

Technology and its impact on Mental Health of the Youth

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ABSTRACT

Children today have grown up in an era of digital technology and are aware about mobile devices, computers, and the internet from very tender age. The individual these days is spending hours and hours in front of screen that has a very negative impact on their health. Among youths it is very common to use the internet very frequently which has a great impact on their mental well being. The depression, anxiety and emotional instability are the common problems these days so the present study was framed to see the impact of technological advancement on the mental health of the youths. The study was conducted in Punjab agricultural University, Ludhiana. The sample comprises of college students in the age range of 17-25 years. Random sample technique was used to select the sample. Self-structured interview schedule was used to assess the personal information and the exposure to technology of the respondents. Singh and Gupta's Mental Health Battery was used to assess the mental health of the students. The result of the study revealed that majority of the students had frequent exposure to the technology especially to the mobile phones and internet. Respondents had either low or medium level of mental health in almost the entire dimensions. The dimensions of mental health had significant negative correlation with the exposure to the technology.

Key words: *Interne, Mental Health, Technology, Youth*

1. INTRODUCTION

Mental health is an emerging topic in this advanced era, it is not merely the presence of wellness or absence of sickness but it is when an individual is able to cope up with the normal stresses of life, and functions well and contribute positively to the society. Technology is basically science or knowledge that is invented to solve the problem and to make life easy. Computer and internet can be the best examples of technology. Youths are the prime consumers of technological advances (Richards and Caldwell 2015) [1]. The youths are the one who are involved in technology the most and especially the social media.

A survey was conducted to assess the use of technology by the youth and it has come up that majority of the youth i.e. 95 per cent between age 12-17 uses the internet, almost 81 per cent had social media account and half of the respondents check their account daily (Messina and Iwasaki, 2011)[2]. Even in the schools the young children they are more exposed to the screen time than the real life experiences (Taylor, 2019) [3]. The technology is impacting the socio-emotional status of the people and people are becoming more rigid and

unemotional (Uhls et al, 2014)[4]. Konrath et al, 2014[5] in their study also found similar trend, where exposure to more screen time develop psychopathy among young children.

However, technology also has positive impact but we have to understand the fact that how it effect the mental health of the youth and creating problems among them. Excessive use of digital technologies and social media are connected with poor mental health (McCrae et al 2017) [6]. The use of social media is correlated with lack of concentration, poorer sleep and lack in emotional maturity (Billari et al 2018) [7]. The rate of depression has increased in past years (Xie et al., 2010)[8]. There is need of proper management of the use of technology by the youths especially the screen time and it is duty of the parents to check on the child and maintain an open communication with the children so that they can share and express their feeling. So keeping all these view in mind the following objectives were framed:

2. OBJECTIVE

- 2.1 To assess the use of technology exposure and mental health of the college students
- 2.2 To see the impact of technology on the mental health of the college students.

3. METHODOLOGY

- 3.1 Local of the study: The study was conducted in Punjab Agricultural University, Ludhiana, Punjab.
- 3.2 Sample of the study: The sample comprises of college students of the Punjab Agricultural University, within the age range of 17-25 years, random sample technique was applied. Thus, comprising total 120 students (60 boys and 60 girls).
- 3.3 Research instrument used:
 - 3.3.1 Self-structured interview schedule was used to assess the general information of the students
 - 3.3.2 Self-structured instrument was used to assess the use of technology by the students
 - 3.3.3 Mental Health Battery by Singh and Gupta (2000) was used to assess the mental health of the respondents.
- 3.4 Statistical analysis: Frequency, Percentage, Z- test and Correlation was used to analyze the data.

4. RESULT AND DISCUSSION

Table 4.1: Socio-personal characteristics of the respondents

Variables		Boys(n ₁ =60)		Girls(n ₂ =60)		Total Sample (n=120)	
		f	%	f	%	f	%
Age	17-19	12	20	13	21.6	25	20.8
	20-22	26	43.3	23	38.3	49	40.8
	23-25	22	36.6	24	40	46	38.3
Number of	1	42	70	40	66.6	82	68.3
	2	13	21.6	10	16.6	23	19.1

siblings	3 or above	5	8.3	10	16.6	15	12.5
Family size	1-4	45	75	41	68.3	86	71.6
	5-8	10	16.6	14	23.3	24	20
	8 or above	5	8.3	5	8.3	10	8.3
Family type	Joint	14	23.3	15	25	29	24.1
	Nuclear	46	76.3	45	75	91	75.8
Maternal education	Illiterate	2	3.3	3	5	5	4.1
	Matriculate	5	8.3	4	6.6	9	7.5
	Intermediate	13	21.6	15	25	28	23.3
	Graduate	25	41.6	20	33.3	45	37.5
	Post graduate	15	25	18	30	33	27.5
Paternal education	Illiterate	1	1.6	0	0	1	0.83
	Matriculate	10	16.6	3	5	13	10.8
	Intermediate	15	25	18	30	33	27.5
	Graduate	10	16.6	27	45	37	30.8
	Post graduate	24	40	12	20	36	30
Maternal occupation	Homemaker	28	46.6	30	50	58	48.3
	Business	1	1.66	2	3.3	3	2.5
	Job(Private/Govt.)	31	51.6	28	46.6	59	49.1
Paternal occupation	Business	10	16.6	15	25	25	20.8
	Farming	11	18.3	8	13.3	19	15.8
	Job(Private/Govt.)	39	65	37	61.6	76	63.3
Family income	10-25k	10	16.6	5	8.3	15	12.5
	25-50k	15	25	20	33.3	35	29.1
	50k or above	35	58.3	35	58.3	70	58.3

Table 4.1 envisages the data regarding socio-personal characteristics of the respondents and the data revealed that about 43 per cent of the boys had age range between 20-22, followed by 36.6 per cent had 23-25 years and 20 per cent were 17-19 years old. Among girls 40 per cent were 20-22, 38.3 per cent were 23-25 and 20.8 per cent were 17-19 years old. Majority of the boys and girls had one sibling (70% and 68% respectively). Majority boys(75%) and girl(86%) had family size up to 4 members. Majority of the respondents belongs to nuclear family type 76.3 per cent in case of boys and 75.8 per cent in case of girls.

Moving further data regarding maternal education of the boys depicted that 41.6 per cent of the mothers were educated up to graduation, followed by 25 per cent up to post graduation, 21.6 per cent up to intermediate, 8.3 per cent up to matriculation and rest 3.3 per cent were illiterate. In case of girls 37.5 per cent of

the respondents mother were educated up to graduation, 27.5 per cent up to post graduation, 23.3 per cent up to intermediate, 7.5 per cent up to matriculation and 4.1 per cent were illiterate.

40 per cent of the fathers of the boy's respondents were post graduate, 25 per cent were educated up to intermediate, and 16.6 per cent up to graduation, 16.6 per cent up to matriculation and 1.6 per cent were illiterate. In case of girl respondents 45 per cent of fathers were educated up to graduation, 30 per cent up to intermediate, 20 per cent up to post graduation and rest 5 per cent were up to matriculation.

Data regarding maternal occupation revealed that almost half of the respondents mother of boys and girls were involved in either private or government job (51.6% and 46.6% respectively). Similar trend was observed in case of paternal occupation both in case of boys and girls more number of fathers were involved in jobs (65% and 61.6% respectively). More than half of the respondents (58.3%) family income was above 50,000.

Table 4.2: Per cent distribution of respondent's exposure to technology

Variables	Frequency	Boys(n ₁ =60)		Girls(n ₂ =60)		Z- value	Total sample	
		f	%	f	%		f	%
Social media account	Yes	60	100	60	100	0	120	100
	No	0	0	0	0	0	0	0
Daily check the social media account	Yes	51	85	55	91.6	1.12	106	88.3
	No	9	15	5	8.3	1.14	14	11.6
Use of mobile phone	Yes	60	100	60	100	0	120	100
	No	0	0	0	0	0	0	0
Check e-mails regularly	Yes	20	33.3	25	41.6	0.93	45	37.5
	No	40	66.6	35	58.3	0.93	75	62.5
Others opinion on social media has impact on daily lives	Yes	18	30	38	63.3	3.65**	56	46.6
	No	42	70	22	36.6	3.66**	64	53.3

**1% level of significance

Table 4.2 illustrates the per cent distribution of the respondents to exposure to the technology and the data depicted that all of the respondents were using the social media, majority of the respondent's check their social media account daily, and all of them have their mobile phone. Further, the data revealed that more than half of the boys (66.6%) do not check their mail while in case of girls 58.3 per cent do not check their mail regularly.

Moving towards the data regarding the others opinion impact on daily lives data revealed that significant differences were observed in boys and girls (Z=3.65). Girls had more impact of social media on their daily lives whereas boys had less impact of social media on daily lives.

Table 4.3: Per cent distribution across different dimensions and levels of mental health

Dimensions of Mental health	Levels	Boys(n ₁ =60)		Girls(n ₂ =60)		Z-value	Total Sample	
		f	%	f	%		f	%
Emotional stability	Low	31	51.6	28	46.6	0.54	59	49.1
	Medium	24	40	26	43.3	0.36	50	41.6
	High	5	8.3	6	10	0.32	11	9.1
Overall adjustment	Low	35	58.3	20	33.3	2.74**	55	45.3
	Medium	20	33.3	32	53.3	2.21*	52	43.3
	High	5	8.3	8	13.3	0.88	13	10.8
Autonomy	Low	20	33.3	18	30	0.38	38	31.6
	Medium	25	41.6	35	58.3	2.00*	60	50
	High	15	25	7	11.6	1.89	22	18.3
Security- Insecurity	Low	30	50	31	51.6	0.17	61	50.83
	Medium	20	33.3	18	30	0.38	38	31.6
	High	10	16.6	11	18.3	0.24	21	17.5
Self-concept	Low	20	33.3	18	30	0.38	38	31.6
	Medium	30	50	36	60	1.10	66	55
	High	10	16.6	6	10	1.06	16	13.3
Intelligence	Low	20	33.3	15	25	1.00	35	29.1
	Medium	28	46.6	30	50	0.37	58	48.3
	High	12	20	15	25	0.65	27	22.5

**1% level of significance

Table 4.3 unveils the per cent distribution of respondents across different dimension and levels of mental health and the data revealed that non-significant differences were observed in emotional stability of boys and girls both were at par and had low level of emotional stability. Further the table revealed more half of the boys (58.3%) had low level of overall adjustment whereas more than half (53.3%) of the girls had medium level of overall adjustment. Further data revealed that significant gender differences were observed at low (Z=2.74) and medium as (Z=2.21) level of overall adjustment.

Autonomy as a dimension of mental health data depicted that more number of both boys and girls had medium level of autonomy (41.6% and 58.3% respectively) and significant gender differences (Z=2) were also observed at medium level of autonomy where girls were more in number than the boys.

In Security-Insecurity a dimension of mental health data illustrated that almost half of the boys (50%) and girls (51.6%) had low level of Security-Insecurity. Non significant gender differences were observed in

Security-Insecurity. While moving towards self-concept the data revealed that 50 per cent of the boys had medium level of self-concept and girls had 60 per cent had medium level of self-concept.

Further moving data regarding intelligence a dimension of mental health revealed that 46.6 per cent boys had medium level of intelligence and 50 per cent girls had medium level of intelligence.

Table 4.4: Correlation between technology exposure and mental health of the students

Dimensions of Mental Health	Exposure to technology				
	Social media account	Daily check the social media account	Use of mobile phone	Check e-mails regularly	Other opinion on social media has impact on daily lives
Emotional stability	-0.64**	-0.75**	-0.58**	0.02	-0.72**
Overall adjustment	0.02	-0.49*	-0.78**	0.005	-0.65**
Autonomy	-0.72**	-0.78**	-0.65**	0.03	-0.64**
Security- Insecurity	-0.40*	-0.80**	-0.63**	0.01	-0.42*
Self-concept	-0.80**	-0.68**	-0.59**	0.005	-0.72**
Intelligence	0.03	0.02	-0.49**	0.02	0.05

*5 % level of significance, **1% level of significance

Table 4.4 illustrates correlation between technology exposure and mental health of the students and the data revealed that the majority of the dimensions of mental health had significant negative correlation with exposure to technology except checking e-mails daily. Further going deep in to table emotional stability had significant negative correlation with social media account, Daily check the social media account, Use of mobile phone and Other opinion on social media has impact on daily lives ($r=-0.64$, $r=-0.75$, $r=-0.58$ and $r=-0.72$ respectively).

Overall adjustment had significant negative correlation with Daily check the social media account, Use of mobile phone and Other opinion on social media has impact on daily lives ($r=-0.49$, $r=-0.78$ and $r=-0.65$ respectively).

Autonomy had significant negative correlation with social media account, Daily check the social media account, Use of mobile phone and Other opinion on social media has impact on daily lives ($r=-0.72$, $r=-0.78$, $r=-0.65$ and $r=-0.64$ respectively).

Security- Insecurity had significant negative correlation with social media account, Daily check the social media account, Use of mobile phone and Other opinion on social media has impact on daily lives ($r=-0.40$, $r=-0.80$, $r=-0.63$ and $r=-0.42$ respectively).

Self-concept had significant negative correlation with social media account, Daily check the social media account, Use of mobile phone and Other opinion on social media has impact on daily lives ($r=-0.80$, $r=-0.68$, $r=-0.59$ and $r=-0.72$ respectively).

Intelligence had significant negative correlation with Use of mobile phone ($r=-0.49$)

5. SUMMARY AND CONCLUSION

Maximum respondents were indulged in technology and spent a good amount of time in front of screen. Majority of the students had low level of emotional stability, boys had low and girls had medium level of overall adjustment, maximum respondents had medium level of security-insecurity, more than half of the respondents had low level of self-concept and medium level of intelligence. Almost the entire dimension of mental health had significant negative correlation with the technology usage.

Hence, it can be concluded that technology especially internet had some adverse effect on the mental health of the students.

Limitations: The study can be conducted on large number of sample and more variable can be used.

Suggestions: The awareness of mental health and ill effect of excessive use of technology should be given to youth and as well as to the parents.

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