

# Perceived stress and parental neglect as determinants of internet addiction among adolescents

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## ABSTRACT

The present study is carried out to identify significant determinants of internet addiction among adolescents. The objectives of the study are to assess perceived stress, parental neglect and internet addiction among adolescents, to study the relationship of perceived stress and parental neglect with internet addiction among adolescents, to study perceived stress and parental neglect as determinant of internet addiction among adolescents. Besides, this study is also aimed to compare adolescents in perceived stress, parental neglect and internet addiction with respect to domicile and parental employment status. The sample of the present study comprises of 100 adolescents. The tools used to collect data were Cohen's perceived stress scale, Straus, Kinard, and William's parental neglect scale and young's internet addiction scale. The collected data was analyzed by various statistical techniques like descriptive analysis, correlational analysis, regression analysis and comparative analysis. The result of correlational analysis revealed that both perceived stress and parental neglect has significant positive correlation with internet addiction. The result of regression analysis revealed that perceived stress and parental neglect are significant predictors of internet addiction. 39% of variance in internet addiction can be attributed to perceived stress and 18% of variance in internet addiction can be attributed to parental neglect. The result of comparative analysis revealed that urban adolescents have higher perceived stress than rural adolescents however no difference was found in terms of parental neglect and internet addiction between rural and urban adolescents. While comparing adolescents whose single parent is employed and whose both parents are employed it was found that adolescents whose both parents are employed have higher perceived stress, parental neglect and internet addiction as compared to adolescents whose single parent is employed.

**Key words:** *perceived stress, parental neglect, internet addiction, adolescents.*

## 1.INTRODUCTION

Internet addition also commonly referred to as compulsive internet use, problematic internet use or internet disorder. Originally debated as a "real thing," it was satirically theorized as a disorder in 1995 by Ivan Goldberg. Internet addiction can be defined as overuse of the internet leading to impairment of an individual's psychological state (both mental and emotional), as well as their scholastic, occupational, and social interactions, Beard & Wolf, [1]. Kimberly Young [2] a well know researcher in this field, describes internet

addiction as “*Internet addiction is defined as any online-related, compulsive behaviour which interferes with normal living and causes severe stress on family, friends, loved ones, and one's work environment. Internet addiction has been called Internet dependency and Internet compulsivity. By any name, it is a compulsive behaviour that completely dominates the addict's life.*” Internet addiction affects lives by causing certain neurological complications, psychological disturbances and social problems. Arthanari, Khaliq, Ansari and Faizi, [3] revealed that 35.6% of the adolescents have internet addiction and males were significantly more addicted to the internet than females. Gholamian, Shahnazi, and Hassanzadeh, [4] while studying the prevalence of internet addiction and its association with depression, anxiety, and stress revealed that 69.5% of the students were normal users, 27.6% had a mild addiction to the internet, and 2.9% were severely addicted to the Internet. The results further revealed that the mean score of anxiety, depression, and stress among the internet addiction was significantly higher than that among the normal internet users. Arisoy [5] revealed that children and young adults are most at risk for internet addiction. Cengizhan [6] stated that excessive use of the internet may negatively influence the individuals psychologically, physically and socially and this may in turn affect their academic success negatively. Hinic, Jovic, and Ignjatovic Ristic [7] portrayed that the individuals reported internet as a means of perceived stress reduction and spend considerably more time online. Seifi, Ayati and Fadaei, [8] highlighted that there is a positive and significant relationship between addiction to the internet and stress. Alavi, Merathi, Janatifard and Islami, [9] while examining the relationship between psychiatric symptoms of internet addiction found that there is a significant positive correlation between psychiatric disorders such as depression, anxiety, stress, hypochondriasis, compulsion, interpersonal sensitivity, aggression, paranoia, phobias, psychosis and internet addiction. Akin and Iskender, [10] while exploring internet addiction, depression, anxiety and stress found that internet addiction was found positively related to depression, anxiety, and stress the result of path analysis results further revealed that depression, anxiety, and stress were also predicted positively by internet addiction. Hsieh, et al [11] revealed that psychological neglect and physical neglect were associated with increased risk among children of developing internet addiction. Soh, Charlton, and Chew [12] while exploring the influence of parental and peer attachment on internet usage motives and addiction revealed that dysfunctional parental attachment has a greater influence than peer attachment upon the likelihood of adolescents becoming addicted to internet-related activities. Park, Kim, and Cho, [13] highlighted that, parenting attitudes; family communication, family cohesion and family violence exposure were associated with high risk for internet addiction. Wu et.al [14] while studying parenting approaches, family functionality, and internet addiction found that adolescents who have negative feelings towards their parents were found to be almost three times more likely to have internet addiction. The study further revealed that adolescents from dysfunctional family were predisposed to internet addiction than adolescents of highly functional families. Fard, Mousavi and Pooravari, [15] while exploring the predictive role of parental acceptance, rejection and control in the internet addiction revealed that parenting style and parent-child interaction plays an important role in addictive tendencies to the internet. Yao, He, Ko and Pang, [16] found that parental rejection and overprotection increases the risk for internet addiction. Xiuqin, Huimin, Mengchen, Jinan, Ying, and Ran, [17], revealed that children whose parents are over involved, rejecting and display insufficient emotional warmth are more likely to develop internet addiction disorder.

## II.OBJECTIVES

- To assess perceived stress, parental neglect and internet addiction among adolescents.
- To study the relationship of perceived stress and parental neglect with internet addiction among adolescents.
- To study perceived stress and parental neglect as determinant of internet addiction among adolescents.
- To study perceived stress, parental neglect and internet addiction with respect to domicile and parental employment status.

## III.METHODOLOGY

### Research Instruments:

Following research instruments were used for the data collection.

- **Young's Internet Addiction Test [18]**. This scale evaluates respondent's level of internet addiction. It consists of 20 questions wherein each item is scored using a five point Likert scale. It covers the degree to which internet use affect daily routine, social life, productivity, sleeping pattern, and feeling.
- **Perceived Stress Scale (PSS) (cohen [19])**. This scale was developed by Sheldon Cohen, it consisted of 10 questions wherein each item is scored using a five point Likert scale. Items number 4, 5, 7, and 8 require reverse coding, which is reflected in their corresponding brackets.
- **Parental neglect scale (Straus, Kinard, and William [20])**. The Multidimensional Neglectful behavior Scale (MNBS) is intended to measure neglect of four basic developmental needs: (1) neglect of physical needs (2) emotional needs (3) supervisory needs (4) cognitive needs.

**Sample:** The sample for the study was 100 adolescents. Out of the total sample 50 (50%) were rural adolescents and 50 (50%) were urban adolescents. Majority of the participants i.e., 64 (64 %) were adolescents whose single parent was employed and 36 (36%) were whose both parents were employed.. The age of the sample ranged from 15-23 years.

## IV.DATA ANALYSIS

The data collected was analysed using descriptive and inferential statistics like frequencies, percentages, mean, standard deviation, correlational analysis, regression analysis and comparative analysis to meet the objective of the study. First descriptive statistics like means, standard deviations, frequencies, range and percentage were calculated for variables of the study. Pearson's coefficient of correlation was calculated to examine the nature of relationship between variables. Then regression analysis was applied to identify the significant predictors. Finally comparative analysis was done to examine the mean difference between groups understudy.

#### 4. Results and Interpretation:

**Table-1: Scale characteristics and reliability analysis of perceived stress, parental neglect and internet addiction**

Variables	Items	Response range	N	Mean	SD	Cronbach's alpha ( $\alpha$ )
Perceived stress	10	1-5	100	2.37	.62	.76
Parental neglect	8	1-8	100	2.91	1.09	.75
Internet addiction	20	1-6	100	2.02	.91	.92

**Table-2: Descriptive Statistics of perceived stress, parental neglect and internet addiction among adolescents (N=100).**

Constructs	Mean	5% TM	$\Delta$ Mean	SD	SE	Skewness	Kurtosis
Perceived stress	2.37	2.35	0.02	.62	.06	.55	.06
Parental neglect	2.91	2.92	-0.01	1.09	.10	-.012	-.756
Internet addiction	2.02	2.00	0.02	.91	.09	.59	-.56

*SD (Standard deviation); SE (Standard error); TM (Trimmed Mean)*

Based on the criteria of Garson [21] the sample distribution of the present study is normal as no skewness and kurtosis value falls beyond the Garson's range of -2.00 to +2.00. Besides, the  $\Delta$ Mean (difference between mean and 5% trimmed mean) is not beyond the criteria of >0.20 suggested by Pallant [22]. The values of standard deviation and standard error are also very small as compared to mean, thereby further improving the scope of data for subsequent analysis.

**Table-3: Range of scores within different levels of perceived stress, parental neglect and internet addiction**

Constructs	Mean	SD	LL-UL	Low	Average	High
perceived stress	2.37	.62	1.75-2.99	$\leq 1.75$	1.75-2.99	>2.99
parental neglect	2.91	1.09	1.82-4.00	$\leq 1.82$	1.82-4.00	>4.00
internet addiction	2.02	.91	1.11-2.93	$\leq 1.11$	1.11-2.93	>2.93

*LL= lower limit; UL= upper limit; SD= standard deviation*

**Table-4: Frequency distribution of perceived stress, parental neglect and internet addiction**

Variables	Levels					
	Low		Average		High	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
perceived stress	15	15	65	65	20	20
Parental neglect	16	16	57	57	27	27
Internet addiction	14	14	64	64	22	22

The above table indicates that 15% adolescents were found to have low level of perceived stress, 65% to have average level and 20% adolescents to have high level of perceived stress.

The above table indicates that 16% adolescents were found to have low level of parental neglect, 57% to have average level and 27% adolescents to have high level of parental neglect.

The above table indicates that 14% adolescents were found to have low level of internet addiction, 64% to have average level and 22% adolescents to have high level of internet addiction.

**Table-5: Summary of Pearson Correlations of perceived stress and parental neglect with internet addiction among adolescents**

Variables	internet addiction	sig
Perceived stress	.631**	.001
Parental neglect	.434**	.001

\*\* $p \leq 0.01$  level

The result of above revealed that both perceived stress (.632\*\*) and parental neglect (.440\*\*) has significant positive correlation with internet addiction among adolescent which indicates that increase in perceived stress and parental neglect will lead to increase in internet addiction.

**Table-6: Regression analysis of Perceived stress with internet addiction among adolescents**

**Multiple regression analysis (ANOVA summary)**

	Sum of Squares	df	Mean square	F	sig
Regression	32.677	1	32.677	64.828	.001
Residual	49.397	98	.504		
Total	82.07	99			

**Table-6a: Multiple regression analysis (summary of predictor variables)**

Outcome	predictor	B	SE B	Beta	t	sig
Internet addiction	Constant	-.149	.279		-.535	.594
	Perceived stress	.916	.114	.631	8.052	.001

**R<sup>2</sup>=.39**

Table 6 and 6a presents the regression analysis of perceived stress and internet addiction. The ANOVA table shows F-value (64.82\*\*) which is significant. This indicates that the perceived stress significantly predict internet addiction. The Model Summary table shows that ( $R^2 = .39$ ), which indicates that 39% of the variance in internet addiction can be predicted from perceived stress. Further analysis (Table 6-a) shows the significance of predictor of internet addiction. As is evident from the table that the t-values of perceived stress ( $t= 8.05^{**}$ ) is significant which means that perceived stress has emerged as the significant predictor of internet addiction.

**Table-7: Regression analysis of Parental neglect with internet addiction among adolescents***Multiple regression analysis (ANOVA summary)*

	Sum of squares	df	Mean square	F	sig.
Regression	15.483	1	15.48	22.786	.001
Residual	66.591	98	.679		
Total	82.074	99			

**Table 7a: Multiple regression analysis (summary of predictor variables)**

Outcome	predictor	B	SE B	Beta	t	sig
Internet addiction	Constant	.971	.235		4.126	.001
	Neglect	.361	.076	.434	4.773	.001

**R<sup>2</sup>=.18**

Table 7 and 7a presents the regression analysis of parental neglect and internet addiction. The ANOVA table shows F-value (22.78\*\*) which is significant. This indicates that the parental neglect significantly predict internet addiction. The Model Summary table shows that ( $R^2 = .18$ ), which indicates that 18% of the variance in internet addiction can be predicted from parental neglect. Further analysis (Table 7-a) shows the significance of predictor of internet addiction. As is evident from the table that the t-values of parental neglect ( $t= 4.77^{**}$ ) is significant which means that parental neglect has emerged as the significant predictor of internet addiction.

**Table-8: Mean difference in perceived stress, parental neglect and internet addiction in adolescents with respect to their domicile**

Variable	Domicile	N	M	SD	df	t-value
Perceived stress	Rural	50	2.17	.498	98	3.23**
	Urban	50	2.56	.685		
Parental neglect	Rural	50	2.79	1.02	98	1.09 <sup>NS</sup>
	Urban	50	3.03	1.15		
Internet addiction	Rural	50	1.96	.770	98	.64 <sup>NS</sup>
	Urban	50	2.08	1.03		

\*\* $p \leq 0.01$  level; NS= Not Significant

The results of the analyses as presented in Table 7 indicate that there is significant mean difference between rural and urban adolescents in perceived stress ( $t=3.23$ ,  $p=.002$ ) However no significant difference was found in parental neglect and internet addiction.

Perceived stress was found significantly higher in urban adolescents ( $M=2.56$ ;  $SD=.68$ ) than rural orphans ( $M=2.17$ ,  $SD=.49$ ).

**Table-9: Mean difference in perceived stress, parental neglect and internet addiction in adolescents with respect to their parental employment status.**

Variable	Parental employment status	N	M	SD	df	t-value
Perceived stress	Single parent employed	64	2.21	.52	98	3.49**
	Both parents employed	36	2.64	.69		
Parental neglect	Single parent employed	64	2.68	1.09	98	2.80**
	Both parents employed	36	3.30	.99		
Internet addiction	Single parent employed	64	1.75	.76	98	4.16**
	Both parents employed	36	2.49	.97		

\*\* $p \leq 0.01$  level;

The result revealed that there is significant mean difference between adolescents whose single parent is employed and adolescents whose both parents are employed in perceived stress ( $t= 3.49, p=.001$ ), parental neglect ( $t=2.80, p=.006$ ) and internet addiction ( $t=4.16, p=.001$ ).

Perceived stress, parental neglect and internet addiction was significantly higher in adolescents whose both parents are employed ( $M= 2.64, SD= .69$ ), ( $M= 3.30, SD=.99$ ), ( $M= 2.49, SD= .97$ ) than adolescents whose only single parent is employed ( $M=2.21, SD= .52$ ), ( $M= 2.68, SD= 1.09$ ), ( $M= 1.75, SD= .76$ ).

## V.DISCUSSION

The present study is carried out to identify significant determinants of internet addiction among adolescents. From the overarching results of the study, it can be said that there is a well-knit relationship between perceived stress, parental neglect and internet addiction.

- The result revealed that both perceived stress and parental neglect has significant positive correlation with internet addiction among adolescents. The results are in line with Krishna, Swathi, and Ram[23]; Seifi, Ayati, and Fadaei[8]; Fard, Mousavi, and Pooravari,[15]; Wu, Wong, Yu, Fok, Yeung, Lam, and Liu,[14] Jafari and Fatehizadeh [24].
- The result of regression analysis revealed that perceived stress and parental neglect are significant predictors of internet addiction. 39% of variance in internet addiction can be attributed to perceived stress and 18% of variance in internet addiction can be attributed to parental neglect. The result is in line with Seifi, Ayati, and Fadaei [8]; Hsieh et.al [11]; Jamwal, Shekhar, and Choudhary,[25]; Akin and Iskender, [10].
- The result of comparative analysis revealed no difference in terms parental neglect and internet addiction between rural and urban adolescents, however urban adolescents have higher perceived stress than rural adolescents. While comparing adolescents whose single parent is employed and whose both parents are employed, it was found that adolescents whose both parents are employed have higher perceived stress, parental neglect and internet addiction as compared to adolescents whose single parent is employed. The result is in line with Dey, Rahman, Bairagi[26]; Rehman, shafi and Rizvi:[27]; liu, Munakata, and Onuoha, [28].

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