



**FACEBOOK AND MOBILE PHONE USE AND
ENTREPRENEURIAL INTENTIONS OF STUDENTS IN SERBIA**

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UDC 658.7: 5502.12	Abstract: The paper presents the results of the research of the impact that Facebook and smartphone use have on the enterprise potential, individual entrepreneurial orientation and entrepreneurial intentions of students in Serbia. The moderating effects of gender and the year of study were also examined. The sample included 488 valid questionnaires. From the Facebook use items, the most powerful and positive correlations were achieved by number of groups, number of friends and number of photos (items which involve active participation in Facebook activities, while a passive and random long stay on Facebook can negatively affect the entrepreneurship dimensions). More time spent on a mobile phone may produce a higher degree of passive behaviour in students, thus reducing their need for success. Creativity, subjective norm, achievement, innovativeness and leadership are under the greatest influence of Facebook and smartphone use items. The impact on entrepreneurial intentions is indirect. The recommendation for parents and teachers is to encourage young people to limit passive participation on Facebook and other social networks. There are no previous studies which link Facebook and smartphones with students' entrepreneurial intentions. Understanding and improving knowledge of the entrepreneurial intention of individuals has a positive effect on the development of society.
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1. Introduction

By using Facebook people are able to fulfil some of their needs and desires, share their everyday lives with others, communicate, and get involved in groups. Many factors influence the use of Facebook. Some people have a dominant desire for self-representation, whilst others would like to primarily please their wish for belonging (Nadkarni & Hofmann, 2012). The number of friends, the number of photos posted, the number of hours spent on Facebook, number of different groups, the daily time use, also daily Facebook frequency of use are categories that differ on an individual level. The aforementioned Facebook usage indicators rely on the beneficiary's personal description and the aim of using Facebook (Skues, Williams, & Wise, 2012). According to Sanchez, Cortijo and Javed (Sanchez, Cortijo, & Javed, 2014), the user's gender and year of study have a significant influence on the purpose and method of using Facebook. Female students do not have the same motives for using it as their male counterparts. The first year students are much lonelier and have a greater need to use Facebook than their older colleagues. Students most often use it for socializing and entertainment, but also for academic purposes (Sanchez et al., 2014).

Smartphones today are used anytime and anywhere. They allow us to communicate with people, save photos and recordings, track news or new clothing

collections, buy books, and keep us up with global trends in all areas. Using a smartphone affects people's behaviour and changes society on a global level. Numerous papers examine the influence of mobile phones on human behaviour, changes in economics, marketing, business, education, and medicine (Sarwar & Soomro, 2013). Smartphones also provide an easy and fast access to Facebook.

Entrepreneurship and entrepreneurial intentions are also the focus of this paper. There are hints of entrepreneurial tendencies at an early age (Obschonka, Silbereisen, & Schmitt-Rodermund, 2010). Factors which form the theory of planned behaviour have a special place in the study of the impact on entrepreneurship intentions (Ajzen, 1991): posture about entrepreneurship, subjective norms and perceived behavioural control.

Enterprise potential dimensions include creativity. The reference (Jayawarna, Jones, & Macpherson, 2014) also points to the importance of creative abilities for entrepreneurship. Creativity can also be linked to social networks. Through the communication and exchange of ideas, social networks offer a large number of opportunities for creative work. Although this exchange of ideas and experiences is very useful, an excessive use of social networks leads to "time wasting", if too much time is spent checking the activities of friends and chatting with them, thereby disturbing the creative process.

Risk-taking is one of the dimensions of individual entrepreneurial orientation. Non-entrepreneurs have a much lower propensity toward risk than entrepreneurs. It can be said that entrepreneurs have a greater risk tolerance than other people (Douglas & Shepherd, 2002). According to Fogel and Nehmad (Fogel & Nehmad, 2009), the same goes for social networks: people who use social networks, including Facebook, have greater risk-taking tendencies than people who do not use them. Observed in terms of gender, men have greater tolerance for risk-taking on social networks than women (Fogel & Nehmad, 2009).

The existence of strong entrepreneurial intentions, *inter alia*, is influenced by enterprise potential, individual entrepreneurial orientation and entrepreneurial intention. Based on all of the aforementioned, there is a link between the use of Facebook and smartphones and some dimensions (creativity, risk-taking) which affect students' entrepreneurial intentions. However, with a detailed overview of the available references, we did not find any studies which linked Facebook and smartphones with students' entrepreneurial intentions.

The purpose of this paper is to examine the influence of using Facebook and smartphones on enterprise potential, individual entrepreneurial orientation and entrepreneurial intention. The research was carried out by interviewing students in Serbia from seven different faculties. Gaining a deeper understanding and improving knowledge of the entrepreneurial intention of individuals has a positive effect on the development of society. Developing the entrepreneurial intention of individuals is a prerequisite for uprising and creating of more entrepreneurs.

Therefore, the uprising of individual's entrepreneurial intentions is highly needed in order to get to a higher number of entrepreneurs.

2. Theory and research questions

2.1. Facebook and the use of smartphones

Making relationships and links between people is what usually Facebook is used for (Skues et al., 2012). Using Facebook is linked to the number of Facebook friends, time spent on Facebook, the reasons for its use and the preferred functions. (Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009).

Students use Facebook several times a day and have many Facebook friends (Sanchez et al., 2014). The number of Facebook friends ranges from 100 to 400 (Skues et al., 2012). The research studies around the world show that students spend between 10-75 min daily using Facebook (Pempek, Yermolayeva, & Calvert, 2009; Ross et al., 2009; Kuo & Tang, 2014).

The time spent there has a negative correlation with the age of students. Younger students spend much more time daily using it than their older colleagues and have more Facebook friends (Pempek et al., 2009).

Male students spend much less time on Facebook than the opposite gender (Muisse, Christofides, & Desmarais, 2009). Also, there is a tendency for male students to have fewer friends than females (Pempek et al., 2009). Men make new friendships through social networks more often and want to make new connections. In many cases, this is because they communicate less in real life (Barker, 2009). Gender also affects the use of smartphones. Female students mostly use smartphones to communicate with their relatives and friends, and then to access Facebook (Sanchez-Martinez & Otero, 2009).

2.2. Enterprise potential

The dimensions of enterprise potential measure the latent tendency of a person to become an entrepreneur. These dimensions do not include firm intentions or a person's desire to become an entrepreneur. The dimensions of enterprise potential evaluate whether a person has the characteristics and attitudes that are desirable to start an entrepreneurial venture. According to Athayde (2009), enterprise potential includes the following dimensions: leadership, creativity, achievement, personal control and intuition. However, in the study (Athayde, 2009), the dimension of intuition was excluded when forming and checking the model.

2.3. Individual entrepreneurial orientation

Miller (1983) introduced the concept of entrepreneurial orientation for the first time, including three dimensions: risk taking, innovativeness and proactiveness. This concept refers to companies, but it is also successfully transferred to the individual and thus becomes an individual entrepreneurial orientation - IEO (Robinson & Stubberud, 2014).

The tendency towards risk taking is the preference for situations that can lead to benefits and rewards for success (Espíritu-Olmos & Sastre-Castillo, 2015). Starting a new business almost always involves a certain degree of risk. Consequently, persons prone to risk are more likely to start an entrepreneurial venture. Innovativeness is, unlike current practice, the ability to create new things (Lumpkin & Dess, 1996). Proactivity is being initiative in the way of making some new opportunities (Crant, 2000). It is clear that proactive people have a greater preference for entrepreneurship than other people.

2.4. Entrepreneurial intention

Entrepreneurship is a complex process, and one of the first and most important stages is the formation of entrepreneurial intentions (Lee & Wong, 2004). The process of making the decision to become an entrepreneur requires a certain period of time (Gartner, Shaver, Gatewood, & Katz, 1994). The existence of entrepreneurial intention is necessary for the realization of entrepreneurial behaviour (Kolvereid, 1996). Liñán and Chen (2009) emphasize that entrepreneurial intention plays a significant role in the decision-making process to start a business venture.

The research questions are:

RQ1: Does Facebook and the use of smartphones have a statistically important impact on enterprise potential, individual entrepreneurial orientation and entrepreneurial intention among students in our country?

RQ2: Does Facebook and smartphone use have a statistically important predictive influence on enterprise potential, individual entrepreneurial orientation and entrepreneurial intention among students in our country?

RQ3: Does a moderating influence of gender on the observed relations exist?

RQ4: Is there a moderating effect of year of study on the observed relations?

3. Method

3.1. Survey instruments (measures)

Questionnaire about Facebook. Five items were set up. The first defined item is about the frequency of Facebook usage (Sanchez et al., 2014). Scores range from

one to six and the students answer to the question about daily Facebook usage that is the second item. Higher scores mean greater usage. The following items are defined according to (Skues et al., 2012; Kuo & Tang, 2014; Sanchez et al., 2014), where students enter numerical values. These items are: hours of using Facebook, number of friends, number of photos and number of groups.

Questionnaire about smartphone (Lepp, Li, Barkley, & Salehi-Esfahani, 2015). Time of using a smartphone on a daily basis and accessing Facebook through smartphone are the two items that make up this instrument. Students write down the numerical values of these two questions.

Enterprise potential questionnaire (Athayde, 2009). The enterprise potential measurement instrument consists of four dimensions: leadership, creativity, achievement, personal control. A seven-point Likert scale was used to evaluate the items.

Individual entrepreneurial orientation questionnaire IEO (Bolton & Lane, 2012). The questionnaire has three dimensions: risk-taking, innovativeness, proactiveness. The respondents evaluate each item according to a seven-point Likert scale.

Questionnaire about entrepreneurial intention EIQ (Liñán & Chen, 2009). Personal attitude, subjective norm, perceived behavioural control, entrepreneurial intention are the dimensions. A seven-point Likert scale was used to evaluate the items.

3.2. Participants

The survey was conducted by students in Serbia completing questionnaires. The sample included the students following technical and economic courses from seven faculties in Serbia. The research was anonymous, and the students completed the questionnaires on a voluntary basis during their classes. The respondents do not have previous entrepreneurial experience. From the total of 488 valid questionnaires, 337 (69.1%) were completed by female and 151 (30.9%) by male students. The surveyed students belong to the 18 to 32 age group. respondents' average age was 21.38. In the sample there was a total of 245 students (1st or 2nd year of study), and 243 students (3rd, 4th and 5th year of study).

4. Results

4.1. Descriptive statistics

For about all the items related to using Facebook and smartphone (all aside from the item FB1), the students entered numerical values in the appropriate places in the questionnaire as these were open questions. Because of this, for conducting the following analysis: correlation, regression and moderator effects analysis, a

categorization of the answers was made. The categories range from 1 to 5. Category 1 makes up the lowest scores, while category 5 consists of the highest scores for the observed items.

The descriptive statistics is shown in Table 1.

Table 1 Descriptive statistics

Names of items and dimensions	Abbr.	N	Min	Max	Mean	Std. Dev.	α
Frequency of Facebook usage (times per day)	FB1	488	1	6	3.03688	1.77325	
Hours of using (daily)	FB2	488	0	24	2.8279	4.22483	
No. of friends	FB3	488	0	5000	685	761.107	
No. of photos	FB4	488	0	6433	211.76	598.7386	
No. of groups	FB5	488	0	2000	22.1281	117.128	
Total daily use of smartphone (hours)	SP1	488	0	24	7.7951	6.76101	
Use of smartphone to access Facebook (minutes per day)	SP2	488	0	1000	36.6848	78.13496	
Leadership	LEA	488	1.00	7.00	3.8856	1.26545	.837
Creativity	CRE	488	1.00	7.00	5.5400	1.15793	.792
Achievement	ACH	488	1.00	7.00	4.2541	1.25905	.809
Personal control	PC	488	1.00	7.00	4.1055	1.20462	.702
Risk-taking	RT	488	1.00	7.00	4.1633	1.33487	.777
Innovativeness	IN	488	1.00	7.00	4.8637	1.14172	.799
Proactiveness	PR	488	1.00	7.00	4.9850	1.21694	.786
Personal attitude	PA	488	1.00	7.00	4.8041	1.23154	.860
Subjective norm	SN	488	1.00	7.00	5.5956	1.24757	.846
Perceived behavioral control	PBC	488	1.00	7.00	4.1414	1.18947	.894
Entrepreneurial intention	EI	488	1.00	7.00	3.7828	1.48613	.937

4.2. Correlation analysis

The results of the correlation analysis (Pearson's correlation) can be seen in Table 2. (* $p < 0.05$; ** $p < 0.01$)

Table 2 The correlation coefficients

	LEA	CRE	ACH	PC	RT	IN	PR	PA	SN	PBC	EI
FB1	-.037	.048	-.029	-.075	-.023	.015	.001	.049	.041	-.016	-.038
FB2	-.062	0.000	-.012	-.072	-.037	-.045	.029	-.045	-.035	-.002	-.052
FB3	.100*	.114*	.119**	.008	.080	.103*	.039	.063	.119**	.018	-.033
FB4	.025	.122**	.093*	-.014	-.023	.097*	.089*	.036	.075	-.006	-.021
FB5	.117**	.105*	.128**	.110*	.075	.126**	.083	.114*	.136**	.044	.001
SP1	-.052	.128**	-.090*	-.107*	-.013	.001	.030	.042	.133**	-.011	.002
SP2	-.044	.108*	.042	-.040	-.021	.044	.080	.029	.144**	-.017	-.039

4.3. Regression analysis

The regression analysis is shown in Table 3.

Table 3 Regression analysis

Dep.	Independent							R ²	F	Sig.
	FB1	FB2	FB3	FB4	FB5	SP1	SP2			
	β									
LEA	-.033	-.072	.128	-.012	.136	-.059	-.083	.041	2.914	.005
CRE	-.011	-.070	.049	.050	.052	.101	.057	.036	2.528	.015
ACH	-.084	-.002	.112	.064	.106	-.130	.004	.047	3.389	.002
PC	-.055	-.046	.026	-.016	.164	-.099	-.044	.038	2.723	.009
RT	-.024	-.041	.117	-.083	.097	-.010	-.038	.022	1.508	.162
IN	.007	-.099	.069	.056	.106	-.027	-.006	.030	2.127	.039
PR	-.071	.028	-.015	.067	.056	.007	.058	.016	1.088	.370
PA	.081	-.126	.031	-.029	.119	.031	-.010	.025	1.764	.093
SN	.002	-.117	.064	-.042	.107	.119	.107	.054	3.944	.000
PBC	-.028	.008	.025	-.023	.060	-.009	-.025	.004	.288	.959
EI	-.007	-.049	-.025	.000	.029	.025	-.032	.005	.344	.933

4.4. Gender as a moderator

Table 4 represents the results of the correlation analysis of the items of Facebook and smartphone use on the observed dimensions. There were 151 men and 337 women respondents. Table 5 shows the results of the hierarchical regression analysis (where the moderating effect of gender was shown).

Table 4 The correlation coefficients between males (M) and females (F)

		LEA	CRE	ACH	PC	RT	IN	PR	PA	SN	PBC	EI
M	FB1	.029	.102	.108	.028	.010	.041	.015	.075	.008	.023	-.08
	FB2	-.03	.052	.024	-.04	-.13	.007	.049	.020	-.028	.057	.023
	FB3	.173*	.123	.184*	.064	.156	.156	.099	.099	.137	.109	-.02
	FB4	.114	.127	.166*	-.07	.010	.146	.157	.150	.172*	.117	.106
	FB5	.172*	.117	.108	.064	.114	.180*	.023	.123	.214**	.004	-.03
	SP1	.040	-.063	.043	-.14	.037	-.06	-.03	.016	.005	.062	.090
	SP2	.109	.255**	.182*	-.02	.072	.078	.134	.204*	.264**	.088	.015
F	FB1	-.05	.011	-.079	-.10	-.03	.002	-.01	.042	.048	-.02	-.01
	FB2	-.07	-.019	-.025	-.09	-.00	-.06	.022	-.07	-.035	-.03	-.08
	FB3	.083	.101	.095	-.00	.053	.078	.007	.051	.103	-.01	-.03
	FB4	.023	.087	.071	.032	-.02	.073	.042	.002	.005	-.03	-.03
	FB5	.093	.107*	.136*	.124*	.057	.105	.113*	.108*	.105	.057	.008
	SP1	-.05	.172**	-.14*	-.06	-.02	.017	.028	.073	.162**	-.01	.014
	SP2	-.10	.040	-.012	-.05	-.06	.029	.057	-.05	.086	-.06	-.06

*p<0.05; **p<0.01.

Table 5 Hierarchical regression analysis with gender as a moderator

Independent	Dependent	R square	F-change
SP1	CRE	.043	5.683
	LEA	.024	4.400
SP2	CRE	.045	5.495
	PA	.018	6.989
	SN	.043	4.303

4.5. Year of study as a moderator

Table 6 show the correlation analysis results of the Facebook items and the use of smartphone, and the dimensions of enterprise potential, individual entrepreneurial orientation and entrepreneurial intention. This was done for the students in the first and second year of study, and third, fourth and fifth year students, respectively. The number of first and second year students is $N_{1,2} = 245$, and the number of those in the third, fourth and fifth year of study is $N_{3,4,5} = 243$. Table 7 represents the hierarchical regression analysis, where the moderating effect of the year of study exists.

Table 6 The correlation coefficients for the students in the first and second year of study (Y) and third, fourth and fifth year students (O) respectively (* $p < 0.05$; ** $p < 0.01$)

		LEA	CRE	ACH	PC	RT	IN	PR	PA	SN	PBC	EI
Y	FB1	-.01	.030	.028	-.067	-.03	.008	.070	.024	.017	.043	-.02
	FB2	-.02	.022	.101	.000	.051	.032	.146*	.027	.051	.114	.020
	FB3	.117	.131*	.141*	-.046	.051	.140*	.084	.075	.141*	.069	-.01
	FB4	.053	.096	.107	-.058	-.03	.072	.086	.009	.015	.027	.027
	FB5	.098	.101	.115	.022	.095	.162*	.065	.164*	.195**	.122	.126*
	SP1	-.01	.179**	-.040	-.18**	-.02	.034	.110	.034	.169**	.043	-.02
	SP2	.007	.135*	.070	-.048	-.04	.062	.086	.045	.117	.011	-.06
O	FB1	-.06	.074	-.081	-.087	-.01	.025	-.06	.072	.066	-.08	-.04
	FB2	-.10	-.017	-.120	-.14*	-.12	-.12	-.08	-.12	-.124	-.12	-.12
	FB3	.083	.097	.096	.064	.111	.062	-.01	.051	.095	-.04	-.06
	FB4	.003	.152*	.088	.024	-.01	.124	.098	.057	.132*	-.04	-.06
	FB5	.143*	.119	.153*	.189**	.068	.097	.110	.062	.078	-.03	-.10
	SP1	-.10	.076	-.14*	-.036	-.01	-.03	-.05	.050	.098	-.07	.026
	SP2	-.09	.088	.019	-.035	.006	.027	.079	.011	.169**	-.04	-.01

Table 7 Hierarchical regression analysis with the year of study as a moderator

Independent	Dependent	R square	F-change
FB2	ACH	.014	6.043
	PR	.014	5.842
	PBC	.015	6.917
FB5	PC	.020	3.865
	EI	.018	6.260

5. Discussion

5.1. Correlation analysis discussion

From the items of Facebook use, the strongest correlations are achieved by FB5 - number of groups, followed by FB3 - number of friends. (Table 2) The number of groups an individual belongs to on Facebook may, in some cases, indicate a broad field of interest for such a person, a desire to follow a variety of different areas and activities, the need to learn more, to participate in current events etc. All this can stimulate leadership qualities, creativity, the need for achievement, and innovation, and may also contribute to a positive attitude towards entrepreneurship. The effect of item FB3 - number of friends is similar. The number of friends on Facebook can indicate a person's engagement, their readiness to make new acquaintances, to communicate more, as well as the desire to be up to date, follow events and participate in them. It is obvious that such attitudes and thinking may in turn have a positive impact on some dimensions related to entrepreneurship, such as: LEA - leadership, CRE - creativity, ACH - achievement, and IN - innovativeness. Both of these items have a positive effect on the dimension of SN - substantive norm. This is logical, since the number of groups and friends on Facebook certainly creates a greater sense of support from colleagues, friends and family, both in general terms and in terms of starting their own business.

Item FB4 - number of photos has positive correlations with the entrepreneurial dimensions, but these correlations are significantly weaker and occur in fewer cases. However, this item mostly affects CRE - creativity and PR - proactiveness. Hence, the number of photos can point to creative and proactive people. Interestingly, the first two items FB1 and FB2 do not have a statistically significant effect, and this effect is even mildly negative. Too many hours spent on Facebook may indicate an irrational expenditure of time, which certainly does not conform to entrepreneurial potentials, orientation and intentions. On the other hand, a positive and significant impact is achieved by those items that can be said to represent active indicators FB5, FB3 and FB4.

The items of smartphone use, SP1 and SP2, have a statistically significant and positive impact on SN - Subjective norm. This can be explained in a similar way as for the Facebook use items: In addition, the items of smartphone use also positively affect the CRE - creativity dimension. Frequent communication develops the need to talk more, to conceive short, effective messages, to find new topics for conversation, to listen to other people and answer their questions, which is all likely to result in increased creativity. On the other hand, item SP1 - total daily smart phone use has a statistically significant, but negative effect on the dimensions ACH - achievement and PC - personal control. This result can be explained by assuming that more time spent using a mobile phone may make a

person more passive. Under such conditions, there may be a decline in the need and will to progress, achieve success, and take control of situations.

The dimensions CRE - creativity, followed by SN - substantive norm, ACH - achievement, IN - innovativeness and LEA - leadership are under the greatest influence of Facebook and smartphone use items. These impacts have been previously commented on. The dimensions that are least affected (no impact at all) are the following: RT - risk taking, PBC - perceived behavioural control and EI - entrepreneurial intention. What is particularly significant is the lack of correlation with the dimension EI - entrepreneurial intention, as a dimension that indicates the existence of firm intentions to start a business.

It should not be forgotten that the items of Facebook and smartphone use have a significant (mostly positive) impact on the observed dimensions. At the same time, these dimensions have a positive impact on entrepreneurial intentions. This has been confirmed in numerous references, for example: the impact of creativity (Jayawarna et al., 2014), the impact of achievement (Carsrud & Brännback, 2011), the impact of innovativeness (Mueller & Thomas, 2001), and the impact of leadership (Rezaei Zadeh, Hogan, O'Reilly, Cunningham, & Murphy, 2017). Given the presence of such relationships, it may be concluded that there is an indirect (predominantly positive) influence of the individual items of Facebook and smartphone use on firm entrepreneurial intentions, since the items of Facebook and smartphone use affect individual dimension of enterprise potential and individual entrepreneurial orientation, which in turn influences entrepreneurial intention.

This provides the answer to RQ1: a statistically significant influence of Facebook and smartphone use on the observed dimensions among students in Serbia exists for certain items and dimensions.

5.2. Regression analysis discussion

In a small number of cases there is a statistically significant predictive effect. (Table 3) However, a stronger predictive effect of two items can be clearly seen: FB5 - number of groups, and FB3 - number of friends. These items appear as strong predictors of certain dependent variables, such as: LEA - leadership and ACH - achievement, followed by PC - personal control, RT - risk-taking, IN - innovativeness, PA - personal attitude and SN - subjective norm. The effect of items FB5 - number of groups and FB3 - number of friends is explained earlier when describing correlation analysis.

Another Facebook use item also appears as a statistically significant predictor in individual cases, FB2 - daily time use. However, the effect of this item is negative, and it is expressed on dimensions PA - personal attitude and SN - subjective norm. If a person spends more hours on Facebook, this can negatively affect their attitude towards entrepreneurship, as well as their desire to engage in

entrepreneurial work. Also, "people in the environment" do not believe that someone who spends a significant part of the day on Facebook can become a successful entrepreneur. This concerns passive time spent on Facebook. On the other hand, items FB5 - number of groups and FB3 - number of friends refer to active time spent on Facebook, which, as previously shown, positively reflects on certain dimensions related to entrepreneurship.

When it comes to the predictive effects of the items of smartphone use, a similarity with the results of the correlation analysis is observed. Thus, both items of smartphone use have a statistically significant and positive predictive effect on the dimension of SN. Item SP1 - total daily smartphone use still has a statistically significant and positive predictive effect on the dimension of CRE - creativity, but also a statistically significant and negative predictive effect on the dimensions ACH - achievement and PC - personal control. The explanation of these results may be the same as in the results of the correlation analysis.

Under the strongest predictive effect of the items of Facebook and smartphone use are the following dimensions: SN - subjective norm, ACH - achievement, and then LEA - leadership, PC - personal control and PA - personal attitude. As with the correlation analysis, there is no predictive effect on the dimension EI - entrepreneurial intention. However, as stated, one can talk about the indirect impact of particular items of Facebook and smartphone use on decisive entrepreneurial intentions.

The consistency between the results of the regression analysis and correlation analysis is huge. The corrected determination indexes have very low scores: 0.004 to 0.054. (Table 3) The values of the determination of the indexes are statistically significant at several dimensions, especially in the case of SN - subjective norm, ACH - achievement and LEA - leadership.

This provides an answer to RQ2: the statistically significant predictive effect of Facebook and smartphone use on the observed dimensions among students in Serbia is rather poor, but exists for certain items and dimensions.

5.3. Discussion of the moderating effects of gender

There is no pronounced moderating effect of gender (Table 4 and 5). The moderating effect of gender for the respondents exists only in a few cases, which are concentrated in the items of smartphone use. For women, item SP1 - total daily smartphone use has a positive and strong impact on CRE - creativity dimension, while for men this relation is not statistically significant, and is even slightly negative. In addition, it should also be noted that for female students, item SP1 - total daily smartphone use statistically, significantly and negatively affects the ACH - achievement dimension, as well as exerting a statistically significant and positive influence on the dimension SN – subjective norm. It seems that for female students, a longer time

spent on smartphones (frequent communication, message writing, exchange of information, posting and answering questions, etc.) encourages creativity and support from people in the environment, but reduces the need for achievement.

When it comes to item SP2 - use of smartphones to access Facebook, the situation is reversed: more use of smartphones to access Facebook statistically, significantly and positively affects CRE – the creativity of male students. Likewise, item SP2 is more powerful and has a positive effect for male students on the following dimensions: LEA - leadership, PA - personal attitude and SN – subjective norm. A similar trend, although not statistically significant, exists in some other dimensions, especially ACH - achievement. In order to explain this result, it is useful to recall which Facebook items positively affect the dimensions related to entrepreneurship. These are the items: FB5 - number of groups, FB3 - number of friends, and FB4 - number of photos. For this reason, in this part of the results, it can be concluded that when using smartphones to access Facebook, male students do so mainly to access and communicate with their groups, to connect with new friends or to upload new images. In this way, they actually implement activities that encourage some of the entrepreneurial dimensions.

This provides an answer to RQ3: the moderating effect of gender on the observed relationships does not exist for the items of Facebook use, but is quite expressed for those of smartphone use.

5.4. The moderating effects of the year of study

It is shown in Tables 6 and 7 that there is no pronounced moderating effect of the year of study. The moderating effect of the year of study exists only in a few cases, which are concentrated in two items of Facebook use: FB2 - daily time use and FB5 - number of groups. Item FB2 - daily time use for younger students has a positive and strong effect on the dimensions of ACH - achievement, PR - proactivity and PBC - perceived behavioural control, while for older students this influence is negative. In general, item FB2 - daily time use has a tendency to have a more negative influence on entrepreneurial dimensions among older students. It is obvious that among younger students, at the beginning of their studies, the time spent on Facebook does not have such a negative impact on the entrepreneurial dimensions, but in later years this begins to negatively reflect on entrepreneurial potentials and intentions. The correlation analysis and the regression analysis, in particular, point to the adverse effects of this item.

The item FB5 - number of groups has a positive and powerful impact on the dimension of PC - personal control among older students, while for younger students this effect is positive, but very weak. Similar tendencies exist in other dimensions of enterprise potential (LEA, CRE and ACH). On the other hand, item FB5 - number of groups negatively influences the dimension EI - entrepreneurial intention, for older students, while for their younger counterparts, this influence is

positive, and even statistically significant. A similar tendency exists for other dimensions of entrepreneurial intention (PA, SN and PBC). These results can be interpreted as follows: older students are closer to the end of their studies, they are mature and more experienced, they know which groups they want to belong to on Facebook, they are more relaxed in information sharing and they have found their perceived and respected place within the groups they belong to. All this contributes to the increase of leadership qualities, the desire for achievement and, in particular, the desire to exert control in different situations. Hence, there is an increase in entrepreneurial potentials. However, belonging to a larger number of groups on Facebook, at the same time leads to a decline in entrepreneurial intentions among older students. Over time, membership in a larger number of groups on Facebook may lead to energy dissipation, which, despite greater maturity and the strengthening of entrepreneurial potentials, still does not focus on anything concrete. In addition, it is possible that by gaining competitive expertise and approaching the end of their studies, older students start to get job offers in the existing organizations, and entrepreneurial intentions thus decrease.

This provides a response to RQ4: the moderating effect of the year of study on the observed relationships does not exist for the items of smartphone use, but occurs moderately for two items of Facebook use.

6. Conclusion

From the items of Facebook use, the most positive and pronounced correlations with the dimensions of enterprise potential, individual entrepreneurial orientation and entrepreneurial intention, are achieved by items of Facebook use which involve active participation in Facebook activities, while passive and irrational long-term stays on Facebook may also negatively affect the dimensions of entrepreneurship. When it comes to influence the items of smartphone use, the assumption is that more time spent on a mobile phone can produce a higher degree of passive behaviour in students, thus weakening their need for success and control over their environment.

The dimensions CRE - creativity, followed by SN - subjective norm, ACH - achievement, IN - innovativeness and LEA - leadership are under the biggest (mostly positive) influence of the Facebook and smartphone use items. The impact does not exist for the EI - entrepreneurial intention dimension, which is an important indicator of future entrepreneurial behaviour. However, as stated above, the items of Facebook and smartphone use have a positive impact on some of the entrepreneurial dimensions. Numerous studies confirm the positive impact of these dimensions on EI - entrepreneurial intention dimension. Thus, it can be concluded that there is an indirect influence (mostly positive) of the items of Facebook and smartphone use on EI - entrepreneurial intention by means of the aforementioned dimensions.

There is a great similarity between the results of the regression analysis and correlation analysis. The difference is that in this analysis item FB2 - daily time use has a statistically significant and negative effect on the dimensions of PA - personal attitude and SN - subjective norm. Hence, spending significantly more hours on Facebook may negatively affect attitudes towards entrepreneurship, as well as the support of people from the environment. The results of the correlation analysis indicated this possibility, which was confirmed in these regression analysis results.

The female students use smartphones mostly for conversations, messages and the passive use of Facebook, while male students use them more to actively participate on Facebook. This active participation encourages some of the entrepreneurial dimensions among male students. At the higher years of study, the time that students spend on Facebook generally begins to interfere with the entrepreneurial dimensions. At the same time, at the higher years of study, membership in a number of groups on Facebook can raise the level of entrepreneurial potentials (especially LEA - leadership, CRE - creativity and ACH - achievement), but also reduce the entrepreneurial intentions among older students.

It can be assumed that other social networks have a similar impact on entrepreneurship and that this influence is probably more pronounced if the impact of the social networks is observed as a whole. In the situation where the existence of numerous social networks and advanced smart phones is a contemporary reality, the general recommendation for parents and teachers is to encourage young people to spend more meaningful and active time on Facebook and other social networks, while limiting passive participation. This is not easy, but it can be achieved through education and systematic actions of different actors in the process.

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FEJSBUK, UPOTREBA MOBILNIH TELEFONA I PREDUZETNIČKA AMBICIJA STUDENATA U SRBIJI

Apstrakt Rad predstavlja rezultate istraživanja o uticaju Fejsbuka i upotrebe mobilnih smart telefona na potencijal jednog preduzeća, individualnu preduzetničku orijentaciju i preduzetničku ambiciju studenata u Srbiji. Uzet je u obzir uticaj roda, kao i godine studija. Uzorak uključuje 488 validnih anketa. Od korišćenih stavki na Fejsbuku, najsnažnije i napozitivnije korelacije postignute su putem brojnih grupa, prijatelja i fotografija (stavke koje podrazumevaju aktivno učešće u aktivnostima na Fejsbuku, dok pasivno i nasumično zadržavanje na ovoj mreži može negativno da utiče na preduzetničku dimenziju). Što se duže provodi vreme na telefonu, veća je šansa da ono stvori pasivno ponašanje kod studenata, time umanjujući njihovu želju za uspehom. Kreativnost, lični standardi, postignuće, inovativnost, liderstvo, pod najvećim su uticajem Fejsbuka i smart telefona. Uticaj na preduzetničku ambiciju je indirektan. Preporuka roditeljima i nastavnicima je da ohrabre mlade da ograniče pasivno učešće na Fejsbuku i društvenim mrežama. Ne postoje prethodna istraživanja koja povezuju Fejsbuk i upotrebu mobilnih telefona sa preduzetničkom ambicijom studenata. Razumevanje i veće znanje o preduzetničkoj ambiciji pojedinca pozitivno utiče na razvoj društva.

Ključne reči: korišćenje Fejsbuka, upotreba smart telefona, potencijal preduzeća, individualna preduzetnička orijentacija, preduzetnička ambicija, studenti, Srbija.

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