



**Civic engagement and the resources of persistent students and the reasons of dropout in higher education**

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## Abstract

**Background and aims:** Even the richest statistical databases leave the reasons of student dropout from higher education largely obscure. It is the answers of the students who drop out that the panel examinations of the cohorts of students do not contain. The theoretical background to our research was provided by Coleman's concept of social capital (1961), Tinto's integrational and Astin's involvement theory, as well as Pascarella and Terenzini's institutional integration/embeddedness ideas (2005). **Methods:** To find a solution to that problem, we devised a quantitative, questionnaire survey, based upon the qualitative examination of students who have dropped out (DEPART 2018;  $N=591$ ). For data gathering, the snowball method was used, and almost all academic fields are represented in the database. The primary

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objective of the research was revealing and identifying the factors preventing students from obtaining a degree, surveying the processes and decisions that resulted in their not being able to graduate. School career, educational experience, the attitude of the family to the student's studies, job/career orientation, educational and social experience in higher education, competitive activities, and social-economical characteristics were the topics we examined. We collected the data of the students who have dropped out with the questionnaire (IESA 2015;  $N = 2017$ ) and compared the information thus collected with the social and demographic characteristics, school career, and higher educational integration of persistent students. We also compared the data to the embeddedness of (the persistent) students in various voluntary organizations (civic, sport, and religious). For the examination of persistence, a 9-item, highly reliable scale [Cronbach, 883 (IESA)] has been used since 2012. *Results:* The results suggest that the influence of institutional factors and that of the social network is more powerful than the individual characteristics. We found considerable differences between the intra- and extra-campus influences. *Discussion:* Our findings highlight the necessity of providing empirical foundations for the institutional dropout prevention programs.

**Keywords:** civic engagement, persistent, dropout

## **Introduction**

The purpose of our research was revealing the interrelations between belonging to a voluntary organization and a particular feature of efficiency and success in learning, that is, persistence. The research was conducted in the higher education institutions of the Northern Plains region of Hungary, the Highlands (Slovakia), Subcarpathia (Ukraine), the Voivodina (Serbia), the Partium and Transylvania (Romania) (IESA 2015;  $N = 2017$ ). Persistence is the commitment of students for the successful completion of their studies to graduation. Our most important research question is whether civic engagement, belonging to a religious group or sports club, improves the persistence of a student or not. We used the institutional integration theory of Pascarella and Terenzini (1980) and the institutional integration theory of Tinto (1993), and we would like to look into the on-campus and extra-campus membership of students in various organizations. According to the theories mentioned above, the more organizations and associations a student is a member within the campus, the more vivid their interaction with their peers and the faculty is, the better they will be integrated and, in turn, better protected against dropout. On the other hand, when a student is a member of an organization, association outside the institution, that membership functions as an attraction, a pulling force, distracting the student from the university, undermining their efficiency and may ultimately lead to their dropout.

For our analyses, we used the subscales related to the level of students' commitment to obtain a degree from the Persistence/Voluntary Dropout Decision Scale (Pascarella & Terenzini, 1980). The 9-item inventory measures how committed students are to complete their studies, to obtain a degree, how useful they find their course of studies,

and what efforts they are ready to make in order to meet the classroom and exam requirements (Cabrera, Castaneda, Nora, & Hengstler, 1992). Low persistence is therefore regarded as a risk factor of dropout. When students who are properly integrated in the educational and social system of an institution of higher education reduce the risk of drop out (Astin, 1993; Tinto, 1993), we therefore assumed that voluntary membership in the various organizations of their peers reinforces persistence. Three prominent kinds of these organizations in the geographical region concerned are religious, sport, and civic associations (Bocsi, Fenyes, & Markos, 2017; Kovacs, Puskas, Moravecz, Rabai, & Bacsne Baba, 2018; Pusztai, 2015). We expressed intentions to find out to what extent the students who dropped out had been members of such organizations, and whether they had been members of associations within or outside their respective institutions during their studies. To find the answers, we used our 2017 database into which we had entered the findings of our research carried out among students who had dropped out from higher education (DEPART 2018;  $N = 591$ ).

### **Civic Engagement and Persistence**

Civic engagement has been regarded as a form of social capital that contributes to success in education and to avoiding failure, since the seminal work of Coleman was published (1988). In the typology of Ekman and Amna (2012), civic engagement consists of latent and manifest political inclusion. One branch of the latent political inclusion is activity in public and social issues, as part of which the individual is a member of a local community based upon values shared with others. In this sense, civic engagement is interpreted as a membership in civic and voluntary groups. Only one quarter of respondents in Magyar Ifjusag 2016 (Hungarian Youth, 2016) survey were asked about their membership in civic organizations. In higher education, students proved to be more active than the average, almost one third of them were members of some sort of a student organization; 10% of them belonged to environment protection associations, whereas 9.9% belonged to charity and cultural associations. In Braxton's (2006) observations in higher education, one of the eight factors determining success is civic activity. Various forms of civic engagement do not only promote the ultimate success in higher education, but also the commitment to studies. If a student is not directly a member of a civic organization, they may cooperate with such organizations through the service-learning courses delivered by their parent institution (Kuhn, 2008). International research projects outline that there was a positive correlation between success in studies and participation in service-learning-type activities (Astin & Sax, 1998; Eyler, Giles, & Braxton, 1997; Hesser, 1995). Pusztai (2017) in a study demonstrated that active civic engagement increases students' efficiency, more powerfully than socio-demographic variables do. Pusztai also showed the positive effects of social capital (good relationships with parents and teachers). The individual's commitment to their studies was found to be an important dimension from the aspect of success.

### **Membership in a Religious Community and Persistence**

The findings of research projects conducted among Hungarian youth reflect that out of civic organizations, it is the churches, i.e., religious associations, that attract young people the most (Csako, 2004; Szabo, Bauer, & Laki, 2002). In the course of the Magyar Ifjusag 2016 research, half the students reported that they belonged to some denomination, 25% of them had received a religious upbringing, and 20% of them had learned what they knew about faith in some religious organizations (Hamori & Rosta, 2013). The results of the series of the surveys we conducted in the geographical region mentioned above suggest that an average of 20% of the students belonged to some religious youth organizations (Puszta, 2015).

Earlier research programs revealed the beneficial effects of the religious organizations, networks on the studies of their members (Astin, Astin, & Lindholm, 2011; Puszta, 2015). A majority of researchers believe that religious practices, pursued individually or in groups, have a positive impact on the success of students in their studies (Coleman, 1988; Darnell & Darren, 1997; Lehrer, 1999; Loury, 2004). Religion may have direct influence on studies, shaping attitudes, and value preferences, and it may also have an indirect effect through the social network (Iannaccone, 1998; Lehrer, 2006). Familiarity with the rituals of religious services enables the individual to more easily adapt to the timetable, to cyclical and linear processes of the institution. Such students find their place in the framework of the college or university. Practicing religion in a small community develops the creativity and self-expression skills of the students, their ability to cooperate. As the student has an interiorized system of norms, they need less external control during their studies (Iannaccone, 1998; Puszta, 2015). Religion as social capital generates confidence, information channels, and norms reaching through the borders of social layers. Our research findings confirmed that a student practices their religion in a community; they are able to utilize the benefit of social capital as powerfully just as strongly they are bound to their religious community. The benefits include solidarity, the elimination of deviant and risky behavior with the moral outrage of the community, and the reward for high performance and attitudes, meeting the expectations of the community (Puszta, 2015).

### **Sport Communities and Persistence**

According to the findings of Magyar Ifjusag 2016 research program, 25% of the students belonged to some sport club or association. The sports clubs are, similarly to religious/denominational associations, a powerful attraction for college or university students. Sportspeople (primarily competitive sportspeople) constitute a special group of students. Analyzing their success and persistence is therefore a highly relevant issue, especially because the topic has not been very well researched to date. Sportspeople

must perform at two places at the same time: in their studies and in their sports career, which generates a number of difficulties ([Fintor, 2013](#)). Competitive sport requires a lot of energy, as there are training sessions every day, there are competitions and tournaments ([Lentene & Perenyi, 2015](#)). Sportspeople are under constant pressure, they face expectations all the time, to make the utmost effort in the classroom and out in the tracks, field, or in the sports hall. Since they are able to spend less time in the academic environment, they might be separated from their peers and the teachers, and this may generate a sense of isolation, solitude in them, increasing the risk of dropout ([Ting, 2009](#); [Watt & Moore, 2001](#)). Pascarella and Smart ([1991](#)), who launched a longitudinal survey, based upon the integration theory, however, found that sportspeople tend to graduate in higher numbers than the students who do not do any sport. There are direct and indirect effects in the background of this difference. Among first-year students, those who did sport were likely to continue their studies in their own institution or – the male students – in another one, whereas the students who did not do any sport were more likely to drop out ([Leppel, 2005](#)). At the same time, as it has been pointed out above, there are research findings that discuss the isolation of sportspeople from the other students and from the faculty which, in turn, increases the risk of dropout. When we analyze the role of sport in persistence, it is necessary to take into consideration the level of sport performed by the students concerned (competitive sport or not), the type of sport (is it a team sport or an individual one), it pursued within the university or outside ([Mosonyi, Konyves, Fodor, & Muller, 2013](#); [Muller, Szeles, Seres, & Kristonne, 2011](#)).

## **Materials and Methods**

For our analysis, we used a database created by the Center for Higher Education Research and Development, Hungary from a research project involving the students of five neighboring countries (IESA 2015;  $N=2017$ ). The sampling was determined in accordance with the data supply of the institutions. The number of participants chosen from each faculty and institution was selected in proportion to the number of their students. The number of students from Hungary is therefore much higher than the number of ethnic Hungarian students from the neighboring countries, so the data received are to be treated with the necessary care. The data are not to be generalized for the student population of the entire countries, only for the specific institutions, and within those, the ethnic Hungarian student community. We planned to set up the sample group in the following way: 20% from the second-year undergraduate and teacher course, 50% from the first year of the postgraduate course, and the fourth year of the teacher courses. Care was taken to select the respondents randomly from the groups mentioned above. The sample is representative for the faculties ([Pusztai & Cegledi, 2015](#)).

A 9-item inventory, based upon Pusztai's work (2015), was used to measure the persistence of students Cronbachs'  $\alpha = .883$ . Principal component analysis was applied to create the principal component of persistence (principal components, KMO = 0.899, value of variance: 51.85%, Mean = 70.54, SD = 20.44). The main component means were converted into a scale of 0–100, where 0 is the lowest level of persistence and 100 is the highest. The variable was then dichotomized.

In accordance with the theories of Tinto (1975) and Pascarella and Terenzini (1980), we surveyed the membership in voluntary organizations, in order to see the integration, embeddedness of the students.

Information was collected about the students' membership in various groups, organizations, clubs, including sport clubs, religious or civic associations (yes, within the university; yes, outside the university; yes in both places; no and does not intend to be one; and no, but would like to be one). Unfortunately, the questionnaire did not address the level of sport pursued by the individual, so we created a quasi competitive sport variable from the available data: we considered quasi competitive sportspeople those who were members of some sport club, and competition was important for them, and that is at least one of the reasons why they did sport. The frequency of doing sport was measured on a 6-item questionnaire, the results of which were converted into a 0–100 scale (0: never; 100: three or more times a week).

The explanatory variables included the most important social and demographic factors: gender, education level of parents, type of resident settlement, and subjective and objective financial backgrounds. To provide a measurable view into their objective financial situation, students were requested to indicate the assets that their families possessed on the listed things. An index was created for the variables of the objective financial situation, and the values were recoded into a 0–100 scale. For the two-variable analyses, a two-value system was introduced (above average and below average). To map the respondents' subjective material situation, we requested them to describe their families' financial situation and offered the following answers to choose from: (a) We have everything we need, we are able to meet major expenses (e.g., going on holiday), and we are also able to save; (b) We have everything, though we cannot afford larger expenses; (c) Sometimes we are not able to meet our daily expenses; (d) We are often unable to make ends meet (the answer alternatives were recoded into a 0–100 scale).

The persistent groups and those exposed to the risk of dropping out were compared to the groups that have already dropped out (DEPART 2018;  $N = 591$ ). Data collection was carried out with the snowball method among those, who had started their studies in

higher education not more than 10 years ago, and dropped out. The dropped out students represented almost all fields of education.

*Persistence in the mirror of the background variables*

Of the categories of variables, the individual characteristic features of the students showed relatively little interrelation with persistence. Insistence on the original study objectives does not show any significant connection with serious efficiency indicators, such as the qualifications, the objective, relative and subjective financial backgrounds, secondary qualification obtained in grammar or vocational school, or the supporter of the secondary school. No considerable difference was found among the persistent student, those who were less persistent than the average asmd those who dropped out in terms of their institutional background, but the institutional features that serve as a background for persistence did not identify one single institution type as the most advantageous. A high number of students at the institution, high academic-professional performance, and a church as a supporter tend to improve persistence. It suggests that, in addition to prestigious and attractive faculties, the cultural background of the institutions also provides an advantage in terms of the persistence of the students. Strong selectivity, on the other hand, does not appear to support students in their persistence. This duality makes it probable that other factors, for example, the social network and embeddedness of the students, play an indirect role in the issue. This assumption is reinforced by two individual factors that strengthen persistence – town or city as home settlement and students' dorm as accommodation – through which students are really closely integrated into their respective institutions. In connection with the female students, we found a higher degree of persistence. They are also more successful and efficient in their studies (Table 1).

A comparison of the persistent, not fully persistent, and dropped out students shows that as the likelihood of graduation decreases, the proportion of male students increases, and almost every second dropped out student is a man. The qualifications of the parents, a good indicator of the vertical structure of the family, in this case proved to be neither a protective nor a risk factor. The financial situation of the family is, on the other hand, a noteworthy indicator, since the number of dropping out students is almost twice as high among families struggling with financial difficulties than in the other two groups. A similarly powerful factor was the type of the home settlement: the lowest is the number of dropping out students in the towns/cities. Half of the persistent students come from that kind of a home settlements, and only one third of the dropping out students come from towns. As for their preliminary schooling is concerned, those coming from vocational secondary school drop out in higher numbers than those who come from grammar schools. Almost two times as many students coming from

Table 1. The interrelation between the basic variables and students' becoming more persistent than the average

	<b>Attributes most powerfully reinforcing the persistenc of students</b>	<b>p</b>
		$\chi^2$ test/ANOVA
<i>Institutional attributes</i>		
Size	Larger number of students	.003
Supporter	Church	.004
Storng selectivity	-	Non-significant
Staff excellence	High academic-professional performance	.000
(Ethnic) Minority/majority institution	Majority institution	.000
<i>Students attributes</i>		
Gender	Female	.000
Father's qualifications	-	Non-significant
Mother's qualifications	-	Non-significant
Financial situation (obj., rel., subj.)	-	Non-significant
Type of home settlement	City	.032
Accommodation during academic year	Students' dorm	.037
Vocational secondary school	-	Non-significant
Supporter of secondary school	-	Non-significant

Note. ANOVA: analysis of variance.

vocational schools drop out of higher education than their share among the persistent students (Table 2).

#### *Civic engagement and persistence*

We assumed that the students who were members of some voluntary organization either within the university or outside the campus were more committed to their studies, and they had a bigger chance of staying in higher education and graduating than their fellow students who did not belong to such organizations. About 22.8% of the students we asked reported that they were members of some civic organization, 20% of them belonged to cultural associations, 15% to research groups, 14% to charity organizations, 13.8 to job seeking organizations, 12% of them to student organizations, and 7% to some political association. Altogether, 44% of the students belonged to at least one such organization, of these 20.3% belonged to at least one voluntary organization, union, community within the university, and 25.5% of them were members of voluntary groups outside the campus. The data show that there are differences between the countries in that respect. More than half of the ethnic Hungarian students in the Ukraine, Romania, and Serbia reported that

Table 2. A comparison of persistent, less persistent, and dropping out students from the aspects of the major sociodemographic indicators

	More persistent than the average (%)	Less persistent than the average (%)	Dropped out (%)
Gender: male	22.6	34.6***	46.6
Father with a college degree	23.0	17.6	24.3
Mother's qualifications	30.0	27.0	33.0
Struggling with financial difficulties	10.5	9.6	20.9
Type of home settlement: city	49.0**	39.6	34.7
Accommodation during academic year: students' dorm	31.9	31.4	26.0
Comes from vocational secondary school	21.5	22.5	38.4
Supporter of secondary school: the state	82.8	79.5	81.2

Note. \*\*.001 < p < .01. \*\*\*p < .001.

they were members of at least one such group, while in Hungary and Slovakia, slightly more than one third of the students reported the same. The differences are explained by a number of factors, the different economic and political systems of the countries, the different levels of development of the civic sector in the different countries, and the role of the civic sectors in the life of the different countries. When analyzing the interrelations between the civic engagement and persistence at colleges, we found a significant connection between membership in civic organizations and commitment to studies (Table 3). Whether the student is a member within their respective institutions or outside it does not appear to influence the issue.

Table 3. Interrelations between civic engagement and persistence (in %) (N = 2017; N = 591)

	More persistent than the average (%)	Less persistent than the average (%)	p	Dropped out (%)
A member in at least one organization and association	<b>46.6**</b>	42.0	.024	22.1
Not a member	53.4	<b>58.0**</b>		72.9
A member of at least one organization within the university	20.7	19.7	NS	-
A member of at least one organization outside the university	26.7	23.7	NS	-
N	1,225	792		591

Note. The bold values are much higher than those that could be expected there as a result of a purely incidental arrangement.

\*\*.001 < p < .01.

Certain types of voluntary work (civic, political, charity, and student organizations) are not in themselves closely related to the commitment of the students to graduate, although membership in cultural, traditionalist associations tends to support persistence. Civic engagement does not distract students from learning, so it does not increase the danger of dropout. Service learning was introduced in Hungarian secondary schools in 2012. It will be interesting to continue testing our hypothesis that those who have done service learning join civic organizations in higher numbers and are more committed to their studies than those who have not done such service.

#### *Membership in religious communities and persistence*

In our survey, we concentrated on the contribution of civic engagement and membership in voluntary organizations on students' persistence in the process of obtaining a degree. Our original assumption was that students seeking religious organizations were attracted out of the campus, since within the institution the choice of such organizations is limited. In this way, membership in religious organizations was considered as a risk from the aspect of persistence. According to our data, three times as many students attend religious services outside the campus than inside. We therefore looked into the proportions of the members of religious organizations, denominational groups, and associations within the university and outside, and the attitude of the members to higher education. One third of the students concerned (34.2% of them) reported they were members of such organizations, but we found considerable regional differences. In Eastern Hungary, the figure is 23.7%, in Transylvania and the Partium (Romania), it was 53.9%, in the Ukraine 71.5%, at the institutions of Serbia 17.5%, and in Slovakia 25.9% of the students belonged to some religious community. Outside their institution of higher education, nearly five times as many students were members (23.9%) of a religious organization than within the campus (4.7%). Membership in both inside the campus and outside was found to be outstanding at the institutions of the Ukraine, and above the average in Romania.

Contrary to our preliminary expectations, students who were the members of religious groups, youth associations within their institutions were found to be less persistent in their studies than those who were members of similar groups outside the institution. This equally applied to the students of Hungary, Romania, Slovakia, and the Ukraine.

While the dimensions of religiousness, personal religious practice (prayer), and community practice (regular attendance of services in church) within the college or university are largely indifferent from the aspect of persistence of a student, the same practices outside the campus, membership in a religious group appears to promote persistence. Our data also demonstrate that persistent students' religious activity is outstanding. Less persistent students are less active in their religious group, and the religious activity of students who dropped out is meagre (15%) (Table 4).

Table 4. Interrelations between membership in religious groups and persistence (%) (N = 2017; N = 591)

	<b>More persistent than the average (%)</b>	<b>Less persistent than the average (%)</b>	<b>Dropped out (%)</b>
Member of a religious community	<b>36.0***</b>	31.6	15.3
Not a member	64.0	<b>68.7***</b>	84.7
Member within the college/university	4.1	5.6	-
Member outside the college/university	<b>26.6***</b>	19.8	-
N	1,225	792	591

Note. The bold values are much higher than those that could be expected there as a result of a purely incidental arrangement.

\*\*\* $p < .001$ .

### *Sport and persistence*

We found that the proportion of students doing sport at the college or university was 4.5%, whereas 10.4% of them were members of sport clubs outside the campus, and 4.8% did sport both within the campus and outside. When we analyzed the interrelations between sport and persistence, we found notable connections between persistence and competitive sport and within that membership in a university sport club and the type of sport (individual or team sport). The powerful commitment to the sport career that is brought about by competitive sport, and allowing sport to precede the importance of studying may explain that the persistence of competitive athletes tends to be lower than the average. It particularly applies to the members of sport clubs, especially the members of university sport associations, as they are also overrepresented among less persistent students. Another risk factor is apparently team sport (in our case, football, basketball, and volleyball, as these were the sports of the respondents), while the individual sportspeople are usually more persistent than the average. During our research conducted in 2018, among dropped out students, we found proportions that are in an almost perfect correlation with less persistent students, completely 34.2% of them did not do any sport and 35.2% of those who did sport regularly. The members of sport clubs were found to be 13.3%. Although we did not examine the members of sport clubs within and outside the campus separately, we found that 10% of the students received some sort of a payment from their clubs; they were the typical examples of "dual career," as they are students and athletes at the same time ([Lentene & Perenyi, 2015](#)). They are usually competitive sportspeople (Table 5).

### *A multivariable analysis of the effects of belonging to a community*

A multigrade, logistic regression model was used to analyze the influences of membership in the voluntary organizations subject to our examinations among the students more

Table 5. Interrelations between various forms of sports, membership in sport clubs, and persistence (%)  
(N = 2017; N = 591)

	More persistent than the average	Less persistent than the average	p	Dropped out
Does not do any sport	65.4	34.6		34.2
Rarely does any sport	64.5	35.5		26.9
Does sport regularly	60.4	39.6		35.4
Competitive sportsperson	56.7	43.3		-
Not a competitive sportsperson	<b>65.0</b>	35.0		-
Member of some sport association, club, or group	58.2	<b>42.8</b>		13.3
Not a member in any sport club	<b>65.3</b>	34.7		86.7
A member within the university	42.9	57.1	.001	-
A member outside the university	65.8	34.2	Non-significant	-
Individual sportsperson	<b>66.0</b>	34.0		-
Team sportsperson	55.9	<b>44.1</b>		-
N	1,225	792		591

Note. The bold values are much higher than those that could be expected there as a result of a purely incidental arrangement.

persistent than the average. The analysis took place in the face of the major sociocultural and demographic variables. In the first model, the effects of the major explaining variables were examined. In the second grade, the home country and the gender were also included. In the third grade, we included in the analysis of the effects of the qualifications of the parents, the type of the home settlement, and the financial situation, measured in three different ways.

Our results clearly showed the negative effects of membership in a sports club within the university, and the positive effects of membership in religious communities outside the campus on the persistence of students. These effects were found to be independent of the social background of the student and the home country of the institutions of the students. In all the three grades/models, these two variables yielded similar results, which means that the other variables included did not have any considerable influence on the effects of the two key variables. Members of university sport clubs had 53% smaller, whereas the members of religious communities outside the campus had 1.35 times higher chances of becoming persistent above the average. Our results match other research findings that, on the one hand, point out the risks of dropout in connection with team sports (Pascarella et al., 1999; Watt & Moore, 2001) and, on the other hand, show that regular, competitive sport requires plenty of energy from the individual that their academic obligations may easily become of secondary importance, replaced by a more

powerful concentration on performing in sports. It applies particularly to the members of sport clubs, since for them the norms and expectations of their sport community will be decisive over the expectations of the academic community, faculty, and even the fellow students (Bowen & Levin, 2003; Kovacs, 2018). The negative effect is further strengthened that, contrary to the institutional integration theory of Tinto (1975) and Pascarella and Terenzini (1980), inclusion in the sport activities of the university has an opposite effect, that is, students in sports clubs will be less persistent in their studies. The members of religious groups, denominations outside the university are, however, more likely to be persistent above the average.

Of the sociocultural and demographic variables, the home country appears to have an effect in connection with the students of Subcarpathia (Ukraine) and the Highlands

*Table 6. Partition coefficients of becoming students persistent above the average (Exp B coefficients). Forras: IESA 2015 (N = 1,651)*

	<b>Model 1 (<math>\beta</math>)</b>	<b>Model 2 (<math>\beta</math>)</b>	<b>Model 3 (<math>\beta</math>)</b>
Membership in civic, voluntary groups within the university	1.066	1.060	1.054
Membership in civic, voluntary groups outside the university	1.068	1.066	1.057
Membership in religious groups within the university	1.024	1.233	1.244
Membership in religious groups outside the university	1.295*	1.375*	1.347**
Member of sport club within the university	0.433**	0.475**	0.469**
Member of sport club outside the university	1.029	1.090	1.069
Home country: Hungary		0.768	0.767
Home country: Romania		0.615	0.613
Home country: Ukraine		0.422**	0.393**
Home country: Slovakia		0.281***	0.282***
Gender		0.580***	0.564***
Father's qualification			1.509**
Mother's qualification			1.019
Objective financial situation			0.857
Subjective financial situation			1.156
Relative financial situation			0.947
Type of home settlement at the age of 14 years			0.872
Nagelkerke $R^2$	.013	.061	.070

Note. NB: reference values; Group membership: not members; Country: Serbia; Gender: female; Parents qualifications: no college or university degree; Objective and relative financial situation: below the average; Subjective financial situation: not good; Type of home settlement: rural.

\* $p \leq .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

(Slovakia). In addition, the gender and the qualification of the father has some influence. The students of the institutions of Subcarpathia and the Highlands have by 60.7% and 71.8% smaller chances, respectively, than their counterparts in the Voivodina (Serbia) to be persistent above the average. Male students have 43.6% lower chances in the same respect than female students. The children of fathers with a college or university degree have 1.5 times higher chances to be persistent in their studies above the average (for the Exp B coefficients, see Table 6).

## **Conclusions**

International researchers, when they study the efficiency and success of students in higher education, usually approach the issue from the negative side, that is, they attempt to reveal the reasons of failure, dropout, and disillusionment with the school or the academic objectives. Therefore, we concentrated on the intra- and extra-institutional factors (e.g., membership in voluntary organizations) and social factors that are able to make a student more persistent than the average in terms of continuing and completing their studies. We also studied the factors that hampered the students in completing their studies, what decisions and processes may lead to their giving up their ideas of graduating.

We compared the data collected from dropped out students with the social and demographic characteristics, school career, civic engagement, membership in voluntary organizations (sport and religious groups) of the persistent students. For the comparison, we relied on Coleman's concept, according to which civic engagement and membership in religious groups constitute a social capital that helps students to be persistent and successful ([Coleman & Hoffer, 1987](#)). Men, individuals from low-income families, students coming from underprivileged rural areas, and those who come from vocational schools are overrepresented among the dropped out students. Female students and the children of highly qualified fathers proved to be more persistent.

In the course of our research, we observed that there was a significant interrelation between persistense in higher education and civic engagement. Furthermore, at our observations in connection with religious communities and persistence, we noted that students sought religious organizations primarily outside the college or university, which is probably explained by the lack or shortage of such organizations within the institution concerned. Belonging to a religious organization outside the campus appeared to improve the persistence of the students in their studies. Last but not least, we examined the interrelation between persistence and sport and found powerful connections between competitive sports and membership in sports clubs and persistence. Membership in a university sports club clearly reduced persistence, so such students are in an increased danger of dropping out, much more so than we had been able to verify earlier ([Kovacs, 2018](#)).

Efficiency and success are not clearcut concepts in the world of mass higher education ([Pusztai, 2017](#)); we therefore extended our research to address some of the issues arising in that area. Our findings clearly indicate the negative effects of membership in university sports clubs and the positive effects of membership in religious communities outside the university to persistence. These effects are largely independent of the social background and the home country of the institutions of higher education concerned.

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GP contributed to study concept and design, analysis and interpretation of data, and obtained funding. KK and VM contributed to analysis and interpretation of data, statistical analysis, and study supervision. ME contributed to study supervision. All authors had full access to all data in the study and responsible for the integrity of the data and the accuracy of the data analysis.

### **Ethics**

The study procedures were carried out in accordance with the Declaration of Helsinki. The Institutional Review Board of the University of Debrecen, Doctoral School of Education approved the study. All subjects were informed about the study and all provided informed consent.

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