

ONLINE LEARNING EFFECTIVENESS IN RELATION TO SELF-ESTEEM AND ACHIEVEMENT MOTIVATION OF ADOLESCENTS DURING COVID-19 PANDEMIC

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ABSTRACT:

The present study aimed to find out effectiveness of online learning in relation to self esteem and achievement motivation of adolescents during covid-19 pandemic. The sample consisted of 100 students of 9th grade was chosen through random sampling technique from Government senior secondary school of Chandigarh. The results of the study indicated significant correlation between online learning and self esteem as well as between online learning and achievement motivation of the adolescents during Covid-19 pandemic.

Keywords: Online Learning, Self-esteem, Achievement Motivation, Covid-19

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INTRODUCTION

The spring of the COVID-19 outbreak has changed education dramatically, with the distinctive rise of online learning, in which learning and teaching are undertaken on digital platforms, which is among the physical distancing policies to help slow down the transmission of the corona virus disease . The rise of the global pandemic forced a bump into online courses and teaching-learning plans for students and teachers.

Online Learning

Online Learning: A form of distance education in which a course or program is intentionally designed in advance to be delivered fully online. Faculty use pedagogical strategies for instruction, student engagement, and assessment that are specific to learning in a virtual environment.

Bates and Poole (2003) Online learning is also used in many cases as a synonym of distance education because most distance education today is done online.

Ehlers and Pawlowski (2006) E-learning is defined as using online platform technologies and the Internet to enhance learning and provide users with access to online services and services.

Martín-Blas and Serrano-Fernández (2009) online platforms have different tools to facilitate conducting online interactive classes to reduce students' loss. Online education platforms are

designed to share information and coordinate class activities.

Kulal and Nayak (2020) online learning is considered as an entertaining way to learn. It has a positive impact on both students and teachers alike. Both faculty and students have optimistic opinions about online classes.

Self-Esteem

Self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. Self-esteem generally has to do with a person's overall positive evaluation of the self. It is composed of two distinct dimensions, competence and worth. Self-esteem can be described as a person's overall subjective sense of personal worth or value.

Murphy and Morrel(2005) Self-esteem defined as a global barometer of self- evaluation involving cognitive appraisals about general self-worth and affective experiences of the self that are linked to these global appraisals .

MacDonald and Leary (2012) “People strive to feel good about themselves or seek to maintain their self-esteem, and this is fundamental to human nature.”

Achievement Motivation

Achievement motivation typically refers to the level of one's motivation to engage in achievement behaviours, based on the interaction of such parameters as needed for achievement, expectancy of success and the incentive value of success.

Bigge and Hunt (1980) defined achievement motivation as the motivation to perform and actively work toward a goal without interruption, and gain a sense of accomplishment in the process.

Singh (2011) Achievement motivation is a subjective value, as well as a psychological drive that helps individuals achieve their goals.

Liao (2012) achievement motivation has the ability to predict academic ability and task success.

Puzziferro, M. (2008) studied that, the effect between self-esteem and online technology was not significant, suggesting that full mediation by ease of use occurred. The total effect of self-esteem on online technology was significant, $B = 0.20$, $t = 2.51$, $p = 0.012$, indicating that a one-unit increase in self-esteem increase the expected value of usefulness by 0.20 units. Therefore, ease of use fully

mediated the link between self-esteem and online technology.

Xiao, J. (2012) studied that, the relationship between self-esteem and e-learning in the pre-university students. The results demonstrated that there was significant ($p < 0.01$) positive relationship between self-esteem and e-learning. Moreover, there was significant difference in e-learning between boys and girls. However, no significant difference was found in self-esteem between males and females.

Kuo, Y.-C. (2014) shows that, there is positive and significant association between students' self-esteem and learning responsibilities. This means that a significance value of less than 0.01 (0.000), with an r-value of 0.468, was obtained.

Peechapol, C et al., (2018) studied that, indicates male students have high level of self-esteem and female students have higher online learning. As it can be seen in result section, there is a strong positive correlation ($r = 0.863$) between self-esteem and online-learning among university students, which also indicates that the results are highly significant at 0.007 level.

Rini Rohmawati (2018) conducted research that employed quantitative research that applied ex-post facto design. The result indicated that there is no effect of achievement motivation on students learning

Assary et al., (2021) studied that, the correlation coefficient between students' motivation in online learning and their reading comprehension was 0.5792.

Gao et al., (2022) The correlation analysis among the measures showed that the learning self-efficacy among college students, either females or males, was significantly positively associated with their levels of self-esteem both in the same academic year and across years ($p < 0.01$)

OBJECTIVES OF THE STUDY

The present study was conducted to attain the following objectives:

- To study online learning effectiveness, self-esteem, achievement motivation of the adolescents.
- To study the correlation between online learning effectiveness and Self-esteem of the adolescents during Covid-19 pandemic.
- To study the correlation between online learning effectiveness and achievement motivation of the adolescents during Covid-19 pandemic.

HYPOTHESES OF THE STUDY

The study was conducted to test the following hypotheses.

Ho1 There is no significant correlation between online learning effectiveness and self-esteem of adolescents during covid-19 pandemic

Ho2 There is no significant correlation between online learning effectiveness and Achievement motivation of adolescents during covid-19 pandemic

Delimitation of the study

The study was delimited to the Government senior secondary school of Chandigarh only.

Tools

Following standardized tools were used for conducting this study

- 1) Online Learning Effectiveness Scale, Self-Prepared.
- 2) Self-Esteem Scale developed by Sorensen(2006)
- 3) Achievement Motivation Scale developed by Deo- Mohan (2002)

METHOD OF THE STUDY

The present study was primarily designed to determine the relationship between online learning and self-esteem; relationship between online learning and achievement motivation. This study covered three variables namely:

- i. Online Learning
- ii. Self- Esteem
- iii. Achievement Motivation

Online Learning was the independent variable, self-esteem and achievement motivation were the dependent variables in this study.

SAMPLE

Sample is a miniature picture of the entire group of aggregates from which it has been taken. In the study the sample of 100 students of 9th grade was chosen through random sampling technique from Government senior secondary school of Chandigarh (sector 20D).

INTERPRETATION AND DISCUSSION

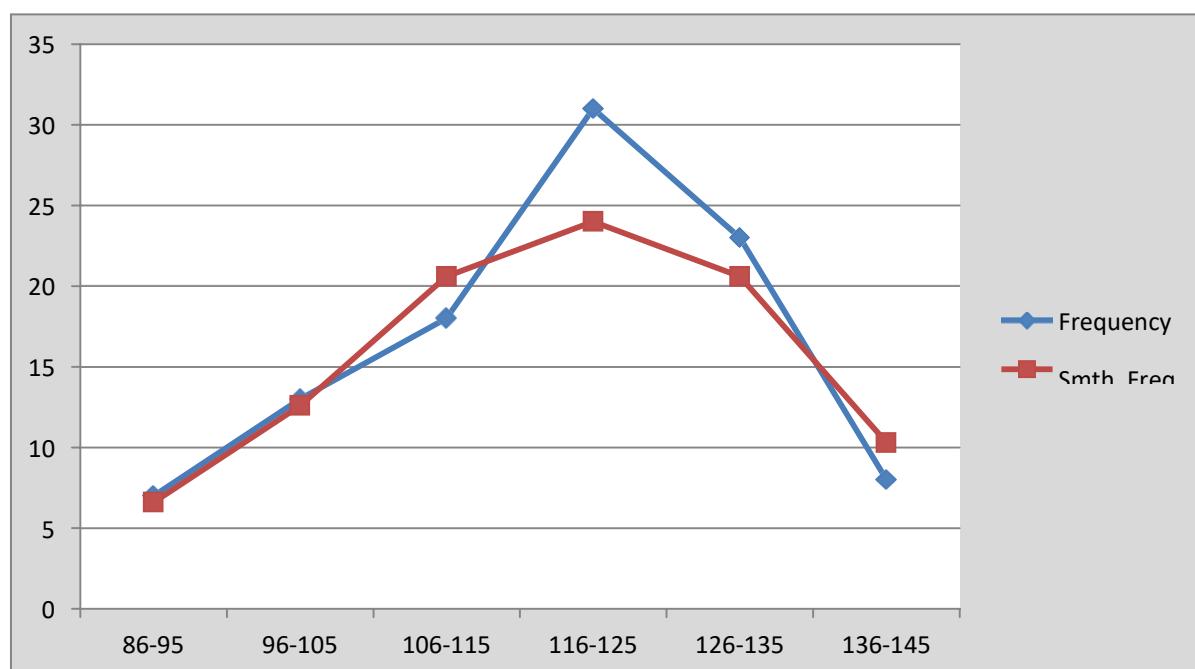
TABLE 1: FREQUENCY DISTRIBUTION SHOWING ONLINE LEARNING EFFECTIVENESS OF TOTAL SAMPLE

CLASS INTERVAL	MID POINT	F	SMOOTHENED FREQUENCY
86-95	90.5	7	6.6
96-105	100.5	13	12.6
106-115	110.5	18	20.6
116-125	120.5	31	24
126-135	130.5	23	20.6
136-145	140.5	8	10.3

TABLE 2: TABLE SHOWING MEAN, MEDIAN, STANDARD DEVIATION, SKEWNESS, KURTOSIS OF ONLINE LEARNING EFFECTIVENESS SCORES OF TOTAL SAMPLE

N	MEAN	MEDIAN	S.D.	SKEWNESS	KURTOSIS
100	117.27	119.50	12.956	-0.414	-0.447

FIGURE 1: FREQUENCY POLYGON SHOWING FREQUENCY DISTRIBUTION OF SCORES OF ONLINE LEARNING OF TOTAL SAMPLE



INTERPRETATION

TABLE 2 shows that mean, median, standard deviation, skewness and kurtosis of online learning of the total sample. The mean is 117.27; median is 119.50 which are very close to each other. This shows that scores are close to normal distribution. Same can be seen from the frequency polygon. The value of skewness is -0.414 which shows that distribution is negatively skewed. The value of kurtosis is -0.447 which is less than table value 0.263, hence the curve is leptokurtic.

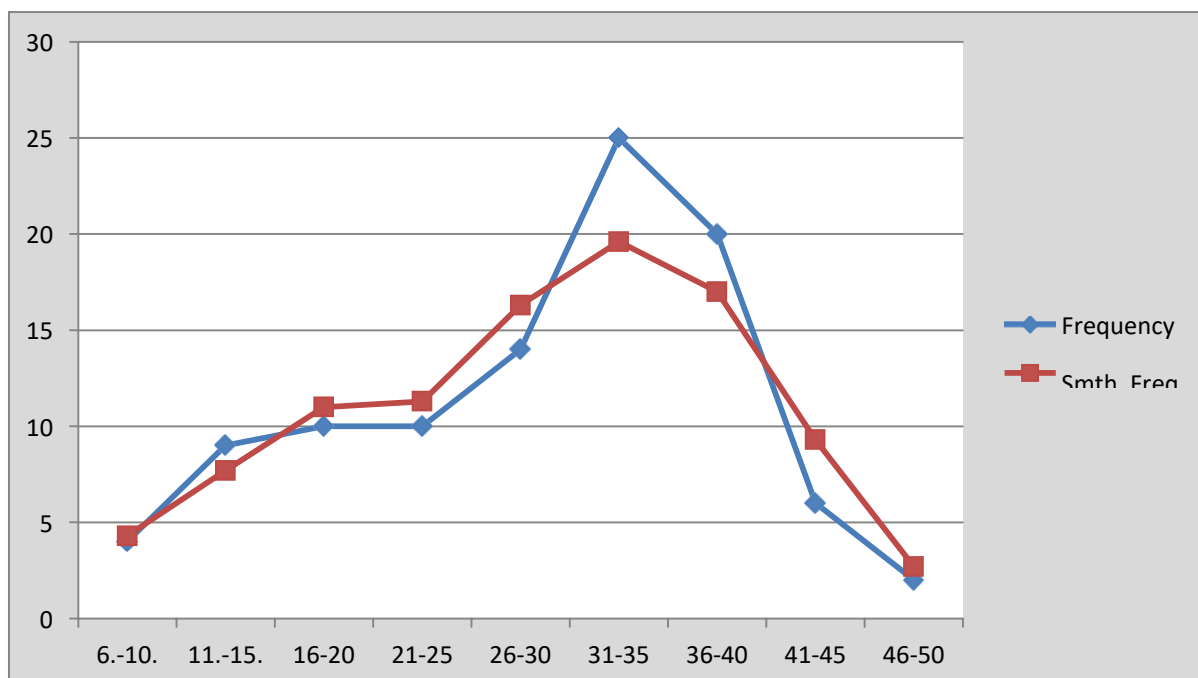
TABLE 3: FREQUENCY DISTRIBUTION SHOWING SELF-ESTEEM OF TOTAL SAMPLE

CLASS INTERVAL	MID POINT	F	SMOOTHENED FREQUENCY
6-10	8	4	4.3
11-15	13	9	7.7
16-20	18	10	9.6
21-25	23	10	11.3
26-30	28	14	16.3
31-35	33	25	19.6
36-40	38	20	17
41-45	43	6	9.3
46-50	48	2	2.7

TABLE 4: TABLE SHOWING MEAN, MEDIAN, STANDARD DEVIATION, SKEWNESS, KURTOSIS OF SELF ESTEEM SCORES OF TOTAL SAMPLE

N	MEAN	MEDIAN	S.D.	SKEWNESS	KURTOSIS
100	27.56	28	10.36	-0.356	-0.639

FIGURE 2: FREQUENCY POLYGON SHOWING FREQUENCY DISTRIBUTION OF SCORES OF SELF ESTEEM OF TOTAL SAMPLE



INTERPRETATION

TABLE 4 shows that mean, median, standard deviation, skewness and kurtosis of self esteem of the total sample. The mean is 27.56; median is 28 which are very close to each other. This shows that scores are close to normal distribution. Same can be seen from the frequency polygon. The value of skewness is -0.356 which shows that the polygon is negatively skewed. The value of kurtosis is -0.639 is less than 0.263, which implies that the curve is leptokurtic.

TABLE 5: FREQUENCY DISTRIBUTION SHOWING ACHIEVEMENT MOTIVATION OF TOTAL SAMPLE

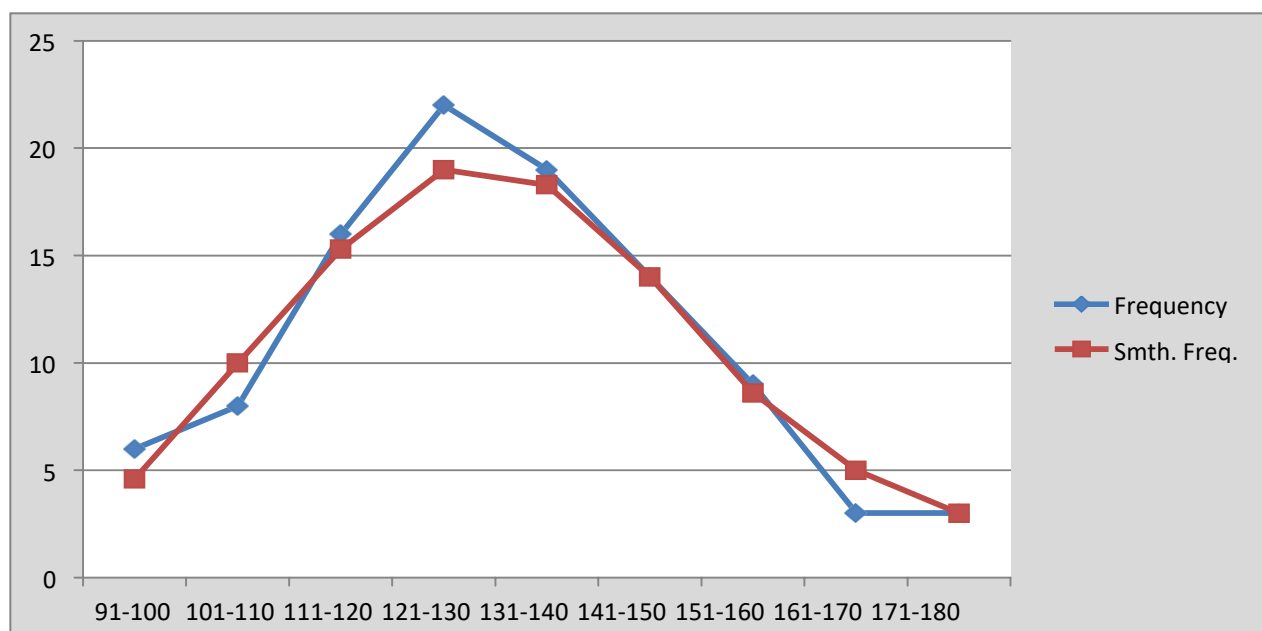
CLASS INTERVAL	MID POINT	F	SMOOTHENED FREQUENCY
91-100	95.5	6	4.6
101-110	105.5	8	10
111-120	115.5	16	15.3
121-130	125.5	22	19
131-140	135.5	19	18.3

141-150	145.5	14	14
151-160	155.5	9	8.6
161-170	165.5	3	5
171-180	175.5	3	3

TABLE 6: TABLE SHOWING MEAN, MEDIAN, STANDARD DEVIATION, SKEWNESS, KURTOSIS OF ACHIEVEMENT MOTIVATION SCORES OF TOTAL SAMPLE

N	MEAN	MEDIAN	S.D.	SKEWNESS	KURTOSIS
100	131.39	129.50	18.607	0.167	-0.227

FIGURE 3: FREQUENCY POLYGON SHOWING FREQUENCY DISTRIBUTION OF SCORES OF ACHIEVEMENT MOTIVATION OF TOTAL SAMPLE



INTERPRETATION

TABLE 6 shows that mean, median, standard deviation, skewness and kurtosis of achievement motivation of the total sample. The mean is 131.39; median is 129.50 which are very close to each other. This shows that scores are close to normal distribution. Same can be seen from the frequency polygon. Skewness and kurtosis are 0.167 and - 0.227 respectively. The value of skewness 0.167 shows that the distribution is positively skewed. The value of kurtosis -0.227 which is less than 0.263 implies that the curve is leptokurtic.

To test the hypothesis 1 and 2 Pearson's Correlation Coefficient was computed and entered in the tables.

HYPOTHESIS- 1

There is no significant correlation between online learning effectiveness and self -esteem of the adolescents during covid-19 pandemic.

TABLE 7: TABLE SHOWING COEFFICIENT OF CORRELATION BETWEEN ONLINE LEARNING EFFECTIVENESS AND SELF ESTEEM OF ADOLESENTS DURING COVID-19 PANDEMIC

VARIABLES	N	MEAN	MEDIAN	S.D.	R	LEVEL OF SIGNIFICANCE
ONLINE LEARNING EFFECTIVENESS	100	117.27	119.5	12.956	0.91	Significant at 0.01 level
SELF ESTEEM	100	27.56	28	10.36		

INTERPRETATION

In this study the first objective was to find out the correlation between Online Learning Effectiveness and Self-Esteem of adolescents during Covid-19 pandemic. Table 1 shows that correlation between Online Learning Effectiveness and Self Esteem of adolescents with value 0.91 is significant at 0.01 level. So, this shows that there exists a strong positive correlation between online learning effectiveness and self-esteem of adolescents. Thus, the Null Hypothesis that **there is no significant correlation between online learning effectiveness and self -esteem of the adolescents during covid-19 pandemic is not accepted.** Hence, we can say that the significance correlation exists between the online learning effectiveness and self- esteem of adolescents during covid-19 pandemic.

HYPOTHESIS- 2

There is no significant correlation between online learning effectiveness and achievement motivation of the adolescents during covid-19 pandemic.

TABLE 8: TABLE SHOWING COEFFICIENT OF CORRELATION BETWEEN ONLINE LEARNING EFFECTIVENESS AND ACHIEVEMENT MOTIVATION OF ADOLESENTS DURING COVID-19 PANDEMIC

VARIABLES	N	MEAN	MEDIAN	S.D.	R	LEVEL OF SIGNIFICANCE
ONLINE LEARNING EFFECTIVENESS	100	117.27	119.5	12.956	0.87	Significant at 0.01 level
ACHIEVEMENT MOTIVATION	100	131.39	129.5	18.607		

Interpretation

In this study the second objective was to find out the correlation between Online Learning Effectiveness and Achievement Motivation of adolescents during Covid-19 pandemic. Table 2 shows that correlation between Online Learning Effectiveness and Achievement Motivation of adolescents with value 0.87 is significant at 0.01 level. So, this shows that a strong positive correlation is between online learning effectiveness and achievement motivation of adolescents. Thus, the Null Hypotheses that **there is no significant correlation between online learning effectiveness and Achievement Motivation of the adolescents during covid-19 pandemic is not accepted.** Hence, we can say that the significance correlation exists between the online learning effectiveness and achievement motivation of adolescents during covid-19 pandemic.

Results and Discussions

HYPOTHESIS-1 states that **there is no significant correlation between online learning effectiveness and self esteem of adolescents** is rejected. The result is supported by the studies **Bandura, A. (1997); Martin, F. (2010); Xiao, J. (2012); Kuo, Y.-C. (2014); Garaika, G(2019); Wasserman & Migdal, (2019), Chatterjee R et al.,(2020); Torres Martín, C (2021)** whose results are also showing positive and significant relationship between online learning effectiveness and self esteem.

HYPOTHESIS-2 states that **there is no significant correlation between online learning effectiveness and achievement motivation of adolescents** is rejected. The result is supported by the studies **Mc Clelland (1961), Patel, R.M. (1981), Mohanty, P. (1998), Ghirardini (2011), Al-Fraihat (2020)** whose results are also showing positive and significant relationship between online learning effectiveness and achievement motivation

Educational Implications

The present study has the following educational implications;

- Appropriate use of Online Learning instructions for educational purpose can enhance the teaching and learning experiences as well as self esteem and achievement motivation for both teachers and students.
- This study is helpful for the teachers to formulate different teaching strategies keeping in view the level of online learning and achievement motivation of the students as the result indicated a strong positive correlation between online learning effectiveness and achievement motivation.

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