

# Selfcontrol, Narcissistic Tendencies and Internet Addiction among Adolescents

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## Abstract

The present research aims to investigate the relationship between self-control, narcissistic tendencies and internet addiction among adolescents. Sample consists of 100 adolescents (50 boys and 50 girls) with the age range from 15 to 19 years ( $M = 18.0$ ,  $SD = 1.33$ ) from different educational institutes. Assessment measures which are reused to assess are Brief Self Control Scale (Maloney, Grawitch & Barber, 2012), Narcissistic Personality Inventory (NPI-16) (Ames, Rose & Anderson, 2006), short version of Young's Internet Addiction Test (Pawlikowski, Altstötter Gleich, & Brand, 2013) and a demographic questionnaire. Results of Pearson product moment correlation showed that there was a positive relationship between self-control, narcissistic tendencies and internet addiction among adolescents.

*Keywords:* selfcontrol, narcissistic tendencies, Internet addiction

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## Introduction

One of the types of behavioral addiction is media addiction, which is without use of any chemical substance (Marks, 1990). According to this definition, the individuals who are addicted to media feel themselves obsessed to use internet despite knowing the negative results of their use. These negative consequences make them feel compelled to use the media irrationally or out of control, even knowing the fact that the use is not beneficial (Liau, Khoo, & Ang, 2005). Self-control can be described as the active role play in refraining from the instant gratification of impulses that would interfere with the daily functioning and attainment of goals (Baumeister, Vohs, & Tice, 2007). From a simple viewpoint, it is an intervening, dominating or changing of a predetermined behavior (Schmeichel & Vohs, 2009). Self-control is the skill of controlling or inhibiting a desired, persuasive urge in the attainment of goal (Fishbach & Trope, 2005).

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It has been observed that self-

control means regulation of thoughts, feelings and behaviors. It has been defined as “the exertion of control over the self by the self” (Muraven & Baumeister, 2000, p. 247). This definition leads to the concept that the individual must possess internal control over himself that regulates his beliefs, sentiments, or responses. Natural tendency of internal self-

control has been linked to many other characteristics like important personality characteristics, but previous data reveals that these characteristics are different from the other personality characteristics (Muraven & Baumeister, 2000). An individual is more vulnerable to addiction if he has a trait of impulsivity, a personality feature that leads to engagement in risky addictive behaviors (Dick et al., 2010).

Self-control is a tendency to overtake, dominate or restrict automatic, habitual, or instinctive acts, desires, feelings, or wishes that would hinder a person in his/her goal-oriented behavior. Self-control (or self-

regulation) can be described as the self’s capability to possess control over behavioral actions and circumstances. Self-

regulation helps to replace maladaptive behavioral actions with adaptive ones. These behavioral responses may include intrusive obsessions (e.g., suppressing thoughts), emotions (regulating of mood), supervision activities (performance under distraction), and impulse control (delaying gratification) (Baumeister, Heatherton, & Tice, 1994). Self-

control refers to the conscious action of controlling attention, emotion, and behavior in order to achieve set goals and standards (Duckworth, Quinn, & Tsukayama, 2011).

Narcissists have a magnified, exaggerated, extravagant self-image about themselves and show less empathy towards others (Hepper, Hart, & Sedikides, 2014). However, narcissists’ view of themselves are not realistic (Gabriel, Critelli, & Ee, 1994). When narcissists face reality and experience low ego and self-esteem, they become self-protective, antagonistic, and hostile (Morf & Rhodewalt, 2001). Walder (1925) described characteristics of the individuals with narcissistic personality disorder as egoistical, arrogant, sensing themselves greater than others, obsessed with themselves and with praising themselves, and showing no empathy towards others. This is often noticeable in their sexual encounters. They are primarily focused on bodily pleasure not emotional intimacy

According to the DSM-

V (APA, 2014), narcissistic personality disorder (NPD) can be explained as a “persistent pattern of high self-

esteem, want for positive feedback, approval and shortage of empathy for others” (Saß, Wittchen, & Zaudig, 2003, p. 781). People with negative

self-

image who use social networking to increase their sense of worth in a virtual environment perceive themselves better as compared to people who perceive themselves negatively. Individuals with narcissism suppose that they are important in everyone’s lives and become more compelled to use the internet (Mehdizadeh, 2010).

Beard (2005) specifies internet addiction as a state in which an individual is psychologically dependent on some medium which disrupts his academic life, vocational life and communication with others. The term Internet Addiction Disorder (IAD) is described as “uncontrollable Internet use and changeable behavioral pattern when restrain from using it” (Mitchell, 2000, p. 632). Rice (2005) explains internet addiction as an inclination toward obsessive internet use that disturbs the individual’s normal functioning. Maladaptive internet using behavioral pattern, hereafter termed as ‘internet addiction disorder’ (IAD), it explained as inability to control one’s use of the internet, which contributes to mental, community or occupation problems (Young, 1998).

According to Young (2004) the internet addicts prioritize using the internet over their families, acquaintances, associates and job. Leaving a spouse, unemployment, worsening school grades and forgetting to eat are some of the results that are seen frequently in media articles.

The relationship between gender and problematic internet usage behavior has been investigated extensively. The major studies’ results indicate that males are more involved in risky online behavior than females. Cooper (2000) found that there are gender differences in internet use, with male and female addicts generally preferring sites that fit behavioral typecast regarding their own gender. Females are more engaged in spending time in flirting and cybersex in sex leaning chatrooms, whereas males are more interested in using porn websites. Males like to see visual stimuli and sexual practice, while females are likely to make relationships.

College students represent a larger portion of addicted internet users than do other populations. Students of this age have grown up in the presence of IT world and the use of it is a part of their daily schedule. It is an integral part of their everyday and becomes as normal as using other appliances. As a group college students were found to be more vulnerable to developing a compulsive use of the internet than other populations of society.

Several other factors also contribute to their internet dependence, including mental and physiological features, easy access to the internet, and the expectation of computer/internet use (Greenfield, 1999). Kim, Nam Koong, Ku and Kim (2008) conducted a research study to find out the relationship between online game addiction and aggression, self-control and narcissistic personality traits. Research results indicated that aggression and narcissistic personality traits are positively correlated with online game addiction, whereas self-control is negatively correlated with online game addiction. In addition, results revealed that the extent of online game addiction could be predicted based on the person's narcissistic personality traits, aggression, self-control, interpersonal relationship, and occupation.

Malik and Najam (2008) conducted a research study in Pakistan to find out the relationship between personality and emotionality of pathological internet use. Results of the study show that disordered internet users scored high on personality characteristics such as emotional consistency, warmth, analysis, rule consciousness, social boldness and self-dependence. Results revealed that internet addicts scored high on three basic emotions: anxiety, guiltiness and depression.

In the light of the above mentioned literature the current study was aimed to explore the role of self-control, narcissistic tendencies and internet addiction among Pakistani adolescents. It was hypothesized that there will be a positive relationship between self-control, narcissistic tendencies and internet addiction among adolescents. It was also assumed that there are likely to be gender differences in the use of internet, self-control and narcissistic tendencies. Another assumption was that there would be no differences in self-control, narcissistic tendencies and internet addiction among adolescents whose study in different examination systems. It was also hypothesized that there would be differences in self-control, narcissistic tendencies and internet addiction among adolescents with reference to their family system, use of internet connection, and class. Finally, these relationships should persist after taking into account students' age, family income, number of siblings, birth order, family system, students' education, number of laptop, computer at home, number of hours of internet use and on which device an individual uses the Internet.

## **Method**

### **Sample**

The sample consisted of  $N=100$  ( $n=50$  boys,  $n=50$  girls), age range (15-19) years and were selected from different educational institutes. Only teenagers able to read and write in English, who have internet connection or access to internet are included. A description of the sample is given in table.

**Table 1: Demographic Characteristics of Sample (N=100)**

Variables	Female(n=50)		Male(n=50)	
	f (%)	M(SD)	f (%)	M(SD)
<b>Age(years)</b>		17.72(1.565)		18.32(.978)
<b>Classoftheparticipant</b>				
<b>sIntermediate</b>	18(36)		23(46)	
<b>B.A</b>	2(4)		4(8)	
<b>Bs(Hons)</b>	22(44)		21(42)	
<b>Masters</b>	8(16)		2(4)	
<b>ExaminationssystemoftheP</b>				
<b>articipants</b>	28(56)		24(48)	
<b>Semester</b>	22(44)		26(52)	
<b>Annual</b>				
<b>Birthorder</b>		2.72(1.262)		2.7(1.71)
<b>No of siblings</b>		3.3(1.43)		3.54(2.17)
<b>Familysystem</b>				
<b>Nuclear</b>	36(72)		34(68)	
<b>Joint</b>	14(28)		16(32)	
<b>MonthlyFamilyincome</b>		6.63(70340.4)		9.11(1.46)
<b>Haveownpc</b>				
<b>No</b>	16(32)		16(32)	
<b>Yes</b>	34(68)		34(68)	
<b>Haveownlaptop</b>				
<b>No</b>	16(32)		11(22)	
<b>Yes</b>	34(68)		39(78)	
<b>No of computersin home</b>		1.98(1.22)		2.12(1.172)
<b>DeviceonwhichyouuseIn</b>				
<b>ternet</b>				
<b>Laptop</b>	35(70)		39(78)	
<b>PcMob</b>	9(18)		8(16)	
<b>ile</b>	6(12)		3(6)	
<b>Noofhoursparticipantuse</b>				
<b>internet</b>		3.85(4.028)		4.18(3.08)
<b>Internetconnection</b>	7(14)		11(22)	
<b>Wired</b>	38(76)		37(74)	
<b>Wireless</b>	5(10)		2(4)	
<b>Both</b>				

## Assessment Measures

**Demographic information questionnaire.** consisted of statements assessing the demographic variables including information about age, monthly family income, family system, number of siblings, birth order, students' education, number of laptops at home, computer at home, number of hours internet use and on which device an individual use internet.

**Brief Self-Control Scale (BSCS).** Brief self-control scale (Maloney, Grawitch, & Barber, 2012) was used to assess dispositional self-control. It consists of 13 items rated on a 5-point scale, ranging from 1 (Not at all like me) to 5 (Very much like me). Brief self-control scale consists of two sub-scales, Restraint and impulsivity SC2 and SC7 are reverse coded.

Reliability estimates for the subscale Impulsivity is .73 and for Restraint is .72.

**Narcissistic Personality Inventory (NPI-16).** Short version of narcissistic personality inventory (NPI-16) (Ames, Rose, & Anderson, 2006) was used to assess the tendencies of narcissism. The purpose of the tool was to measure of narcissism, behavior and consequences. There is a pair of statements in which the participant has to select the any one which computed the proportion of responses consistent with narcissism. The reliability of NPI-16 is .69, because the inventory was used in English.

**Short version of Young's Internet Addiction Test (s-IAT).** Short version of Young's Internet Addiction Test (Pawlikowski, Altstötter-Gleich, & Brand, 2013) consists of 12 items including two sub-scales that measure Loss of control/timemanagement and Craving/social problems. The responses are rated on 5-point likert scale. There is no reverse scoring of any item. The scale consists of two subscales loss of control/timemanagement and craving/social problems.

Reliability value of the factor loss of control/timemanagement is .88 and for craving/social problem the value is .84.

## Procedure

Participants from different educational institutes were visited. Participants were informed about the nature and purpose of the study. They were ensured of privacy regarding their identity and their right of withdrawal from the study. Informed consent was distributed among the participants and they were given the questionnaire to fill it up. They were settled down in their combined study room. The data was collected in the form of groups. The participants



needed 20 minutes to complete the questionnaire.

All of the 100 participants completed their questionnaire with the response rate of 100%.

## Results

Pearson Product Moment correlations, Independent Sample t-test and One Way ANOVA were computed to assess the relationship of demographic variables, self-control, narcissistic tendencies and internet addiction among adolescents.

**Table 2: Correlation between Self Control, Narcissistic Tendencies and Internet Addiction among Adolescents with its Subscales (N=100)**

Variables	1	2	3	4	5	6	7	8
1.s-IAT	----	....	....	....	....	-.25	.05	.09
2.Lossofcontrol		----	....	....	....	-.17	.09	.03
3.Craving			----	.13	....	-.24	-.02	.12
4. BSCS				----	....	....	....	.07
5. Impulsivity					----	-.17	.20*	.11
6. Restraint						----	-.25	-.05
7.Selfcontrol							----	.02
8. NPI-16								----

Note. \* $p < .05$ , \*\* $p < .01$ .

As shown in table 2, Results from overall sample including both males and females revealed that loss of control and craving had positive correlation with each other. Loss of control was found significant with the impulsivity of the individual. Cravings showed positive correlation with impulsivity but craving shows negative correlation with restraint. Impulsivity and restraint showed positive correlation with self-control.

T-test revealed that there were significant gender differences in cravings, impulsivity and narcissistic personality. Males showed more impulsivity and cravings for internet addiction while females showed more narcissism. There were no significant gender differences on loss of control, restraint and self-control in both the gender.

**Table3: Gender Differences in Self Control, Narcissistic Tendencies and Internet Addiction among Adolescents (N=100 each)**

Variables	Males (n=50)		Females (n=50)		t	p	95% CI		Cohen'sd
	M	SD	M	SD			LL	UL	
NPI-16	7.3	2.4	6.8	3.6	-0.8	.42	-1.72	.73	0.16
s-IAT	31.3	5.8	30.2	7.7	-0.8	.42	-2.07	1.5	0.17
Loss of control	5.6	3.8	16.5	4.4	1.0	.32	-0.79	2.5	-0.21
Craving	5.7	3.2	13.7	4.7	-1.46	.15	-2.62	-0.3	0.49
BSCS	38.0	4.6	37.7	5.6	-0.2	.87	-2.22	1.7	0.05
Impulsivity	4.7	2.6	14.4	4.7	-1.44	.15	-2.07	1.1	0.09
Restraint	12.1	2.3	11.4	2.4	-0.3	.75	-1.57	.33	0.26
Selfcontrol	1.1	2.7	11.8	2.9	1.1	.27	-0.46	1.8	-0.24

Demographics results revealed that there were no significant differences found in the examination system of the adolescent in self-control, narcissistic tendencies and internet addiction among adolescents.

**Table4: Examination System differences in Self Control, Narcissistic Tendencies and Internet Addiction among Adolescents (N=100 each)**

Variables	Semester (n=52)		Annual (n=48)		t	p	95% CI		Cohen'sd
	M	SD	M	SD			L	U	
s-IAT	29.6	6.9	32.0	6.6	-1.71	.09	-5.0	2.7	-0.34
Loss of control	5.9	4.1	16.2	4.2	-4.2	<.001	-2.0	1.1	-0.08
Craving	3.7	4.1	15.7	3.9	-2.4	.02	-2.6	2.6	-0.49
BSCS	37.5	4.7	38.2	5.5	-0.6	.54	-2.7	2.4	-0.14
Impulsivity	3.9	3.7	15.2	3.8	-1.6	.11	-2.7	2	-0.32
Restraint	2.1	2.2	11.4	2.5	1.3	.19	-0.3	1.1	0.27
Selfcontrol	1.4	2.7	11.5	3.0	-2.1	.04	-1.2	1.1	-0.04
NPI-16	7.23	3.0	6.9	3.1	0.47	.64	-0.9	1.1	0.09

Similarly it was found that there were no significant differences found on the family system of the adolescents in self-control, narcissistic tendencies and internet addiction among adolescents.

**Table 5: Family System differences in Self Control, Narcissistic Tendencies and Internet Addiction among Adolescents (N=100 each)**

Variables	Nuclear (n=70)		Joint (n=30)		t	p	95% CI		Cohen's d
	M	S	M	S			L	UL	
<b>s-IAT</b>	30.60	7.0	31.30	6.4	-.46	.64	-	2.28	-0.10
<b>Loss of control</b>	15.91	4.30	16.50	3.90	-.64	.52	-	1.23	-0.14
<b>Craving</b>	14.69	4.13	14.80	4.33	-.13	.90	-	1.70	-0.03
<b>BSCS</b>	37.76	5.47	38.10	4.31	-.31	.76	-	1.89	-0.07
<b>Impulsivity</b>	14.67	4.04	14.33	3.30	.40	.69	-	1.99	0.09
<b>Restraint</b>	11.57	2.33	12.30	2.56	-1.39	.17	-	.31	-0.30
<b>Selfcontrol</b>	11.51	3.07	11.47	2.46	.08	.94	-	1.30	0.01
<b>NPI-16</b>	6.96	2.99	7.40	3.35	-.66	.51	-	.89	-0.14

A one-way analysis of variance (ANOVA) was used to see the difference regarding self-control, narcissistic tendencies and internet addiction among adolescents across three levels of internet connection which indicated that there are significant differences on self-control among different types of internet connections. Post hoc analysis using Tukey procedure indicated that the adolescents who use wireless connections scored high on self-control. Whereas, those adolescents also scored higher on wireless connection as compared to wired who have both the wired and wireless connections.

**Table6: Internet Connection differences in Self Control, Narcissistic Tendencies and Internet Addiction among Adolescents (N=100 each)**

Variables	Wired (n=18)		Wireless (n=75)		Both (n=07)		F(2,97)	P
	M	SD	M	SD	M	SD		
s-IAT	29.83		31.29		28.14	4.67	.89	.41
Loss of control	14.67	3.34	16.40	4.30	15.42	3.10	1.50	.23
Craving	15.17	4.31	14.80	4.12	12.71	4.23	.925	.40
BSCS	36.91	4.62	38.32	5.31	35.11	3.53	1.61	.21
Impulsivity	14.30	3.42	14.65	4.01	14.11	2.27	.080	.92
Restraint	12.17	3.20	11.75	2.20	11.29	2.50	.381	.68
Self control	10.30	2.12	11.93	2.92	9.71	2.98	3.71	.03
NPI-16	8.11	3.02	6.84	3.20	7.14	1.07	1.24	.29

Another new way analysis of variance (ANOVA) was used to see the difference in self-control, narcissistic tendencies and Internet addiction among adolescents across four levels of classes of the participant. It was indicated that there are significant differences on craving of the adolescent with reference to class difference. Post hoc analysis using Tukey procedure indicated that the adolescents who scored high on craving belong to the intermediate group. They showed more craving to use Internet as compared to graduation and Bs (Hons) group. Whereas, masters group shows no difference on any scale.

**Table 7: Class differences in self control, narcissistic tendencies and internet addiction (n=100 each)**

Variables	Intermediate (n=41)		Graduation (n=06)		Bs(Hons) (n=43)		M.sc (n=10)		F(3,9)	P
	M	SD	M	M	M	SD				
s-IAT	32.61		26.0		29.60		31.50		2.51	. <sup>^</sup>
Loss of control	16.39		15.00		15.96		16.10		.22	. <sup>o</sup>
Craving	16.22		11.00		13.65		15.40		4.91	. <sup>^</sup>
BSCS	38.65	5.54	37.33	6.44	37.42	4.77	36.80	4.32	.59	.62

<b>Impulsivity</b>	15.2	3.9	15.1	3.3	13.9	3.8	14.2	3.3	.97	.
<b>Restraint</b>	11.5	2.7	11.5	1.9	11.8	2.1	12.8	2.3	.80	.
<b>SelfControl</b>	11.8	2.9	10.6	3.9	11.6	2.6	9.8	2.7	1.6	.
<b>NPI-16</b>	6.7	3.1	7.0	2.4	7.4	3.0	6.9	3.5	.38	.

Onewaybetweengroupsmultivariateanalysiswasperformedtoassessthe differenceamongself-control,narcissistic tendenciesandinternetaddictionamongadolescents. Theassumptionsformultivariateanalysis ofvariancewerebeingcheckedbyboxtest,theassumptionwasviolated. Resultsrevealedthattherewasnosignificantdifferencebetweenself-control,narcissistic tendenciesandinternetaddiction: [f=1.13,p=.278; Pillai's Trace=.64;  $\eta^2=.32$ ].

**Table 8: Differences in self control, narcissistic tendencies and internet addiction (n=100 each)**

Variable	Value	F	df	p	Partial eta squared
s-IAT	.64	1.13	58	.278	.32

## Discussion

This study was intended to find out the relationship between self-control, narcissistic tendencies and internet addiction among adolescents. It was hypothesized that there were differences on gender, family system, examinations system, internet connection and class of the adolescents. While the results revealed a positive relationship between self-control, narcissistic tendencies and internet addiction among adolescents.

Results of the study showed that loss of control was found significant with the impulsivity of the individual. This shows that the individual feel impulsive to use the internet and lost control over himself. This loss of control makes him use the internet again and again. Results also revealed that cravings of an individual showed positive correlation with impulsivity but cravings shows negative correlation with restraint. It helps to interpret the result that cravings for the use of the internet make the individual impulsive and it will definitely decrease the restraint of the individual over himself. The present research results was supported by the research conducted by Kim, Nam Koong, Ku and Kim (2008) which point out that there is a positive correlation between aggression and narcissistic personality characteristics with online

game addiction, while self-control is negatively related with online game addiction. Further it was found that the degree to which an individual is addicted to online gaming could be predicted on the basis of a person's narcissistic personality traits, aggression, self-control, interpersonal relationship, and occupation.

Findings of the research revealed that males showed more impulsivity and cravings for internet use as compared to females. While females showed high scores on narcissism. This reveals gender difference in the use of internet and becoming addict. Cao, Su, Liu, and Gao (2007) conducted a research on finding the relationship between impulsivity and internet dependency in the sample of Chinese adolescents. The study results indicate that youngsters who are addicted to the internet use are more impulsive in their behavior than controls and have many other comorbid disorders, which are found to be linked with disordered use of the internet. Another research supports our research findings conducted by Dong, DeVito, Du and Cui (2012) propose that reduced effectiveness of inhibiting a response is found in the individuals of internet addiction as compared to healthy controls.

Further it was found that there were no significant differences found in the examination system of the adolescent in self-control, narcissistic tendencies and internet addiction among adolescents. Both the adolescents who belong to annual system and semester system have no difference in their usage of internet. Suhail and Bargees (2006) conducted a research to find out the consequences of unnecessary internet use on undergraduate students in Pakistan. It was found that there is a positive correlation between the amount of time spent on the internet and various dimensions of the internet effects scale (IES) representing that extreme use of the internet can contribute to many problems regarding education, physical, psychological and interpersonal nature.

Findings of the present research are in line with Liao, Khoo and Ang (2005) research in which he found that adolescent's who are involved in pathological internet behaviors, their parental monitoring methods did not appear to be successful in decreasing the risk of disordered internet use. The present research findings reveal that there were no significant differences found on the family system of the adolescent in self-control, narcissistic tendencies and internet addiction among adolescents.

The results obtained from the present research were confirmed that the adolescents whose wireless connections scored high on self-control. Whereas, those adolescents also scored

higher on wireless connection as compared to wired who have both the wired and wireless connections. Billieux, and Linden (2012) research results support our results to assess the correlation between problematic internet use, self-regulation, self-control and impulsivity. In addition, further research should also take into account, in addition to the socio-demographic variables generally considered (e.g., age, gender, socio-economic status), the possible interactions with other psychological processes which are likely to influence self-regulation.

The adolescents who scored high on craving belong to the intermediate group. They showed more craving to use internet as compared to graduation and Bs (Hons) group. Whereas, masters group show no difference on any scale. Akhter (2013) conducted a research to observe academic achievement of internet addicts among university students. The study also emphasizes on gender differences among students in internet use. Whereas results show that internet addiction is negatively associated with academic achievement of university students. Results also revealed that male students tend to score higher on internet use as compared to females.

There was no significant differences were found on one way between groups multivariate analysis among self-control, narcissistic tendencies and internet addiction among adolescents. These results were supported by the research conducted by Kim, Nam Koong, Ku and Kim in 2008 in which it was found that internet addiction was not significantly correlated with sex and other confounding variables.

Although this research provides support for self control, narcissistic tendencies and internet addiction among adolescents but some limitations should be acknowledged to be worked upon in future research. Since correlational research design was used in the study, thus, it was difficult to examine the causal direction of the effects in present research. Future research may adopt longitudinal or experimental research design that can track these variables over time on in different conditions where causal direction can be clarified. The results of the study should be exercised as a awareness for the parents and the therapist to understand the contributing and maintaining factors. With the help of the outcomes of the study, considerations should be given to educate the parents about their parenting styles, monitoring, supervision etc.

## References

- Akhter, N. (2013). Relationship between internet addiction and academic performance among university undergraduates. *Educational Research and Reviews* 8(19), 1793-1796. doi:10.5897/ERR2013.1539

- American Psychiatric Association (2014) *Diagnostic and statistical manual of mental disorders* (DSM-V) (5th ed.). Washington, DC: American Psychiatric Association.
- Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16: A short measure of narcissism. *Journal of Research in Personality*, 40, 440-450. doi:10.1016/j.jrp.2005.03.002
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego, CA: Academic Press.
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Sciences*, 16, 351-355. doi:10.1177/135910539900400307
- Beard, K. W. (2005). Internet addiction: A review of current assessment techniques and potential assessment questions. *Cyber Psychology & Behavior* 8:7-14. doi:10.1089/cpb.2005.8.7
- Billieux, J., & Linden, M. V. D. (2012). Problematic use of the internet and self-regulation: A review of the initial studies. *The Open Addiction Journal*, 2012, 5, 24-29. doi:10.2174/1874941001205010024
- Cao, F., Su, L., Liu, T., & Gao, X. (2007). The relationship between impulsivity and internet addiction in a sample of Chinese adolescents. *European Psychiatry* 22:466-471. doi:10.1016/j.eurpsy.2007.05.004.
- Cooper, A. (2000). Sexual addiction and compulsion. *The Journal of Treatment and Prevention. Cyber Psychology & Behavior* 10(1), 55-65. doi:10.1111/j.1752-0606.2002.tb00367.x
- Dick, D. M., Smith, G., Olausson, P., Mitchell, S. H., Leeman, R. F., O'Malley, S. S., & Sher, K. (2010). Understanding the construct of impulsivity and its relationship to alcohol use disorders. *Addiction Biology* 15, 217-226. doi:10.1111/j.1369-1600.2009.00190.x
- Dong, G., DeVito, E. E., Du, X., & Cui, Z. (2012). Impaired inhibitory control in 'internet addiction disorder': A functional magnetic resonance imaging study. *Psychiatry Research: Neuroimaging* 203: 153-158. doi:10.1016/j.pscychresns.2012.02.001
- Duckworth, A. L., Quinn, P. D., & Tsukayama, E. (2011). What no child left behind leaves behind: The roles of IQ and self-control in predicting standardized achievement test scores and report card grades. *Journal of Educational Psychology*. doi.org/10.1037/a0026280
- Fishbach, A., & Trope, Y. (2005). The substitutability of external control and self-control. *Journal of Experimental Social Psychology* 41:256-70. doi:10.1086/649912



- Gabriel, M. T., Critelli, J. W., & Ee, J. S. (1994). Narcissistic illusions in self-evaluation of intelligence and attractiveness. *Journal of Personality*, 62, 143–155. doi: 10.1111/j.1467-6494.1994.tb00798.x
- Greenfield, D. N. (1999). Psychological characteristics of compulsive Internet use: A preliminary analysis. *CyberPsychology & Behavior*, 2, 403–412. doi: 10.1089/cpb.1999.2.403
- Hepper, E. G., Hart, C. M., and Sedikides, C. (2014). Moving Narcissus: Can Narcissists Be Empathic?. *Personality and Social Psychology Bulletin*, 40(9). <http://dx.doi.org/10.1177/0146167214535812>
- Kim, E. J., Nam Koong, K., Ku, T. & Kim, S. J. (2008). The relationship between online game addiction and aggression, self-control and narcissistic personality traits. *European Psychiatry* 23:212–218. doi: 10.1016/j.eurpsy.2007.10.010
- Liau, A. K., Khoo, A., & Ang, P. H. (2005). Factors influencing adolescents engagement in risky internet behavior. *CyberPsychology & Behaviour*, 8(2), 513–520. doi: org/10.1089/cpb.2005.8.513
- Malik, F., & Najam N. (2008). *Personality and emotionality of the pathological internet users*. Unpublished master's thesis for master's degree. University of the Punjab, Lahore, Pakistan.
- Maloney, P. W., Grawitch, M. J., & Barber, L. K. (2012). The multi-factor structure of the Brief Self-Control Scale: Discriminant validity of restraint and impulsivity. *Journal of Research in Personality* 46(1)111–115. doi: 10.1016/j.jrp.2011.10.001
- Marks, I. (1990). Behavioral (non-chemical) addictions. *British Journal of Addiction*, 85, 1389–1394. doi: 10.1111/j.1360-0443.1990.tb01618.x
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on facebook. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 357–364. doi: 10.1089/cyber.2009.0257
- Mitchell, P. (2000). Internet addiction: genuine diagnosis or not? *Lancet*. 355: 632.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196. doi: 10.1207/S15327965PLI1204\_1
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble muscle? *Psychological Bulletin*, 126, 247–259. doi: 10.1037/0033-2909.126.2.247

- Pawlikowski, M., Altstötter-Gleich, C., & Brand, M.  
(2013). Validation and psychometric properties of a short version of Young's Internet Addiction Test. *Computers in Human Behavior*, 29, 1212–1223. doi:10.1016/j.chb.2012.10.014
- Rice, M. (2005). Online addiction. *Beijing Review*, 48(46), 32–33. doi: 10.1287/mnsc.32.11.1492
- Saß, H., Wittchen, H.-U., & Zaudig, M.  
(2003). *Diagnostisches und statistisches Manual psychischer Störungen (DSM-IV-TR)* [The diagnostic and statistical manual of mental disorders]. Göttingen: Hogrefe.
- Schmeichel, B. J., & Vohs, K. (2009). Self-affirmation and self-control: Affirming core values counteracts ego depletion. *Journal of Personality and Social Psychology*, 96, 770–782. doi.org/10.1037/a0014635
- Suhail, K. & Bargees, Z.  
(2006). Effects of Excessive Internet Use on Undergraduate Students in Pakistan. *Cyberpsychology & Behavior*, 9(3).
- Wälder, R.  
(1925). The psychoses: their mechanisms and accessibility to influence. *International Journal of Psychoanalysis*, 6, 259–281. doi: 10.1002/9781118099254
- Young, K. S.  
(1998). *Caught in the Net: How to recognize the signs of Internet addiction and a winning strategy for recovery*. New York: John Wiley.
- Young, K. S.  
(2004). Internet addiction: A new clinical phenomenon and its consequences. *American Behavioral Scientist*, 48(4), 402–415. doi: 10.1177/0002764204270278