

Effect of Internet Addiction on Depression and Self-Efficacy

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ABSTRACT

Introduction: The contemporary era is digital era, which not only had influenced the way of people interaction but also the way of perceiving others and own selves with in a societal framework. The increase in digital devices and online platforms increased the opportunities with provision of stage to people to manifest their skills, talents and to reduce their boredom as well (Özer, 2013). These online platforms indeed provided people with ease to share their experience at the same time social media and internet use have some effects on their psychological wellbeing. These effects might sooth psychological wellbeing or may be averse to it.

Objectives: To explore the relationship between social media use and mental health conditions such as Depression and Self-Efficacy to investigate the effect of Internet Addiction on Depression and Self-Efficacy in males and females.

Method: This section comprises of measures taken to complete the research including study design, information of targeted population, sampling strategy used,

inclusion and exclusion criteria, sample, study setting, measures/scales used to generate quantitative data from generated sample, and ethical considerations followed during the course of research.

Results: Interestingly, there was a significant difference in Internet Addiction in males and females with a higher level of Internet Addiction in males and slightly higher levels of self-efficacy, in females were found. Other than that, no significant difference in the effect of Internet Addiction on Depression and Self-Efficacy in both genders, in other words, Hypotheses 2 i.e., There is a difference in rate of Internet Addiction for males and females and effect of it on Depression and Self-Efficacy. These results hold critical implications for mental health interventions in order to design and promote the decisions or policies to make students of colleges and universities to limit their higher internet use as well as to promote healthy internet use than problematic one.

Discussion: This research investigated that whether or not someone have Internet Addiction and Depression along with varying Self-Efficacy levels. Therefore, Study was conducted to investigate relationship between Internet Addiction, Depression and Self-Efficacy by collecting data using systematic quantitative self-administered questionnaires for recruited sample of students. After that data was analyzed using Pearson correlation and independent sample t-test between genders uncovered the following concepts.

Key Words: Depression, Self-Efficacy, psychological wellbeing, contemporary Internet Addiction

Introduction

The contemporary era is digital era, which not only had influenced the way of people interaction but also the way of perceiving others and own selves with in a societal framework. The increase in digital devices and online platforms increased the opportunities with provision of stage to people to manifest their skills, talents and to reduce their boredom as well (Özer, 2013). These online platforms indeed provided people with ease to share their experience at the same time social media and internet use have some effects on their psychological wellbeing. These effects might sooth psychological wellbeing or may be averse to it. As online platforms are increasing, the number of users as well. According to Kepios analysis, in

Pakistan 4.4 million internet users has been increased from 2022 to 2023 out of which 28.0 percent of Pakistan's social media users were females, while 72.0 percent were males. Statistics reveal the use of at least one social media platform in 70.71 million social media users regardless of their age. The population on each social media platform is varied including, on Facebook the population is 37.30 million, on YouTube it is 71.70 million, on Instagram it is 12.95 million, on LinkedIn it is 1.8 million, on TikTok it is 16.51 million, on Snapchat it is 25.70 million and on Twitter it is 4.65 million (Data Reportal Pakistan, 2023). With the increase in Internet users from past few years there is also an increase in mental health issues as reported in Karachi and Lahore such as Depression 34%-39% from 2017 (Ali, S., Aseem, Rafique, & R., 2017) to 2019 (Muhammad, et al., 2019) Not only in Pakistan but globally, there has been a notable rise in both the prevalence of social media usage and incident of mental health issues. Worldwide statistic reveals that 10-20% adolescents had suffered with various mental health issues (World Health Organization, 2017) among those disorders the most pervasive to be noted were Depression and Generalized Anxiety Disorder (Mental Health Foundation, 2018). These conditions when present in children and adolescents, mostly in students adversely affect their interpersonal relationships, lower grades, increase self-harm problems in academic performance, and eventually increase the number of dropouts from schools (Copeland, W. E., Angold, & Shanahan, 2014). In the past 25 years mental health issues particularly anxiety and Depression have increased 70% in young people globally (Royal Society for Public Health, & Young Health Movement., 2017) concerning the past decade 75% surge in mental health problems in adolescents (Betul Keles, 2019). Along with Anxiety and Depression, there was an increase in the inferiority complex leads to perceived weakness and helplessness (Han, 2006; Ergun-Basak, 2019). Those suffering from an inferiority complex often have lower self-esteem, Self-Efficacy, and increased Depression. (Xiong, 2019; Zhang, 2020) In recent years, social media has also developed very much providing facilities for people to open up their physical and mental problems and share feelings on the internet with anonymity (Tian, 2016; Hu, 2018). On the other hand, people who overuse social media problematically, or do social comparisons are often affected by anxiety, inferiority complex (Sana Attah, 2022), and Depression (Liebert, 2014). These trends underscore the immediate need for comprehensive understanding of the factors contributing to

mental health challenges in youth such as with a particular focus on digital connectivity and social media engagement.

Social Media Use

Social media is an integration of diverse technological platforms that allow individuals to connect and interact verbally and visually (Carr, 2015). Through social media platforms mass-generated content can be shared. Social media platforms include virtual social and game worlds, collaborative blogs and content, and social networking sites (Andreas Kaplan, 2018). Social media platforms not only allow the individuals to socialize but also empowers them (Magro, 2012). Social media platforms not only facilitate instant communication between youth but also the sharing of content such as photos posted on walls. These allow friends to compare their own content with others as well as receive feedback from others (Boyd, 2008). These status updates about parties, holidays and activities increase social comparisons, the more time spent on social media platforms such as Facebook is positively correlated with the perception that others have more happier lives (Chou, 2012). So, the current study is focusing on time spent on social media including Facebook, YouTube, Twitter, Instagram, and Snapchat. Internet Addiction Test (IAT) a quantitative measure will be employed to the sample to assess the time spent on these or other social media platforms to measure its relation with targeted mental health issues.

Internet Addiction

As we are going to measure Internet Addiction and this variable holds the place of independent variable it is important to understand about it. Internet usage and Internet Addiction are side by side concepts. The excessive use of internet has been increased from past years rapidly which is seen in college and university students. Spending a huge portion of time on using internet and gaining pleasure from it, or giving internet surfing more priority than actual life activities and interpersonal relationships such as talking to online friends more than actual life friends and cutting off of morning classes due to late night internet use is called Internet Addiction (Chou, Chou, & Tyan, 1999) .

Depression

Depression is a prevalent mental disorder characterized by episodes of mood deviation from normal emotional baseline. Symptom of Depression manifested commonly are diminished sense of self-worth, a waning interest in life activities alterations in sleep patterns, fluctuations in weight and appetite, among others (Organization, 2023). Depression is caused by several factors including severe life stressors, prolonged work stress, self-criticism and negativity, striving to perfectionistic tendencies, low self-esteem, and presence of addictive behaviors among others (Barber, 2014).

Depression is linked to impairment in cognitive abilities and higher the Depression, higher the impairment in cognitive abilities as well (Austin, et al., 1992). Depression is not only linked to cognitive impairment but also with other psychological factors such as high distress in minorities due to chronic stress (Escalante, Rincón, Cynthia , & Cynthia , 2021).

General Sense of Self- Efficacy

Self-Efficacy is the sense of person's own belief in her or his capability to carry out a particular task. Self-Efficacy is important construct for motivation with effects of it on behaviors (Bandura, 1977). Development of Self-Efficacy is emerged from individuals' own past experiences, psychological and emotional indexes (Schunk, 2012).

There has been a vast investigation with regards to the construct of Self-Efficacy suggesting that Self-Efficacy is highly affected and influenced by the contextual factors. Self-Efficacy can be increased or decreased by the individuals' perceptions and labeling those in light of any words said by teacher, any achievement and even the psychological or physiological sense of emotions (Usher & Pajares, 2008). So, in the current study Self-Efficacy is studied in relation to Internet Addiction and is measured using General Self Efficacy Scale (GSES) English version.

Aim of The Present Research

The current study aims to systematically investigate the relationship between Excessive Social Media Use or in other words Internet Addiction with mental health outcome of Depression and effects on Self-Efficacy among adolescents and young adults with using standardized measures and quantitative assessment tools in targeting the population areas, of Quetta, Pakistan. The research seeks to

contribute to enhance the pre-existing body of the knowledge regarding these factors and aims to uncover the relationship of Internet Addiction with Depression and Self-Efficacy, this topic is considered because of the importance of both variables, the Internet Usage and Mental health.

Objectives

To explore the relationship between social media use and mental health conditions such as Depression and Self-Efficacy. To investigate the effect of Internet Addiction on Depression and Self-Efficacy in males and females.

Significance of the Study

The current study in the context of Pakistan is crucial as it is addressing a gap found by intricate systematic literature review, and will contribute to prior body of knowledge. It delves in to the understanding of how time spent on social media platforms can affect individuals' emotions and mental well-being.

Method

This section comprises of measures taken to complete the research including study design, information of targeted population, sampling strategy used, inclusion and exclusion criteria, sample, study setting, measures/scales used to generate quantitative data from generated sample, and ethical considerations followed during the course of research:

Study Design

This cross-sectional research approach employed a quantitative study design to investigate the relationship between Internet Addiction, Depression and Self-Efficacy along with exploring the rates and effects of Internet Addiction on males and females students. This method was chosen to get the vivid picture of current characteristics of the selected variables and to generate the empirical and systematic data for further analysis.

Population

The targeted population was individuals who use internet/social media on daily basis for varying purposes. In Quetta city of Pakistan mostly every student of

college and universities has their own mobile phones so in the current study those enrolled students were aimed to be recruited with in the study's sample who meet the defined inclusion criteria.

Sampling Strategy

The sampling strategy employed to collect sample was multi-level sampling, to ensure comprehensive representation of targeted population. Distinctive levels were specified for the inclusion of participants in to the sample.

Initial phase of sampling was to shortlist the relevant and diverse universities. Subsequently, eligible participants were included in the sample based on defined inclusion criteria. With in the selected samples the participants were further stratified on the basis of gender (males/females) for potential gender-based variations in the sample for comparative analysis. Finally, participants were selected with daily internet/social media use.

Inclusion Criteria

Participants must be currently enrolled as students in University/College. The study focused on both males and females participants equally along with that, participants should fall in the age range of 17-29 years. Selected participants must be the daily internet user.

Exclusion Criteria

Those who did not fall under the inclusion criteria of enrolled as university/college student, was below the age of 17 or above the age of 29, and was not the internet user was excluded from the sample.

Sample

The sample was generated from six universities and colleges of Quetta combinedly, including Sardar Bahadur Khan University (SBK), University of Baluchistan (UOB), Bolan University of Medical and health Sciences (BUHMS), Baluchistan university of Information Technology Engineering and Management Sciences (BUIITEMS), Government Post Graduate Science college, Islamia Girls College.

Study Setting

The study was conducted in multiple academic atmospheres including Sardar Bahadur Khan University (SBK), University of Baluchistan (UOB), Bolan University of Medical and health Sciences (BUHMS), Baluchistan university of Information Technology Engineering and Management Sciences (BUIITEMS), Government Post Graduate Science college, Islamia Girls College, considering diverse educational levels ranging from undergraduate (FSC, BS, BA) to post graduate programs (MS, MA).

Physical Setting

The research was carried out in the classrooms, playgrounds, libraries, and other spaces of the academic institutions to consider the representativeness of the selected samples of students.

Measures

Following measures were administered to generate basic sociodemographic information of participants and data relevant to analysis:

Procedure

In the current study quantitative research method was used to obtain the targeted objectives. A sample of N=300 students between the age of 17-29 years were selected while considering inclusion criteria. The sample was selected from Quetta's Universities and colleges. This was done to analyze the correlation between internet use/Internet Addiction, Depression and the levels of Self-Efficacy. Sample was specified using multi-level sampling. The sample was provided with self-administered questionnaires based on 4 and 5 points Likert scales including IAT, DASS, GSES. Pearson correlation was investigated between the targeted combination of variables. Quantitative analysis was applied including T-test to compare the means and standard deviation between males and females. To get the deeper insights into the predictive variable i.e., Internet Addiction and change in corresponding variables i.e., Depression and Self-Efficacy regression analysis was applied.

Ethical Considerations

Prior to the study, permissions were requested via E-mails from the owners of self-report measures including Lovibond and Lovibond for DASS, Matthias Jerusalem and Ralf Schwarzer for GSES, Dr. Kimberly S. Youngs' website for IAT.

After getting permission to use self-report measures, I applied for institutional research letter to my own institute for research purpose, after getting that letter I concerned with the selected six institutes to grant their permission for sample and data collection from their academic institutes. During the study, while collecting the data from selected sample, before administering the actual questionnaire the participants were asked their consent on a consent form while making them clear about their rights in research, purpose of research, potential benefits and risks of the research. After the study, it was ensured that the confidentiality of the participants would not breach. Any identity revealing information was kept anonymous during the analysis and reporting stages.

Results

Descriptive of Demographic information

Table 1

Descriptive of Demographic information about the sample including age, Income and siblings

Participants' Characteristics		<i>N=300</i>		
	Minimum	Maximum	Mean	Std. Deviation
Age	17	29	20.55	2.332
Siblings	0	20	5.29	2.916
Family Income	5000	850000	90623.33	109720.265

As shown in Table 1, Study included N=300 with 50% males and 50% females with the minimum age of 17 and maximum age of 29. Mean age of participants was 20.55 with SD of 2.332. participants' numbers of siblings range from 0 to 20.

Table 2

Frequency and percentage for participants' demographic information

Participants' Characteristics		<i>F</i>	<i>%</i>
Gender	Males	150	50.0
	Females	150	50.0
Marital Status	Unmarried	289	96.3
	Married	8	2.7
	Engaged	3	1.0
Relationship with Mother	Unsatisfactory	2	.7
	Somewhat Unsatisfactory	5	1.7
	Neutral	40	13.3
	Somewhat unsatisfactory	13	4.3
	Satisfactory	240	80.0
Relationship with Father	Unsatisfactory	7	2.3
	Somewhat Unsatisfactory	8	2.7
	Neutral	61	20.3
	Somewhat	21	7.0

	unsatisfactory		
	Satisfactory	203	67.7
Education	Undergraduate/BS	243	81.0
	FSC	55	18.3
	MA/MS/MS	1	.3
Family System	Nuclear Family	162	54.0
	Joint Family	138	46.0
Total		300	100.0

As given in Table 2, from N=300, 96.3 percent were unmarried, 2.7 percent were married, while 1.0 percent were engaged. Along with it, 80 percent of them reported a satisfied relationship with their mother and .7 percent reported unsatisfied. From them 67.7 percent stated satisfied relationship with their father and 2.3 percent indicated unsatisfaction. Along with that, participants were living in nuclear family were 54.0 percent and joint family 46.0 percent.

Pearson Correlation

Hypothesis. It is hypothesized that there would be positive relation among Internet Addiction, Depression and Self-Efficacy

Table 3

Correlations of Internet Addiction, Depression (factors; Stress and Anxiety), and Self-Efficacy

Correlations						
	Internet Addiction	Depression Stress Anxiety	Stress (factor)	Depression (factor)	Anxiety (factor)	Self- Efficacy
Internet	1	.502**	.466**	.454**	.401**	.136*

Addiction						
Depression						
Stress		1	.882**	.869**	.879**	.108
Anxiety						
Stress	---	---	1	.655**	.668**	.109
Depression	---	---	---	1	.636**	.081
Anxiety	---	---	---	---	1	.094
Self-Efficacy	---	---	---	---	---	1

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

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

The correlation coefficient (r) value between Internet Addiction and DASS (Depression Anxiety Stress Scale) is 0.502** which shows a significant moderate positive correlation between these two variables. The p-value which is <.001 indicating statistical significance to the relationship. While the correlation coefficient (r) value between Internet Addiction and factors of DASS i.e., Stress is 0.466**, with Depression is 0.454**, and Anxiety is 0.401** which shows a moderate positive correlation between these overall factors of DASS. The p-value which is <.001 indicating statistical significance to the relationship. The correlation coefficient (r) value between Internet Addiction and General Self-Efficacy is 0.136* which shows a weak positive linear relationship between these two variables. The p-value is 0.018 indicating a less significance.

Interpretation for Correlation: Internet Addiction found to be significantly moderate positively correlated with Depression and weak positively correlated with Self-Efficacy.

Independent Sample T-Test: Hypothesis. It is hypothesized that there is difference between the relationships of Internet Addiction, Depression and Self-Efficacy between males and females.

Table 4

T-test for comparison between genders in Internet Addiction rate, Depression and Self-Efficacy

Variables	Gender	Mean	SD	T	P<	95%		Cohen's d
						LL	UL	
Internet Addiction	Males	45.82	16.07	3.129	.002	2.27836	10.00164	.361
	Females	39.68	17.86					
Depression Stress Anxiety	Males	25.39	11.06	.300	.765	-2.22775	3.02775	.035
	Females	24.99	12.03					
Stress	Males	8.40	4.01	-.291	.771	-1.13799	.84466	-.034
	Females	8.55	4.68					
Depression	Males	8.57	4.34	1.474	.141	-.24564	1.71231	.170
	Females	7.84	4.27					
Anxiety	Males	8.41	4.19	-.359	.720	-1.21025	.83692	-.041
	Females	8.60	4.79					
General Self- Efficacy	Males	26.20	6.57	-.941	.347	-2.12236	.74902	-.109
	Females	26.8867	6.05					

For Internet Addiction; comparison of mean score for males (45.82) is higher than for females (39.68), The larger mean of males than females indicate higher Internet Addiction in males than females while the SD for males (16.07) which is lower than females (17.86) indicating less variability in Internet Addiction scores among males. t value of 3.129 with p value of 0.002 which is less than typical significance

level (0.05) indicating a significant difference in Internet Addiction between both genders. The 95% confidence interval (2.27836 to 10.00164) for mean difference between genders do not include zero and Cohens' d of 0.361 suggest a small to moderate effect size indicating practical significance. For Depression Anxiety and Stress combinedly; the mean scores for males (25.39) and females (24.99) are very close and lack the support of substantial difference while the SD for males (11.06) which is lower than females (12.03) indicating less variability in Depression, Stress and Anxiety scores among males. t value of 0.300 and p value of 0.765 suggest no statistically significant difference between mean scores for males and females for Depression Anxiety and Stress combinedly. The confidence interval ranges -2.22 to 3.02 includes zero which means the difference between means is not statistically difference. A Cohens' d of 0.035 suggest a very small effect size, while this indicates some difference but not statistically significant.

T-test for Self-Efficacy comparison between males and females; the mean scores for males (26.20) and females (26.88) with SD for males is 6.57 and SD for females is 6.05 are very close and lack the support of substantial difference. t value of -0.941 and p value of 0.347 suggest males score slightly lower than females. However, the p -value exceeds the typical significance level indicating that this difference is not statistically significant, the confidence interval ranges -2.12236 to 0.74902 includes zero which means the difference between means is not statistically difference. A Cohens' d of -0.109 suggesting a minimal practical significance in the difference between the groups.

Interpretation for T-test: Males were more addict to internet than females, and females were found to be with slightest higher Self-Efficacy than males but there was no any significant difference found between the relationships of Internet Addiction, Depression and Self-Efficacy for both groups.

Regression analysis for Internet addiction and Depression

Hypothesis. It is hypothesized that Internet Addiction would be the predictor of Depression in college and university students.

Table 5

Model Summary of regression Analysis of Internet Addiction and Depression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 ^a	.252	.249	10.00395

a. Predictors: (Constant), Internet Addiction

As indicated in table 5, we can see that R-Square value is .252 which means that our independent variable i.e., Internet Addiction has 25.2% change associated with in the dependent variable i.e., Depression.

Table 6

Regression Analysis' ANOVA Table for Independent variable "Internet Addiction" and Dependent variable "Depression"

ANOVA^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	10037.257	1	10037.257	100.293	<.001 ^b
1	Residual	29823.530	298	100.079		
	Total	39860.787	299			

a. Dependent Variable: Depression

b. Predictors: (Constant), Internet Addiction

The table 6 shows that the p-value is <.001 which is less than .05 hence we say that there is a significant relationship between independent variable i.e., Internet Addiction and dependent variable i.e., Depression.

Table 7

Regression Analysis's Coefficients table for Internet Addiction and Depression

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	10.825	1.547		6.999	<.001
1	Internet Addiction	.336	.034	.502	10.015	<.001

a. Dependent Variable: Depression

Table 7, shows the coefficient results. As indicated that the Beta value is .502 which means that the estimated change in dependent variable i.e., Depression, for one unit increase in Internet Addiction, holding other variables constant. Here p-value is <.001 indicating significance of this relationship.

Regression Analysis for Internet Addiction and Self-Efficacy

Hypothesis. It is hypothesized that Internet Addiction would be the predictor of in Self-Efficacy in college and university students.

Table 8

Model Summary of regression Analysis of Internet Addiction and Self-Efficacy

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.136 ^a	.018	.015	6.26854

a. Predictors: (Constant), Internet Addiction

In the table 8, value of R-Square is .018 indicating only approximately 1.8% of the variability in the dependent variable i.e., Self-Efficacy is explained by the independent variable i.e., Internet Addiction.

Table 9

Regression Analysis' ANOVA Table for Independent variable "Internet Addiction" and Dependent variable "Self-Efficacy".

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	220.656	1	220.656	5.615	.018 ^b
1	Residual	11709.781	298	39.295		
	Total	11930.437	299			

a. Dependent Variable: Self-Efficacy

b. Predictors: (Constant), Internet Addiction

Here in table 9, the p-value is .018 indicating a weak significance correlation between Internet Addiction iv, and Self-Efficacy dv.

Table 10

Regression Analysis's Coefficients table for Internet Addiction and Self-Efficacy

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	24.413	.969		25.191	.000
1	Internet Addiction	.050	.021	.136	2.370	.018

a. Dependent Variable: Self-Efficacy

The coefficient table 10, indicates the beta value of .136 for Internet Addiction with p-value of .018 suggesting a significant relation of Iv i.e., Internet Addiction and dv i.e., Self-Efficacy and that, the relationship is not due to any random chance.

Summary of Result

This study investigated the relationship between Internet Addiction, Depression, and Self-Efficacy among college and University Students considering gender specific dynamics. Our H1, and H2 got accepted after analyzing the collected data from sample which uncovers the intricate relationships among targeted variables.

Hypothesis 1 of the study i.e., there is a positive correlation between Internet Addiction, Depression and Self-Efficacy is accepted. The results of Pearson correlation indicate a significant positive correlation between Internet Addiction (Iv) and Depression (dv) suggesting that as increase in Internet Addiction, so does the likelihood of experiencing Depression. Along with it, a weaker positive correlation of Self-Efficacy with Internet Addiction was found.

Interestingly, there was a significant difference in Internet Addiction in males and females with a higher level of Internet Addiction in males and a slightly higher levels of self-efficacy, in females were found. Other than that, no significant difference in the effect of Internet Addiction on Depression and Self-Efficacy in both genders, in other words, Hypotheses 2 i.e., There is a difference in rate of Internet Addiction for males and females and effect of it on Depression and Self-Efficacy.

These results hold critical implications for mental health interventions in order to design and promote the decisions or policies to make students of colleges and universities to limited their higher internet use as well as to Discussion

This research investigated that whether or not someone have Internet Addiction and Depression along with varying Self-Efficacy levels. Therefore, Study was conducted to investigate relationship between Internet Addiction, Depression and Self-Efficacy by collecting data using systematic quantitative self-administered

questionnaires for recruited sample of students. After that data was analyzed using Pearson correlation and independent sample t-test between genders uncovered the following concepts:

As per the acceptance of H1, it is concluded that those students either males or females with high Internet Addiction also have higher level of Depression in them. This showed the alignment with previously conducted studies outside the Pakistani countries. This means that the targeted correlation in Pakistan is similar to Korea (Ryu, Choi, Seo, & Nam, 2017) and Finnish (K, et al., 2020). Along with inclining with prior researches of different states, current study's findings also opposing the studies concluded no correlation between the targeted variables (Coyne, et al., 2020).

The analysis suggested very weaker co-relation of Internet Addiction with regards to the changes in Self-Efficacy either in males students or females students. As the individuals with Depression tends to have a lower Self-Efficacy in our study it is a little correlation showed would be due to the reason that individuals with higher levels of Depression may find social media platforms as a place to open up or could be due to individual differences along with that Pakistan has a collectivist societal system in which the individuals somehow get the support from someone either from blood line relatives or from other family members and friends therefore, they tends to a higher Self-Efficacy.

Our study found that males have higher levels of Internet Addiction than females and is aligned with Li, Hou and Yang a study of 2019. (Li , Hou a, Yang a , & Jian, 2019). Other than this difference in Internet Addiction levels among males and females predict no other difference but a slightly higher levels of self-efficacy in females.

Implication in Future Direction:

This study was conducted in Quetta only with N=300, it is suggested that the future researches would be conducted using a larger and more diverse samples from different cities of Pakistan and its comparison with other world countries.

Other studies may concern population other than students, as most of the general population use internet on daily basis. promote healthy internet use than problematic one.

Limitations of Study:

In this study it is important to acknowledge several limitations. This study lacks the cultural variability within the context of Pakistan because the sample was only generated from a specific region i.e., Quetta and only the students were recruited in the study students only. Because along with the students there is also a huge population using internet on daily basis due to resource containment the students were selected in the study.

The data was collected using self-report measures to assess targeted variable, increasing the possibility of response bias. Future research with alternative data collection method could provide a comprehensive.

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