Impact of Internet Addiction on Spiritual Wellbeing and Conscientiousness

Tanu Kukreja Bhayana[1] and Sukirti Ahuja[2]

[1](Assistant professor, Amity Institute of Behaviour and Allied Sciences, Amity University, Gurgaon, Haryana, India)

[2](Student, Dept. of Psychology, Bangalore University, Bangalore, India)

Abstract: *'Spirituality' has been identified as a fundamental attribute of the personalities of all human beings. There have been lots of studies on Spirituality and Mental Health. Many mental health practitioners have tried to find out the relation between Spiritual Wellbeing and Addiction. In this study the focus is on growing Internet addiction among Youngsters. A sample of 200 students from a Private University in Haryana was collected by method of Convenient Sampling. The scales used for this research were Spiritual Index of Wellbeing (SIWB) by Daaleman & Frey (2004), Internet Addiction Test (IAT) by Young (2009) and subscales of NEO FFI by Costa and McCrae (1990). It is hypothesized that Internet Addiction will significantly predict Spiritual Wellbeing and Conscientiousness. Results are discussed in the light of related review of literature.*

Keywords: *Keywords: Spiritual Wellbeing, Internet Addiction, and Conscientiousness*

I. INTRODUCTION

Internet addiction was first researched in 1996, and findings were presented at the 104th annual meeting of the American Psychological Association, Canada. The study reviewed over 600 cases of heavy Internet users who exhibited clinical signs of addiction as measured through an adapted version of the DSM-IV criteria for pathological gambling (Young, 1996). From then onwards, further researches have examined various pathological aspects of Internet Addiction.

Recent figures suggest that 830 million young people are web users, representing 80 per cent of the youth population in 104 countries. It also shows a significant increase in broadband access and subscriptions with China leading the way. The 2017 annual release of global ICT data shows that youths (15-24 year olds) are at the forefront of Internet adoption. In Least Developed Countries (LDCs), up to 35 per cent of individuals using the Internet is aged 15-24, compared with 13 per cent in developed countries and 23 per cent globally. In China and India alone, up to 320 million young people use the Internet. (International Telecommunication Union, 2017). Though, Internet is useful in every facet of modern life; be it entertainment, communication, business, work, or at home. You use it every time you log on to the web, send an e-mail or SMS, consult online navigation systems, listen to the radio, watch television, order something online, travel by plane or ship – and of course every time you use a mobile phone, smartphone or tablet computer. The Internet has connected people around the world, providing endless sources of information, communication, and entertainment. It also provides tremendous educational benefits for college students and also provided better opportunities for communication, information, and social interaction for young adults. But, with all these unlimited benefits of the modern society we are forgetting our limits, which are being penetrated by each and every one of us, and is leading its way to excessive use of everything.

Now comes the question whether Internet is a boon or a bane for the society? Well, the answer can be both. Internet can be a boon if it's limited to meaningful and purposeful work, but it can also act as a bane for each and every individual of the society if it is used in excess, for illegal purpose or for harming others. We consider the current cyber world as a blessing because we have access to everything with just a click. But the coin has the other side too, which is darker and is eating up the whole world with its unwanted addiction.

In 1992, the World Health Organization (WHO) described habit and impulse disorders (F 63) as characterized by repeated acts that have no clear rational motivation, generally harm the person's own interests and those of other people, and are associated with impulses the person experiences as uncontrollable. According to ICD-10, Internet Addiction is now claimed as an impulse control disorder, which does not involve use of an intoxicating drug, alcohol or substance, and is very similar to pathological gambling. It is a behavioral addiction, because some Internet users may develop an emotional attachment to other on-line users, or so-called friends and activities they create on their computer screens. Internet users may enjoy aspects of the Internet that allow them to meet, socialize, and exchange ideas through the use of the chat rooms, social networking websites, or "virtual communities." like Facebook, Hike, Whatsapp, etc.

On the other hand, fifth edition of the Diagnostic & Statistical Manual of Mental Disorders by the American Psychiatric Association (DSM-5) has also considered it as 'Internet Gaming Disorder'. Internet addiction, in a way is similar to other kinds of addictions. The only difference is that it does not involve use of any drug or substance. But, the effects are almost similar. It affects the lives of its user in more or less the same

way as other addictions do. The major variables we are trying to study in this research are Spiritual Wellbeing and Conscientiousness. We believe that these two are affected to a deeper extent than any other part of our lives.

Spiritual Wellbeing is about our inner life and its relationship with the wider world. It includes our relationship with the environment, our relationships with others and with ourselves. Spiritual wellbeing does *not just* reflect religious belief although for people of a religious faith it is obviously a central feature. Each person's spirituality is greatly impacted by the community they are a part of and their relationships. To be spiritually well will mean a positive engagement with others, self and our environment. The person who is affected by the addiction of the Internet loses all the connections with the outer world and the deep inner world too. The person lives his/ her life on a superficial level. He/ she believe in portraying virtual relationships.

A study by Weinstein and Lejoyeux (2010) suggest that several factors are predictive of problematic Internet use, including personality traits, parenting and familial factors, alcohol use, and social anxiety. Cross-sectional studies on samples of patients report high comorbidity of Internet addiction with psychiatric disorders, especially affective disorders (including depression), anxiety disorders (generalized anxiety disorder, social anxiety disorder), and attention deficit hyperactivity disorder (ADHD).

On the other hand, Internet Addiction affects Conscientiousness also. It is the personality trait of being thorough, careful, or vigilant. Conscientiousness implies a desire to do a task well. Conscientious people are efficient and organized as opposed to easy-going and disorderly. They exhibit a tendency to show self-discipline, act dutifully, and aim for achievement; they display planned rather than spontaneous behavior; and they are generally organized and dependable.

Research by Waldo (2014) studied that Internet addiction is a broad concept. Despite inconclusive or inconsistent definition for this disorder, usage of the Internet is growing rapidly each year especially among adolescents, making it imperative to look into factors that can be correlated to it. The study provided description on adolescent internet addiction and examined significant differences in terms of gender, type of school and online behaviors. Further, the relationship of adolescent internet addiction to spiritual intelligence, psychological wellbeing and social desirability was explored. Findings suggest that adolescents are frequent online users and that there are significant differences in terms of gender, school type, and online behaviors; social desirability had a strong positive relationship with adolescent internet addiction.

Another research by Sharma and Sharma (2018) concluded that students with higher levels of internet addiction are more likely to be low in Psychological Wellbeing. Simple linear regression showed that internet addiction was a significant negative predictor of Positive well-being (PWB).

The Institute of Psychology of the Chinese Academy of Sciences proposed a "compensation theory" to account for the causes of young people's Internet addiction in China. Specifically, Tao (2005) argues that the "single assessment system" for academic excellence has led many young people to look for "spiritual compensation" from the online activities. In addition, by engaging in Internet activities, the young people also look for compensation for self-identity, self-esteem, and social networking. For the past 20 years, Chinese young people have used poetry, the guitar, and sports to express their needs and feelings, whereas now they tend to use electronic games and other Web-based tools.

Researches have also shown that internet use is negatively correlated with conscientiousness. Stavropoulos et. al (2015) conducted a longitudinal study to examine the role of conscientiousness (as a personality trait) and classroom hostility (as a contextual factor) in the development of Internet Addiction. The participants comprised 648 adolescent and were assessed over a 2-year period (while aged 16-18 years). A three-level hierarchical linear model was carried out on the data collected. Findings revealed that (a) lower conscientiousness was associated with Internet Addiction and this did not change over time and (b) although being in a more hostile classroom did not initially have a significant effect, it increased girls' internet addiction vulnerability over time and functioned protectively for boys. Results indicated that the contribution of individuals and contextual internet addiction factors may differ across genders and over time. More specifically, although the protective effect of conscientiousness appeared to hold, the over-time effect of classroom hostility increased the risk of internet addiction for girls.

Research by Saini et. al (2016) concluded their research on a note that the factors like higher neuroticism and less extroversion displayed significant associations with internet addictive behaviors. Internet addictive behavior was found to be lower on extroversion traits because they are more in social activities, making friend easily, and cheerful.

A study by Naz and Sharma (2018) suggested that the males are more internet-addicted than females; but females are more smart-phone addicted than males; Urban youth are less addicted than rural youth; Government youth are less addicted than private youth; superior religionist are lesser internet addicted; internet-addiction creating many behavioral and physical problems; and work problems among males. There is a most important relationship between Personality traits and internet-addiction. Adjustment problems are exists in youth but urban youth are well adjusted than rural youth; and females are well in social and emotional adjustment and males are well adjusted in home and social. Hindu women were better adjusted than Muslim

women. Women belonging to higher socio-economic status and high caste were better adjusted compare to women belonging to lower socio-economic status and lower caste respectively.

Research by Błachnio and Przepiorka (2016) indicate that lower positive orientation, conscientiousness, emotional stability, and openness to experience are related to problematic use of both Internet and Facebook. Also, extraversion and agreeableness are connected only with problematic Internet use.

Chen et. al (2008) studied the causal relationship between personality traits and life satisfaction in online game players. The result shows that neuroticism has significant negative influence on life satisfaction. Both openness and conscientiousness have significant positive influence on life satisfaction.

Another research finding suggests that a more problematic Internet use is associated with a lower subjective vitality (Akin, 2012).

Engelberg and Sjöberg (2004) investigated the extent to which inter-personal skills, personality, and emotional intelligence (EI) were related to the extent of usage of the Internet, as measured with the Internet Addiction Scale, on a sample of undergraduates. Results suggested no link between personality and usage of the Internet. Results suggest that frequent users tend to be lonely, to have deviant values, and to some extent to lack the emotional and social skills characteristic of high EI.

Carli and Durkee (2016) concluded that The Internet usage trends show that mean hours online per week has risen exponentially during the last two decades among the general population. Among specific subgroups, however, studies have shown that some individuals spend between 20 and 80 h per week on the Internet, with some sessions lasting up to 15 h. These individuals often experience clinical depression, anxiety, social isolation and despair. This phenomenon is referred to as pathological Internet use (PIU).

Another interesting finding showed that students who come from cities (towns) had higher symptoms of Internet addiction than villagers (Hosťovecký and Prokop, 2018). While another study by Dora et. al (2017) suggested that Internet addiction has significant relationship with the age and types of personality while it does not have significant relationship with the type of settlement. The findings also showed that youths between 20-24 years have the tendency to be categorized as high Internet addiction.

A study showed that low conscientiousness and low self-efficacy predicted gaming dependency. In addition, conscientiousness, neuroticism and self-esteem predicted internet dependency. However, agreeableness, openness to experience, extraversion and locus of control had no significant value on the dependencies (Yilmaz, 2015).

The study by Zurawski (2015) found a significant correlation between gender and, age, and ethnicity and proactive coping skills. There was also a significant relationship between age and compulsive Internet use. Compulsive Internet use was negatively correlated with proactive coping, suggesting improved proactive coping skills will lead to a lower level of compulsive Internet use.

Objective

- To study the relation between Internet Addiction, Spiritual Well-being and Conscientiousness.
- To examine the impact of Internet Addiction on Spiritual Wellbeing and Conscientiousness.
- To examine gender differences in the usage of Internet.

Hypothesis

1. Internet will have a significant negative relation with Spiritual Well-being and Conscientiousness.
2. Internet Addiction will be a significant predictor for Spiritual Wellbeing and Conscientiousness.
3. Males will be significantly higher on Internet usage.

II. METHODOLOGY

Sample

The Study was done on 200 college students of age 18-23 years, out of which 114 were girls and 86 were boys. The sample was taken from private universities of Haryana, India using convenient sampling technique.

Procedure

Each student was given a questionnaire and was asked to carefully read each question/ statement and tick the option that suited him or her the most.

Tools Used

1. Spiritual Index of Wellbeing (SIWB)

Spiritual Index of Wellbeing (SIWB) by Daaleman & Frey (2004) defined spirituality as a sense of meaning or purpose from a transcendent source. It is an instrument that measures one's perceptions of their spiritual quality of life. The scale is divided into two subscales: (1) self-efficacy subscale and (2) life-scheme subscale. Each item is answered on a 5-point scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree). The SIWB contains 12 items: 6 from a self-efficacy domain and 6 from a life scheme domain. The index had the following reliability results: for the self-efficacy subscale, $\alpha = .86$ and test-retest $r = 0.77$; for the life scheme subscale, $\alpha = .89$ and test-retest $r = 0.86$; and for the total scale $\alpha = .91$ and test-retest $r = 0.79$, showing very

good reliability. The SIWB had significant and expected correlations with other quality-of-life instruments that measure well-being or spirituality.

2. Neo Five Factor Inventory (Neo-Ffi)

The NEO-FFI was designed by Costa, P. T., & McCrae, R. R. (1989), to assess the constellation of traits defined by the Five Factor Theory of Personality. NEO FFI comprises of 60 items.

The correlation coefficients range from 0.44 to 0.54 for the different domains of personality. The five domains (factors) measured by the NEO-FFI-3 provide a general description of personality. They include:

- **Neuroticism**
- **Extraversion**
- **Openness to Experience**
- **Agreeableness**
- **Conscientiousness**

3. Internet Addiction Test

Internet Addiction Test (IAT) is a reliable and valid measure of addictive use of Internet, developed by Dr. Kimberly Young (1996). It consists of 20 items that measures mild, moderate and severe level of Internet Addiction. It determines how children perceive themselves about internet addiction. Internet addiction test is a Likert type survey and participants are needed to choose from "not appropriate", "rarely", "occasionally", "frequently", "often", and "always" choices. These choices are given points 0,1,2,3,4, and 5 in the same order. If subjects receive a score of 80 or over they are described as "internet addicted", if they receive scores between 50 and 79 defined as "showing partial symptoms", if received less than scores of 50 points defined as "not showing symptoms". These scales show good moderate internal consistency-alpha coefficients (0.54-0.82).

III. RESULTS AND DISCUSSION

TABLE 1.1- Descriptive Statistics

	GENDER	N	MEAN	STD. DEVIATION
INTERNET ADDICTION	Males	86	40.95	14.46
	Females	114	36.50	15.030
TOTAL SPIRITUAL WELLBEING	Males	86	41.03	9.76
	Females	114	40.37	10.31
CONSCIENTIOUSNESS	Males	86	27.80	6.42
	Females	114	28.62	4.94

TABLE 1.2- Comparison Between Male And Female: t- Test

	t	Df	Sig. (2-tailed)
INTERNET ADDICTION	2.095	198	.037*
TOTAL SPIRITUAL WELLBEING	.458	198	.647
CONSCIENTIOUSNESS	-1.025	198	.306

As per table 1.2 the difference between males and females has found to be significant with the t value .037 ($p<.05$). As the mean value for Internet addiction of the males comes out be 40.95 and for females it is 36.50, it can be concluded that males are more internet addicted than females. They tend to be using internet more than the required than females. The study by Naz and Sharma (2018) also support the results that males are more internet-addicted than females.

India is a male dominated society, where man is the main bread earner of the family, who also is comparatively more exposed to various technical or any other changes in the society. Mobile phone, computers and other electronic gadgets are part of this technical revolution. Men is being more exposed to it and also due to revolutionary technical change, each and every working sector is connected through social media or

otherwise other internet forums, it almost became mandatory to use smart phones. Repeated exposure to the internet and too many options like social media etc. may have led to men using more addicted to internet than women.

TABLE 1.3- Relationship between Internet addiction, Spiritual Wellbeing and Conscientiousness- Pearson product moment correlation

		Internet Addiction	Spiritual Wellbeing	Conscientiousness
Pearson Correlation Sig. (2-tailed)	Internet Addiction	1	-.256**	-.214**
	Spiritual Wellbeing	-.256**	1	.280**
	Conscientiousness	-.214**	.280**	1

****. Correlation is significant at the 0.01 level (2-tailed)**

Table 1.3 illustrates the relationship between all the variables of this research. Internet addiction has got a negative correlation with Spiritual wellbeing (r=-.256, p>.01). Internet addiction is also negatively correlated with conscientiousness (r=-.214, p>.01). There have been a lot of studies which also support the results of the current study (Sharma and Sharma, 2018; Waldo, 2014).

Addiction itself means excessive use of anything, whereas human's mind and body works on the principle of homeostasis. Addiction to internet would mean deviation to lot of things which are available in bulk on internet for example social media; it pulls people outward whereas spirituality takes people inside. Social media and internet is about awareness about the society whereas spirituality and conscientiousness is about knowing oneself, self-awareness.

2. Impact of Internet Addiction on Spiritual Wellbeing

TABLE 2.1- Multiple linear Regression Analysis

Model	R	R Square	Adjusted R Square	F Change	Sig. F Change
1	.256[a]	.065	.061	13.712	.000

a. Predictors: (Constant), Internet Addiction

TABLE 2.2- COEFFICIENTS[a]

Model	B	Std. Error	t	Sig.
(Constant)	47.281	1.918	24.646	.000
Internet Addiction	-.172	.047	-3.703	.000

a. Predictors: (Constant), Internet Addiction

b. Dependent Variable: Total Spiritual Wellbeing

3. IMPACT OF INTERNET ADDICTION ON CONSCIENTIOUSNESS

TABLE 3.1- Regression Table

Model	R	R Square	Adjusted R Square	F Change	Sig. F Change
1	.214[b]	.046	.041	9.442	.002

a. Predictors: (Constant), Internet Addiction

TABLE 3.2- COEFFICIENTS[b]

Model	B	Std. Error	t	Sig.
(Constant)	31.379	1.084	28.947	.000
Internet Addiction	-.081	.026	-3.073	.002

a. Predictors: (Constant), Internet Addiction

b. Dependent Variable: Conscientiousness

Table 2.1, 2.2, 2.3 and 2.4 depicts the impact of Internet Addiction on Spiritual Wellbeing through Regression Analysis. The Regression equation as per the above table is Internet addiction = -.172(spiritual well-being) + 47.28. As per the results, Internet addiction may impact spiritual well-being of a person by 17.2%, the value is highly significant. As discussed above, Internet addiction and spiritual well-being have opposite directions, one pushes the attention of an individual outside whereas the other two (Spiritual well-being and conscientiousness) pulls the individual inside.

Waldo (2014) in his study also showed relationship between internet addiction and spiritual intelligence whereas Stavropoulos et. al (2015) conducted a study on students to find the role of conscientiousness and classroom hostility in the development of Internet Addiction. One of the findings revealed that the lower conscientiousness was associated with Internet Addiction and this did not change over time.

IV. CONCLUSION

The results of this study are directly related to the growing problem of the current era internet addiction, lack of spiritual well-being and conscientiousness among young adults. The current study indicates that over use of internet has an impact on spiritual wellbeing and conscientiousness of a person. We have reached to the time where we need to teach our youngsters to have a balanced approach as we move forward in life. Where not using Internet is not a good solution but using internet for a limited time may help our youngsters maintain a balance between their personal, social and professional life.

Limitations

- Sample size was small for this research.
- The data was collected only at the private Universities in the state of Haryana; hence it cannot be generalized for all other cross-cultural sections.

Recommendations

Having known as a country of diverse changes and a very large population, more comprehensive and applicable researches are required on internet addiction. It is recommended that the study must be repeated with a larger sample size and with subjects from different cross-cultural sections to demonstrate the impact of Internet addiction on Spiritual Wellbeing and Conscientiousness.

V. REFERENCES

[1] *Akin, A. (2012). The Relationships Between Internet Addiction, Subjective Vitality, and Subjective Happiness. Cyberpsychology, behavior, and social networking. Volume 15, Number 8, 2012. DOI: 10.1089/cyber.2011.0609.*

[2] *American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. (DSM-5). American Psychiatric Publishing, Inc.; 2013.*

[3] *Bozoglan, B. (2018). Psychological, Social, and Cultural Aspects of Internet Addiction. Information Science Reference (an imprint of IGI Global), United States of America; 2018. ISSN: 2328-1316.*

[4] *Błachnio, A. and Przepiorka, A. (2016). Personality and positive orientation in Internet and Facebook addiction. An empirical report from Poland. Computers in Human Behavior. 59 (2016). 230-236. DOI: http://dx.doi.org/10.1016/j.chb.2016.02.018.*

[5] *Carli V., Durkee T. (2016). Pathological Use of the Internet. In: Mucic D., Hilty D. (eds) e-Mental Health. Springer, Cham. DOI: https://doi.org/10.1007/978-3-319-20852-7_14*

[6] *Chen, L.S.; Tu, H.H. and Wang, E.S. (2008). Personality Traits and Life Satisfaction among Online Game Players. Cyber-Psychology & Behavior. Volume 11, No. 2 (2008). DOI: https://doi.org/10.1089/cpb.2007.0023.*

[7] *Dora, M.T.; Sidek, S.; Hassan, M.A.; Mohamed, S.; Kudus, N.; Mustaffa, F. and Mokhtar, M.Y. (2017). Internet Addiction Among Urban Youths in Melaka. Asian Journal of Information Technology, 16(1); 14-18, 2017. ISSN: 1682-3915.*

[8] *Engelberg, E. and Sjöberg, L. (2004). Internet Use, Social Skills, and Adjustment. CyberPsychology & Behavior. Vol. 7, No. 1. https://doi.org/10.1089/109493104322820101.*

[9] *Hosťovecký, M. and Prokop, P. (2018). The relationship between internet addiction and personality traits in Slovak secondary schools students. Jamsi, 14 (2018), No. 1. DOI: https://doi.org/10.2478/jamsi-2018-0006.*

[10] *I.T.U Telecommunication Development Sector, World Telecommunication/ ICT Indicators Database Online. 2017, I.T.U.*

[11] *Müller KW, Beutel ME, Egloff B, Wölfling K. Investigating risk factors for internet gaming disorder: A comparison of patients with addictive gaming, pathological gamblers and healthy controls regarding the big five personality traits. Eur Addict Res 2014; 20:129-36.*

[12] *Naz, S. and Sharma, H. (2018). Review on internet-addiction, personality, religion and adjustment of youth. International Journal of Recent Scientific Research. Vol. 9, Issue, 1(J), pp. 23535-23540, January, 2018. DOI: http://dx.doi.org/10.24327/ijrsr.2018.0901.1487.*

[13] *Saini, V.K.; Baniya, G.C.; Verma, K.K.; Soni, A. and Kesharwani, S. (2016). A Study on Relationship of Internet Addictive Behavior with Personality Traits among Medical Students. Journal of Mental Health and Human Behaviour. September 2016, Volume 21, Issue 2.*

[14] *Sharma, A. and Sharma, R. (2018). Internet addiction and psychological wellbeing among college students: A cross-sectional study from Central India. Journal of Family Medicine and Primary Care. Jan-Feb 2018; 7(1): 147–151. DOI: [10.4103/jfmpc.jfmpc_189_17]. PMID: 29915749.*

[15] *Stavropoulos, V.; Kuss, D.J.; Griffiths, D.; Wilson, P. and Stefanidi, F.M. (2015). MMORPG gaming and hostility predict Internet Addiction symptoms in adolescents: An empirical multilevel longitudinal study. Addictive Behaviors. Volume 64, January 2017, Pages 294-300. DOI: https://doi.org/10.1016/j.addbeh.2015.09.001.*

[16] *Tao, H. K. (2005). Teenagers' Internet addiction and the quality-oriented education. Journal of Higher Correspondence Education (Philosophy and Social Sciences), 3, 70–73.*

[17] *Waldo, A.D. (2014). Correlates of Internet Addiction among Adolescents. Psychology, 5, 1999-2008. DOI: http://dx.doi.org/10.4236/psych.2014.518203.*

[18] *Weinstein, A., & Lejoyeux, M. (2010). Internet addiction or excessive internet use. The American Journal of Drug and Alcohol Abuse, 36(5), 277–283. doi:10.3109/00952990.2010.491880 PMID:20545603.*

[19] *World Health Organization. The ICD-10 classification of mental and behavioral disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992.*

[20] *Yilmaz, O. (2015). The Role of Personality Traits, Self-esteem, Self-efficacy and Locus of Control in Internet and Gaming Dependency. Thesis submitted to Institute of Graduate Studies and Research, Eastern Mediterranean University, Gazimağusa, North Cyprus; September 2015.*

[21] Young, K. S. (1996). Internet addiction: The emergence of a new clinical disorder. Published in CyberPsychology and Behavior, Vol. 1 No. 3., pages 237-244. Paper presented at the 104th annual meeting of the American Psychological Association, Toronto, Canada, August 15, 1996.

[22] Young, K.S. and Abreu, C.N. (2011). Internet Addiction: A Handbook and Guide to Evaluation and Treatment. John Wiley & Sons Inc., Hoboken, New Jersey; 2011.

[23] Zurawski, J. (May, 2015). Internet Usage, Self-Efficacy, And Proactive Coping Skills. Thesis presented to the School of Social Work, California State University, Long Beach. Published by ProQuest LLC (2015).

[24] Fernandez, O.L. (2015). How Has Internet Addiction Research Evolved Since the Advent of Internet Gaming Disorder? An Overview of Cyberaddictions from a Psychological Perspective. Curr Addict Rep (2015) 2:263–271. DOI:10.1007/s40429-015-0067-6.