



E-Learning in Relation to Personality Factors and Modernization among Prospective Teachers

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ARTICLE INFO ABSTRACT

E-learning has become integral to contemporary education, particularly in preparing future educators. This study investigates the level of E-learning among prospective teachers, exploring how personality factors and perceptions of modernization influence are related to E-Learning. In this study the researcher has used the descriptive survey research design. In this present study the population consists of the B.Ed. college students studying in different colleges (Govt. Aided and Self Finance) of Paschim Medinipur and Purba Medinipur districts of West Bengal. Out of the population a sample 500 students including male (230) and female (270) were selected by following purposive sampling method for the purpose of the study. Test of E Learning Related Attitude, The Big Five Inventory (Goldberg, 1993) and Comprehensive Modernization Inventory (Ahluwallia & Kalia, 2010) were used for data collection. Collected data were analyzed in the SPSS version 20 with the help of descriptive statistics and Inferential Statistics. Findings of the study indicate that Personality Factors and Modernization are positively related to E-Learning.

Keywords: E-Learning, Personality Factors, Modernization, Prospective Teachers

Introduction:

E-learning, driven by advancements in technology and globalization, has revolutionized educational paradigms worldwide. This research investigates the attitudes towards E-learning among learners, exploring how personality traits and perceptions of modernization influence these attitudes. Understanding these dynamics is crucial for enhancing educational practices, improving learner engagement, and fostering effective digital learning environments in the context of contemporary education. E-learning adoption is influenced by various factors, including individual traits and contextual factors. Personality traits such as openness to experience, conscientiousness, and technology readiness have been identified as predictors of E-learning acceptance (Alavi & Leidner, 2001; Liu et al., 2010). Additionally, perceptions of modernization, encompassing technological infrastructure, cultural attitudes towards digital education, and institutional support, significantly impact attitudes towards E-learning (Altbach & de Wit, 2020; Moyle, 2016).

Modernization and education are strongly connected concepts. good modernization requires good teaching, which education provides. A civilization must educate itself in order to advance, making quick educational advancements crucial. The result of educational churning is only the cream of intellect. The significance of this research comes from the fact that modernization is crucial to raising societal consciousness. The social, cultural, and religious values evolve in the intended way as a result of modernization. It alters how individuals see themselves in relation to their surroundings. Modernization is crucial for students since it has an impact on their conduct and attitudes towards society.

“The new technology's ability to permeate many professional domains has been significantly hampered by the hesitation of many people to abandon conventional and outmoded technology that is less complex and simple to use. Studies on the knowledge and ability gaps of university professors in technology pedagogical topic knowledge have been conducted for decades”. (Thompson Manning, 1987) The success of the use of technology

in the educational environment is correlated with the teaching staff's attitude, according to Rogers (1995), "whether the educational system is committed to accomplish a meaningful use of technology in instruction. There is no denying that instructors are crucial to the educational system and to the use of instructional tools and practices. Their attitude towards technology is a critical factor in determining how well they will utilize it in any kind of educational environment".

Significance of the Study:

Understanding how personality traits influence attitudes towards E-learning can inform educators and institutions on tailoring digital learning experiences. Insights into the relationship between modernization factors (such as technological infrastructure, accessibility, and institutional support) and attitudes towards E-learning can guide educational policymakers and administrators in improving digital learning environments. The study can contribute to advancing psychological understanding of how individual traits, such as openness to experience or conscientiousness, influence technology adoption in educational contexts. This knowledge can have broader applications beyond E-learning, impacting fields related to human-computer interaction and technology acceptance. Studying the attitude towards E-learning in relation to personality factors and modernization is significant for its potential to enhance educational practices, optimize digital learning environments, promote inclusive education, inform policy decisions, advance psychological understanding, prepare stakeholders for the future, contribute to global educational trends, and empower educational stakeholders. These outcomes collectively contribute to fostering a dynamic, responsive and effective educational system in the digital age.

Objectives: The current study has been carried out with the following objectives-

- ✓ To examine the E- Learning among Prospective Teachers.
- ✓ To examine the Personality Factors among Prospective Teachers.
- ✓ To examine the Modernization among Prospective Teachers
- ✓ To find out the relationship between Personality Factors, Modernization and E-Learning.

Method:

Research Design: In this study the researcher has used the descriptive survey research design.

Variable: The major variables of the present study is

- a) Personality Factors
- b) Modernization
- c) E-Learning

Population and Sample: In this present study the population consists of the B.Ed. college students studying in different colleges (Govt. Aided and Self Finance) of Paschim Medinipur and Purba Medinipur districts of West Bengal. Out of the population a sample 500 students including male (230) and female (270) were selected by following purposive sampling method for the purpose of the study.

Tools of Research

Test of E Learning Related Attitude: It is a self structured questionnaire consisting of 36 items with the response of Strongly Disagree, Disagree, Agree and Strongly Agree.

The Big Five Inventory (Goldberg, 1993): A 44-item personality test based on Goldberg's (1993) Big Five dimensions. Subsequently, personality aspects are subdivided into each of the components- Openness, conscientiousness, extraversion, agreeableness, and neuroticism are the Big Five personality factors.

Comprehensive Modernization Inventory (Ahluwallia&Kalia,2010)

"A standardized questionnaire-Comprehensive Modernization Inventory(CMI-AK)developed by Dr. S. P. Ahluwalia and Dr. A. K. Kaliawas used for the purpose of studying the attitude of adolescents towards modernization with respect to 7 dimensions viz., education, parent-child relationship, politics, status of women, marriage, religion and socio-cultural factors".

Procedure for Data Collection:

We sought the principal's or head teacher's approval to gather the data. Individuals taking the test were sat in a relaxed and relaxed manner. The students were informed explicitly before receiving the pamphlets. "Remain silent and wait for instructions before making any notes on the booklet. Pay close attention to the directions provided on the inventory's home page. If something is unclear, feel free to ask. Verbal explanations of the directions to the students should also be provided by the test administrator. It is recommended to eliminate any uncertainties in advance.

Statistical Techniques: For the purpose of the study the researcher used both the descriptive statistics and inferential statistics.

Hypothesis:

H01- Prospective Teachers' e-learning level will be positive

H02- There will be high modernization among the prospective teachers

H03- Personality factors of the prospective teachers will be positive towards the e learning

H04- There is no significant relationship of personality factors and E-Learning of Prospective Teachers

H05- There is no significant relationship of Modernization and E-Learning of Prospective Teachers.

Data Analysis and Interpretation:

Table 1: Descriptive Statistics of the Attitude towards E Learning, Personality Factors and Modernization

	E learning	Modernization	Personality Factors
N Valid	500	500	500
Missing	0	0	0
Mean	61.61	61.00	59.93
S.E. Mean	.43	.42	.40
Mode	63.00	60.00	60.00
Std. Dev	9.56	9.38	8.87
Variance	91.41	87.93	78.74
Kurtosis	-.25	-.23	-.31
S.E. Kurt	.22	.22	.22
Skewness	-.10	-.09	-.01
S.E. Skew	.11	.11	.11
Range	53.00	50.00	49.00
Minimum	32.00	35.00	40.00
Maximum	85.00	85.00	89.00
Sum	30804.00	30498.00	29967.00

The average score of E-learning is 61.61. SD Scores vary around the mean by approximately 9.56 points. The skewness is close to zero (-0.10), indicating a relatively symmetrical distribution of E-learning. The kurtosis is also near zero (-0.25), suggesting a moderate distribution shape. E-Learning scores range from 32.00 to 85.00, indicating a wide variation in how individuals perceive E-learning. It is evident from the table above that the mean value for E-Learning is higher than the midpoint of the data which indicates that the prospective teachers' attitude towards E-Learning is positive. Hence the formulated hypothesis "Prospective Teachers' e-learning level will be positive" is accepted. The average score related to perceptions of modernization is 61.00. Similar to E-Learning scores, perceptions of modernization also have a standard deviation of approximately 9.38 points.

Both skewness (-0.09) and kurtosis (-0.23) are close to zero, indicating a relatively normal distribution of modernization perceptions. Scores range from 35.00 to 85.00, showing variability in how individuals perceive the modernization of educational practices. The mean value for modernization is higher than the midpoint indicating the prospective teachers' modernization. Therefore the formulated hypothesis "There will be high modernization among the prospective teachers" is accepted. The average score for personality factors influencing E-learning is 59.93. Scores vary around this mean by approximately 8.87 points. Skewness (-0.01) and kurtosis (-0.31) are close to zero, suggesting a relatively normal distribution of scores related to personality factors. Scores range from 40.00 to 89.00, indicating variability in how personality traits towards E-learning. The mean value for the variable Personality Factor is 59.93 which is higher than the midpoint of the collected dataset. It indicates the positivity of the respondents towards E-Learning. Therefore, the formulated hypothesis "Personality factors of the prospective teachers will be positive towards the e learning" is accepted in the current study.

Table 2: Relationship between Personality Factors and E-Learning of Prospective Teachers

		E-Learning Score	Personality Factor Score
E-earning Score	Pearson Correlation	1	.112*
	Sig. (2-tailed)		.012
	Sum of Squares and Cross-products	31829.192	9611.756
	Covariance	63.786	19.262
	N	500	500

Personality Score	Pearson Correlation	.112*	1
	Sig. (2-tailed)	.012	
	Sum of Squares and Cross-products	9611.756	230644.758
	Covariance	19.262	462.214

*. *Correlation is significant at the 0.05 level (2-tailed).*

The Pearson correlation coefficient between the E-Learning Score and the Personality Score is **0.112**. This value indicates a positive but weak correlation between these two variables. The significance level (p-value) is **0.012**, which is less than the common alpha level of 0.05. This means that the correlation is statistically significant, suggesting that there is a meaningful relationship between the E-Learning Score and the Personality Score, albeit weak. Hence the formulated hypothesis is rejected and it is concluded that the E-Learning is significantly related to personality factors of the Prospective Teachers.

Table 3: Relationship of Modernization and E-Learning of Prospective Teachers

Total Prospective Teachers :500		-Learning Score	Modernization Score
E-Learning Score	Pearson Correlation		.246**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	31829.192	36135.376
	Covariance	63.786	72.416
Modernization Score	Pearson Correlation	.246**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	36135.376	676377.528
	Covariance	72.416	1355.466

The Pearson correlation coefficient between the E-Learning Score and the Modernization Score is 0.246. This indicates a moderate positive relationship between these two variables. A correlation of this magnitude suggests that as modernization increases, the other tends to increase as well, but the relationship is not extremely strong. The p-value for this correlation is 0.000, which is less than the common alpha level of 0.05. This indicates that the correlation is statistically significant. In other words, there is strong evidence to suggest that the relationship between the E-Learning Score and the Modernization Score is not due to random chance. The Pearson correlation coefficient of **0.246** indicates a moderate positive relationship between the E-Learning Score and the Modernization Score. The p-value of **0.000** confirms that this correlation is statistically significant. This suggests that there is a meaningful association between the E-Learning Score and the Modernization Score, where increases in one variable are associated with increases in the other. While the correlation is not extremely strong, it is notable and statistically reliable.

Findings:

- The prospective teachers showed a high level of E-Learning.
- There is positivity in the Personality Factors among Prospective Teachers.
- Prospective Teachers are highly modernized.
- There exists a positive relationship between the E-Learning, Modernization and Personality factors.

Conclusion:

Finally, prospective instructors' attitudes towards E-learning are influenced by a mix of individual traits and views on progress. This research contributes valuable insights into optimizing E-learning environments, enhancing professional development opportunities, and fostering effective digital learning experiences in teacher education. By recognizing and addressing these factors, educators and policymakers can promote sustainable educational practices that meet the evolving needs of future educators and enhance overall educational outcomes.

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