Abstract
The goal of this study was to determine the preferences concerning Facebook usage by university students in Poland and the Czech Republic regarding their gender and nationality. This study aimed also to discover the relation between the need to be popular on Facebook and three key factors: the number of Facebook friends, activity on Facebook and perceived enjoyment during this activity. To get necessary data, multiple research tools were developed – a questionnaire consisting of four sections and a 12-item questionnaire measuring the level of the need for popularity. Results show that there is no significant differences in the background of Facebook usage between Polish and Czech students. However, there is a statistically significant correlation between the need for popularity and two factors: the number of friends ($r = .501$) and the level of perceived enjoyment in using Facebook ($r = .401$). The results suggest that participants feel pleasure while undertaking different actions on Facebook and treat Facebook as a way to increase their perceived popularity.

Keywords: activity on Facebook, Czech students, Facebook, Polish students, popularity

Introduction
The exponential growth of the Internet observed in the last decade has brought significant changes to information distribution, the cultural norms and maintaining social relationships. One of the most widely used Internet applications are
Social Networking Sites (SNSs), which offer a new participatory online culture. These platforms give members access to digital creation and allow them to portray their private lives in new ways by sharing photos and videos, sending messages and keeping in touch with others (cf., Huk, 2016). In fact, communication via Social Networking Sites is characterized by a high awareness both of watching and being seen. According to Christena Nippert-Eng, “Humans are constantly scanning, constantly receptive to and looking for whatever they can perceive about each other, for whatever is put out there” (2010, p. 8). Despite the fact that sharing of intimate details on SNSs is pervasive and growing rapidly, relatively little research has investigated the underlying motivations behind this behavior. As suggested by Helen Nissenbaum, “In a flourishing online ecology, where individuals, communities, institutions, and corporations generate content, experiences, interactions, and services, the supreme currency is information, including information about people” (2011, p. 33). Oscar H. Gandy, using the metaphor of Panopticon\(^1\), argues instead, that a surveillance system can exert the same type of control in contemporary culture and it is important to hold “the rationalization and control of human existence” (1993, p. 227). In this context, a surveillance system is a general method of regulating individuals’ behavior in society and is part and parcel of socialization. Therefore, sociality has always required some abandonment of privacy. As pointed out by Zizi Papacharissi and Paige L. Gibson, “learning how to share is a central process of being socialized into society, as it enables relationships and presentations of the self” (2011, p. 80). Among the numerous players on the field of SNSs, Facebook is recognized as one of the most popular and influential SNS, with 1.01 billion daily active users and 894 million mobile daily active users as of September 2015 (Facebook. Statistics, 2015).

David Kirkpatrick reported in his book *The Facebook Effect: The Inside Story of the Company That Is Connecting the World* that the mission of Facebook founders has been to “make society more open” (Kirkpatrick, 2010, p. 207), which they described as “radical transparency” (Kirkpatrick, 2010, p. 200). Perhaps, this idea is based on a dream of an interpersonally intimate society without hierarchical structure, where openness and transparency are positive for society and interpersonal relations. This point of view could explain why more and more people are exposing their intimacy to invisible audience as they may consider that

\(^1\) The Panopticon is a type of architectural design created by the English philosopher and social theorist Jeremy Bentham in the late 18\(^{th}\) Century for prisons. Its structure is ideal for indoor discreet and covert surveillance of the inmates. In 1975 Michel Foucault developed Panopticon as a metaphor for modern “disciplinary” societies and their pervasive inclination to observe and normalise.
openness is beneficial for their relationships. Julie E. Cohen suggests that “norms of transparency and exposure are developed to legitimate and reward practices of self-exposure and peer exposure. These practices are the morality plays of contemporary networked life, they operate as both spectacle and discipline” (Cohen, 2012, p. 135).

Jessica Vitak and Jinyoung Kim (2011), based on the survey conducted in 2011 among 2000 American graduate students, found six self-disclosure goals of using Facebook: social approval, social control, intimacy, identity clarification, relief of distress, and personal record. The first one is connected with the need for social acceptance, so users share information, specifically because they think their friends will be interested in it. The second one results from the fact that users are highly cognizant of their self-presentation online and nearly all make references to engaging in some degree of social control in their self-disclosures. The third one allows the participants to increase or maintain relational closeness with others, especially if specific friends are geographically dispersed. The fourth one functions to clarify users’ opinions or beliefs on various issues. The fifth one underlines the cathartic role of self-disclosure during online communication. The last one is associated with intrinsic rewards and is related to the desire to keep an online diary of events in one’s life. Thus, the popularity of Facebook is based on a large offer of communicative features and information-sharing applications that foster social capital by allowing users to exchange resources within an online environment. According to Santor, Messervey and Kusumakar (2000), the need to be popular is related to conformity to peer group norms. Moreover the authors suggests that “being popular involves being recognized or liked by a group of individuals” (p. 165).

Therefore, Facebook has had currently an enormous impact on the lives of millions of users worldwide and constitutes an important part of popular culture.

**Methods**

The purpose of the study was to determine the preferences concerning Facebook usage by youth in Poland and the Czech Republic regarding their gender, age and nationality and how the need for popularity relates to Facebook activity and perceived enjoyment during this activity.

**Instrument and measures**

The presented study uses multiple measures of frequency of Facebook use and frequency of engaging in various types of Facebook activities. To get basic
information from participants, a questionnaire was developed, which consisted of four sections. The first section of the questionnaire included basic questions regarding preferences for Facebook use, such as the length of Facebook usage, sources used to access Facebook, number of Facebook friends, frequency and purposes of Facebook use. The second section of the questionnaire focused on preferred activities of Facebook use, including posting one’s own photos, posting comments on other people’s profiles or photos, status update, “liking” other people’s pages. The rate of the activity was based on a four-point ordinal scale: 1 – Never; 2 – Seldom (1–5 times a week); 3 – Sometimes (6–10 times a week); 4 – Often (11–15 times a week), 5 – Very Often (more than 15 times a week). The third section of the questionnaire concerned perceived enjoyment in using Facebook during different activities, which was measured with the use of a four-point Likert scale (1 – strongly disagree, 2 – disagree, 3 – agree, 4 – strongly agree). The last section included demographic questions to describe the population in terms of age, gender and nationality. The collected data was analyzed using the Statistical Package for Social Sciences (SPSS) software for Windows version 24.0.

As Santor at al. (2000) claim, the need to be popular is related to being accepted by the peer group, hence it is probable that activity on Facebook and perceived enjoyment in using Facebook would be correlated with the need for popularity. The need for popularity was measured by a 12-item questionnaire (Santor at al., 2000), using a bipolar Likert scale, measuring either a positive or negative response to a statement, ranging from 1 (Definitely Not) to 5 (Definitely Yes).

Thus, the aim of this study was to examine the level of the need to be popular in the context of Facebook usage by Polish and Czech Students based on the following research questions:

Question 1: What is the background connected to the use of Facebook by Polish and Czech university students in view of their nationality?

Question 2: What is the background connected to the use of Facebook by Polish and Czech university students in view of their gender?

Question 3: Is there a relationship between the number of Facebook friends and the need to be popular among Polish and Czech university students?

Question 4: Is there a relationship between the level of Facebook activities and the need to be popular among Polish and Czech university students?

Question 5: Is there a relationship between the level of perceived enjoyment in using Facebook and the need to be popular among Polish and Czech university students?
Participants
The survey was conducted in 2015 among 104 university students from Poland (N=53) and the Czech Republic (N=51). The participants’ age ranged from 20 to 30, although over 79% were between 21 and 24 years of age. The mean age of the sample was 23.5 with a standard deviation of 1.73 (among Polish students – 23, SD 1.14 and Czech – 24, SD 2.05). With regards to the respondents’ gender, 57% were female, including 46% from Poland and 54% from the Czech Republic and 43% were male – 60% from Poland and 40% from the Czech Republic.

Results
The background of Facebook use
The first research objective was to examine the background of Facebook use among Polish and Czech students, which was measured on several dimensions: the length of Facebook membership, frequency of Facebook use, the kind of devices used to access Facebook, the number of Facebook friends and the purpose of using Facebook. Chi-square tests of independence were conducted to determine if the distribution among categories was not equal.

The research shows that the large majority of the participants have been active Facebook users for several years. Over 90% of them have had a Facebook account for 4 years and longer. However, over 30% admitted that they are active Facebook users even longer than for 6 years, including 20% Polish and 43% Czech students. As presented in Table 1, there are significant differences between the Polish and Czech Facebook users in the length of Facebook use. Although both groups have belonged to Facebook community for a long time, the Czech students indicate longer Facebook membership period.

To measure the rates of frequency, the participants were asked to indicate the average amount of time they spent with a logged-in profile by selecting one of the following categories: Less than 1 hour a day; 1–3 hours a day; more than 3 hours a day. The majority of the respondents spend on Facebook 1–3 hours a day (57.7%), while only 11.5% reported more than three hours of Facebook use in a typical day. Regarding to nationality, the time spent on Facebook was similar. About 71.7% of the Polish and 66.7% of the Czech students spend more than one hour on Facebook, whereas slight differences are visible with regard to the respondents’ gender. More women spend over one hour on Facebook (45.1%) than their counterparts (31.6%). However, this difference is not statistically significant ($c^2 = 1.263$).
Regarding the sources used to access Facebook, the largest group of respondents uses smartphones (85.6%). This indicates that both the Polish and Czech students prefer mobile devices to participate in Facebook life anywhere and anytime. The personal computer is still popular as a device used to access Facebook, wherein the Czech students use it more often (88.2%) than the Polish students (66%). It is also interesting that both the Polish and Czech women are more likely to use smartphones (90.4%) than the men (79.8%) to access Facebook. However, these differences are not statistically significant ($c^2 = 3.88$; $c^2 = 1.999$, respectively).

Table 1. The usage of Facebook among Polish and Czech students (Chi-Square Analysis)

|                                | df | Nationality | Gender |
|--------------------------------|----|-------------|--------|
| Length of Facebook Membership | 2  | 6.014*      | .899   |
| Frequency of Facebook Usage   | 2  | .600        | 1.263  |

The Source used to Access Facebook

| Source                          | df | Nationality | Gender |
|---------------------------------|----|-------------|--------|
| Smartphone                      | 1  | 1.73        | 1.999  |
| Personal computer               | 1  | 3.88        | .576   |
| Tablet                          | 1  | .503        | .036   |

$p < 0.5$

Facebook primarily allows people to contact others and this interaction can take many forms. Therefore, the participants were asked to indicate the purposes for which they use Facebook by selecting more than one answer (Table 2).

Table 2. The purpose of using Facebook

| Purpose                          | Poland |            | Czech Republic |            | Total |            |
|----------------------------------|--------|------------|----------------|------------|-------|------------|
| Interacting with family          | 21     | 39.6%      | 15             | 29.4%      | 36    | 34.6%      |
| Interacting with friends         | 52     | 98.1%      | 48             | 88.2%      | 97    | 93.3%      |
| Fallowing recent events          | 29     | 54.7%      | 34             | 66.7%      | 63    | 60.6%      |
| Fallowing activity of other users| 24     | 45.3%      | 29             | 56.9%      | 53    | 51.0%      |
| Meeting new people               | 14     | 26.4%      | 8              | 15.7%      | 22    | 21.2%      |
| Playing games                    | 2      | 3.8%       | 1              | 2.0%       | 3     | 2.9%       |
| Belonging to the group           | 26     | 49.1%      | 15             | 29.04%     | 41    | 39.4%      |
| Inviting others                  | 10     | 18.9%      | 13             | 25.5%      | 23    | 22.1%      |

* Table 2 does not add up to 100% as respondents were able to select more than one response.
The largest group of respondents indicated that they used Facebook to interact with friends (93.3%). The next large group uses Facebook to follow recent events (60.6%) and activities of other users (51%). Taking into account the respondents’ nationality, there are no significant differences, although the Polish students more often than the Czech ones use Facebook to satisfy their need for belonging. Regarding gender, the research shows that the female students more often use Facebook to invite others (30.5%) than the male students (11.1%). However, the latter are more likely to meet new people (28.9) than the former (15.3%).

**The need for popularity and activities on Facebook**

This study was done to determine which factor (number of Facebook friends, preferred activities or perceived enjoyment) was more strongly related to the need for popularity. While the effect of gender and nationality could be important variables in Facebook use, they will not be taken into account in this analysis, because, as shown in the above analysis, there are no significant differences in Facebook usage between the Polish and Czech students. To test the relationship between the need for popularity and three mentioned factors, the Pearson correlation coefficient was used. The findings are presented in Table 3.

The level of the need to be popular was measured with the use of a bipolar Likert scale ranging from 1 (Definitely Not) to 5 (Definitely Yes). The maximum score obtained by the participants is 41 and the minimum is 12, with the average of 17.8 and SD = 6.64. Wherein almost 31% of the respondents obtained a score above the average.

The first variable taken into account was the number of Facebook friends. According to Zywica and Danowski (2008), the number of friends and posts a person has on his/her wall on Facebook is a significant indication to other users that the person is popular. Tom Tong et al. (2008) stated that a person with at least 302 friends was perceived to be the most socially attractive by others. It suggests that people who want to increase their popularity notice how many friends they have. Thus, the following hypothesis was put forward:

*H1: There is a relationship between the number of Facebook friends and the need to be popular*

To obtain adequate data, the participants were asked to reveal how many people they have on their Facebook friend lists. The number of friends ranged from 120 to 970 friends per account, an average of 413.6 and SD = 249.2. It shows that for young people it is very important to have many friends on Facebook. The result of
a correlation test also showed that there was a statistically significant relationship between the number of friends and the need for popularity ($r = .501, p < .001$).

Popularity can also be connected with different activities on Facebook, which requires user engagement. In other words, people who seek to be popular on Facebook are those who take significant notice to be seen and recognizable on Facebook. Thus, the following hypothesis was put forward:

**$H_2$: There is a relationship between the level of activity on Facebook and the need to be popular**

To obtain necessary data, the participants were asked to estimate the frequency with which they conducted various activities on Facebook. As the possible types of Facebook activities change over time because of addition or deletion of features, the list of Facebook activities was developed just before the presented study. Eventually, the activities connected with Facebook use were categorized as follows: self-promotion (e.g., posting photos and films), maintaining relationships (e.g., commenting on contents posted by others), communication (e.g., chatting) and entertainment (e.g., playing games). The rate of an activity was based on a four-point scale from 1 – Never to 5 – Very Often (more than 15 times a week). The scores obtained by the respondents ranged from 4 to 16 points. The activity undertaken on Facebook was essentially connected with maintaining relationships with others. Almost 65% of the respondents post contents on their Facebook wall several times a week and 46% of them comment on the profiles of others. However, there is no statistically significant relationship between the level of activity and the need for popularity.

According to Deci et al. (1991), people engage in activities for their own pleasure and satisfaction, they are affected by intrinsic motivation, which is defined as “the extent to which the activity of using a specific system is perceived to be enjoyable in its own rights, aside from any performance consequences resulting from system use” (Davis et al., 1992). Therefore, Facebook users may get involved in different Facebook activities to meet their personal need for popularity, which as result makes them pleased. Taking the above mentioned into account, the following hypothesis was proposed:

**$H_3$: There is a relationship between the level of perceived enjoyment in using Facebook and the need to be popular**

To verify this hypothesis, the students were asked to indicate the level of perceived enjoyment they feel while using Facebook. The level of perceived enjoy-
ment in using Facebook during different activities was measured with the use of a four-point Likert scale (from 1 – strongly disagree to 4 – strongly agree). The scores obtained by the participants ranged from 9 to 32, with the average of 22.6 and SD = 5.24. Almost 60% of the respondents obtained a score above the average. The results of a correlation test also showed that there is a statistically significant relationship between the level of perceived enjoyment in using Facebook and the need for popularity (r = .401, p < .001).

Table 3. Pearson’s Correlation Coefficients for the need for popularity and three variables

| Variable                          | Pearson Correlation | Sig. (2-tailed) |
|-----------------------------------|---------------------|-----------------|
| The number of Facebook friends    | .501                | .000            |
| The level of activity on Facebook | .101                | .308            |
| The level of perceived enjoyment in using Facebook | .401                | .000            |

Discussion and conclusion

In the age of the open society, the need for popularity has become a value, thus many ordinary people try to become popular through different activities online. Undoubtedly, Facebook with its full panoply of communication tools seems to be an ideal environment, allowing its users to meet their need for popularity. As a result, most of Facebook users make a lot of efforts to be seen and recognizable on Facebook.

The research shows that Facebook plays a significant role in the lives of Polish and Czech university students. This platform is an excellent way to be more connected to each other, even crossing time and geographic barriers. As stated by Bovitz (2007), “it's a way to meet people, share things about themselves, and communicate with friends”. With a full panoply of different tools, Facebook offers a great opportunity to become popular by posting photos, videos and other contents and to follow other users’ activities. Hence, both the Polish and Czech students consistently pursue every opportunity to interact with friends, as almost 70% of them spend on Facebook over one hour a day. The respondents prefer to connect with Facebook using smartphones followed by computers. What is interesting is that there are not significant differences in using Facebook between them. It can be explained by the similar political and historical background of both countries. Regarding the participants’ gender, there are also no significant
differences between them – both the females and males use Facebook above all to contact with friends, follow recent events and activities of others.

The technological capabilities of Facebook have made it easy to search for people and become friends with them at a click of a button. It is also visible among the researched students, who reported a high number of Facebook friends ranging from 120 to 970, an average of 413.6 per account. Moreover, the number of friends is positively correlated with the need for popularity. Therefore, Santor et al. (2000) are right when saying that popularity involves being recognized or liked by a group of individuals (p. 165). A positive correlation was also found in the level of perceived enjoyment in using Facebook and the need for popularity, which confirms the hedonic nature of Facebook. On the other hand, there was no statistically significant correlation between the need for popularity and the level of activity on Facebook. It indicates the widespread nature of this phenomenon regardless of the need to be popular.

In summary, the need for fame and accessibility to a wide audience proved to be extrinsic motivators for a variety of activities on Facebook. Therefore, Facebook profile owners’ popularity was manipulated via the number of friends, photos tagged, and the proportion of self – vs. friend-authored wall posts.

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