

The Role of Social Networking Services in High School Students' Lives

Abstract: This paper investigates the relation between using social networking sites and different aspects of students' well-being. The dataset consists of 3841 high-school students from the Czech Republic, Italy and Slovenia. The analysis was performed using two non-linear logistic regression models. The results show there is a positive relation between social networking and self-trust for the limited time spent on social networks. If students devote too much time to using social networks, there is potential for quite high negative effects. Further, social networking has no impact on students' life satisfaction. Our study indicates both the potential positive and negative impacts of using social networking services. The negative effect can be especially significant if students spend too much time on social networks.

Key words: social networks, happiness, self-trust, youth, Facebook

Julius Janáček, Libor Měsíček

Department of Economics And Management

Faculty of Social and Economic Studies

Jan Evangelista Purkyně University in Ústí nad Labem

Czech republic

Introduction

The use as well as the impact of social network sites and of social media on people is the subject of intensive research. General impacts on well-being were summarized by Verduyn et al. (2017). Youth life satisfaction is an important topic that has been studied by many researchers for decades and from several points of view and fields. (Proctor, Linley and Maltby, 2009), gathered a comprehensive literature review. King, Reno and Novo (2014), summed up literature from a socio-economical perspective.

A study by Lai, Hsieh and Zhang (2019) showed that Facebook use was positively related to the subjective well-being of both male and female students and supported the idea formulated by Frison and Eggermont (2016) that students with a greater need to belong to a peer group and explore their identity spend more time on Facebook.

Cheng, Burke and Davis (2019) found that young peoples' (under 25) subjective report Facebook use as problematic is twice as likely than by other age groups.

Although there are articles describing the effects of using social networks, there has not yet been any study that would investigate the connection of this phenomenon with self-trust and life satisfaction in so much detail. The added value of this study also stems from the specific choice of countries: Czech Republic, Italy and Slovenia.

Personal relationships, quality of nutrition, being with friends and many other factors connected with social networking influence peoples' psychological well-being. Content generated by users is shared, viewed and interacted with by other users; this could affect peoples' lives either in a positive or negative way.

The aim of this paper is to investigate the role of online social networking in the lives of high school students in comparison with other free-time activities.

The hypotheses of this paper are:

- 1) Social networking decreases the self-trust of the students;
- 2) Using social networks has a negative impact on the life satisfaction of the students;

This paper is organized as follows: Section 2 is concerned with the literature review, Section 3 deals with the methodology of the presented research, Section 4 contains the results and a discussion while Section 5 concludes this article.

Materials and methods

Our study is based on data collected in a questionnaire survey among 3841 students from three countries: 1564 students from the Czech Republic, 800 students from Italy and 1477 students from Slovenia. The questionnaire consisted of 26 questions. The question regarding the dependent variable in the questionnaire concerning the variable Self-trust was: To what extent is this statement true for you: "In my life I am and I will be able to take care of myself and make a living"? This way we studied the self-confidence of the students.

The second dependent variable (Life satisfaction) was "How would you evaluate the quality of your current life on a scale from 0 to 10 where 0 is the lowest quality and 10 is the highest quality?" In the regression analysis, we use 4 additional dummy variables, Population Medium (for $3000 \leq \text{Population} < 100\,000$) and Population Large (for $100\,000 \leq \text{Population}$). The reference point is Population < 3000 . In this way, we distinguish students in villages, from small towns and in big cities. The other two dummy variables are Country2 Italy and Country3 Slovenia. Here, the reference point is the Czech Republic. Variable Breakfast Regular was included as a proxy variable for leading a structured life in the same way as in the research by Peltzer and Pengpid (2013).

Coefficients for the variables Social Networking Time, Alcohol and TV Time were included both in linear and squared form (SocNetworksTime2, Alcohol2, TVTime2), because non-linear dependency with a peak of the effect could be expected.

To study the relations between different life aspects of the students, we created two non-linear regression ordered logit models. Logistic regression is used because the dependent variables are discrete.

It is necessary to emphasize that regression models do not show one-direction causalities but rather relations. If an independent variable is significant, the causality direction can go both ways. However, it has been shown that even in this case, regression models serve as a good approximation and that many theoretical difficulties do not cause significant deviations or distortions on a practical level (Kahneman and Schwarz, 1999).

Results

The portion of correctly predicted cases for the logit models is relatively low. This is due to the fact that all of the dependent variables are based on reported information of the students, which can fluctuate with time and are influenced by many unobserved variables. Nevertheless, the low values of the models' criteria are not a problem in this case – our goal is not to forecast the values of the dependent variables but to find general trends and relations for which our models, along with their criteria, are sufficient. When interpreting the results, we also focus on the role of other free-time activities and compare these with social networking.

Self-trust

The effect of social networking on self-confidence is positive for a limited number of hours spent online and negative for large amounts of time. To find the breakpoint, we need to find the maximum of the function $0.014933x - 0.000119x^2$ (the numbers are the coefficient of the linear variable social networks and the coefficient of the squared variable social networks, respectively). The maximum at 62.7 tells us that increasing the time on social networks up to 62 hours per week has a positive effect on self-confidence and going beyond this number of hours has a negative effect (hypothesis no. 1 confirmed only for larger amounts of time spent on social networks). The results also show a negative relationship between art time and self-trust.

Life Satisfaction

We constructed the model with the dependent variable Life Satisfaction in order to measure the relationship between free-time activities and life satisfaction of the students. The results showed no relation of social networking with one's life satisfaction. With no significant relation in general, it is certain that there is no direct impact.

The output shows a positive relationship between sport and life satisfaction as well as between time spent with friends and life satisfaction. It is likely that the causality direction from independent variables to the dependent variable applies and both of the independent variables affect students' life satisfaction in a positive way. This would correspond to the studies of Abedini and Majareh (2015) and Zarei (2013).

The model results also show a negative relationship between reading and happiness. We believe that the reverse causality direction applies in this case: students who are less happy strive to make their lives better and look for information in books. Yet, this is just a hypothesis.

Conclusion

The results indicate that spending a limited amount of time on social networks can increase the self-confidence (self-trust) of the students. If the time goes beyond a certain number of hours per week (the approximation of our analysis is 62.7), then self-trust decreases. Further, our statistical outcomes show no relationship between social networking and students' life satisfaction.

Negative effects of social networks are especially likely when the time spent there is very high. Students should be aware of the potential negative effect of excessive usage of social networks. Since the Italians spend much more time on social networks than Czechs and Slovenians, this recommendation applies especially to them.

References

- Verduyn, P., Ybarra, O., Resibois, M., Jonides, J., and Kross, E. (2017) 'Do Social Network Sites Enhance or Undermine Subjective Well-Being? A Critical Review', *Social Issues and Policy Review*, vol. 11, no. 1, pp. 274–302. <https://doi.org/10.1111/sipr.12033>
- Frison, E., and Eggermont, S. (2016) 'Gender and Facebook motives as predictors of specific types of Facebook use: A latent growth curve analysis in adolescence', *Journal of Adolescence*, vol. 52, pp. 182–190. <https://doi.org/10.1016/j.adolescence.2016.08.008>
- Lai, H.-M., Hsieh, P.-J., and Zhang, R.-C. (2019) 'Understanding adolescent students' use of Facebook and their subjective wellbeing: A gender-based comparison', *Behaviour and Information Technology*, vol. 38, no. 5, pp. 533–548. <https://doi.org/10.1080/0144929X.2018.1543452>
- Cheng, J., Burke, M., and Davis, E. G. (2019) *Understanding Perceptions of Problematic Facebook Use When People Experience Negative Life Impact and a Lack of Control*, New York: Assoc Computing Machinery.