



Role of Online Media: A Study of Happiness Index in Students' Online Screen Use in West Bengal

Archan Mitra and Trinanjana Das*

Amity School of Communication, Amity University, Kolkata, West Bengal, India

*Corresponding author: trinanjana.414@gmail.com

Received: 10 Feb., 2020

Revised: 29 Apr, 2020

Accepted: 28 May, 2020

ABSTRACT

Objective: The research aims to study the correlation of happiness and online media use of the students of West Bengal and predict the level of influence that digital media can have on students' happiness.

Introduction: Digital technology has transformed the way the present generation navigates through life and form connections with each other. The years after 2010 in particular have shown a massive decline in terms of happiness which failed to rebound to the 1990s level. In fact, both adults and teens reported that they felt far less happy and satisfied, which was prevalent even till 2000 also. Incidences of low psychological well-being were prominent, besides deterioration of physical health. Hence, this study makes an attempt to gauge at how happiness and mental well-being is largely impacted owing to the rising internet addiction. The hypothesis employed for this research is:

- ⊙ H_0 – There is a strong relationship between online media use and happiness.
- ⊙ H_1 – There is no relationship between online media use and happiness.
- ⊙ H_0 – Online media use affects happiness significantly.
- ⊙ H_2 – Online media use does not affect happiness significantly.

Methodology: Quantitative Research method has been used to evaluate both the hypothesis H_1 and H_2 .

Analysis: The regression model has been used by the researchers to analyze the students' use of online media and the happiness associated with it. Pearson's Correlation and simple linear regression was used to predict how much online media use affects happiness.

Findings: Both the hypothesis has been proved null hence accepted through linear regression 'r' value percentage.

Keywords: Happiness Index, Digital Culture, New Media, Correlation & Regression, Internet Addiction, Well-Being

Perhaps the most important goal for human beings and their actions is obtaining happiness. The quest for happiness and wellbeing is age-old, which largely motivates humans to work to the best of their capacities and attain the same. The resolution of United Nations of 2012 clearly pointed that 'the pursuit of happiness is a fundamental human objective'. Over the course of time, scientific studies pertaining to happiness showcased the conception of it as a vital human experience. The measurement

principle was direct and largely based on enquiring people about what and how they felt when they had to explain about being happy. The experience about their well-being determined to a great extent what grounds were necessary that would help happiness to surface and furthermore, studying the variegated

How to cite this article: Mitra, A. and Das, T. (2020). Role of Online Media: A Study of Happiness Index in Students' Online Screen Use in West Bengal. *Int. J. Peace, Edu. and Deve.*, 8(01): 07-17.

Source of Support: None; **Conflict of Interest:** None



personal and social environmental factors that also accounts for happiness.

In common parlance, the study of happiness or happiness research emphasizes on the quantitative side that includes the positive and negative affect, well-being, quality of life and life satisfaction. It is after the late 20th century that the field has witnessed exponential growth in terms of futuristic study. Very closely related to this is happiness economics that takes into account the theoretical perspective of happiness as well. This typically assimilates economics with fields like psychology, health and sociology. Almost every discipline that stressed on the study of happiness showcased some common tenets and behavioral patterns that projected how a happy person can be distinguished from an unhappy one (Bojanowska *et al.* 2016).

While making the right choices for happiness, participants of one of the longest-running studies on happiness called 'Harvard Study of Adult Development' conducted in the year 1938 prove convenient. As much as specific traits and behaviours showed a deep link with increased levels of happiness, it also established a close association between happiness and close relationships in the real world. Alongside this, it has also come into notice after careful analyses that a deep connect lies between happiness and technology. The fact that technology brings considerable advantages has caused more people to adapt to certain and much-required changes to keep pace with the present mode of living. No matter how much advances and progress is made after technology is recognized, most of it has come with its own set of stress and frustration.

In the current digital phase, the usage and stay in the online world is tried to be understood as criterion and predictor of happiness, primarily among high school students, college goers and university learners. Of particular mention are the social network sites (SNS), alongside the online shopping portals, video sites and more. The US report on happiness and digital media has highlighted about the declining status of well-being among Americans since 2010. So even when the economy was boosted

after the Great Recession in 2009, the life satisfaction quotient declined steadily after 2012, chiefly among adolescents and young adults. The last decade has been terribly pressurizing on generation Z. As a result of over exposure to data and its widespread availability, the amount of time that teens spent on overall screen activities (gaming, texting, and social media) is more than alarming. This study is an attempt to seek credibility about how far this holds true in the present context for Indian student group (comprising teens and those who barely stepped into adulthood), in specific West Bengal.

In India, the study on happiness has been in the field of health and medicine, Happiness reference has more than often been raised as a means to wellbeing in the medical or health journals (Deb, S., Thomas, S., Bose, A. *et al.* 2020; Mahboubeh Dadfar, 2020, Chakraborty, B., Maji, S., Sen, A. *et al.* 2019) though the happiness in being and becoming scriptures of India stresses more on mind and soul without neglecting body. However, the researcher's here focus on the happiness and well-being in terms with mediated communication mediums like the use of digital media through various platforms.

Aims and Objectives

This study makes an attempt to gauge at how happiness has largely impacted the students in West Bengal owing to the rising internet addiction, as evident through excessive screen exposure. The hypothesis employed for this research is as follows:

H_0 – There is a strong relationship between online media use and happiness.

H_1 – There is no relationship between online media use and happiness.

H_0 – Online media use affects happiness significantly.

H_2 – Online media use does not affect happiness significantly.

Objective of the Study

The research objective is to find out the correlation and regression pattern of use of online media and happiness among students of West Bengal.

Methodology

Quantitative Research method has been used to evaluate both the hypothesis H_1 and H_2 . Hypothesis 1, explains the plausible reasons that there is a working relationship between the online media use and happiness and hypothesis 2, explains that how much of online media use affects happiness of an individual. As the study states that the research ought to be conducted among students of West Bengal, hence we can say that research universe constitutes students of West Bengal aged 14-23, including all the demographics that has been studied in this research. The research population comprises students who are exposed to digital media in West Bengal and are possible to be affected by it. Therefore the impact can be studied among the research population after drawing a sample from it.

Variable

There are two variables which have been studied in this research, one being digital media use and the other happiness. This research considers (HR_SM, HR_GM, HR_TX, HR_ON, HR_SI, HR_SP) as independent variable and dependent variable as happiness (SHS1, SHS2, SHS3) because happiness is dependent on digital media according to the hypothesis stated above. Control variable is the context of the study i.e. it is being focused on students' perception. The justification of the fact that students' perception is being studied in the research is because it is the students who are exposed to digital media more than any other individual or a cluster. Depression being rampant in students in the last half of the decade, the need to study this relationship becomes even more evident. The variable list is as follows:

Table 1: Variable List

Variable No.	Variable Name	Variable Description
V ₁	HR_SM	Hours on Social Media
V ₂	HR_GM	Hours on Gaming
V ₃	HR_TX	Hours on Texting
V ₄	HR_ON	Hours on Online
V ₅	HR_SI	Hours on Social Interaction

V ₆	HR_SP	Hours on Sleep
V ₇	SHS_1	In general, I consider myself how much Happy
V ₈	SHS_2	Compared to most of my peers, I consider myself how much Happy
V ₉	SHS_3	Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?
V ₁₀	SHS_4	Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

**Source: Happiness index report 2019 – variables 1 -7.

**Source: SHS (Subjective Happiness Scale)- Variables 8-10.

The breakup of the hypothesis can be considered as follows:

H_0 – There is a strong relationship between online media use and happiness (Null).

H_1 – There is no relationship between online media use and happiness. (Alternate).

Correlation matrix as determined by the researcher is established though this relationship:

$$HR_SM/GM/TX/ON/SI/SP \rightarrow SHS_1/2/3/4$$

The time spent on social media, gaming, and texting and online determines the social media use and time spent by a student on social interaction and sleep determines day to day activities. The subjective happiness scale was used to calculate the happiness index of students to see if there is a relationship between them.

H_0 – Online media use affects happiness significantly (Null).

H_2 – Online media does not affect happiness significantly (Alternate).

How much social media, gaming, online activity affects happiness is calculated for proving the hypothesis. A predictive analysis is done to see how much (%) percentage change in online media use

brings change in the happiness index (%) is proved through this hypothesis. The break up is as follows:

Model 1: Social Media (HR_SM → SHS_1, SHS_2, SHS_3, and SHS_4)

Model 2: Gaming (HR_GM → SHS_1, SHS_2, SHS_3, and SHS_4)

Model 3: Texting (HR_TX → SHS_1, SHS_2, SHS_3, and SHS_4)

Model 4: Online Surfing (HR_ON → SHS_1, SHS_2, SHS_3, and SHS_4)

The average percentage will be reflected in the findings as how much average (%) change in happiness of students is possible from a point change in use of social media. The four models (regression models) will help determine the level of happiness change in each and every aspect of digital media use.

Sampling

The study was conducted for (n=190) respondents. The respondents were all (14<23) years of age living in a similar semi-urban area. Out of them, 20% were Post Graduate students, 60% Under Graduate students and 20% High School Students.

Table 2: Student Demography

Students	No of Respondents		Age
	Male	Female	
High School	20	18	14-16
Undergraduate	74	70	17-20
Post Graduate	23	15	21 and above

The primary study was survey-based and was conducted in the districts of Burdwan and Hooghly (West Bengal, India) as shown with red dots in the map.

The researchers employed a cluster sampling method to carry out the survey; the cluster sampling method was used to serve the purpose of the study, which is about students and their viewpoint. The sampling formula used to determine the cluster sample size is as follows:

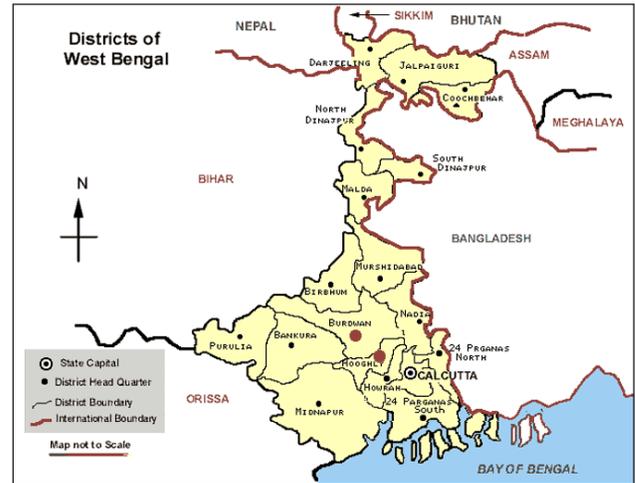
$$SS = Z^2 * \dots$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)

p = percentage picking a choice expressed as a decimal (.5 used for sample size needed)

c = confidence interval, expressed as decimal (e.g., .04 = ±4)



The student population, according to the Confederation of Indian Industry (CII) as of 2016¹ was 19 lakh enrollments in schools and colleges of Hooghly and Burdwan district combined. Therefore, the sample size was considered as (n=190) respondents with 95% confidence level and 7.1 confidence interval.

Scaling

The measurement for two variables is taken on a 7-Point scale to keep uniformity in analysis. Subjective happiness Scale (SHS) has been used for calculation of the happiness of students. The SHS is a 4-item scale designed to measure subjective happiness. Each of items is completed by choosing one of 7 options that finish a given sentence fragment. The options are different for each of the four questions. Refer to the appendix of the research article for scale used in the research. The justification of the subjective happiness scale lies in the study by Mattei & Schaefer (Mattei & Schaefer, 2004).

Data Collection

¹The data has not been updated hence sampling is based on data previously gathered. This may contain sampling errors, which has been compensated with hypothesis breakdown and confidence level adjustment.

The researchers collected primary data through online survey for the cluster sample of students to get their opinion and understand their happiness index when exposed to digital media in the era of information technology. The table 3 shows the descriptive statistics of the data collected:

Table 3

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
HR_SM	190	.326	.940	.67975	.157388
HR_GM	190	.333	.941	.68385	.156286
HR_TX	190	.00	40.30	4.7215	6.28806
HR_ON	190	.00	43.90	4.6850	6.28991
HR_SI	190	.00	77.10	8.4477	11.91389
HR_SP	190	.00	72.00	9.1205	12.30238
SHS_1	190	4.00	100.00	68.2336	26.96066
SHS_2	190	4.20	100.00	68.6762	27.02227
SHS_2	190	4.10	100.00	68.4756	27.00122
Valid N (listwise)	190				

Analysis

The regression model has been used by the researchers to analyze the students' use of online media and the happiness associated with it. Pearson's Correlation and simple linear regression was used to predict how much online media use affects happiness. The scoring is done on the basis of summation or cumulative frequency of the SHS scale, therefore the researcher has been using the cumulative frequency to draw out the continuous data from the discreet data available from the primary survey.

The two hypotheses have been dealt separately in the research paper as follows:

H₀ – There is a strong relationship between online media use and happiness (Null).

H₁ – There is no relationship between online media use and happiness (Alternate).

The relationship was established through Pearson's Correlation significance:

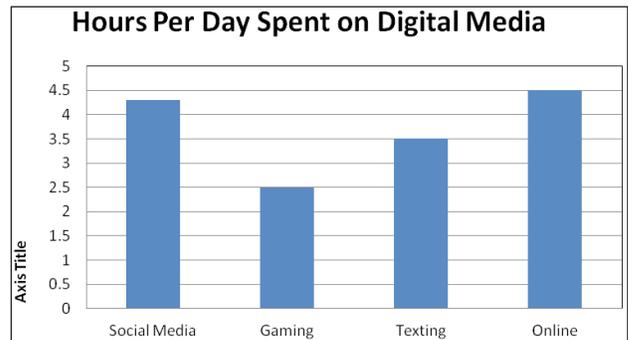
H₀ – Online media use affects happiness significantly (Null).

H₂ – Online media does not affect happiness significantly (Alternate).

The effect was established though regression modeling, a predictive modeling study to determine the effect of one on the other.

RESULTS AND DISCUSSION

The first part of the finding focuses on the amount of time (hrs.) a person spends on digital media as shown in graph 1.



****Source:** primary data collected though online survey.

Graph 1: Hour distribution of students engaged with digital media hrs. per day calculation

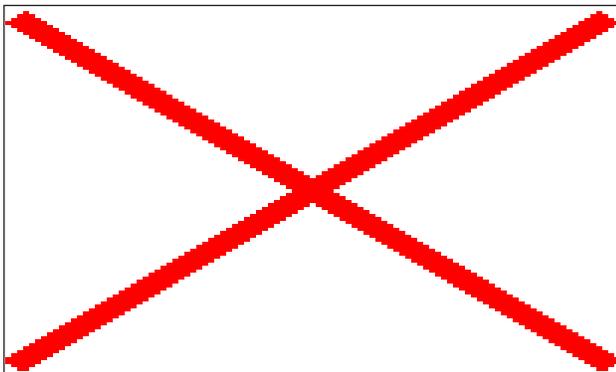
The following assumptions were made from the data analysis:

- ⊙ Hours spent on social media gradually increase towards 5hrs and then decreases, this may be because of the fact that though students enjoy being on social media they don't want to be on social media more than 5 hours to compensate for their studies and other study related works.
- ⊙ Hours spent on gaming increases for an hour's play and then falls drastically giving a sense that student generally enjoy games for a limited amount of time, By far the exposure in gaming in our country is still less in consideration with other south east Asian countries.
- ⊙ Hours spent on texting on social media/ or mass self-media like WhatsApp also increases for an hour, but for some candidates it is also as good as 5 hours of texting. Variable response from students reveals that each individual has varied interest and not all students enjoy texting; some enjoy browsing as well.

Students enjoy online time just for surfing or browsing or watching news feed, this gradually increase towards 5 hours and decrease proving the fact that they are not online without reason and has a particular purpose in mind. The research revealed that they enjoyed being online just to escape the reality.

- ⊙ The online hours include other social media activity and social interactions include offline/online activities. Already discussed before in the paper as the control variable is the context in which the study is directed by the researchers.

The following graph 2 shows the average hours spend by students on social media. We can identify that students are more online doing activities other than texting, gaming or being active on social media. This is followed by social media and texting and then last but not the least gaming. We can understand the usage within the digital media landscape by an average student population through this study.



****Source:** primary data collected though online survey.

Graph 2: Hour per day spent on digital media by students understudy.

The second part of the findings focus on the social interaction and sleep which are *non-digital media use* variables taken into consideration with the study. To provide sense of validity and reliability of the test results the researchers have taken these two *non-digital variables* to provide balance to the study. The researchers also calculated the correlation and regression of the *non-digital use variables* tp provide a comparative study. The researchers have

found through their study that the amount of social interaction physically and sleep have been drastically reduced in comparison to the digital media use. The particulars have not been presented in the study because this study focuses on the two hypothesis already stated above. Therefore the researchers shall take reference of these two for comparative analysis only.

Similar to the analysis the findings can also be divided according the two specific hypotheses. The findings from the first hypothesis are as follows:

Correlation & Regression Analysis

The first hypothesis reflected upon the relationship between digital media use by students and their happiness, it is seen from the table 1 below that there is significant amount of relationship between each of the variables studied, and the findings from the second hypothesis, the researchers try to derive the amount of effect digital media have on happiness of a student through regression modeling. The details of which are as follows:

		Correlations		
		SHS_1	SHS_2	SHS_3
HR_SM	Pearson Correlation	.600	.590	.228
	Sig. (2-tailed)	.000	.000	.005
	N	190	190	190
HR_GM	Pearson Correlation	.570	.450	.156
	Sig. (2-tailed)	.000	.000	.054
	N	190	190	190
HR_TX	Pearson Correlation	.228	.256	.350
	Sig. (2-tailed)	.005	.054	.000
	N	190	190	190
HR_ON	Pearson Correlation	.198	.146	.342
	Sig. (2-tailed)	.000	.000	.870
	N	190	190	190

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

Happiness and Social Media

HR_SM is positively correlated to SHS_1 at value .600** (Significance 2-Tailed), to SHS_2 at .590** and SHS_3 at value .228** which is mildly significant. In studies similar to this which tried to gauge the relationship of social media with happiness. Some studies have put forth that social media brings a

lot of freedom from stress by writing blogs and other activities which brings happiness to the users (Bollen *et al.* 2011; Pittman & Reich, 2016; Quercia *et al.* 2012; Chae, 2018). Some studies on purchasing behavior of customers from social media have seen increase in happiness (Duan & Dholakia, 2017). Other studies say that social media is becoming more and more important every day in their lives. Therefore happiness derived in use of social media being more and more relevant (Freitas, 2017). According to Manago and Vaughn (Manago & Vaughn, 2015) friendship and happiness are interlinked and that is why social media friendships lead to strong correlative relationship with that of happiness.

Model Summary 1: SHS_1 → HR_SM

Model Summary 1				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.600 ^a	.348	.344	5.09102

(a) Predictors: (Constant), SHS_1

(b) independent Variable: HR_SM

Model Summary 2: SHS_2 → HR_SM

Model Summary 2				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.590 ^a	.449	.444	4.09006

(a) Predictors: (Constant), SHS_2

(b) independent Variable: HR_SM

Model Summary 3: SHS_3 → HR_SM

Model Summary 3				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.228 ^a	.238	.344	5.19026

(a) Predictors: (Constant), SHS_3

(b) independent Variable: HR_SM

From the above model summaries the researchers can come to an understanding that 1% change in use of social media by the student can alter significant

amount of change in happiness of the student. The study proves the fact that yes happiness is greatly affected by use of social media, for model summary 1 it is 60%, model summary 2 it is 59% and model summary 3 it is 22.8%. The percentage value is the predictor percentage of how much it can affect happiness per point increase in the use of social media. The average % change would be 47.26% for all the variables being affected by social media.

Happiness and Gaming

HR_GM is positively correlated to SHS_1 at value .570** (Significance 2-Tailed), to SHS_2 at .450** and SHS_3 at value .156** which is mildly significant. From various research it is probable that an iterative and synergistic process of low levels of happiness, and high levels of certain elements of flow and gaming addiction are blends of experiences that make for gamers seeking out social support systems from within the online game to ameliorate (Hull *et al.* 2013). This study however does not delve into whether gaming increases or decreases happiness rather gives us a clear picture of whether it is significantly related. Later in the study we get to know the answer that how much gaming affects happiness.

Model Summary 1: SHS_1 → HR_GM

Model Summary 1				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.570 ^a	.348	.344	5.09102

(a) Predictors: (Constant), SHS_1

(b) independent Variable: HR_GM

Model Summary 2: SHS_2 → HR_GM

Model Summary 2				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.450 ^a	.449	.444	4.09006

(a) Predictors: (Constant), SHS_2

(b) independent Variable: HR_GM

Model Summary 3: SHS_3 → HR_GM

Model Summary 3				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.156 ^a	.238	.344	5.19026

- (a) Predictors: (Constant), SHS_3
- (b) independent Variable: HR_GM

From the above model summaries the researchers can come to an understanding that 1% change in hours spent on gaming by the student can alter significant amount of change in happiness of the student. The study proves the fact that yes happiness is greatly affected by hours spent on gaming, for model summary 1 it is 57%, model summary 2 it is 45% and model summary 3 it is 15.6%. The percentage value is the predictor percentage of how much it can affect happiness per point increase in hours spent on gaming. The average % change would be 39.2% for all the variables being affected by gaming.

Happiness and Texting

HR_TXT is positively correlated to SHS_1 at value .228** (Significance 2-Tailed) to SHS_2 at .256** and SHS_3 at .350**. With more advancement in technology, emotion mining of people from texts and chats on social media is becoming more and more realized in the contemporary society. It is becoming easier to understand human emotion and happiness being one part of it (Yassine & Hajj, 2013; Lu *et al.* 2010).

Model Summary 1: SHS_1 → HR_TXT

Model Summary 1				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.228 ^a	.348	.344	5.09102

- (a) Predictors: (Constant), SHS_1
- (b) independent Variable: HR_TXT

Model Summary 2: SHS_2 → HR_TXT

Model Summary 2				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.256 ^a	.449	.444	4.09006

- (a) Predictors: (Constant), SHS_2
- (b) independent Variable: HR_TXT

Model Summary 3: SHS_3 → HR_TXT

Model Summary 3				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.350 ^a	.238	.344	5.19026

- (a) Predictors: (Constant), SHS_3
- (b) independent Variable: HR_TXT

From the above model summaries the researchers can come to an understanding that 1% change in hours spent on texting by the student can alter significant amount of change in happiness of the student. The study proves the fact that happiness is greatly affected by hours spent on texting, for model summary 1, it is 22.8%; model summary 2, it is 25.6% and model summary 3, it is 35%. The percentage value is the predictor percentage of how much it can affect happiness per point increase hours spent on texting. The average % change would be 27.8% for all the variables being affected by gaming.

Happiness and Online use

HR_ON is positively correlated to SHS_1 at value .198** (Significance 2-Tailed) to SHS_2 at .146** and SHS_3 at .342**. Internet users have a strong relation with that of happiness (Mitchell *et al.* 2011). However in a research by Yen *et al.* (2011) they state that online use is correlated with a lot of violence addiction and hence not with that of happiness. This corresponds with our research also where we see that the correlation matrix significance is much lesser in comparison to other relationships established.

Model Summary 1: SHS_1 → HR_ON

Model Summary 1				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.198 ^a	.348	.344	5.09102

(a) Predictors: (Constant), SHS_1

(b) independent Variable: HR_ON

Model Summary 2: SHS_2 → HR_ON

Model Summary 2				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.146 ^a	.449	.444	4.09006

(a) Predictors: (Constant), SHS_2

(b) independent Variable: HR_ON

Model Summary 3: SHS_3 → HR_ON

Model Summary 3				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342 ^a	.238	.344	5.19026

(a) Predictors: (Constant), SHS_3

(b) independent Variable: HR_ON

From the above model summaries the researchers can come to an understanding that 1% change in hours spent online by the student can alter significant amount of change in happiness of the student. The study proves the fact that yes happiness is greatly affected by hours spent on texting, for model summary 1 it is 19.8%, model summary 2 it is 14.6% and model summary 3 it is 34.2%. The percentage value is the predictor percentage of how much it can affect happiness per point increase hours spent online. The average % change would be 22.86% for all the variables being affected by being online.

Therefore both the hypothesis have been proved through correlation and regression analysis. For correlation the hypothesis was proved through Pearson's correlation significance at 0.5 and for the second hypothesis which has been proved null hence accepted through linear regression 'r' value

percentage. The research doesn't divulge into the fact of how much happy or unhappy the digital media is making the students rather it says that it has a significant effect on them.

CONCLUSION

The definition of happiness has truly undergone significant transformation over the years, specifically among the adolescents and adults, to a considerable point. The focus has shifted more into the technological spectrum, aside social norms, conflicting situations and several other policies; all of which have led to such changes. We can see from the research that we can predict (regression is a form of predictive analysis):

- ⊙ Using social media makes 47.26% of the students happy.
- ⊙ Gaming makes 39.20% of the students happy.
- ⊙ Texting makes 27.80% of the students happy.
- ⊙ Being online makes 22.86% of the student's happy (being online means surfing the internet).

Terms like happy life, self-esteem, confidence, life satisfaction has a significant connection with the screen time devoted by generation Z. In fact, the psychological well-being as the findings also indicate is drifting largely, chiefly because of extreme dependence on gadgets and time spent on the same. With sleep timings equally affected, the concentration level of students has dipped in more ways than one, and these are noticeable after 2012 onwards. Professionals employed in mental health field, who look into the damaging effects of the same have also explained in clear terms the close and binding relationship between lower academic achievement, moodiness, clinical depression, poor family associations, increased pressures, social isolation and even aggressive behavior with digital space occupied and the exact hours devoted. Despite each having their characteristic reasons, the addictive nature is beyond general understanding. The limitations of the study is proper theoretical construct on empirical studies in this area. Literature had to be taken from foreign sources while the

study had to be made in Indian context. There may be other factors which lead to the happiness or unhappiness of students which has not been regarded in this study. If we can add all the control factors and conduct a confirmatory factor analysis then we might get the model to map the student's happiness at a greater degree than what can be done with simple linear predictive modelling study such as the regression analysis.

While there is no definitive answer as to how much screen time is actually too much, it also differs across individuals and their social situations. Also, as the study looked into the variables involved, the dependence on the digital world is primarily for the influence that the screens affect. So, even when few students manage to pull through and score well, simply because they have been meeting their basic needs and balancing the time well, few others fail to do so and show the ill effects vividly.

REFERENCES

- Bojanowska, A. and Zalewska, A.M. 2016. Lay Understanding of Happiness and the Experience of Well-Being: Are Some Conceptions of Happiness More Beneficial than Others?. *J. Happiness Stud.*, **17**: 793–815.
- Bollen, J., Gonçalves, B., Ruan, G. and Mao, H. 2011. Happiness is assortative in online social networks. *Artificial Life*, **17**(3): 237-251.
- Chae, J. 2018. Reexamining the relationship between social media and happiness: The effects of various social media platforms on reconceptualized happiness. *Telematics and Informatics*, **35**(6): 1656-1664.
- Chakraborty, B., Maji, S., Sen, A. et al. 2019. A Study on Happiness and Related Factors Among Indian College Students. *J. Quant. Econ.*, **17**: 215–236.
- Deb, S., Thomas, S., Bose, A. et al. 2020. Happiness, Meaning, and Satisfaction in Life as Perceived by Indian University Students and Their Association with Spirituality. *J. Relig. Health*, **59**: 2469–2485.
- Duan, J. and Dholakia, R.R. 2017. Posting purchases on social media increases happiness: the mediating roles of purchases' impact on self and interpersonal relationships. *Journal of Consumer Marketing*, **34**(5): 404-413.
- Freitas, D. 2017. *The happiness effect: how social media is driving a generation to appear perfect at any cost*. Oxford University Press.
- Hull, D.C., Williams, G.A. and Griffiths, M.D. 2013. Video game characteristics, happiness and flow as predictors of addiction among video game players: A pilot study. *Journal of Behavioral Addictions*, **2**(3): 145-152.
- Lu, C.Y., Hsu, W.W., Peng, H.T., Chung, J.M. and Ho, J.M. 2010. Emotion sensing for internet chatting: a web mining approach for affective categorization of events. In *2010 13th IEEE International Conference on Computational Science and Engineering* (pp. 295-301). IEEE.
- Lyubomirsky, S. and Lepper, H.S. 1999. A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, **46**: 137-155.
- Dadfar, M., Ahmed, M. Abdel-Khalek and Lester, D. 2020. *Love of life and its association with well-being in Iranian psychiatric outpatients*. *Nursing Open* **2**.
- Mattei, D. and Schaefer, C.E. 2004. An investigation of validity of the subjective happiness scale. *Psychological Reports*, **94**(1): 288-290.
- Mitchell, M.E., Lebow, J.R., Uribe, R., Grathouse, H. and Shoger, W. 2011. Internet use, happiness, social support and introversion: A more fine grained analysis of person variables and internet activity. *Computers in Human Behavior*, **27**(5): 1857-1861.
- Pittman, M. and Reich, B. 2016. Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, **62**: 155-167.
- Quercia, D., Ellis, J., Capra, L. and Crowcroft, J. 2012. Tracking gross community happiness from tweets. In *Proceedings of the ACM 2012 conference on computer supported cooperative work* (pp. 965-968). ACM.
- Yassine, M. and Hajj, H. 2010. A framework for emotion mining from text in online social networks. In *2010 IEEE International Conference on Data Mining Workshops* (pp. 1136-1142). IEEE.
- Yen, J.Y., Yen, C.F., Wu, H.Y., Huang, C.J. and Ko, C.H. 2011. Hostility in the real world and online: the effect of internet addiction, depression, and online activity. *Cyberpsychology, Behavior, and Social Networking*, **14**(11): 649-655.

Appendix

Scale: 7 point Likert scale

Instructions: For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:

not a very happy person 1 2 3 4 5 6 7 a very happy person

2. Compared to most of my peers, I consider myself:

less happy 1 2 3 4 5 6 7 more happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

not at all 1 2 3 4 5 6 7 a great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

not at all 1 2 3 4 5 6 7 a great deal

** **Source:** SHS scale Lyubomirsky, S. & Lepper, H.S. (1999)

Scoring: Sum the scores for each item together. Keep scores continuous.

