DÁNIEL OROSS AND ANDREA SZABÓ* Digitalization and Gender Differences in Political Participation among Hungarian University Students

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Abstract

Similarly to with the debate in western societies, concern about the disengagement of young people in political life is present in Hungarian politics. Traditional party-based politics is less and less appealing to younger cohorts of Hungarian society. However, empirical evidence supports the claim that university students are the most politically active strata of society, and online political participation has been identified as a potential avenue for connecting young people to politics. The present paper aims to reveal whether the characteristics of those students who are active online differ significantly from the background characteristics of students who take part in offline activities.

In order to describe university students' activity in online forms of participation and assess the chronological trends thereof, the paper uses data that covers the period between 2015 and 2019 – i.e. research rounds three and four of the dataset collected by Active Youth in Hungary Research. We use latent class analysis (LCA) to assess whether individuals who participate most actively in traditional offline activities are also those who are most active in terms of online participation.

The results of the research reveal that distinct groups of university students are drawn to specialize in online versus offline repertoires of political participation, indicating that online political activities are not exclusively the purview of those who are most active in traditional offline activities.

Keywords: Hungarian university students, political participation, gender equality.

1. Introduction

Debates about young people's political participation tend to include the argument that the willingness of the latter to participate in politics is decreasing. There is huge scientific debate about whether young people may be switching to nontraditional forms of political engagement (e.g. direct action) (Norris, 2012) and/or civic engagement (e.g. volunteering) (Pattie et al., 2003; Quintelier, 2007). Some authors herald young people as political innovators and creators of sophisticated new forms of participation, especially online (Coleman, 2006; Vromen, 2008; Vromen et al., 2015; 2016). Research evidence also indicates that young people are taking advantage of technological opportunities to engage with politics in a new way through online means (Oser et al., 2013), but also that this has the potential to reinforce inequalities. In the case of deliberation, most online deliberators are also engaged face-to-face, thus the online environment supplements the traditional deliberative sphere, rather than replaces it (Baek et al., 2012). However, the debate is dominated by studies conducted in Western countries, and most data comes from the United States. Since the socioeconomic stratification of online participation identified in the United States may be less applicable in another context, we undertook research among Hungarian students who live in a country with a multi-party system.

The main goals of the article are twofold. First, we aim to create empirical evidence that increases understanding about changing forms of political participation by measuring the proportion of Hungarian university students that participate in political activities in different ways. Second, we intend to join the scientific debate about the consequences of the political use of the internet by testing the theses of mobilization and reinforcement. According to the former, new information and communication technologies are involving disengaged groups of the population in politics. The latter assumes that the internet does not change existing patterns of political participation, and may actually widen the gaps in participation between advantaged and disadvantaged populations. Do the background characteristics of offline activists? Is there a gender divide in relation to any of the participation types?

After describing the trends in political activity among Hungarian university students, we use latent class analysis (LCA) to answer the question whether online participation can be empirically identified as a distinctive type of political participation among Hungarian students. In a second step, we run two multinomial regression models to reveal if the social characteristics of online activists differ significantly from the characteristics of offline activists.

2. Changing forms of political participation and trends in Hungarian university students' political activities

The study of changing forms of political participation is one of the key areas of international political science today. As citizens have a wide repertoire of political participation at their disposal, when measuring the willingness of citizens to participate, the theoretical significance of choosing adequate forms of participation is enormous. Given that it is young people in particular who are experimenting with innovation, it is particularly important to consider this aspect when researching the activity of young people. While some traditional forms of participation are regularly included in questionnaires, some new forms are omitted. As a result, the risk is increasing of drawing the wrong conclusion that citizen activity is declining from the fact that some forms of participation have become unpopular. In a book summarizing changes in political participation, Yannis Theocharis and Jan W. van Deth (2017) sought to develop a common denominator for bridging different concepts and approaches. After reviewing earlier theoretical work and the results of several empirical pieces of research, the authors developed a conceptual classification to unify the different forms of measurement (Table 1).

Theocharis and van Deth (2017) classify the first type of political participation as voluntary and non-professional forms of political participation that are within the realm of politics and governance. This category includes making contact with politicians, participating in a political assembly, or working for a political party/candidate, in addition to casting votes. The second category includes activities outside the area of politics and governance, including the signing of petitions, demonstrating, activities undertaken in political action groups, and other forms of creative, expressive protest. The third type of political participation, in the authors' approach, includes volunteer-based forms of action that are tailored to the needs of a particular community, including making charitable donations, volunteering at charity events, and participating in a local community project. The fourth group includes networked forms of political action enabled by digitization, including sharing information and ideas about political issues on social media, commenting on social media, and encouraging citizens to be active about social issues on social media. The fifth category includes forms of participation that enable consumers to express their political opinions, such as buying or boycotting specific products for political or ethical reasons.

Table 1: Overview of changing forms of political participation							
Conceptual Category	Major specimen of each of these variants	each of these litems used for empirical analyses					
	Voting	casting a vote	Electoral participation				
Political participation I.	Institutionalized participation	contacting a politician attending a political meeting working for a party or candidate	Traditional/ institutionalized participation				
Political participation II.	Protest	signing a petition demonstrating working for a political action group other creative or expressive form	Direct participation				
Political participation III.	Volunteering	donating money to a social, humanitarian or charitable organization volunteering in a social, humanitarian or charitable organization volunteering for a community project	Volunteering participation				
Political participation IV.	Digitally networked participation	posting or sharing links to political stories on social media commenting on social or political issues on social media encouraging other people to take action	Online participation				
Political participation V.	Consumerist participation	boycotting certain products for political or ethical reasons deliberatively buying products for political or ethical reasons	Direct participation				

Table 1: Overview of changing forms of political participation

Source: Theocharis and van Deth (2017: 106-107) and authors' own classification.

First, we describe the pattern of political participation of Hungarian university students, which was of particular interest in spring 2019 (see Figure 1). The second most strongly supported form of participation in 2019, as in 2015, was the intention to participate in upcoming parliamentary elections (60 per cent compared to 46 per cent four years earlier). The appreciation of electoral

participation was also confirmed by the fact that support for the activity 'encouraging someone to vote during the campaign' almost doubled compared to four years earlier. Accordingly, students in 2019 may be characterized by their high electoral turnout (i.e. willingness to participate in political activity).

Figure 1: Political participation of young people in different activities, 2015 and 2019 (%)



Source: Active Youth in Hungary Research, 2015, 2019.

Compared to 2015, the frequency of other forms of participation decreased – out of the 16 forms of participation we examined, an increase was only found in four forms (+2 per cent), while four stagnated (±2 per cent) and eight decreased (-2 per cent). There was a significant decrease (over 10 percentage points) in 'sharing social events, social issues, images, videos, posts' on community websites, donating money to a non-governmental organization or party, and in 'posting related to public affairs about social issues.' In general, the frequency of online forms of participation seems to have decreased in opposition to that of traditional participation. However, two forms of participation increased in popularity over the four years; namely, 'Liked posts in social media concerning public affairs or social problems' (from 47 per cent in 2015 to 56 per cent in 2019) and 'wearing campaign badges.' In the latter case, we can see the effect of campaigning for the 2018 parliamentary elections.

In 2019, as in 2015, the least favored forms of participation (under 10 per cent) were joining in spontaneous demonstrations, wearing campaign badges, and doing campaign work. The latter response was selected in both years by 2-3 per cent of students only.

It should also be noted that two classic civic activities (donating money to a non-governmental organization or party, and collecting signatures) were defined as a separate principal component.

Second, we compare the results of the Active Youth Research with two representative Hungarian samples (Oross and Szabó, 2019: 39): Hungarian Youth Research 2016 (HYR 2016),¹ and the Hungarian Election Panel Study 2018 (HELPS 2018/3).² In each of the three databases, there were 14 types of participation that can be compared. From these we constructed a simple overall participation rate ('0' = no participation, '14' = active in all 14 forms of participation). The results show that 62 per cent of 18–29-year-olds and 68 per cent of those 29 years old or older were passive, meaning that they did not politically participate in any way. However, the proportion of passive *students* was only 21 per cent. The activity index is the lowest among adult citizens (above 29 years of age), followed by young people (primarily due to the frequency of online participation), while university students are by far the most active in our comparison (Oross and Szabó, 2019: 60).

As Table 1 indicates, we compare the repertoire we used to the classification established by Theocharis and van Deth (2017). We distinguish between traditional and direct offline and online participation. We defined electoral activity as participation in parliamentary and municipal elections, which could apply to the past in a retrospective way ('did you participate in the previous national elections?') and in the future, in a predictive way ('would you participate in national elections this Sunday?'). Offline participation (not directly related to an election) was divided into traditional/institutionalized and direct forms (Szabó and Oross, 2014).

We classified those activities as traditional/institutionalized forms of participation that are related to the political system, and to political actors/organizations. Types of the former included respondents contacting a parliamentarian, local councilor mayor, or another local politician. They also included activity related to political parties, attending political events, campaigning, encouraging voting, and being an elected official in a public, social, or political organization. Finally, we also classified into this category cases in which a respondent donated money to a non-governmental organization or political party, or participated in a student council election.

¹ In Hungarian Youth Research 2016: the representative sample size was 1418 young people (18–29 years old) – not including university students.

² HELPS 2018/3: *Participation, Representation, Partisanship. Hungarian Election Study 2018. NKFI* – *119603.* Principal investigator: Szabó, Andrea. The sample size of the third wave was 1300 individuals 29+ years old – excluding university students.

We consider direct participation to be an activity that requires the personal involvement of students and requires a commitment of varying intensity and durability. In terms of the resources required for participation, we distinguish between resource-intensive, face-to-face activities requiring intensive involvement, and those requiring few resources and a low level of involvement. For example, a qualified case of direct participation that requires a lot of resources and face-toface action is mobilization for political demonstrations. This category includes participation legal (pre-announced) demonstrations, spontaneous in demonstrations, street marching, and carrying badges and emblems with a political message. Other direct forms of participation are collecting signatures, signing paper-based political declarations, referendum initiatives, or petitions.

We are the first in Hungary to study the online participation of university students. In our research we consider online participation to be a form of political activity that only arose after the internet broadened the means of participation, enabling people to take part in both traditional/institutionalized and direct forms of participation. In our questionnaire, we have thus continually expanded the range of online participation items.

This result is a model similar to that of Theocharis and Van Deth's that classifies volunteering and donation into a third category. As domestic data and international literature confirm that civic/volunteering activity is a special, independent form of participation, we investigate not only four, but five categories of activities. However, we do not consider boycotts to be a key element of the 'consumerist' type of participation for Hungarian students. For the time being, we do not see the type of commitment that could lead to students explicitly limiting their consumption-related behavior, especially due to the decline in the frequency of boycotting since 2015 (Gerő and Szabó, 2019). However, we do not claim that there might not be radical change in this field in Hungarian student society in the future.

Similarly to the categorization of Theocharis and Van Deth's, we make a distinction between online and offline participation (see Table 2). In Round 2015 and 2019 of the Active Youth in Hungary Research, alongside online participation we examined five forms of offline direct participation and four forms of participation: electoral traditional/institutionalized participation; direct participation; civic/volunteer participation; and, traditional/institutionalized participation. It is clear from the data (see the end of Table 2) that every second university student has participated in electoral activity, and it is also clear that online forms of participation occur more often than offline activity. However, civic participation is weak (activity index: 0.2). As for non-electoral offline participation, direct forms of participation are more common (the activity index value is high, at 0.94). Similarly to other international findings, traditional party-centered participation is of little interest to Hungarian university students. As for the different categories of political participation, Hungarian students can best be characterized by their engagement in electoral-, online-, and direct forms of participation.

	Offline partic	A	i i	ation (2015 and 20	
Туре	Electoral participation (1)	Direct participation (5)	Civic/volunteer participation (1)	Traditional/ institutionalized participation (4)	Online participation (5)
1	Would surely vote if parliamentary elections were to be held this Sunday	Collecting signatures for a petition	Donating money to a political or civil organization or group	Contacting politicians at a national level or representatives in the local government	Liking posts in social media concerning public affairs or social problems
2		Signing of a protest letter or a petition		Taking action in a political party, and/or assisting in its programs*	Voting on the internet in relation to issues concerning public affairs or social problems
3		Legal, public protest (demonstration)		Encouraging someone to vote during the campaign	Sharing pictures, videos, creating events on social media concerning public affairs or social problems
4		Spontaneous, illegal demonstration, civil unrest*		Wearing or displaying a campaign badge/sticker*	Making comments on blogs concerning public affairs, social problems
5		Any type of boycott			Posting on topics concerning public affairs, social problems
mean value of participation	0,53	0,94	0,20	0,46	1,44
no activity	47%	46%	80%	68%	37%

Table 2: Examined forms of political participation (2015 and 2019)

* Due to the low number of elements, this factor is not taken into account in the LCA analysis. Source: Active Youth in Hungary, 2015–2019.

3. Data and methods

Since its inception in 2011, four rounds of Active Youth in Hungary Research have been conducted using the survey method of data gathering from a single social cohort – namely, students in full-time education – to obtain a deeper understanding of their political values, orientations, and activities. By pooling data from the 2015 and 2019 dataset of Active Youth in Hungary Research, we produced a sample of 1,600 students. Variables were analyzed using R software. We ran an LCA model (Oser et al., 2013; Hustinx et al., 2012) that is suitable for clustering types of participation based on a large number of variables (Albert et al., 2017). The LCA identified well-defined, distinct groups of respondents based on participation variables. Thus, the model helped us to distinguish the participation structure of respondents with a high degree of similarity.

Variables with a frequency of 10 percentage points or more were included into the LCA model. Out of 16 forms of political participation (listed in Table 2), 14 were included in the LCA analysis. Two low-frequency forms of participation were omitted.³

In the second step we included classic socio-demographic variables, as well as political, ideology-type variables, to analyze the clusters (see Table 3).

variable name	categories	reference	
		category	
Gender	0=female; 1=male	1=male	
Socioeconomic	father's highest level of education and	4=highest	
	subjective income (1–4) first quarter=low	status	
status (SES)	status; fourth quarter=high status		
permanent	1=village; 2=town; 3= city; 4=capital city	4=capital city	
residence			
level of education	1=BA, BSc; 2=undivided; 3=MA, MSc;	4=PhD	
level of education	4=PhD, DLA		
	1=technical and agrarian studies; 2=arts	5=natural	
area of studies	and pedagogy 3=social sciences;	sciences	
	4=medical studies; 5=natural sciences		
	1=interested; 2=not interested; 3=average	3=average	
political interest	level of interest	level of	
		interest	
satisfaction with	1=not satisfied; 2=satisfied	2=satisfied	
democracy			
ideology	1=left; 2=right; 3=centrist	3=centrist	

 Table 3: Control and explanatory variables in the Multinomial Logistic Regression

Analysis

³ 'Taking action in a political party, and/or assisting in its programs' and 'Worn or displayed a campaign badge/sticker.'

We ran two multinomial regression models. In both, we used the four-cluster variable resulting from the LCA model as the dependent variable, with Online Activist as the reference category. According to Oser et al. (2013), the independent variables in the first run should be socioeconomic status (SES), gender, and age. However, in terms of students, we can speak of individuals of the same or nearly identical age. In fact, 88 percent of the sample students were born between 1990 and 1998. Therefore, we changed the independent variable structure of the original model. The socioeconomic status (SES) variable was transformed into a variable derived from the father's level of education and the subjective income variable. In Hungary, an important indicator of social inequality is the type of permanent residence, so this variable was also included into our model. We also included two special student-status-related variables: level of education (BA, MA, PhD), and area of studies (e.g. social sciences, sciences, etc.). In the second run, we included political interest, satisfaction with the way democracy works, and an ideological variable (self-positioning on the classic left-right scale). By including these variables, we aimed to examine whether there is a significant difference in political thinking between members of different clusters.

4. Results

4.1 Latent Class Analysis findings

The first step in analyzing an LCA model is determining the optimal number of clusters. Based on the various statistical indicators included in Table 4 and Figure 2 – BIC statistics, statistics, and CAIC statistics – it can be seen that the values decrease until Model 4, or in the case of ABIC statistics, the values stagnate. We identified a breakpoint here because BIC and CAIC values started to increase from the five-cluster solution onwards. Table 3 shows the weight of each variable within the four-cluster model.

Model	log_likelihood	BIC	ABIC	CAIC	likelihood_ratio
3 cluster	-10537.05	21398.72	21258.94	21442.72	3406.753
4 cluster	-10407.60	21250.48	21063.05	21309.48	3147.848
5 cluster	-10374.82	21295.60	21060.51	21369.60	3082.299
6 cluster	-10342.81	21342.24	21059.51	21431.24	3018.280
7 cluster	-10317.44	21402.17	21071.79	21506.17	2967.543
8 cluster	-10295.26	21468.47	21090.43	21587.47	2923.176

Table 3: Latent Class Analysis (LCA) model statistics for participation behavior

Source: Active Youth in Hungary, 2015-2019.

Considering Table 4 and Figure 2, we decided to choose four clusters.



Figure 2: Latent Class Analysis (LCA) model FIT plot

Source: Active Youth in Hungary, 2015–2019.

According to the LCA analysis, the group containing the most Hungarian students (52 per cent) is the 'Disengaged' group. The strongest variable in the cluster is participation in parliamentary elections this Sunday (0.409). However, none of the other forms of participation reaches more than 0.5 points. Members of this group do not participate in politics much – at most in parliamentary elections.

Members of the second-largest cluster (20 per cent) are called 'Contactors.'⁴ In this cluster, we identify those forms of participation (with a weight of above 0.5) that require a low level of personal involvement and minimal cost in terms of time, money and commitment. These factors include 'intend to participate in the elections' (0.762), signing a protest letter (0.592), and voting on the internet about public affairs or social problems (0.527). Thus, 20 per cent of respondents are clustered due to a mix of low involvement and low-commitment-driven forms of online and direct participation.

The third cluster is named 'Online Activists,' and consists of 19 per cent of all respondents. The two most important types of participation in the cluster happen in an online space: liking posts on social media (0.772) and sharing pictures and videos and creating events on social media concerning public affairs and social problems (0.712). It is difficult to interpret the level of personal involvement in the case of 'liking' posts, but this is more evident in the case of sharing in the online world, which is an integral and even decisive part of student life (Székely and Aczél, 2018). When an individual shares a public image or a post, most of their online acquaintances will become aware of their public interest, and, if relevant, their political affiliation. That is, such an act may even have consequences. It is

⁴ Based on evidence presented in an article by Oser et al. (2013), this cluster is also distinct in the US population.

interesting that among the four categories of participation (electoral participation, direct participation, traditional participation, and online participation), only online participation emerges as a standalone cluster based on the LCA analysis.

Finally, the smallest cluster, involving 9 percent of the total student population, is made up of 'Omnivores.' Almost all forms of participation in this cluster have a weight of above 0.5. The students classified herein are distinguishable for their political participation and are likely to have strong ideological commitment, expressed through various channels of participation (online and offline). They are likely to take part in activities that require high levels of personal engagement, such as going to a demonstration, participating in online activities, and distributing likes. Out of the 14 forms of participation we examined, only 4 have a low probability (below 0.5) for members of this group: the latter individuals are not likely to take part in illegal or spontaneous demonstrations; in civil unrest; to donate money to a political organization or group; or to contact politicians. For the latter form of participation, however, the value reaches 0.492 points, which is just at the limit of significance.

(four clusters)								
Forms of	Form of political	Cluster 1	Cluster 2	Cluster 3	Cluster 4			
political participation	participation	Disengaged	Online Activists	Contactors	Omnivores			
	Collecting signatures	0.126	0.229	0.393	0.395			
	Signing a protest letter	0.085	0.197	0.592	0.686			
direct participation	Legal, public protesting	0.044	0.156	0.391	0.638			
	Illegal protesting	0.017	0.047	0.161	0.335			
	Boycotting	0.071	0.198	0.247	0.503			
traditional	Contacting politicians	0.066	0.174	0.277	0.492			
participation	Encouraging someone to vote	0.044	0.123	0.426	0.539			
volunteer participation	Donating money	0.138	0.246	0.239	0.388			
	Liking posts	0.254	0.772	0.662	1.000			
	Voting on the internet	0.087	0.379	0.527	0.711			
online participation	Sharing pictures and videos	0.003	0.712	0.089	1.000			
	Making comments	0.036	0.390	0.151	0.731			
	Posted	0.000	0.481	0.010	0.867			
electoral participation	Sure to vote	0.409	0.461	0.762	0.827			
Number		831	306	322	141			
%		52	19	20	9			

Table 4: Latent Class Analysis (LCA) model fit statistics for participation behavior

Source: Active Youth in Hungary, 2015–2019.

Direct participation and electoral participation are important (+0.5 points) among Contactors and Omnivores, but traditional/institutionalized participation appears only within the Omnivores cluster. Thus, traditional/institutionalized forms of participation appear to be considered of minimal importance and become the terrain of politically highly involved Hungarian university students. Electoral participation reaches a value of 0.4 even among Disengaged students, therefore has a non-negligible role, whereas the activity of volunteer participation is not at all important for any LCA cluster.

Online participation is an important form of participation for all clusters except the Disengaged cluster. An important result of this is that participation in different types of offline activities – direct traditional activity and volunteering – does not form a separate cluster.

The LCA model thus shows four distinct types of student participation that can be understood as an ordinal scale. It ranges from passive, aloof behavior to full involvement and activism, with two intermediate forms. As a result of the LCA, it can be stated that online participation is an independent type of activism engaged in by Hungarian students. Therefore, our research evidence confirms our first hypothesis.

Before doing a regression analysis, we used descriptive statistical tools to describe the characteristics of different clusters (see Figure 3).



Figure 3: Distribution of clusters based on gender and participation index

Source: Active Youth in Hungary, 2015–2019.

Figure 3 draws attention to several interesting factors in relation to our research questions. As the figure shows, a gender gap is detectable among the participation clusters. From the perspective of gender, 53 per cent of female students belong to the Disengaged group, 21 percent are Online Activists, 19 per cent are Contactors, and 7 per cent are Omnivores. That is, the higher the level of involvement, the lower the proportion of female students.

In contrast, men are less well represented within the Disengaged and Online activist clusters, but appear in greater proportions among the Contactors (22 per cent) and Omnivores (10 per cent). In parallel, the differences appear to be more significant based on the distribution of clusters: 57 per cent of the Online activists and 53 per cent of Disengaged are female students, compared to 43 per cent for Omnivores and 47 per cent for Contactors. These results are statistically significant, indicating variation in participation according to gender (Pearson Chi-Square = 9.792; Sig = 0.020, Cramers'V = 0.078).

However, there is no statistically significant difference among different clusters of students based on place of residence and socioeconomic status. Among the special, student-specific variables, the level of education and the area of studies segment the population. The data suggest that the fewer years students spend in education, the more they are overrepresented within the Disengaged and Online Activists cluster.

On the basis of the area of studies, students of humanities, the social sciences, and economics are the most active groups. This finding is most notable regarding the Disengaged cluster, in which the proportion of students of engineering and IT services training is 59 per cent, but only 45 per cent of students of humanities and 51 per cent of those involved in the social sciences. The latter two groups of students are overrepresented within the Omnivores cluster (11 per cent and 10 per cent, respectively). In addition, students of humanities are significantly over-represented (26 per cent) in the Online activist group compared to their weight in the sample (21 per cent). Students of science are also overrepresented among the Online Activists.

To sum up, out of the four clusters created by LCA analysis, within the cluster of Disengaged younger students, women, BA students, and students studying engineering and IT are overrepresented. Online Activists are also mostly women, and students of liberal arts, while students of science are overrepresented among them. The proportion of men within the cluster of Contactors is high, and students of medicine and health care are overrepresented within the group. Finally, men, graduates, and students of humanities and social sciences are significantly overrepresented among the most active group, the Omnivores.

The results of the descriptive statistics suggest that different forms of participation (direct participation, traditional participation, volunteer participation, online participation, and electoral participation) and inactivity result in clearly defined participation clusters. The higher the level of personal involvement (i.e. the higher the 'price' of participation), the smaller the number of participants. The size of each cluster changes accordingly: the largest is the passive, Disengaged cluster; the smallest is the cluster of Omnivores. Traditional forms of participation – i.e. those that are strongly tied to main political actors such as political parties – are exclusive in nature and the terrain of the students most committed to political participation. Another important lesson from the results is that the most favorable terrain for female student involvement is the online space, where the cost of involvement is lower. These results indicate that political participation, as Inglehart and Norris (2003) and Hustinx et al. (2012) point out, is higher among men, including among college students.

4.2 Stratification of participation types

In the second part of the analysis, we use multinomial logistic regression modeling to examine what sociological components distinguish those students who are active only in online participation from those in other clusters, and test whether there is a gender divide between them.

In the regression model, we compare members of other clusters with Online Activists (N = 306). The independent variables are gender, socioeconomic status, place of residence, level of education, and study area.

As indicated in Table 5, the most important result of the regression model⁵ is the fact that the influence of the status variables we included on the individual clusters is small. There is only one socioeconomic variable in the whole model that shows significant correlation, and that is gender. According to Table 5, female students are less likely to be Contactors and Activists than Online Activists. However, for the cluster of Disengaged students there is no such statistical relationship. So, it is much more likely that Contactors and Activists will be male students than Online Activists.

Type of settlement, socioeconomic status, level of education, and area of studies do not affect the clustering outcomes.

 $^{^5}$ The multinomial logistic regression shows very low Pseudo R-Square values, whether Nagelkerke or Cox or Snell R-Square.

		-	an	alysis ⁶			C	C C	
* p<0,05	Diseng	aged	ged Contactors				Omnivores		
** p≤0,01 ***p≤0,001	В	Wald	Exp(B)	В	Wald	Exp(B)	В	Wald	Exp(B)
Female	034	.052	.967	405*	5.403	.667	706***	10.226	.494
Type of settlement ¹									
village	353	2.894	.703	297	1.451	.743	.043	.018	1.044
town	194	1.014	.824	252	1.214	.777	163	.289	.850
city	258	1.750	.773	179	.614	.836	.158	.291	1.171
SES ²									
First quarter	162	.672	.850	067	.078	.935	.477	2.565	1.612
Second quarter	071	.138	.931	.095	.175	1.100	.046	.023	1.047
Third quarter	.058	.072	1.060	.205	.637	1.227	.189	.310	1.208
education ³									
undivided	358	.536	.699	636	1.459	.529	808	1.745	.446
BA, BSc	.088	.037	1.091	619	1.590	.539	-1.003	3.134	.367
MA, MSc	.024	.002	1.024	242	.201	.785	507	.657	.602
area of studies.4									
engineering	.368	1.986	1.445	.273	.711	1.315	.054	.016	1.056
liberal arts	211	.607	.809	.227	.468	1.255	.518	1.488	1.679
social sciences	.224	.726	1.252	.412	1.610	1.509	.714	2.967	2.043
medical studies	.390	1.439	1.476	.692	3.170	1.997	.599	1.406	1.820
Intercept	1.081^{*}	4.608		.620	1.255		184	.079	
Nagelkerke R ²	0,052								
Cox and Snell R ²	0,047								

 Table 5: Stratification of participation types: Multinomial logistic regression

Reference category: Online Activists.

1 Reference category: capital city (Budapest)

2 Reference category: Highest (fourth) quarter

3 Reference category: PhD

4 Reference category: science

An important finding is that there is a gender gap in the participation structure of Hungarian students: female students are less active, or are active online at most. The online space seems to offer greater opportunities to female students in Hungary, a result that is consistent with earlier findings (Inglehart and Norris, 2003), and especially with the finding that 'male students are significantly more likely to participate in an omnivorous way [...] and women feel more attracted to a more informal and monitorial repertoire of participation' (Hustinx et al., 2012: 111.)

In our second model we included political and ideological variables. These are political interest, satisfaction with democracy, and the classic left-right scale. The reference value for both the political interest and the left-to-job scale was the average value or the center position. For the dependent variable, the reference cluster was the group of Online Activists.

⁶ The model is based on Oser et al. (2013: 97).

Based on Table 6 (below), the fit of the model is significantly better than that of the previous model.⁷ Thus, political, ideological-type variables explain belonging to individual clusters to a much greater extent than socioeconomic variables. The effect of gender in this new model disappears. For those new variables that have a strong effect, see Table 6.

Compared to the Online Activists cluster, the likelihood of being classified into the Disengaged cluster is high (Exp (B) = 2.021) if the student is not interested in politics. But, if interested, the chance of not entering that cluster is high (Exp (B) = 0.585). Students with a left-wing attitude are also less likely⁸ to be included in the cluster of Disengaged students. Based on these results, compared to Online Activists, the Disengaged cluster primarily contains students with little interest in political issues who position themselves at the center of the ideological scale.

There is only one significant effect regarding the cluster of Contactors. Compared to Online Activists, the more dissatisfied a student is with the functioning of democracy in Hungary, the more likely they are to be included in this cluster (Exp (B) = 1.579).

Finally, the chances of being included in the Omnivores cluster is greater among those who are interested in politics (Exp (B) = 3.998) and dissatisfied with the way democracy works in Hungary (Exp (B) = 1.582)⁹. Not surprisingly, compared to Online Activists, Omnivores are much more involved in politics.

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* p<0,05	Disengag	ged		Contac	ctors		Omnivore	es	
** [*] p≤0,01 ***p≤0,001	В	Wald	Exp(B)	В	Wald	Exp(B)	В	Wald	Exp(B)
Female	245	2.935	.783	292	3.105	.747	385	3.171	.681
Political interest ¹									
disinterest	.703***	16.963	2.021	288	1.739	.750	705	3.141	.494
interest	537***	8.768	.585	.331	2.871	1.393	1.386***	25.076	3.998
Dissatisfied with	040	.078	.961	.457**	7.373	1.579	.459*	4.219	1.582
democracy									
Left-right scale ²									
left	981***	25.207	.375	255	1.214	.775	.290	.869	1.337
right	067	.062	.935	.208	.448	1.231	548	1.307	.578
Intercept	1.633***	45.734		.048	.028	.747	-1.676***	16.419	.681
Nagelkerke R ²	0.226								
Cox and Snell R ²	0.205								

 Table 6: Stratification of participation types: Multinomial logistic regression

 analysis

Reference category: Online Activists.

1 Reference category: Moderately interested.

2 Reference category: Centrist position.

⁷ This is indicated by a multiple of Nagelkerke R2 and Cox and Snell R2 (0.226 instead of 0.052).

⁸ Wald index or Exp (B) value (.375).

⁹ While the effect is not significant, it is noteworthy that the Activists cluster is more likely to contain left-wing students.

We also know from Table 5 that male students are more likely to be included in this cluster. Thus, there is little difference between the clusters in terms of social background and composition, but from a political, ideological point of view, we can speak of the clusters having different characters.

Overall, according to the second multinomial regression model, Online Activists are more interested in politics than Disengaged ones, but much less interested then Contactors and Activists. The satisfaction of the former with democracy is as high as for Disengaged students, and they are much more satisfied than Contactors and Activists. Finally, according to the left-right scale, Disengaged individuals are more left-wing, with no significant difference in this respect to the other two clusters.

Overall, confirming previous findings in the literature, a key factor in political participation is found to be interest in politics. Low political interest results in passivity, while a high level of interest promotes involvement.

5. Conclusions

Our main goal was to assess the trends in Hungarian university students' political participation over time, taking into account the latest results about changing forms of political participation (Theocharis and van Deth 2017). Whereas the level of political participation of Hungarian society is generally low (Róbert and Szabó, 2017), a distinguishable youth group – university students – are the exception, and perhaps even represent an encouraging sign (Oross and Szabó, 2018). In our study, we examined the political participation of Hungarian students and set up political participation groups using LCA analysis. Beyond creating empirical evidence about changing forms of political participation among university students, we also tested the consequences of the political use of the internet.

In terms of analyzing political participation trends among Hungarian university students, we found that every second university student participated in electoral activity, while in relation to non-electoral offline participation, direct forms of action were the most common (with an activity index value as high as 0.94 points). Traditional, party-related forms of participation and civic participation are of little interest to students. These results confirm the fact that university students are a very politically active strata of Hungarian society. It also became clear that online forms of participation are much more likely than offline activity. Therefore, it is worth examining online participation in more detail.

Our LCA model helps us distinguish four clusters: Disengaged, Contractors, Omnivores, and Online Activists may be classified as separate groups of students. Compared to earlier results (Hustinx et al., 2012), the cluster of Disengaged students is much bigger among Hungarian students, and there is no sign of classic volunteers, humanitarian citizens, or monitorial citizens. Unlike results based on data from the US population (Oser et al., 2013) offline activists do not represent a separate cluster among Hungarian students, since the fourth group (that we called 'Omnivores') consists of students involved in direct-, online-, and electoral forms of participation, thereby combining those forms in a complex way. The results of LCA analysis support the thesis of reinforcement. Similarly to our previous findings and results of international studies about this topic, we found that the online space did not represent new opportunities for democratization for the entire student community. As for SES, similarly to earlier research (Oser et al., 2013), our results also confirm that online participation does not narrow the participation gap. However, from a political, ideological point of view, we can speak of the existence of clusters of a different character: those students who are more dissatisfied with the functioning of democracy in Hungary are more likely to become Contractors, whereas the chance of being included in the Omnivores cluster is higher among those who are interested in politics and dissatisfied with the way democracy works in Hungary.

In our study, we examined the issue of gender inequality in political participation. There is a consensus in the literature that political participation is fundamentally male-centered. However, it is not evident whether the online space may balance the inequalities that still exist between the political participation of men and women. From an examination of the participation patterns of Hungarian students, we did not obtain completely unambiguous results. We found little difference between the clusters in terms of social background. It seems that students who are already politically active appear in the online space, but some groups, especially women, become activated.

The reason for the lack of explanatory power of the social status of individual students is probably that Hungarian student society is comprised of a fundamentally homogeneous group of middle-class individuals (the latter term being widely interpreted). Students of a lower-status cannot enter higher education, while the children of the social elite often do not enter Hungarian higher education as they study abroad.

One limitation of our study is that we analyzed a homogenous group in Hungarian society; namely, university students. Future research might help us to understand how university students differ from Hungarian youth more generally, or from the wider population. As little comparative data has been systematically collected about the Central European youth population, further research is needed to enable the study of the topic from a Central European comparative perspective. Another avenue of research could be the impact of the hybridization of the Hungarian political system (Enyedi, 2016; Bozóki and Hegedűs, 2017; Bogaards, 2018) on young citizens' participation patterns. Based on Morlino (2009), it can be assumed that in hybrid regimes the independent, autonomous participation of citizens is low, although electoral participation can grow when this is encouraged by political actors because it can give such systems a huge surplus of legitimacy (Petrov, Lipman and Hale, 2013). Our results indicate that even Disengaged Hungarian university students strongly participate in electoral activity, which might be one indicator of such an impact, but further research is needed to understand the matter more clearly.

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