PhD Anna Wołpiuk–Ochocińska, https://orcid.org/0000-0002-4316-7308
Department of Psychology
Institute of Pedagogy, University of Rzeszów

Communication and online activities undertaken by Internet users satisfied with their lives - research report

Komunikacja i aktywności w Sieci zadowolonych z życia internautów – doniesienie z badań[1]

https://doi.org/10.34766/fetr.v46i2.803

Abstrakt: Internet jako źródło aktywności człowieka staje się coraz bardziej dominującym elementem życia każdego człowieka bez względu na wiek czy wykształcenie. Młodzi ludzie spędzają czas w Sieci w bardzo różny sposób, co niesie za sobą konsekwencje zarówno dla ich funkcjonowania społecznego jak i psychologicznego. Przedmiotem analiz w niniejszym opracowaniu jest poszukiwanie związków pomiędzy formami korzystania z Internetu a zadowoleniem z życia badanych. Wykorzystano w tym, celu Skalę Satysfakcji z życia (SWLS) Dienera oraz kwestionariusz form korzystania z Internetu w opracowaniu własnym. Wyniki analiz wskazują, że granie w gry pozytywnie koreluje z satysfakcją z życia, natomiast media społecznościowe, komunikacja za pomocą komunikatorów czy portali plotkarskich oraz blogów ma ujemny związek z zadowoleniem z życia.
Słowa kluczowe: internet, media społecznościowe, aktywności w internecie, satysfakcja z życia, gry komputerowe

Abstract: Internet as a source of human activity is becoming an increasingly dominant human experience. Young people spend their time online in very different ways, which has consequences for their social and psychological functioning. The subject of analyzes in the article is finding correlations between the forms of using the Internet and satisfaction with life. For this purpose, Diener's Life Satisfaction Scale (SWLS) and the Internet acitities questionnaire were use. The results of the analysis shows that playing games positively correlate with life satisfaction, while social media, communication via messengers, gossip websites and blogs have a negative relationship with life satisfaction.
Keywords: internet, social media, online activities, life satisfaction, gaming

1. Introduction

Over the past couple of decades, the Internet has become an integral part of human life. Various sources report that globally 2.5 – 4.38 billion people have access to the Internet (*cf.* Statista, 2020, Datareportal, 2019), which is more than half of the earth's population. North America and Western Europe have the highest Internet penetration rates, at above 80 percent. The age distribution of Internet users worldwide leans towards the younger

[1] Wersja w języku polskim na stronie:
https://www.stowarzyszeniefidesetratio.pl/Presentations0/2021-2-04Wolp2.pdf

population, with more than half of users being 34 years old or less. In Poland, more than 30 million people use the Internet. As of June 2020, every Pole aged 18 to 34 had connected wirelessly to the Internet using a mobile device. Ninety-two percent of the older population in Poland also enjoy wireless connectivity. On average, a Pole spends more than 6 hours a day using the Internet, with more than 80% of those surveyed going online daily (*cf.* Datareportal, 2019, CBOS, 2019). The Internet is increasingly gaining importance in the lives of younger age groups. Children have the use of phones and computers much earlier than their parents did, and use them primarily for connecting to the Internet.

So, what do people need the Internet for? As is well known, the online experience offers a huge variety of activities and, consequently, many benefits to its users although it also poses some threats. Interestingly, the Internet is attractive to both younger and older populations, as it "provides an opportunity to have fun, allows for the satisfaction of needs related to pursuing a variety of interests, facilitates meeting new people and establishing new contacts, enables social self-presentation, allows for a quick getaway from the real world but is also conducive to evading difficult face-to-face relationships, helping individuals eliminate inhibitions and compensate for personal deficits" (Ogonowska, 2014, p. 36).

The benefits of Internet use are many. Thanks to news portals and educational websites, users have almost unlimited access to information on issues which are often only discussed or available online. Various music or film services are a great source of entertainment and relaxation. Social media, forums and discussion groups are excellent places for exchanging opinions and ideas on various topics, while instant messaging allows for contact with people from faraway places, which has become even more relevant during the Covid-19 pandemic. Internet users can pursue their passions and interests by exploring the vast resources of knowledge available online and viewing videos accessible through general-access services, e.g., Youtube. Thanks to the Internet, people find it easier to manage many daily activities, such as trading, shopping, banking etc. (*cf.* Kozak, 2011), but also to present themselves and their profile to future employers. In recent months, the Internet has also become a place of remote learning and working, providing access to education and gainful employment to many of those who, for various social and personal reasons, could not perform their duties face-to-face.

Unfortunately, the improper use of the Internet can also put people of all ages at risk. Aftab (2003) discusses six types of threats that may be encountered when using the Internet, such as accessing inappropriate information relating to pornography, spreading hate, intolerance and bigotry, encouraging violence or fraud, accessing the purchase of dangerous or inappropriate items, being insulted or disturbed by hostile people and finally, being subjected to personal data theft, including personal or banking details.

Cyberspace is nowadays capable of satisfying many of our needs, both real and those artificially created. Problems arise, however, when people forget that the virtual world

cannot provide them with a cure for the real problems they experience in their lives. Excessive use of the Internet can also exacerbate loneliness. What's more, it can be both a cause and an effect of personal problems with self-acceptance, feelings of loneliness and life satisfaction (Bozoglan et al., 2013; Cao et al., 2011).

Internet users have preferences for specific types of engagement. The following forms of activity are mentioned in the literature of the subject as most popular: use of e-mail, blogging, online/offline games, chat rooms, social networking sites (Facebook, Instagram, Tik-tok), instant messaging (Messenger), and educational portals. Users have preferences when it comes to a particular form of communication or style of usage. For example, Wrońska and Lange (2019) mention ambitious students who explore the information available on the Internet, looking for homework materials, but also consumers of pop culture seeking cultural products, gamers, content creators (using the Internet as a tool for exchanging opinions and creating content) or sociable people wishing to participate in a social scene.

Each type of Internet usage involves different user needs and requires a singular level of commitment. Many studies indicate that the way the Internet is utilized leaves a mark on a person's psychological functioning. In addition to Internet addiction, or being dependent on computer games or online gambling (Kozak, 2011), users are exposed to cyber-stress and cyber-anxiety (Spitzer, 2016) linked to the tension they experience in the process. Furthermore, studies point to associations between particular types of activity and psychological variables. Thus, the use of social media negatively affects task performance (Brooks, 2015) and increases users' tendencies towards negative comparisons (Chae, 2018). Instant messaging, in turn, negatively affects the quality of friendships and romantic relationships (Blais et al., 2008), while spending time on Facebook increases loneliness (Jin, 2013), lowers self-esteem (Blachnio et al., 2016) and suppresses empathic social behaviour (Chan, 2014). Computer games, on the other hand, can play an educational and positive role in an adolescent's development (Brezinka, 2014; Durkin & Barber, 2002), and can result in strong social bonds if players engage in online communications that continues beyond the game (Trepte et al., 2012). Many of these online activities have been positively or negatively correlated with life satisfaction in the populations studied (Blachnio, 2007; Blachnio et al, 2016; Brooks, 2015; Kalpidou et al, 2011; Kross et al, 2013; Satici & Uysal, 2015; Verduyn et al, 2015; Ward et al, 2018).

Subjective well-being (SWB) is one of the scientific terms used in defining happiness. A concise overview of SWB is provided by Ed Diener (Diener, 1984; Diener et al., 1999), who is a leading researcher in this field. SWB is defined by 3 components: 1) the presence of positive emotions, 2) the absence of negative emotions, and 3) life satisfaction. The first two are linked to balance being influential in everyday choices (eating tasty food, avoiding traffic jams, etc.). Life satisfaction is a long-term cognitive self-assessment of life, and was the focus

of the research presented in this paper. Life satisfaction is linked to pleasant experiences and positive emotions prevailing over negative moods in a person's life (Kasperek-Golimowska, 2012). Understandably, psychological well-being is not given to us once and for all. After a period of experiencing it, we can, regrettably, lose it again. Czapiński (2001) suggests that enjoying life and having a positive attitude enhances our ability to set goals that aim for something, which again results in a sense of absolute happiness. This has been found to have a positive impact on health, with a boosting effect on the immune system, increasing energy and creativity, influencing others' perceptions of ourselves and increasing our efficacy. It might even have a positive impact on life expectancy (Hooghe, 2012; Lyubomirsky et al., 2005). Furthermore, happier individuals tend to attract higher income, and their relationships are more stable as they enjoy better health (Diener et al., 2003). It is, therefore, of the utmost importance to continue monitoring the associations between the activities that users enjoy on the Internet and the levels of life satisfaction and happiness they experience.

2. Research procedure

The study was conducted at the beginning of 2020, before schools were locked down and distance learning was introduced in relation to the Covid-19 pandemic. After obtaining consent from the respondents' legal guardians and school headmasters, the participants were asked to fill in the questionnaires presented below. Each person was informed of the purpose and conditions of the study and that it was voluntary and anonymous.

2.1. Test group

The pilot study involved 202 participants, of which 45.1% were boys. The respondents were primary school students aged between 10 and 16, with the mean age of 13.59, sd= 2.218.

2.2. Method

Life satisfaction was measured using the Satisfaction with Life Scale (SWLS) by Diener et al. (Diener, 1984)) in the Polish adaptation by Juczyński (Juczyński, 2011), which is used to measure the overall dimension of satisfaction in the sense of conscious appreciation of the quality of one's life as a whole. The scale consists of five statements, to which answers are given by assessing the extent to which each statement relates to the respondent's experience on a seven-point scale, from 1 – "strongly disagree", to 7 – "completely agree". The total score consists of the sum of all scores. The range of scores is from 5 to 35 points -

the higher the score, the greater the feeling of satisfaction with life. The reliability of the tool measured by Cronbach's alpha is 0.704.

In order to measure the frequency of engagement in the various activities available online, the Forms of Internet Usage Questionnaire was applied, which was developed during the diploma seminar taught by the author. The research tool contains 16 questions that concern the various forms of Internet use and the amount of time spent online. The respondents answer the questions on a four-point Likert scale, indicating the level to which they agree with each statement.

Research question. Based on the analysis of the literature available and the observation of changes taking place in the world, the author posed the following research question: What is the relationship between the different forms of online activity and the respondents' level of life satisfaction?

3. Analysis of the results obtained

The SPSS ver. 22.0 package was used for statistical analysis. The Kolmogorov-Smirnov test showed that the variables do not have a normal distribution, therefore non-parametric statistics were used.

The analysis of the results showed no statistically significant difference between boys and girls when it came to the amount of time spent using the Internet - the average time among the respondents was 5 hours per day, which unfortunately still seems to be a worrying level. After all, it amounts to more than 40% of a person's daily activity time. Our respondents declared that they got their first computer at the age of 9.5 (sd=1.78), and a phone almost a year earlier, at the average age of 8.6 (sd=1.69).

The respondents declared that when online they most frequently used instant messaging (3.63/4), music services (3.49/4) and, equally frequently, social networking sites (3.47/4). Boys, to the same degree as girls, were likely to use the Internet for learning purposes, e.g., for doing homework or watching films (3.18/4). The least popular activity among our respondents was checking out gossip sites (although girls were statistically significantly more likely to use them, $p<0.000$).

In this study, gender differentiated type of online activity and kinds of communication. Girls were more likely to spend time on the Internet and engage in chatting via social media (social networks like Facebook) ($p=0.007$) and instant messaging (Discord, Messenger or WhatsApp) ($p=0.005$), and to read and write blogs ($p<0.000$), but were also more likely to search for knowledge about the world on news portals ($p<0.000$) and check for trivia on gossip sites ($p<0.000$). At the same time, girls were also found to be more likely to shop online ($p<0.000$). Boys, on the other hand, tended to focus on different types of online

activity, i.e., games, more often choosing arcade games (p<0.000), sports games (p=0.031), adventure games (p=0.016) and strategy games (p=0.003). Overall, male adolescents were found to feel more satisfied with life (Hedge g = 0.695, p<0.000), which raises an important question about the type of online activities that are indeed positively related to life satisfaction.

As a matter of fact, it turned out that the level of satisfaction in the case of girls (M=26.17, sd=12.07) was statistically significantly lower (p<0.000) than that of boys (M= 36.43, sd=17.27). The large scatter of results in this respect between the two genders is certainly noteworthy. Girls' results indicated an average level of satisfaction with life, while boys' were at a high level.

Table 1a. Correlation coefficients between Internet activities and SWLS

	Internet activities		SWLS
1	HOURS	c.c.	-0.381**
		p	0.000
2	SOCIAL MEDIA	c.c.	-0.358**
		p	0.000
3	BLOGS	c.c.	-0.454**
		p	0.000
4	E-MAIL	c.c.	-0.006
		p	0.949
5	GAMES_ARCADE	c.c.	0.163
		p	0.102
6	GAMES_LOGIC	c.c.	0.220*
		p	0.026
7	GAMES_SPORT	c.c.	0.213*
		p	0.031
8	ADVENTURE	c.c.	0.342**
		p	0.000
9	GAMES_STRATEGY	c.c.	0.037
		p	0.708
10	GAMES_EDUCATION	c.c.	0.038
		p	0.703
11	COMMUNICATIONS	c.c.	-0.758**
		p	0.000

Table 1b. Correlation coefficients between SWLS and Internet activities

	Internet activities		SWLS
12	MUSIC	c.c.	-0.405**
		p	0.000
13	GOSSIP	c.c.	-0.216*
		p	0.029
14	FILMS	c.c.	-0.035
		p	0.729
15	SHOPPING	c.c.	-0.182
		p	0.067
16	ENTERTAINMENT	c.c.	-0.172
		p	0.084
17	INFORMATION	c.c.	-0.024
		p	0.808
18	EDUCATION	c.c.	-0.188
		p	0.059

(c.c. - correlation coefficient, p - significance level * - p<0.01, ** - p<0.001)

The correlation analyses presented in Table 1 indicate a positive relationship between life satisfaction and the use of puzzle, sports and adventure games. In contrast, negative correlations were obtained when it came to the relationship between life satisfaction and overall time spent using the Internet, engaging in blogs, social and gossip sites, instant messaging, and listening to music.

Table 2: Life satisfaction predictors (regression analysis)

SWLS	Beta Standardized Coefficient	t	p
(Constant)		5.226	0.000
Communicators	-0.670	-10.739	0.000
Music	-0.235	-3.993	0.000
Blogs	-0,128	-2.197	0.030
s=78.398, p<0.000, R2 =0.697, p - significance level			

The regression analysis presented in Table 2 restricted the predictors of life satisfaction to three dimensions: use of instant messaging, blogging, and online music. This model explains almost 70% of variance.

In the analysis that followed, the author sought to answer the question of whether they could distinguish any particular styles of Internet usage. To this end, factor analysis using the principal components method: oblimin rotation with Keiser normalization was performed, in order to extract coefficients. Four main factors, explaining a total of 61.2% of the overall variance, (KMO = .695, $\chi 2$ = 442.534, df =91, p < .000) were extracted from the scatter analysis. The first factor, *Games,* includes online activities related to the use of games (strategy games, adventure games, puzzle games, arcade games and sports games) explaining 26.2% of the variance in online activities. The factor identified as *Trend Following* includes variables such as *shopping, browsing blogs and browsing gossip sites,* which accounts for 14.4% of the total variance. The *Entertainment* factor explains 12% of the variance and includes variables such as *listening to music, downloading music, watching videos* and *using email.* The last factor, *Knowledge Seeking,* accounts for another 8.6% of the variance and includes the dimensions of *exploring educational or news sites.*

The collinearity analysis of the predictors entered into the model showed that the extracted coefficients do not show a collinearity problem (VIF between 1.000 and 1.045).

Further analysis showed that girls are more likely to prefer *Knowledge Seeking* (Hedge's g=0.410, p=0.04) and *Trend Following* (Hedge's g=1.374, p<0.000) styles of Internet usage, while boys are more likely to choose the *Games* variant (Hedge's g=0.680, p=0.001).

This shows that girls are more oriented towards a communicative and relational style of Internet usage - they seek contact through social media, where they can exchange ideas. This hardly means that boys do not engage in online chats. In fact, online gaming includes elements of collaboration and real-life chatting during the game.

The analysis of the correlation between the selected coefficients and SWLS and time spent online indicated a positive correlation of the *Games* dimension with life satisfaction (rho=0.266, p< 0.01) and a negative correlation with time spent online (rho=-0.315, p<0.001). For the coefficient *Entertainment* a negative correlation was found with SWLS (rho= - 0.220, p<0.05) and a positive correlation with the amount of time spent online (rho=0.355, p<0.000). The coefficient *Trend Following* also correlated negatively with SWLS (rho= - 0.403, p<0.000) and positively with time spent online (rho=0.267, p<0.01), while *Knowledge Seeking* did not correlate with either time spent online or SWLS.

4. Discussion of the results

The analyses presented unambiguously show that young people closely associate their daily activity with the use of the Internet, which is consequently linked to their life satisfaction.

Girls who spend time on social media take the opportunity to exchange opinions on trends, interests and the situation in the world. They keep in touch with their peers through

indirect communication, using popular instant messaging services. This is also a good source for listening to music, following gossip, shopping etc. Unfortunately, all these activities negatively correlate with their level of life satisfaction. Correlational analyses do not make it clear, however, whether it is the Internet that lowers levels of happiness or, rather, low levels of life satisfaction that encourage individuals to use the Internet more often.

Previous research has suggested that Internet users are happier than non-users (Lissitsa & Chachashvili-Bolotin, 2016; Pénard et al., 2012), particularly elder people, users with health problems or on lower-income. Research by Pavot, Diener and Fujita (1990) indicated a positive relationship between the amount of social interaction online and feelings of happiness. People with communication difficulties find indirect communication easier. However, it seems that excessive use of the Internet may have the opposite effect, as confirmed by other research (*cf.* Ward et al., 2018). Age may also be a moderating factor for the correlation discussed, as indicated, among other things, by studies of adult populations (Teo & Lee, 2016). Additionally, people who use social media a lot make negative social comparisons to their disadvantage, which may consequently lead to lowered life satisfaction (Chae, 2018). Seeing more physically or mentally attractive people prompts women in particular to self-reflect on their bodies, abilities and resources. With lower self-esteem, these inferences can have a negative impact and consequently make a person feel less happy or satisfied with life.

The reverse is also possible; for example, if feeling unhappy and less satisfied with themselves and their lives, the girls in the study tried to make themselves feel better by engaging with Internet activities connected to listening to music, browsing through entertainment services, or seeking support from friends through chatting on instant messengers, which would explain the results obtained in the regression analysis (Table 2).

The boys in the study , on the other hand, spent their time online in a different way. They were more likely, as already noted, to play computer games, whether these were puzzle, arcade or strategic games (Cudo et al., 2017), and felt more satisfied with their lives than female respondents. In game- playing, these respondents took the opportunity to develop skills related to logical and strategic thinking, decision-making, and problem-solving, which reinforced their need to personally engage in activities of a cognitive nature (Puppel, 2014). A difference was also observed between male and female gamers in terms of motivation to play. Boys were more likely to undertake gaming to fulfil their need for achievement and to have friends, while girls simply wanted to pass the time (Ko et al., 2005, Cudo et al., 2017) . In other words, achievement in gaming was more likely to be a stimulus to greater life satisfaction, which was not experienced by girls. Moreover, gamers were more likely to experience a sense of flow (Hull et al., 2013), and are therefore more likely to become addicted to games through experiencing pleasure and satisfaction with game outcomes (Gros et al., 2020). Consequently, this promoted a sense of life satisfaction.

The functioning styles or styles of Internet usage identified in the factor analysis were essentially similar to those listed by Wrońska and Lange (2019). Thus, it can be concluded that the Internet offers a broad range of activities which can be organized into certain streams: using the Internet for entertainment, as a source of knowledge, a platform for social relations or an opinion-forming space.

Summing-up our attempt to answer the question posed as the research theme, it can be concluded that Internet users who are happy with their lives are less frequently engaged with the Internet than their less satisfied peers. If they do engage, they avoid social media and messengers services, focusing more on gaming.

Conclusions:

- Teenagers spend most of their free time online.
- The time spent online on social media, instant messaging, blogs and gossip sites correlates negatively with life satisfaction.
- Adolescents who primarily use computer games have a higher sense of life satisfaction
- In the education processes, it is essential to choose online activities that will develop in children a sense of agency and thus increase their satisfaction with life.
- Attention should be paid to helping children and adolescents find alternative methods of spending their leisure time.

Bibliography:

Aftab, P. (2003). *Internet a dzieci. Uzależnienia i inne niebezpieczeństwa*, Warszawa: Prószyński i S-ka.

Błachnio, A. (2007). Przegląd wybranych badań nad wpływem Internetu na dobrostan psychiczny i kontakty społeczne użytkowników, *Psychologia Społeczna*, *2* (3-4-5), 225–233.

Błachnio, A., Przepiorka, A., Pantic, I. (2016). Association between Facebook addiction, self-esteem and life satisfaction: A cross-sectional study, *Computers in Human Behavio*r, *55*, 701–705, doi: https://doi.org/10.1016/j.chb.2015.10.026.

Blais, J.J., Craig, W.M., Pepler, D., Connolly, J. (2008). Adolescents online: The importance of internet activity choices to salient relationships. *Journal of Youth and Adolescence*, *5* (37), 522–536, doi: https://doi.org/10.1007/s10964-007-9262-7.

Bozoglan, B., Demirer, V., Sahin, I. (2013). Personality and Social Psychology Loneliness, self-esteem , and life satisfaction as predictors of Internet addiction : A cross-sectional study among Turkish university students, *Scandinavian Journal of Psychology, 54*, 313–319, doi: https://doi.org/10.1111/sjop.12049.

Brezinka, V. (2014). Computer games supporting cognitive behavior therapy in children, *Clinical Child Psychology and Psychiatry*, *1* (19), 100–110, doi: https://doi.org/10.1177/1359104512468288.

Brooks, S. (2015). Does personal social media usage affect efficiency and well-being? *Computers in Human Behavior*, 46, 26–37, doi: https://doi.org/https://doi.org/10.1016/j.chb.2014.12.053.

Cao, H., Sun, Y., Wan, Y., Hao, J., Tao, F. (2011). Problematic Internet use in Chinese adolescents and its relation to psychosomatic symptoms and life satisfaction, *BMC Public Health, 1* (11), 802, doi: https://doi.org/10.1186/1471-2458-11-802

CBOS. (2019). *Korzystanie z Internetu. Komunikat z badań*, Warszawa: Fundacja Centrum Badania Opinii Społecznej.

Chae, J. (2018). Reexamining the relationship between social media and happiness: The effects of various social media platforms on reconceptualized happiness, *Telematics and Informatics*, 6 (35), 1656–1664, doi: https://doi.org/https://doi.org/10.1016/j.tele.2018.04.011.

Chan, T.H. (2014). Facebook and its Effects on Users' Empathic Social Skills and Life Satisfaction: A Double-Edged Sword Effect. *Cyberpsychology, Behavior, and Social Networking*, *5* (17), 276–280, doi: https://doi.org/10.1089/cyber.2013.0466.

Cudo, A., Dobosz, M., & Basaj, Ł. (2017). Compulsive Use of Computer Games and Interpersonal, *Rozprawy Społeczne*, *1* (11), 40–49.

Czapiński J. (2001). Szczęście – złudzenie czy konieczność? Cebulowa teoria szczęścia w świetle nowych danych empirycznych (w:) M. Kofta, T. Szustrowa (red.), *Złudzenia, które pozwalają żyć*, Warszawa: PWN.

Diener, E. (1984). Subjective well-being, *Psychological Bulletin*, *3* (95), 542–575.

Diener, E., Oishi, S., Lucas, R.E. (2003). Personality, Culture, and Subjective Well-being: Emotional and Cognitive Evaluations of Life. *Annual Review of Psychology*, doi: https://doi.org/10.1146/annurev.psych.54.101601.145056.

Diener, E., Suh, E.M., Lucas, R.E., Smith, H.L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 2* (125), 276–302, https://doi.org/10.1037/0033-2909.125.2.276.

Datareportal (2019). Digital 2019: Poland, https://datareportal.com/reports/digital-2019-poland.

Durkin, K., & Barber, B. (2002). Not so doomed: Computer game play and positive adolescent development. *Journal of Applied Developmental Psychology*, *4* (23), 373–392, doi: https://doi.org/10.1016/S0193-3973(02)00124-7.

Gros, L., Debue, N., Lete, J., & van de Leemput, C. (2020). Video Game Addiction and Emotional States: Possible Confusion Between Pleasure and Happiness? *Frontiers in Psychology*, *10,* 2894, doi: https://doi.org/10.3389/fpsyg.2019.02894.

Hooghe, M. (2012). Is Sexual Well-Being Part of Subjective Well-Being? An Empirical Analysis of Belgian (Flemish) Survey Data Using an Extended Well-Being Scale, *The Journal of Sex Research*, *2–3* (49), 264–273, doi: https://doi.org/10.1080/00224499.2010.551791.

Hull, D.C., Williams, G.A., Griffiths, M.D. (2013). Video game characteristics, happiness and flow as predictors of addiction among video game players: A pilot study, *Journal of Behavioral Addictions*, *2* (3), 145–152, https://doi.org/10.1556/JBA.2.2013.005.

Jin, B. (2013). How lonely people use and perceive Facebook, *Computers in Human Behavior*, *29*, 2463–2470.

Kasperek-Golimowska, E. (2012). Nadzieja i optymizm vs zwątpienie i pesymizm w kontekście „dobrego życia" w kulturze konsumpcji, *Studia Edukacyjne, 19,* 179-213.

Kalpidou, M., Costin, D., & Morris, J. (2011). The Relationship Between Facebook and the Well-Being of Undergraduate College Students, *Cyberpsychology, Behavior, and Social Networking, 4* (14), 183–189, doi: https://doi.org/10.1089/cyber.2010.0061.

Ko C.H., Yen J.Y., Chen C.C., Chen S.H., Yen C.F. (2005), Proposed diagnostic criteria of Internet addiction for adolescents. *The Journal of Nervous and Mental Disease*, *11* (193), 728–733.

Kozak, S. (2011). *Patologie komunikowania w Internecie. Zagrożenie i skutki dla dzieci i młodzież,* Warszawa: Difin, Engram.

Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D.S., Lin, N., Shablack, H., Jonides, J.,
& Ybarra, O. (2013). Facebook Use Predicts Declines in Subjective Well-Being in Young Adults, PLoS ONE, *8* (8), doi: https://doi.org/10.1371/journal.pone.0069841.

Lissitsa, S., Chachashvili-Bolotin, S. (2016). Life satisfaction in the internet age – Changes in the past decade, *Computers in Human Behavior*, *54,* 197–206, doi: https://doi.org/https://doi.org/10.1016/j.chb.2015.08.001.

Lyubomirsky, S., King, L., Diener, E. (2005). The Benefits of Frequent Positive Affect: Does Happiness Lead to Success?, *Psychological Bulletin*, *6* (131), 803–855, doi: https://doi.org/10.1037/0033-2909.131.6.803.

Ogonowska, A. (2014). Nowe media. Nowe uzależnienia, *Świat Problemów*, *3* (254), 17-21.

Pavot, W., Diener, E., & Fujita, F. (1990). Extraversion and happiness. Personality and Individual Differences, *11* (12), 1299–1306, doi: https://doi.org/10.1016/0191-8869(90)90157-M.

Pénard, T., Poussing, N., & Suire, R. (2012). Does the Internet Make People Happier? SSRN *Electronic Journal*, October, doi: https://doi.org/10.2139/ssrn.1918937.

Puppel, W. (2014). Rola gier komputerowych we współczesnej przestrzeni edukacyjnej, *Linguodidactica*, *18,* 157–169.

Satici, S. A., & Uysal, R. (2015). Well-being and problematic Facebook use, *Computers in Human Behavior*, *49*, 185–190, doi: https://doi.org/10.1016/j.chb.2015.03.005.

Spitzer, M. (2016). *Cyberchoroby. Jak cyfrowe życie rujnuje nasze zdrowie*, Słupsk: Dobra literatura.

Statista (2021). Internet. Demographics & Use, za: https://www.statista.com/statistics/1155157/poland-share-of-people-who-connect-to-the-internet-wirelessly-by-age/, (dostęp: 10.01.2021).

Teo, W.J. S., & Lee, C.S. (2016). Sharing Brings Happiness?, (in:) A. Morishima, A. Rauber, & C.L. Liew (eds.); *Effects of Sharing in Social Media Among Adult Users BT - Digital Libraries: Knowledge, Information, and Data in an Open Access Society*, 351–365, Springer International Publishing.

Trepte, S., Reinecke, L., & Juechems, K. (2012). The social side of gaming: How playing online computer games creates online and offline social support. Computers in Human Behavior, *3* (28), 832–839, doi: https://doi.org/https://doi.org/10.1016/j.chb.2011.12.003.

Verduyn, P., Lee, D.S., Park, J., Shablack, H., Orvell, A., Bayer, J., Ybarra, O., Jonides, J., & Kross, E. (2015). Passive Facebook usage undermines affective well-being: Experimental and longitudinal evidence, *Journal of Experimental Psychology: General*, *2* (144), 480–488, doi: https://doi.org/10.1037/xge0000057.

Ward, D.M., Dill-Shackleford, K.E., & Mazurek, M.O. (2018). Social Media Use and Happiness in Adults with Autism Spectrum Disorder, *Cyberpsychology, Behavior, and Social Networking*, *3* (21), 205–209, doi: https://doi.org/10.1089/cyber.2017.0331.

Wrońska, A., Lange, R. (2016). Nastolatek jako użytkownik Internetu – społeczny wzorzec konsumpcji, (w:) M. Tanaś (red.), *Nastolatki wobec Internetu*, 15-26, Warszawa: NASK.