



# Screen Time Effects (STE) and Psychological Well Being (PWB) of the Children, Adolescents and Youth

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## Abstract

This descriptive-survey study was conducted to find out the relationship between Screen Time Effects (STE) and Psychological Well Being (PWB) among the Children, Adolescents and Youth. A sample of 90 parents reported from various parts of India. These 90 respondents were parents and they reported about the Screen time practices of their daughters and sons. Among them 11.1% of them were in the age group of 7 to 10 years, 53.3% were in the age group of 11 to 19 and 35.6 % were in the age group of 20 To 29. Screen Time Effects Questionnaire and Psychological Well Being Scale constructed by Saileela.K were used to collect the data. The data were analysed using the statistical techniques like Percentile analysis, mean, standard deviation, t-test, ANOVA, Chi-square, and Pearson's product moment correlation. PWB of the adolescents (Age 11-19 years) is high when compared with that of the Children (Age 7-10years) and Youth (Age 20-29 years). The finding shows that there exists Significant Positive correlation, it implies that those who manage screen time effectively have good Psychological Well Being (PWB)

## I Introduction

Screen time has increased amongst all individuals in the global context. On previous years there was no need for the people to expose themselves to the screen time all the time, now-a-days it became essential for all in some way or other. According to new World Health Organization guidelines, Babies and toddlers should not be exposed to screens of any kind like TVs, Smart phones etc. For the toddlers less than one year of age, admittance of Screen time is strictly not desirable. Until the children are four year of age less than one hour of Screen time is advisable. The amount of time children spends fastened to a screen has risen dramatically in the last 20 years, a new report suggests. Children aged five to sixteen spend an average of six and a half hours a day in front of a screen. In 1995 it was three hours, according to market research firm Child wise. Adolescent boys spend the longest, with an average of eight hours. 8-year-old girls spend the least - three-and-a-half hours, according to the study.

The newest study, that engaged more than 500 children in Singapore and published in Lancet Child and Adolescent Health journal, suggests that adhering to WHO guidelines to restrict, screen time to one hour each day or less amongst children aged two to five years might help healthier behaviour in later life.

Among 369 (99.7%) children were exposed to screen-based media till 18 months of age. Smartphone and television were being viewed by 354 (96%) and 328 (89%) children, respectively. Meena, P., Gupta, P. & Shah, D, (2020). In 2016/17, mobile app use was common among pre-school (37 minutes/day) and school-aged children (43 minutes/day) (Daniela Rodrigues and et al., 2021)

In china pre-schoolers with screen time of greater than 60 minutes tend to have more behavioral problems than those with screen time of less than 60 minutes (Xie, G., Deng, Q., Cao, J. *et al.* 2020)

Normally, children aged 8 to 12 years in the United States spend 4 to 6 hours a day viewing or using screens, and adolescences spend up to 9 hours. Young children and adolescents in the countries United States and Australia are facing both emotional and physical destruction for extreme screen time (Cox, Marrisa, 2020).

Yun Song, Luxiu Li, 2020 found that there exist significant associations between screen time (ST), negative life events (NLEs) and emotional and behavioral problems (EBPs) Participants with high exposure to ST or NLEs were more likely to have EBPs than those with low exposure to ST or NLEs among Chinese children and adolescents.

Duch, H., Fisher, E.M., Ensari, I. (2013), findings suggest that increased screen time in adolescence is linked to some health outcomes, including increased BMI, diminished cognitive and language development and academic failure.

After reviewing the current state of research in Screen time effects across the world, this study was attempted to study Screen Time Effects (STE) and Psychological Well Being (PWB) of the Children, Adolescents and Youth

### Research Questions

1. Is there any significant difference in the Screen Time Effects of the Children, Adolescents and Youth with regard to certain demographic variables?
2. Is there any significant difference in the Psychological Well Being of the Children, Adolescents and Youth with regard to certain demographic variables?
3. Is there any significant relationship between the Screen Time Effects and Psychological Well Being of the Children, Adolescents and Youth?

### METHODS

This descriptive-survey study was conducted to find out the relationship between Screen Time Effects and Psychological Well Being of the Children, Adolescents and Youth. A sample of 90 parents attempted to fill the google form, when it was floated on various Social media. The data were collected using

- (i) Personal data form,
- (ii) Screen Time Effects Questionnaire,
- and (iii) Psychological Well Being Scale.

The Personal Data collection form was used to collect the demographic information such as gender, location, education of parents, income of parents and age of the Children, Adolescents and Youth.

Screen Time Effects Questionnaire constructed by Saileela.K has 10 items. Scoring for the statement numbers 1,2,3,4,5,6,7,8 and 9 are for No-1, Yes-0, as they are negative and for the statement number 10, Yes-1, No-0, as it is Positive. Thus, the maximum score of STE is 10 and minimum is zero. More score implies their screen time effect is minimum.

Psychological Well Being (PWB) Scale constructed by Saileela.K is a Three-point Likert Scale with 25 statements, constructed for the Children, Adolescents and Youth with the scores, Agree- 2, Disagree-1, Undecided-0, for the positive statements and scoring for negative statements are Agree- 1, Disagree-2, Undecided-0. Statements 1 to10,15, 19, 22 and 24 are positive and others are negative

The reliability test of the scale for the present study was established with the help of IBM's SPSS version 16.0., using Cronbach's alpha reliability test. Lee Cronbach developed Cronbach's alpha in the year 1951 for the purpose of measuring reliability of such tools. The Cronbach Alpha for the instrument was determined to test for reliability of the scale with all 25 items and it was found to be 0.88. Thus, it is concluded that Psychological Well Being (PWB) is reliable

**H01:** There is no significant difference in Screen Time Effects of the Children, Adolescents and Youth in terms of gender.

Table 1

*Difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of gender*

Variable	Gender	N	Mean	Std Deviation	t-value	p-value
	Male	54	5.78	1.38	0.48	.631
	Female	36	5.64	1.26		

From the results of Table 1, it is evident that there is no significant mean difference with respect to screen time effect between males and females. Hence, we tend to accept the null hypothesis which is stated above.

**H02:** There is no significant difference in Screen Time Effects of the Children, Adolescents and Youth in terms of location

Table 2

*Difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of location*

Variable	location	N	Mean	Std Deviation	F-value	p-value
Screen Time Effects	Urban	53	5.77	1.30	0.12	0.885
	Semi Urban	20	5.60	1.67		
	Rural	17	5.71	1.04		

The p-value reported in Table 2 is compared at 0.05 level of significance and it is observed that there is no significance. In other words, there exists no statistical significance between the mean screen time effects of three locations. However, mean screen time effect is slightly higher in Urban and Rural locations than that of semi urban.

**H03:** There is no significant difference in Screen Time Effects of the Children, Adolescents and Youth in terms of Educational qualification of their Father

Table 3

*Difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of Educational qualification of their Father*

Variable	Educational qualification of the Father	N	Mean	S.D	t-value	p-value
Screen Time Effects	School Education	13	5.54	1.27	0.54	.594
	College Education	77	5.75	1.35		

It is inferred from the Table 3 that the computed p-value is more than the 5% level of significance. Hence the respective null hypothesis is accepted ( $p > 0.05$ ). Thus, the result shows that there is no significant mean difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of Educational qualification of the Father

**H04:** There is no significant difference in *the* Screen Time Effects of the Children, Adolescents and Youth in terms of Educational qualification of their Mother

Table 4

*Difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of Educational qualification of their Mother*

Variable	Educational qualification of the Mother	N	Mean	S. D	t-value	p-value
Screen Time Effects	School Education	11	5.64	1.50	0.38	.709
	College Education	74	5.80	1.30		

It is inferred from the Table 4 that the obtained p-value is not less than the 5% level of significance. Hence the respective null hypothesis is accepted ( $p > 0.05$ ). Thus, the result shows that there is no significant mean difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of Educational qualification of the Mother

**H05:** There is no significant difference in Screen Time Effects of the Children, Adolescents and Youth in terms of Income of Parents

Table 5

*Difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of Income of Parents*

Variable	Income of Parents	N	Mean	Std Deviation	F-value	p-value
Screen Time Effects	10000-25000	15	5.53	1.64	0.16	0.923
	25000-50000	23	5.74	1.21		
	50000-100000	23	5.70	1.15		
	above 100000	29	5.83	1.44		

Upon using the One-Way ANOVA, from the Table 5, it is observed that the p-value is not less than the 0.05 level and thus we can infer that there is no significant mean difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of Income of Parents

**H06:** There is no significant difference in Screen Time Effects of the Children, Adolescents and Youth in terms of their Age

Table 6

*Difference in the Screen Time Effects of the Children, Adolescents and Youth  
in terms of their Age*

Variable	Age	N	Mean	Std Deviation	F-value	p-value
Screen Time Effects	7 to 10	10	5.70	1.25	1.88	.159
	11 to 19	48	5.96	1.29		
	20 To 29	32	5.38	1.39		

It is inferred from the Table 6 that the p-value is greater than the 5% level of significance. Hence the respective null hypothesis is accepted ( $p > 0.05$ ). Thus, the result shows that there is no significant mean difference in the Screen Time Effects of the Children, Adolescents and Youth in terms of their Age

**H07:** There is no significant difference in PWB of the Children, Adolescents and Youth in terms of gender.

Table 7

*Difference in the PWB of the Children, Adolescents and Youth in terms of gender*

Variable	Gender	N	Mean	Std Deviation	t-value	p-value
PWB	Male	54	25.78	3.694	0.39	.695
	Female	36	25.47	3.476		

From the results of Table 7, it is noticed that the p-value is greater than 0.05, hence we will be accepting the null hypothesis, meaning to that there is no significant mean difference between the males and females with respect to PWB.

**H08:** There is no significant difference in PWB of the Children, Adolescents and Youth in terms of location

Table 8

*Difference in the PWB of the Children, Adolescents and Youth in terms of location*

Variable	location	N	Mean	Std Deviation	F-value	p-value
PWB	Urban	53	25.53	3.550	0.14	.872
	Semi Urban	20	25.65	3.675		
	Rural	17	26.06	3.816		

It is inferred from the Table 8 that the PWB is compared across the three different locations and it is found that the p-value is not less than the 0.05 level. Hence, it makes an inevitable situation to accept the null hypothesis, inferring that there is no mean difference with respect to PWB between the three locations

**H09:** There is no significant difference in PWB of the Children, Adolescents and Youth in terms of Educational qualification of the Father

Table 9

*Difference in the PWB of the Children, Adolescents and Youth in terms of Educational qualification of the Father*

Variable	Educational qualification of the Father	N	Mean	S.D	t-value	p-value
PWB	School Education	13	22.85	4.469	3.20	.002
	College Education	77	26.13	3.221		

It is inferred from the Table 9 that the p-value is less than the 0.05 level as well as 0.01 level, indicating high significant mean difference between the level of education of father on PWB. Hence the respective null hypothesis is rejected ( $p < 0.01$ ). Thus, the result shows that higher the father's education there will be better PWB among Children, Adolescents and Youth.

**H010:** There is no significant difference in PWB of the Children, Adolescents and Youth in terms of Educational qualification of the Mother

Table 10

*Difference in the PWB of the Children, Adolescents and Youth in terms of Educational qualification of the Mother*

Variable	Educational qualification of the Mother	N	Mean	S. D	t-value	p-value
PWB	School Education	11	24.36	4.567	1.47	.146
	College Education	74	26.00	3.265		

It is inferred from the Table 10 that the p-value is not less than the 5% level of significance. Hence the respective null hypothesis is accepted ( $p > 0.05$ ). Thus, the result shows that there is no significant mean difference in the PWB of the Children, Adolescents and Youth in terms of Educational qualification of the Mother

**H0-11:** There is no significant difference in PWB of the Children, Adolescents and Youth in terms of Income of Parents

Table 11  
*Difference in the PWB of the Children, Adolescents and Youth in terms of Income of Parents*

Variable	Income of Parents	N	Mean	Std Deviation	F-value	p-value
PWB	10000-25000	15	23.73	4.698	2.75	.048
	25000-50000	23	26.04	3.586		
	50000-100000	23	25.13	3.429		
	above 100000	29	26.76	2.655		

The results pertaining to the comparison of Income levels with PWB indicate a significant p-value in the Table 11, thus claiming to accept the alternative hypothesis, meaning to that there is a significant mean difference between the incomes levels and PWB. Higher income levels witness better PWB and vice versa.

**H012:** There is no significant difference in PWB of the Children, Adolescents and Youth in terms of their Age

Table 12

*Difference in the PWB of the Children, Adolescents and Youth in terms of their Age*

Variable	Age in years	N	Mean	Std Deviation	F-value	p-value
PWB	7 to 10	10	23.80	4.92	2.92	.059
	11 to 19	48	26.42	2.88		
	20 To 29	32	25.09	3.89		

It is inferred from the Table 12 that the p-value is greater than the 5% level of significance. Hence the respective null hypothesis is rejected ( $p > 0.05$ ). Thus, the result shows that there is significant mean difference in the PWB of the Children, Adolescents and Youth in terms of their Age

**H013:** There is no significant relationship between the Screen Time Effects and PWB of the Children, Adolescents and Youth.

Table 13

*Correlation between Screen Time Effects (STE) and PWB  
of the Children, Adolescents and Youth*

Variables	N	Mean	Std. Deviation	Pearson's p-value
Screen Time Effects	90	25.66	3.59	0.38
PWB	90	5.72	1.33	

\* Significant at the 0.01 level (2-tailed).

It is inferred from the above Table 13 that the calculated correlation value is moderate, meaning to that is a significant correlation between (STE) and PWB of the Children, Adolescents and Youth. Significant Positive correlation exists implies that those who manage screen time effectively have good PWB

### Conclusion

Thus, the result shows that Higher income levels witness better PWB and vice versa and higher the father's education there will be better PWB among Children, Adolescents and Youth. Socioeconomic status is a vigorous predictor of difference in parenting and child development. Parents with high

economic wealth are able to devote in enriching materials and motivating learning experiences for their children. Human capital equips parents with the knowledge and abilities to foster positive development in their children (Yana A. Kuchirko, Catherine S. Tamis-LeMonda, 2019), Socioeconomic status (SES) is a common predictor of child development; childcare is a large part of the reason why. Across diverse populations and different developmental areas, there is indication that parenting intermediates the relation between SES and child outcomes and is part of the process by which societal discrimination is diffused across generations (Hoff, E., & Laursen, B. 2019). And another finding according to this study is that there exists significant positive correlation between screen time and PWB, it implies that those who manage screen time effectively have good PWB. Vishal Upadhayay (2018), in his study found significant there were significant negative correlation between social media usage and wellbeing, and self-control. Bhavya Nidhi Sharma et.al., (2021), in her study found that the problematic risky internet use was positively correlated with the psychological well-being. Neha Shresta, Mackwin Kenwood D'mello (2020) found that PWB of high school students is negatively affected by Internet addiction. The outcome of the research is that those who manage screen time effectively have good PWB. Healthy screen use is about how we use it effectively. As a parent using screens in healthy ways makes children to develop healthy screen use habits. Spending time with the child, focusing on the needs of the child will develop a positive well-being among them.

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