

# Is the frequency of social networking sites visiting and online gaming related to life satisfaction among youth?

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## Abstract

The paper analyses the relationship between the frequency of social networking sites visiting and online gaming and life satisfaction, as well as the role of sex and age in it. The data from the international *FES Youth Study in Southeast Europe 2018/2019* survey, conducted in ten Southeast European countries (including Serbia) on the representative samples of young people aged 14 to 29 years, were used, selecting those with regular Internet access (total  $N = 10,532$ ). Both the association between the frequency of use of social networks and life satisfaction and the correlation between online gaming frequency and life satisfaction were significant, but of very low magnitude. Only the latter relationship was moderated by sex and age. The obtained results do not support the popular views on “Facebook depression” and the negative ‘effects’ of Internet use on youth well-being.

**Keywords:** social networking sites; online gaming; life satisfaction; youth.

## Introduction

According to a current report of Datareportal, in 2020 almost 4.7 billion people worldwide (59% of the global population) are active Internet users. For the first time in history, more than half of the world uses social media.<sup>4</sup>

More and more time is spent on the Internet (e.g. Smahel et al., 2020). If we look at Serbia only, as many as 80% of young people aged 15-29 spend 3 hours or more a day on the Internet (Popadić, Pavlović & Mihailović, 2019). During the pandemic, the time spent behind the screen is certainly much longer both in Serbia and in the world. The more important the Internet is in our lives, especially in the lives of young people, the more important are the questions about the consequences of its use. These questions have been asked and answered for nearly thirty years. The concerns over Internet use and warning messages are mostly voiced, at least in the mainstream media.

Certain forms of online activities, especially the use of social networking sites (SNS) and playing online games, have generated heightened concerns because of the indications that they might be associated with various internalizing and externalizing problems among youth. There are warnings that SNS use is negatively associated with subjective well-being and positively associated with symptoms of depression (so-called Facebook depression),

especially among girls (e.g. Chou & Edge, 2012; Cross et al., 2013; Kelly et al., 2019; Selfhout et al., 2009). Some authors have warned that computer game playing may lead to addiction and increased aggression (e.g. Grüsser et al., 2006; Ng & Wiemer-Hastings, 2005). Yet, others have failed to confirm these associations or found them to be of very low magnitude and practically insignificant (e.g. Király et al., 2017; Orben & Przybylski, 2019). Overall, numerous studies in which the mentioned variables were operationalized in various ways have yielded contradictory results.

One meta-analysis of 121 studies (Saiphoo et al., 2020) has reported a small, negative and significant link between the SNS use and self-esteem. This finding should nevertheless be taken with a grain of salt. The overall correlation in question is extremely low ( $r = -.079$ ) and its significance is due to a very large sample ( $N=91,462$ ). Secondly, the strength of negative association was dependent on the measures used in the study. In studies that deployed the problematic use of the Internet, negative correlation was more intense,  $r = -.184$ ,  $p < .001$ . When the simple amount of time spent on SNS was used, the correlation with self-esteem was only  $-0.045$ ,  $p < .01$ , although still significant.

The subject of this paper is the analysis of the way in which the frequency of using SNS and online gaming is associated with one aspect of subjective well-being, namely, life satisfaction. We also probed for the moderating role of sex and age in these relations.

## Method

### Participants

The study is based on data from the international investigation *FES Youth Study in Southeast Europe 2018/2019*, conducted in ten countries of Southeast Europe (including Serbia) on nationally representative samples of respondents aged 14-29.<sup>5</sup> Our sample size, after excluding those who do not have regular access to the Internet, was  $N = 10,532$  (49.9% females, mean age  $M = 21.7$ ,  $SD = 4.5$ ).

### Data

The data were collected by face-to-face interviews in early 2018. The frequency of using social network sites and playing online games was assessed on three-point response scales (1 – Never / 3 – Often). Satisfaction with

<sup>4</sup> <https://datareportal.com/reports/digital-2020-july-global-statshot>

<sup>5</sup> <https://www.fes.de/en/youth-studies>

life was measured by one question followed by a five-point scale (1 – very unsatisfied / 5 – very satisfied).

### Results

The zero-order (Spearman’s rho’s) correlations between the overall satisfaction with life and the frequency of online gaming and frequency of visiting SNS are given in Table 1.

The results indicate that the relationship between the frequency of SNS use and life satisfaction is positive and significant, but of very low strength. The magnitude of correlation varies across the countries and ranges from -.006 (Romania, the only case of negative association) to .104 (Croatia). In the sample of Serbian youth (N=1,062, 51.5% females, mean age  $M = 22.2$ ,  $SD = 4.3$ ), these measures were not significantly correlated.

Table 1. Correlations of life satisfaction with frequencies of gaming and visiting SNS

		Gaming	Social networking sites
10 countries	All	-.035**	.040**
	M	.009	.046**
	F	-.051**	.032**
Serbia	All	-.021	-.009
	M	.077	.009
	F	-.069	-.043

\*\*  $p < .01$

The relationship between the frequency of online gaming and life satisfaction is negative and significant, but of equally low magnitude. The correlations range across the countries, from .090 in Albania, to -.084 in Croatia. In seven out of ten countries, the correlation sign is negative. That is the case in Serbia as well, but the correlation is not significant.

In order to test whether the relationship between the life satisfaction and two online activities is dependent on sex and age, we performed a series of multiple regression analyses with the aim of testing the significance of the interaction terms of age/gender and SNS/online gaming.

Regression analyses show that neither age nor gender moderate the relationship between life satisfaction and SNS. But the interaction terms of both playing games and gender ( $\beta = .11$ ,  $p < .05$ ) and playing games and age ( $\beta = -.16$ ,  $p < .01$ ) are significant. The negative relationship between life satisfaction and online gaming is more pronounced among girls (Figure 1) and older age (Figure 2).

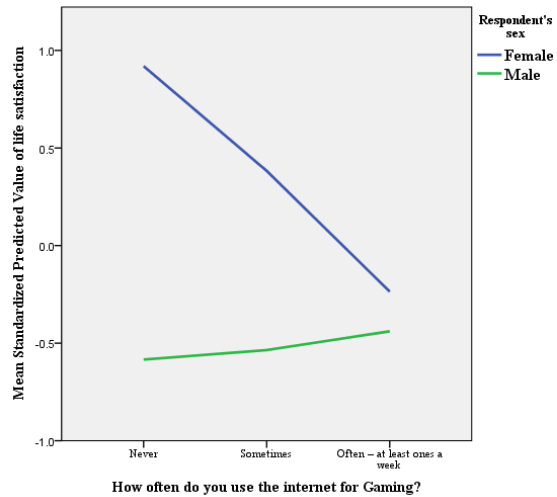


Figure 1: Standardized predicted values of life satisfaction by sex and frequency of online gaming.

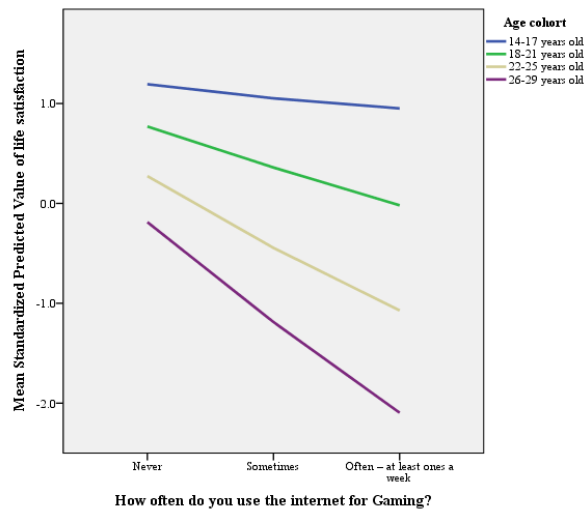


Figure 2: Standardized predicted values of life satisfaction by age and frequency of online gaming.

### Discussion

The results as a whole do not provide a basis for the popular theses about “Facebook depression” and the negative ‘effects’ of using the Internet on the psychological well-being of young people. More specifically, our results indicate that those young people who use SNS more often report *higher* general life satisfaction, while playing games is negatively correlated with life satisfaction, especially among girls and young adults. However, these correlations, significant owing to extremely large sample size, are very low and bear little practical significance.

Since we believe that it does matter how one spends the hours of one’s everyday life, we will repeat what has already become commonplace – what is important is the way of using the Internet, and not just the amount of time spent online. The effects probably depend on the motivation with which someone plays games or uses SNS, as well as on the specific content these activities are filled with. Yet, it is possible that some negative ‘effects’ are more closely associated with intensive (time spent online)

and others with excessive internet use (i.e. problematic Internet use) (Popadić, Pavlović & Kuzmanović, 2020).

Our results have some limitations that are typical for the analyses of large-scale survey datasets (cf. Orben & Przybylski, 2019). One is the ease with which small associations can be identified as significant. Additionally, variables are measured by one-item indicators with a rather small number of categories. Cross-sectional design can reveal the association between the variables but not the directions of 'influence' and cannot account for the possibly confounding factors. In regard to the correlation between online gaming and life satisfaction, it remains unclear whether those who are more dissatisfied with life more often seek refuge in such activities, or these activities negatively affect young people.

In the end, we would like to draw attention to something not related to our data only, but to the majority of studies in the field. It seems that self-assessments are becoming increasingly inadequate as measures of the time spent on the Internet or using specific applications. Asking young people how much time they spend online seems to be the same as asking them for how much time they use electricity per day. In the future, we will have to search for the answers to such questions from the devices themselves, and thank the respondents for their cooperation so far.

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