.

However, we could see a massive cleavage: Polish (and in some questions Slovak) people are more open to the people on the Internet, try to be optimistic about the information on Facebook, and think that social media is part of their lives. On the other hand, Hungarians and Czechs are more sceptical about the advantages of social media, and have less trust in group members. This cleavage is observable in the questions about the group identity.

Finally, we could see that the bubble effect might be powerful in our region based on media literacy and self-classification. People do trust more in their smaller groups, think that people from their groups are more reliable and feel safer with them in the online and offline space.

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## **Chapter V**

### **Visegrad Four and the (Mis)management of Information in Social Media Bubbles**

#### **Perspectives on Facebook groups' users news' handling habits**

The objective of this Chapter is to provide an overview and analysis of findings from quantitative and qualitative research regarding the Facebook groups' members' handling of news, dis-, and misinformation encountered on social media networks in Poland, Czechia, Slovakia, and Hungary (V4). Aiming at investigating major trends in Facebook groups' members' engagement with news and information, the questionnaire used in this research included questions related to: the modes of consumption of news on social media networks; attitudes towards the information encountered on Facebook groups; verification of information found on social media; trust and mistrust towards a variety of news and information sources; and general attitudes towards media and news sources available in V4 countries. We hope that the overview of these findings could provide points of reference as well as reflections for further research in the fields of sociology, political science, media studies, and

other disciplines, especially in the context of the V4 digital sphere.

The inquiry into the news and information habits of the V4 citizens is needed, if not urgent, given the impact of ‘fake news’ on the rise of populism in Central European states, and the significant role the spread of disinformation plays in promoting the polarisation of the region’s societies (Sadouskaya-Komlach 2018). In particular, two factors – the lack of resilience of democratic and civil society institutions in the V4 states, and the fact that this part of Europe remains a target of geopolitical sabotage by Russia and China. These two features, as many experts point out, render the V4 societies particularly vulnerable to manipulation through disinformation and polarisation (Forbrig 2021).

This Chapter is divided into following sections: (I) the presentation of 5 major trends identified throughout our research are presented and discussed, supplemented by comparative numerical data from the survey and quotes from the conducted focus groups; (II) suggestions for future research focused on social media bubbles and their members’ attitudes toward news and disinformation.

## I. Facebook groups' users news' and disinformation handling habits – key findings and data

### *1. Social media – key news sources and content moderators in V4 societies*

Significant proportion of Facebook group users consider social media as a major source of news information, as social media are increasingly replacing traditional news media. News reaches respondents on Facebook most often equally from both social media posts and directly Facebook accounts of news organisations. As shown in table 5.1, 31.6% of Slovaks, 43.8% of Czechs, 52.8% of Hungarians, and 36.5% of Poles report to source their news from both social media posts and directly Facebook accounts of news organisations, while 34.4% of Slovaks, 17.7% of Czechs, 21.4% of Hungarians, and 34.7% of Poles report to mostly get their news via social media posts. This means that **nearly every third Polish or Slovak citizen considers social media posts as their primary source of news information**. Czechs and Hungarians, based on the results of this questionnaire, are less likely to use social media as their primary sources of information.

**Table 5.1. V4 - News consumption on social media.**

	I mostly get news via social media posts	I mostly get news directly from Facebook accounts/ pages of a news organisations/ platforms	I get news equally from both social media posts and directly Facebook accounts of news organisations	I don't know	TOTAL
<b>Slovakia</b>	34.4%	19.6%	31.6%	14.3%	100%
<b>Czechia</b>	17.70%	26.5%	43.8%	12.3%	100%
<b>Hungary</b>	21.4%	13.2%	52.8%	12.7%	100%
<b>Poland</b>	34.7%	13.6%	36.5%	15.1%	100%

*Note: N[Slovakia]=1207; N[Czechia]=1207; N[Hungary]=1201; N[Poland]=1209.*

The discrepancy between these two groups: Polish and Slovak, and Czech and Hungarian respondents could be further analysed in the light of each groups' trust levels in other types of media and news sources in their countries, discussed further in this section.

The proportion of respondents who declare they do not know where they get their news from also deserve some reflection: 14.3% of Slovaks, 12.3% of Czechs, 12.7% of Hungarians, and 15.1% of Poles. Such data could point to the relative lack of interest and reflection among the V4 societies with regards to their social media activity and the news and media handling habits. This is also one of the reflections that came up in our focus group discussion – the relatively low level of the respondents' reflection about how

and for what purposes they use social media they are active on.

Focus groups' participants from our research further reinforce the role of social media networks as an important source of news-like information, as exemplified by the quotes gathered from the focus groups:

- [My facebook group is] “a reliable information source” (a Polish Facebook group member);
- “this group is where I can find reasonable and helpful articles” (a Polish Facebook group member about his/her group);
- “I use this group to learn and gain knowledge” (a Polish Facebook group member about his/her group);
- “... I guess I'm there because of those articles, I guess there are articles that would probably be in the last place of interest in a normal online newspaper or something.” (a Czech Facebook group member about their motivation to be part of the group);

Another finding based on the results of our qualitative research is that **social media, especially Facebook, often act as ‘implicit moderators’ of news content and information.** This finding makes sense in the context of the quantitative data and the relatively high proportion of

respondents declaring to rely on social media for news. Many discussants from the focus groups reported not using search engines or news outlets to look for news, claiming they will see the most important news of the day come up on their social media feeds anyway. Some respondents pointed to the considerable amount of mis- and disinformation they encounter on social media networks. There was also a mention of information fatigue and information overflow in relation to that point. This finding is further exemplified by the quotes from the focus groups:

- *“it is kind of like an information aggregator, so that I do not have to spend time filtering all the information and news”* (a Polish Facebook group member about their Facebook group);

- *“It’s a paradox that we have more access to information than ever, but you can also find the most stupid information”* (a Polish Facebook group member)

2. *V4 citizens have an ambiguous relationship with verifying the sources of the information they encounter in Facebook groups. 10.1% of the Polish respondents consider the information they encounter in Facebook groups as true*

This finding is not related to the general level of trust toward information encountered in social media but news information encountered on Facebook groups by their members. The implication of this is such that the

respondents to some extent identify themselves with the groups they belong to and are therefore likely to have a relatively high trust level towards news information encountered in these groups. More data on the issues of membership in and identification with Facebook groups are available in Chapter 3 and Chapter 4 of this publication.

As table 5.2 shows, 10.1% of the Polish respondents report that they take news information on Facebook groups they belong to as true, since they trust other members of the group, in comparison with 7.3% of Slovaks, 6.0% of Czechs, and 5.2% of Hungarians responding in that way to the same statement. This points to a tendency in particular among the Polish FB groups to not take many precautions when it comes to the consumption of information that they come across in Facebook groups.

**Table 5.2. V4 - Attitudes towards information and news encountered in Facebook groups.**

	I take information on FB groups as true; I trust people in the group	I take information from FB groups with caution and verify the sources	I take information from FB groups with caution. I rely on my own judgement	I do not consume news from FB groups	TOTAL
<b>Slovakia</b>	7.3%	48.8%	32.3%	11.6%	100%
<b>Czechia</b>	6.0%	59.5%	29.5%	5.1%	100%
<b>Hungary</b>	5.2%	67.7%	19.7%	7.5%	100%
<b>Poland</b>	10.1%	58.1%	23.4%	8.4%	100%

*Note: N[Slovakia]=1207; N[Czechia]=1207; N[Hungary]=1201; N[Poland]=1209.*

Other data confirm strong tendency among the V4 Facebook groups users to not always verify the sources of the news information that they encounter. 58.1% of the Polish respondents, 48.8% of Slovak respondents, 59.5% of Czech Respondents, and 67.7% of Hungarian respondents declare that they take information from Facebook groups with caution and verify the sources. Additionally, between roughly one fifth and one third of the V4 societies say they “take information from FB with caution” but “rely on [their] judgement”.

The data about those who do not consume news from Facebook groups also implies that the majority of the V4 societies are exposed to news via Facebook groups. 11.6% of Slovaks, 8.4% of Poles, 7.5% of Hungarians, and 5.1% of Czechs do not consume news via Facebook groups, in all cases a rather small proportion of the population. This number is especially small among Czechs. In conclusion, there is considerable ambiguity when it comes to the attitudes towards information and news encountered on Facebook groups by the V4 states’ citizens, with the range of 48.8% to 67.7% of the respondents reporting that they verify the sources.

*3. Facebook groups’ members in the V4 tend to be not so active in debunking disinformation and fake news, once they encounter them on Facebook groups*

There is a tendency for the Facebook group members to ignore misinformation and fake news when they encounter it. The percentages of respondents who admit that they “tolerate [disinformation or fake news] as it is online” diverge among the V4 states. As table 5.3 shows, 11.4% of Slovak respondents, 18.9% of Czech respondents, 10.8% of Hungarian respondents, and 6.9% of Polish respondents replying positively to that statement. It is especially interesting to note the significant number of Czech respondents who admit they do not care about it, and in comparison, a rather low percentage of Polish respondents who admit that.

**Table 5.3. V4 - When in a Facebook group, you come across disinformation or fake news, what is your reaction usually?**

	I do not mind, I am tolerating it as it is online	I do not mind; I tend to overlook it	I feel the need to respond to it and try to refute misinformation in communication with other members	It depends on the type of information. If it's funny I don't care about the truth.	I don't know	TOTAL
<b>Slovakia</b>	11.4%	40.5%	21.5%	17.9%	8.6%	100%
<b>Czechia</b>	18.9%	26.7%	21.1%	22.6%	10.9%	100%
<b>Hungary</b>	10.8%	36.4%	24.8%	21.1%	6.8%	100%
<b>Poland</b>	6.9%	26.0%	33.2%	24.9%	9.0%	100%

*Note: N[Slovakia]=1207; N[Czechia]=1207; N[Hungary]=1201; N[Poland]=1209.*

As much as 40% of the Slovak respondents claim that they do not mind and tend to overlook disinformation they

encounter in their Facebook groups; 36.4% of Hungarian respondents, and 26.7% of Czech respondents, and 26.0% of Polish respondents admit to the same thing.

The percentages that account for those who “feel the need to respond to it and try to refute misinformation in communication with other members” can reveal something about the rates of “debunking activism” among the respondents in the V4: 21.5% of the Slovak respondents, 21.1% of Czech respondents, 24.8% of Hungarian respondents, and 33.2% of Polish respondents report the need to refute misinformation in their groups. In that way, the Polish case seems a particular one – with the highest rate of those declaring the need to refute the misinformation or fake news, in comparison to the others, and with the lowest rate of those reporting that they tolerate misinformation and fake news when they encounter them.

Additionally, the factor of “funniness” of the fake news and misinformation seems to have an influence on the respondents’ decision whether to refute or counter disinformation or fake news, according to the survey, with as many as 24.9% of respondents declaring that “if it’s funny, [they] don’t care about the truth”. 17.9% of Slovaks, 22.6% of Czechs, 21.1% of Hungarians respond in the same way to the statement about the funniness of the news. However, it does not necessarily mean that the Slovaks have the least of the sense of humour out of all the respondents.

Overall, it could be said, based on the data, that the action against fake news on the groups is not very strong among the V4 societies, if we consider the percentages of those who either do not feel the need to respond or refute misinformation or fake news, as well as the relatively high percentages of respondents who do not care about refuting fake news as long as they are “funny”.

*4. Radio seems to be the most trusted medium among the V4 societies, and generally, as news sources, traditional media are more trusted than social networks and messaging apps*

There are significant differences among the V4 citizens’ trust levels towards particular kinds of media. Traditional media continue to gain more trust compared to new media – social networks and messaging apps, and that trend is consistent among all of the V4 states.

When it comes to Slovak Facebook users, they tend to generally trust radio, TV, printed and online media, and then the lowest trust level is visible towards social networks. As shown in table 5.4a, nearly 12% of the respondents report to “totally trust” TV and printed media, and the most of “total trust” is in the Radio at 17.7%. Only as much as 3.4% of Slovak respondents say that they “totally trust” social networks and messaging apps and 4.2% “totally trust” websites with videos and podcasts. In sum, Slovaks tend to

have more trust in the so-called traditional media, rather than social networks, according to the survey.

**Table 5.4a. Slovakia - To what extent do you agree with the following statements:**

	Do not trust at all	Tend not to trust	Tend to trust	Totally trust	Total
Printed newspapers and news magazines	8.7%	24.8%	54.5%	11.9%	100%
Online newspapers and news magazines	7.7%	27%	55.3%	10%	100%
Social networks and messaging apps	11.9%	38.3%	46.4%	3.4%	100%
Websites with videos and podcasts	10%	32.9%	52.8%	4.2%	100%
TV	11%	25.3%	51.8%	11.9%	100%
Radio	5.4%	21.7%	55.2%	17.7%	100%

*Note: N=1209. Figures in %.*

In Czechia, social networks and messaging apps and websites with videos and podcasts also record the lowest level of trust, while the cumulative percentage of those who “tend to trust” and “totally trust” is the highest for TV, at 78.2% (table 5.4b), which is a number significantly higher than the cumulative level of trust among the Slovaks – 63.7% (table 5.4a). Another significant difference between data from Slovakia and Czechia occurs when it comes

to the number of those who tend to trust or totally trust social networks and messaging apps – 49.8% in Slovakia (table 5.4a) and 30.6% in Czechia (table 5.4b). This implies that nearly half of the Slovak society has confidence in social media and messaging apps as sources of news and information.

**Table 5.4b. Czechia - To what extent do you agree with the following statements:**

	Do not trust at all	Tend not to trust	Tend to trust	Totally trust	Total
Printed newspapers and news magazines	5.2%	26.3%	61.1%	7.3%	100%
Online newspapers and news magazines	4.4%	31.3%	60.6%	3.6%	100%
Social networks and messaging apps	10.8%	58.7%	29.4%	1.2%	100%
Websites with videos and podcasts	8.0%	53.9%	36.2%	1.9%	100%
TV	4.1%	17.6%	66.4%	11.8%	100%
Radio	7.0%	27.4%	57.7%	7.8%	100%

*Note: N=1207. Figures in %.*

When it comes to Hungarian Facebook users, the percentages of “total trust” are 5.1% when it comes to radio, 4.2% when it comes to TV and printed newspapers, and 2.7% regarding the online newspapers, so just like in

the Slovak case, radio earns the higher rate of “total trust” among the respondents, but overall the levels of “total trust” for all of the media tend to be lower than for the Slovak respondents (table 5.4c).

**Table 5.4c. Hungary - To what extent do you agree with the following statements:**

	Do not trust at all	Tend not to trust	Tend to trust	Totally trust	Total
Printed newspapers and news magazines	11.3%	31.4%	53.0%	4.2%	100%
Online newspapers and news magazines	7.5%	34.7%	55.0%	2.7%	100%
Social networks and messaging apps	12.5%	50.1%	36.1%	1.3%	100%
Websites with videos and podcasts	11.2%	45.1%	41.7%	1.9%	100%
TV	12.8%	33.9%	49.0%	4.2%	100%
Radio	10.3%	28.6%	56.0%	5.1%	100%

*Note: N=1201. Figures in %.*

Among the Polish respondents, radio also earns the highest level of “tend to trust” and “totally trust” declarations combined, since 70% of the respondents either tend to trust or totally trust that medium. However, TV seems to be the least trusted medium, since 49.1% of Polish respondents either “tend to trust” or “totally trust” TV, in comparison with 54.8% of trust in websites with videos and podcasts or 51.2% of trust in social networks and messaging apps (table

5.4d). 50.9% of the respondents “tend not to trust” or “do not trust at all” TV, making it the least trusted medium out of all. The levels of trust in social networks and messaging apps generally seems to resemble the pattern in Hungary. In Poland, 36.4% of the respondents report to trust social networks and messaging apps (table 5.4d), and 37.4% in Hungary (table 5.4c). In Czechia the trust in social media and messaging apps is the lowest - 30.6% (table 5.4b) and it is the highest in Slovakia (table 5.4a) – at 49.8%, a very significant proportion.

**Table 5.4d. Poland - To what extent do you agree with the following statements:**

	Do not trust at all	Tend not to trust	Tend to trust	Totally trust	Total
Printed newspapers and news magazines	7.9%	34.6%	53.5%	4.0%	100%
Online newspapers and news magazines	6.9%	36.9%	52.9%	3.3%	100%
Social networks and messaging apps	5.5%	43.3%	49.5%	1.7%	100%
Websites with videos and podcasts	5.4%	39.9%	52.2%	2.6%	100%
TV	17.0%	33.9%	45.9%	3.1%	100%
Radio	4.9%	25.1%	63.6%	6.4%	100%

*Note: N=1209. Figures in %.*

5. *Nearly 65% of respondents claim to not be able to find credible/trustworthy sources of information in their countries*

Generally, one of the key takeaways from this part of the research regards the high levels of distrust of the V4 states' citizens toward the media in their countries.

**Table 5.5a. Slovakia - To what extent do you agree with the following statements:**

	Strongly disagree	Mostly disagree	Mostly agree	Strongly agree
You will learn true information about domestic and world politics from acquaintances and friends rather than from the Slovak national media	10.7%	33.1%	31.4%	13.7%
It is difficult for me to find out if the news I follow in the media is credible.	8.1%	27.6%	40.1%	16.7%
It is difficult for me to find a news medium in my country whose reports / information I can trust	5.1%	20.2%	41.2%	26.9%
When I follow the news about political events, I carefully select the media that I think are the most trustworthy	3.6%	8.3%	47.9%	32.3%

*Note: N=1214.*

**Table 5.5b. Czechia - To what extent do you agree with the following statements:**

	Strongly disagree	Mostly disagree	Mostly agree	Strongly agree
You will learn true information about domestic and world politics from acquaintances and friends rather than from the Slovak national media	14.3%	42.1%	28.1%	8.5%
It is difficult for me to find out if the news I follow in the media is credible.	8.4%	37.2%	38.8%	11.4%
It is difficult for me to find a news medium in my country whose reports / information I can trust	7.1%	26.5%	39.9%	21.3%
When I follow the news about political events, I carefully select the media that I think are the most trustworthy	3.2%	9.9%	42.0%	38.6%

*Note: N=1214.*

**Table 5.5c. Hungary - To what extent do you agree with the following statements:**

	Strongly disagree	Mostly disagree	Mostly agree	Strongly agree
You will learn true information about domestic and world politics from acquaintances and friends rather than from the Hungarian national media	11.4%	30.7%	39.3%	12.4%
It is difficult for me to find out if the news I follow in the media is credible.	3.9%	16.8%	48.0%	27.7%
It is difficult for me to find a news medium in my country whose reports / information I can trust	5.2%	15.8%	40.9%	34.9%
When I follow the news about political events, I carefully select the media that I think are the most trustworthy	2.7%	1.1%	39.4%	44.8%

*Note: N=1201.*

**Table 5.5d. Poland - To what extent do you agree with the following statements:**

	Strongly disagree	Mostly disagree	Mostly agree	Strongly agree
You will learn true information about domestic and world politics from acquaintances and friends rather than from the Polish national media	9.5%	29.4%%	34.2%	14.6%
It is difficult for me to find out if the news I follow in the media is credible.	5.5%	25.5%	45.9%	16.1%
It is difficult for me to find a news medium in my country whose reports / information I can trust	5.8%	22.0%	44.1%	22.1%
When I follow the news about political events, I carefully select the media that I think are the most trustworthy	3.0%	9.3%	42.6%	37.8%

*Note: N=1209.*

## **II. Directions for further research**

Based on the results of quantitative and qualitative research with respect to the topic of information and news handling by Facebook groups' members, the following directions for further research could be differentiated.

1. The relationship between the degree of self-identification with a given Facebook group and its culture and the attitude towards the encountered fake news or disinformation. This could be an interesting avenue of research since the Facebook group identities and the sense of belonging might significantly influence the members' evaluation of themselves when it comes to news, fake news, and disinformation.

2. The relationship between the perception of "funniness" of fake news and disinformation and the attitudes of the Facebook group members toward these, as well as their self-identification with particular online communities. It is no secret that fake news can often sound 'ridiculous,' and there could be interesting research conducted on the topic of humour in relation to Facebook groups and news information. In the course of the quantitative research conducted in Poland, one of the major topics about Facebook groups was related to the topic of humour and memes.

3. In our survey, we used the categories of websites with videos and podcasts and radio, when comparing the levels of trust toward different types of media among the Facebook group members. Among the V4 states, radio tends to be the most trusted media, based on the results of our survey. At the same time, the category of podcasts remained under websites with videos and podcasts and radio. It would be therefore interesting to conduct more research on the attitudes of social media users toward both radio and podcasts, especially given the heightened popularity of the podcast form in recent years. The podcasts seem to have an increasingly significant role in the provision of information and are produced by a variety of media outlets, institutions, and individual actors.

4. Diverging levels of trust into different media outlets among the V4 should be further investigated, especially in relation to the political affiliation of the respondents, as well as the declared consumed media outlets.

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## References – Chapter V

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## Conclusion

The world's transformation happens so fast that we are no longer able to fully adapt to the new social, political and cultural circumstances, nor to face the avalanche of the everyday massive flow of information. With the arrival of the Internet and social networks it became even more difficult to manage the influx of information coming from innumerable sources, as well as to check their validity. The spread of fake news and disinformation has become one of the most challenging issues of our times, having a significant impact on the social and political processes all over the world. The region of Central Europe, and Visegrad countries in particular, are not an exception.

The dissemination of such information on social networks leads to the emergence of so-called social bubbles – invisible borders between parts of the society with a different cultural, social, or political background. Social (filter or opinion) bubbles consist of people sharing the same beliefs, values and opinions. Persisting reinforcement of the opinions characteristic for particular groups contributes to deepening of social polarisation, as well as to growth of populism, radicalisation, and extremism. The building of social bubbles is provided by social media algorithms and its activity is intensified by various psychological factors,

including homophily, selective exposure, confirmation bias, disconfirmation bias, false consensus, and group polarisation. Consequently, users tend to lose the ability to confront their views and lead fruitful debates with people of different opinions. Constructive public debate requires a plurality of views, which the impermeability of social bubbles does not allow, and thus no consensus can be met.

This research examines the behaviour of Facebook users in Visegrad countries, since it is the most frequently used social network in the region. As for group membership, generally, the majority of the active users in Visegrad countries enter Facebook groups that are related to their hobbies or their local/regional communities and belongings. Another significant part of the active users also enters online communities related to entertainment or fun. With the raising “seriousness” or more personal character of the topic, the users’ willingness to join such online communities declines. The activity of users within a Facebook group depends on the type of the group, and their identification with a particular group(s) they have joined. The reasons for joining these communities are various, including a sense of belonging, personal identification and effort to gain social or economic profit.

One of the main aims of our research was to uncover the digital social identity of Facebook group(s) users, and explain how (if) it differs from their off-line activities and

from their off-line identity. The results show that Visegrad user's online life is minimised to their own circle and their own "wall" and the tendency to be visible among others is on decline. The majority of the online users tend to protect their online activity when it comes to presenting their personal views and prefer to act as observers. The tendency not to interact is mostly caused by the fear of facing possible negative consequences of their actions. Passivity when it comes to consumption and reaction to disinformation, fake news and hate speech has a negative impact on the whole society, making users unable to question the reality.

Our research reveals several paradoxes of Facebook groups' members: People in the online space are generally more negative. Possible anonymity makes people feel more secure, and thus they lose the ethical limits and barriers when communicating online. Online discussions make people feel more comfortable, since they provide them with enough time to think about their answers, comments and questions. Facebook groups are perceived as a tool for education, information, communication, and promotion, as well as a community of people being "together because of their human cohesion". However, members of the social bubbles are not willing to communicate and react to other users' comments, since they believe that the online world is too radical, offensive and polarised, which makes reacting useless. Many respondents claim to restrict the time spent

on social media, while the practical purposes that motivate them to join the groups, such as looking for information prevent them from quitting Facebook. Similarly paradoxical is the fact that group members often mention the danger of being enclosed in “social bubbles”. Despite that, the only ones up trying to join groups outside of different views are members of the “Exclusive society”.

Therefore, it might be rather surprising that, based on our findings, citizens of Visegrad countries do not believe that Facebook plays a big role in their lives. In addition, it seems that they tend to avoid negative consequences of social media. However, when comparing Polish people with the Czechs and Hungarians, we can see a massive cleavage between their reflections on what role do Facebook groups play in a formation of their self-identities and in terms of mutual trust-building between group members.

The research of social bubbles certainly should not end here. Based on the results of both our qualitative and quantitative research, we may conclude that social media, especially Facebook, often act as “implicit moderators” of news content and shared information. There are also data which confirm a tendency among the Facebook users from Visegrad countries to not always verify sources of the news they encounter in their groups and consider them to be true. Thus, social media pose a viable mechanism for

extremists, foreign forces and other third parties with the aim to influence individuals.

In order to find a way of combating this kind of social manipulation, it is crucial to understand how social bubbles are formed, what is their impact on their members and what is the potential of their amplification. In this day and age, where social media constitute a “fake news- and disinformation-friendly” environment, comprehension of those online interactions seems to be an essential part of the strategy to tackle growing polarisation within our societies.



# **Bubbles in V4**

The phenomenon of social bubbles and their impact  
on Facebook users

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