

# Analysis on the students towards Behavioural Factor of E-Learning and Traditional Learning

Rashmi Bahukhandi<sup>1\*</sup>, Dr. Navinta Rani<sup>2</sup>

<sup>1</sup> Research Scholar, University Maharaja Agrasen Himalayan Garhwal University (Pauri).

<sup>2</sup> Research Guide, University Maharaja Agrasen Himalayan Garhwal University (Pauri).

**Abstract - Academic success is a crucial tool for reaching one's goals and fostering all-around growth in a youngster. The main aim of the study is to Students Towards Behavioural Factor Of E-Learning And Traditional Learning. The experimental design is the plan for the experiment that will be used to test the hypotheses and draw reliable findings regarding the connection between the independent and dependent variables. Students in their last class of secondary school are shown to have the same behavioral attitude toward E-learning, regardless of gender.**

**Keywords - Traditional, Learning, Behavioural, Fostering, Gender, Reliable**

-----X-----

## 1. INTRODUCTION

Academic success is a crucial tool for reaching one's goals and fostering all-around growth in a youngster. It aids in the fulfillment of parent's dream that their children may climb the ladder of success. There is a lot of pressure on both students and educators in the traditional educational system to succeed. In our society, academic success is determined by how well children do on standardized tests. A student's intelligence, mediocrity, rate of learning, and readiness for the next grade level are all determined by his or her performance on standardized tests. As a matter of fact, it seems that students' academic progress and accomplishment serve as the central axis of the whole educational system.

Conceptual learning and comprehension in the classroom are crucial to a child's success. It's important to note that kids' economic, social, and cultural backgrounds all have a role in how successful they are in school. The techniques and approaches employed by instructors in class, the home environment, the study habits and mental composition, certain characteristics of personality and social surrounds, and so on all contribute to the development of desired performance in pupils. In general, achievement refers to the process of accomplishing a desired objective, whether that goal is specific or broad. The results of tests and exams reflect the student's mastery of the required curriculum. An achievement is "proficiency of performance" in a particular skill or body of information, according to the Dictionary of Education (C.V. Good, 1959).

## 1.1 Academic Anxiety And Academic Achievement

Anxiety is a wide-ranging emotional, behavioral, and cognitive reaction to the impression of risk, and it comes from the Latin word "anxietas" (to choke, throttle, difficulty, disturb). Worry is a natural part of being human. Anxiety, in moderate amounts, may help you prepare for and respond appropriately to potentially stressful situations. Anxiety in excess undermines stability and decreases efficiency. The difference between "trait anxiety" and "state anxiety" is a common topic of discussion among psychologists. People with trait anxiety tend to feel nervous about a wide variety of things. Anxiety in a certain environment and at a given moment is referred to as "state anxiety."

Freud made a distinction between "normal" and "neurotic" anxiety. The former is aimed at a particular target, whereas the latter includes feelings of dread for no apparent reason. Concern over one's academic performance is known as "academic anxiety," and it is exclusive to academic settings. The term "academic anxiety" refers to a range of concerns related to schoolwork, not only tests. For instance, students in math, reading, science, and foreign language courses have been shown to experience anxiety. This anxiety is related to the perceived threat posed by the classroom setting, the instructor, and the content being covered in programs like these. It's a mental sensitivity to discomfort in reaction to stressful situations at university.

## 2. LITERATURE REVIEW

**Dr.Guneet Kaur Cheema (2021)** Low self-esteem is a major contributor to mental health problems. As a prerequisite for inspiration, self-respect is a fundamental need of the human condition. Human morale is bolstered because of the good self-concept and outlook it fosters. A quality school system ensures that all children, regardless of their background, race, religion, or economic status, have access to a foundational set of skills and information. It's useful information for understanding the student's academic progress and the obstacles he's encountering. Emphasis is placed on school-related pursuits, both academic and extracurricular. Additionally, adolescents' development is greatly impacted by their family environments. An improvement in his health is possible if we can provide him a feeling of safety. It's a network in which everyone's actions and connections to one another are intertwined. Adolescents thrive in situations where they are challenged and encouraged on occasion; this is especially true at home. Two-hundred teenagers made up the study's sample. The sample was selected using a random sampling method. One's sense of pride in oneself and success in school are dependent variables, whereas one's home environment is an independent one. The data was analyzed using the Pearson product-moment correlation coefficient. It was shown that if an adolescent grows up in a supportive household, he has a higher sense of self-worth and is more equipped to deal with the trials and tribulations of adulthood. Many artists, including his parents, classmates, siblings, mentors, and, most significantly, the culture and environment in which he is raised, may mold and improve his perceptions throughout this formative period of his life. Once he learns to control his behavior, he will be a valuable member of society. In contrast, he might be socially irresponsible if we are unable to change his behavior. A child's character is heavily influenced by the culture in which he or she is raised, as well as the family environment. If he is given a pleasant atmosphere to work in, he will be able to take steps forward. Therefore, in most cases, the importance of family is made clear. Recent years have seen psychologists and educators place more emphasis on adolescent's growing up space.

**Gizem Engin (2020)** The purpose of this research is to examine the relationships between parental expectations, teacher motivation, teacher self-efficacy, and kids' academic progress and motivation in a primary school setting. The study's research technique is a descriptive one, and its data come from interviews with 60 fourth-grade instructors and 1476 fourth-graders in the 2017-2018 school year. Among the elements shown to have a beneficial effect on students' academic performance were teachers' motivation, fathers' education, and the presence of a democratic home atmosphere. The results also show that a highly motivated teacher and a democratic parental attitude both boost students' motivation. Neglectful parents have a significant impact on their children's academic performance and motivation, the

study concludes. Teacher morale is affected by whether a centralized or decentralized style of school administration is preferred. Self-confident educators are likewise highly motivated, as shown by the results. As a corollary, it is inferred that early-career educators are less motivated than their more seasoned counterparts. Researchers hope their work will serve as a template for future investigations into related areas.

**Ching-Hsue Cheng (2019)** We hope that by gaining insight into the challenges rural students from disadvantaged backgrounds face in their pursuit of education, we may help enhance and maintain progress toward educational sustainability. This research obtained an integrated dataset, encompassing 16 attributes with 883 records, from an elementary school in a rural location in Taiwan. Then, this paper proposes an integrated features selection method to integrate four feature selection methods for finding the key features of academic achievement, and it uses a statistical test to investigate the differences in the nine features and the graduated score across different student backgrounds. This article revealed that the five categories of disadvantaged students display different academic accomplishments, and a statistical test showed that there were disparities between ordinary students and disadvantaged students in terms of important characteristics and the graduated score. This research interviewed six groups of kids from varied demographic origins to tease out these distinctions, and the results were distilled into the categories of "self," "family," and "school." Many students at this rural elementary school were at risk of failing academically due to their families' socioeconomic backgrounds, as evidenced by the following findings: (1) the majority of parents' educational levels were below the college level (72.3%); (2) the majority of parents were staff members and workers (73%); (3) 26.4% of students were economically disadvantaged; and (4) the age range of parents was from 30 to 64 years old.

**Mustafa YILDIZ (2013)** This research aims to clarify the relationship between reading motivation, reading fluency, and reading comprehension and academic performance in fifth grade. Within the context of the correlational design, a structural model was created and evaluated. A primary school in Etimesgut, Ankara Province, has 135 kids enrolled in the fifth grade. The Turkish version of the Motivations for Reading Questionnaire was used to assess the pupils' interest in reading. Oral reading of a suitable book was used to assess reading fluency in the classroom setting. Throughout the course of the research, the pace and accuracy of reading were calculated based on the number of mistakes committed. Multidimensional Fluency Scale was used to evaluate the reader's prosody, an additional measure of reading fluency. The results of the narrative and expository comprehension and vocabulary examinations were used to compile this information about the pupils' reading comprehension levels. Students' academic standing was evaluated

based on their performance in mathematics, science, and social studies. To resolve the study's central mystery, the researchers turned to Structural Equation Modeling (SEM). SPSS and AMOS statistical tools were used for the data analysis. According to the results, students' drive to read, their reading fluency, and their reading comprehension account for 61% of the variation in their academic performance. This is considered a major addition to the body of knowledge. It is time to rethink how we teach students to read and comprehend academic writings. There should be more research aimed at inspiring a love of reading in pupils, improving their reading fluency, and enhancing their ability to comprehend what they read.

**Dima Hijazi (2018)** The purpose of this research was to learn how well Yarmouk University students understand what they read and how it relates to their overall success in English. 150 male and female students were included in the sample. It is a random sample of the second-semester 2016–2017 English101 students at Yarmouk University. The study's questions were answered with the use of two different sets of multiple-choice questions: a 20-item reading comprehension exam and a 40-item achievement test. Both pupils' reading comprehension and English proficiency were found to be moderate. Furthermore, there were no gender disparities in terms of either reading comprehension or success. There were, however, statistically significant variations in reading comprehension and academic success favoring the college of science. Reading comprehension has a beneficial effect on pupils' success, and this association proved statistically significant. Since studies on the correlation between reading comprehension and English proficiency are so uncommon, the researcher concluded with a call for further investigation into the topic. Since English is the international language of trade and diplomacy, mastering it is essential. To a better life, it is crucial to our daily existence. Because it is the language that everyone needs to stay up with the information era, learning English is an indication that we are making the greatest possible progress into the present and the future (Hijazi, 2012).

### 3. METHODOLOGY

#### 3.1 Research Design

The experimental design is the plan for the experiment that will be used to test the hypotheses and draw reliable findings regarding the connection between the independent and dependent variables. The goal of the experiment, the nature of the controlled variables, and the constraints placed on the experiment all play a role in determining the design used. Students in the pauni district of Uttarakhand, both male and female, enrolled in a secondary school, and made up the study population of this research. The effect of E-learning vs conventional learning on students' academic achievement was investigated using a facility-based, quasi-experimental research method.

### 3.2 Statistical Treatment Test

For the first attitude scale, the researcher chooses the following statistical treatment for the chosen sample of students. It was determined using ASTES, CR (Critical Ratio), F-ratio, Chi-square, and percentage. Parametric relationships between factors including self-efficacy, intrinsic goal orientation, perceived interaction, diversity in assessment, perceived satisfaction, behavioral intention to use, and online learning effectiveness are investigated via the use of regression analysis. In statistics, Pearson's correlation is used to measure the degree to which two or more variables are correlated. The two parts of a Structural Equation Model (SEM)—the measurement model, also known as confirmatory analysis, and the structural model, also known as route analysis—are developed with the use of AMOS 20. Frequency, simple mean, and standard deviation; Chi-square test; Friedman test; Independent Sample t-test.

## 4. RESULTS

### 4.1 Demographic Profile of the Study

The study's data are summarized by using descriptive statistics to highlight their most salient characteristics. Simple summaries of the sample and the measurements are provided. Analyzing data in terms of percentages is a common statistical method for characterizing broad aspects of a sample or population. The findings of a percentage analysis are easily understood by the reader since they are based on the computation of measurements of research variables.

**Table 4.1 Frequency Distribution of Demographic profile of Learners**

Variable	Descriptive	Frequency	Percentage
Enrollment Status	Full Time	167	56
	Part time	133	44
Prior Work Experience	Experienced	76	25
	Non- experienced	224	75
Prior Online learning Experience	No experience	179	60
	Upto 2	78	26
	3 and above	43	14
Locality	Rural	120	40
	Urban	180	60
Computer knowledge	Yes	200	67
	No	100	33
Total		300	100.00

Current Enrollment Status: 56% of students are enrolled in full-time programs, while 44% are enrolled in part-time programs, as shown in Table 4.1. Most students are engaged in the program full

time, while the others attend just sometimes. When it comes to undergraduate education, most prestigious institutions still require full-time enrollment.

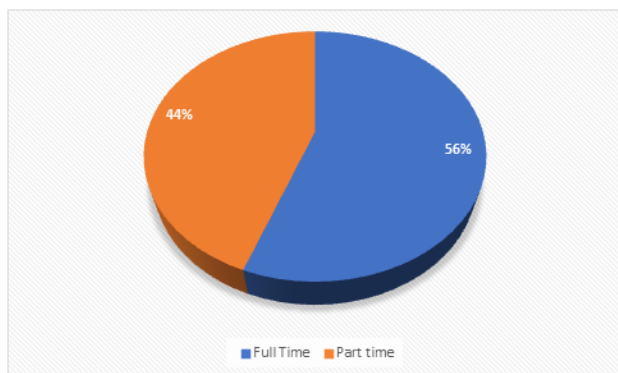


Figure 4.1: Current Enrollment Status

**Prior work experience:** Table 4.1 shows that just 25% of the students are seasoned professionals while 75% are first-time students. Since most UG students are under 25 years old, the vast majority of them have no relevant work experience.

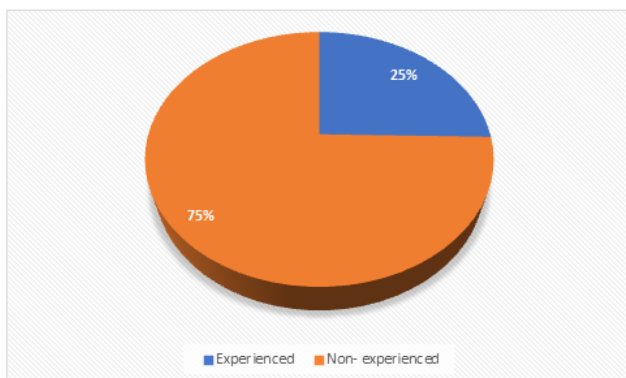


Figure 4.2: Prior work experience

**Prior online learning experience:** Based on the data in Table 4.1, the majority of students (60%) have never participated in any kind of online learning before, while 26% have participated in online courses for up to two years and 14% have participated in online courses for three years or more. Regarding formal schooling, online education in India is still in its infancy. Most students enrolling in UG programs are under 25 years old and have no experience with distance education.

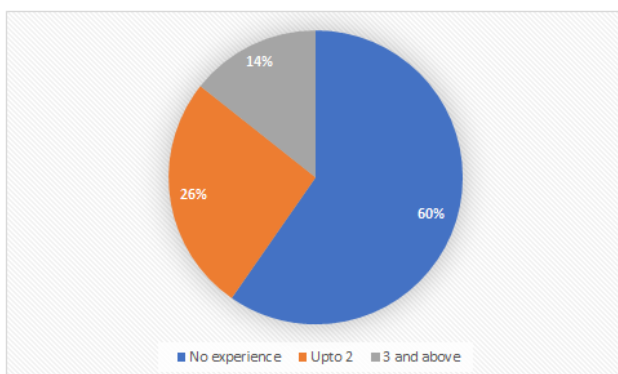


Figure 4.3: Prior online learning experience

**Locality:** Table 4.1 shows that 60% of students come from rural areas, whereas 40% live in urban areas.

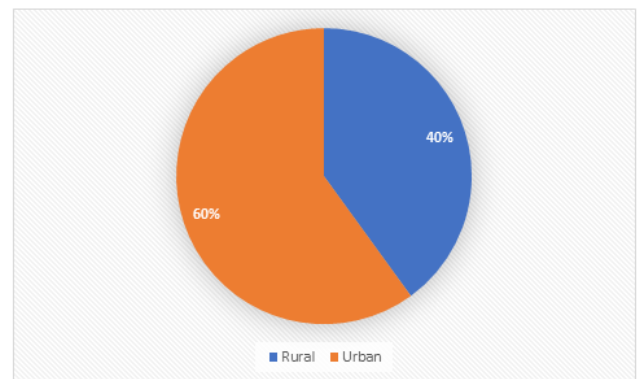


Figure 4.4: Locality

**Computer knowledge:** According to Table 4.1, two-thirds of students agree with the statement.

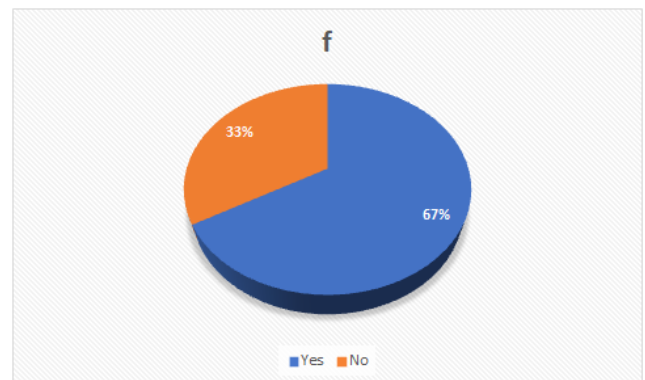


Figure 4.5: Computer knowledge

#### 4.2 The Male And Female Students Towards Behavioural Factor Of E-Learning And Traditional Learning

In this part, we cover the student t-test, which is used to compare the mean scores of two groups on a set of factors. In addition, Analysis of Variance (ANOVA) with the Duncan Multiple Range Test (DMRT), the Chi-square test, the Friedman test, the Correlation Analysis, the Multiple Regression Analysis, and the Structural Equation Model (SEM).

##### 4.2.1 Male and Female with respect to behavioural Factors of Online Learning effectiveness

**Table 4.2 t test for significant difference between Male and Female with respect to behavioural Factors of Online Learning effectiveness**

Factors of Online Learning effectiveness	Gender				t value	P value
	Male		Female			
	Mean	SD	Mean	SD		
Quality	34.91	6.53	37.19	6.01	4.327	<0.001**
Flexibility	25.90	5.06	26.43	5.05	1.225	0.221
<b>Overall Course Aspects</b>	<b>60.81</b>	<b>10.41</b>	<b>63.62</b>	<b>9.52</b>	<b>3.354</b>	<b>&lt;0.001**</b>
Usefulness	16.02	3.34	17.19	2.92	4.461	<0.001**
Ease of use	13.04	2.54	13.85	2.42	3.882	<0.001**
<b>Overall Design Features</b>	<b>29.06</b>	<b>5.52</b>	<b>31.05</b>	<b>4.85</b>	<b>4.569</b>	<b>&lt;0.001**</b>
ICT Support	30.41	4.85	31.97	4.83	3.781	<0.001**
ICT Skills	21.37	3.80	22.02	3.82	1.993	0.047*
ICT Infrastructure	21.94	4.21	22.84	4.06	2.569	0.010**

<b>Overall Technology</b>	<b>73.72</b>	<b>9.82</b>	<b>76.83</b>	<b>10.10</b>	<b>3.645</b>	<b>&lt;0.001**</b>
Self-Efficacy	25.91	4.62	28.50	4.60	6.598	<0.001**
Intrinsic Goal Orientation	16.01	2.94	17.35	3.06	5.184	<0.001**
<b>Overall, Learner Characteristics</b>	<b>41.92</b>	<b>6.93</b>	<b>45.85</b>	<b>6.87</b>	<b>6.684</b>	<b>&lt;0.001**</b>
Perceived Interaction	28.83	5.04	30.23	5.04	3.250	0.001**
Diversity in Assessment	16.69	3.12	17.99	2.82	5.189	<0.001**
<b>Overall Environmental Characteristics</b>	<b>45.52</b>	<b>7.32</b>	<b>48.22</b>	<b>6.77</b>	<b>4.533</b>	<b>&lt;0.001**</b>
Perceived Satisfaction	29.67	5.27	31.25	4.95	3.647	<0.001**
Behavioral Intention to Use	16.74	2.89	17.53	3.10	3.061	0.002**
Online Learning Effectiveness	56.91	8.71	60.47	8.78	4.772	<0.001**
Benefits	47.59	7.86	49.18	7.95	2.343	0.019*
Constraints	37.99	6.69	40.22	6.83	3.858	<0.001**
Drivers	23.32	4.24	25.01	4.07	4.791	<0.001**
Barriers	34.63	6.41	36.01	6.78	2.436	0.015*
Online capabilities	29.50	4.83	31.58	5.06	4.905	<0.001**

#### 4.2.2 Full-time and Part time Enrolment with Respect to behavioural Factors of Online Learning Effectiveness

**Table 4.3 t-test for significant difference between Full time and Part time enrolment with respect to behavioural Factors of Effectiveness of Online Learning**

Factors of Online Learning effectiveness	Current Enrolment Status				t value	P value
	Full time		Part time			
	Mean	SD	Mean	SD		
Quality	35.94	6.00	37.59	6.86	2.896	0.004**
Flexibility	25.40	4.74	28.45	5.23	6.865	<0.001**
<b>Overall Course Aspects</b>	<b>61.34</b>	<b>9.33</b>	<b>66.04</b>	<b>10.63</b>	<b>5.313</b>	<b>&lt;0.001**</b>
Usefulness	16.50	2.85	17.52	3.64	3.617	<0.001**
Ease of use	13.33	2.31	14.19	2.83	3.807	<0.001**
<b>Overall Design Features</b>	<b>29.84</b>	<b>4.68</b>	<b>31.71</b>	<b>6.10</b>	<b>4.021</b>	<b>&lt;0.001**</b>

ICT Support	30.88	4.55	32.87	5.44	4.546	<0.001**
ICT Skills	21.53	3.56	22.49	4.38	2.770	0.006**
ICT Infrastructure	22.24	3.96	23.26	4.48	2.725	0.007**
<b>Overall Technology</b>	<b>74.65</b>	<b>9.14</b>	<b>78.62</b>	<b>11.83</b>	<b>4.381</b>	<b>&lt;0.001**</b>
Self-Efficacy	27.33	4.60	28.28	5.13	2.181	0.030*
Intrinsic Goal Orientation	16.66	3.01	17.48	3.21	2.947	0.003**
<b>Overall, Learner Characteristics</b>	<b>43.99</b>	<b>6.85</b>	<b>45.75</b>	<b>7.70</b>	<b>2.733</b>	<b>0.006**</b>
Perceived Interaction	29.23	4.75	31.07	5.64	4.020	<0.001**
Diversity in Assessment	17.40	2.86	17.89	3.30	1.774	0.077

<b>Overall, Environmental Characteristics</b>	<b>46.64</b>	<b>6.63</b>	<b>48.95</b>	<b>7.92</b>	<b>3.632</b>	<b>&lt;0.001**</b>
Perceived Satisfaction	30.39	4.79	31.50	5.82	2.378	0.018*
Behavioral Intention to Use	17.07	2.97	17.74	3.21	2.439	0.015*
Online Learning Effectiveness	58.30	8.23	61.68	10.12	4.235	<0.001**
Benefits	47.80	7.62	50.78	8.41	4.174	<0.001**
Constraints	39.02	6.90	40.53	6.66	2.430	0.015*
Drivers	24.05	4.02	25.41	4.52	3.596	<0.001**
Barriers	35.28	6.46	36.19	7.19	1.491	0.136
Online capabilities	30.27	4.89	32.40	5.23	4.691	<0.001**

## 5. CONCLUSION

Students in their last class of secondary school are shown to have the same behavioral attitude toward E-learning, regardless of gender. It was discovered that male and female seniors in secondary school had quite different perspectives on the behavioral and emotional factors of E-learning. It has been discovered that male and female students in secondary school have quite different perspectives on the behavioral aspect and cognitive factor of E-learning. Students at the secondary level of the school are discovered to have vastly different perspectives on the emotive and cognitive aspects of E-learning. It has been shown that graduating seniors of both sexes have the same outlook on the efficacy of the traditional educational system. Male and female seniors in dental schools are found to have similar perspectives on the value of traditional education. Both male and female seniors in engineering programs have a similar outlook on the value of a traditional education.

## REFERENCES

1. Ezike, B. U. (2018). Classroom environment and academic interest as correlates of achievement in senior secondary school chemistry in Ibadan southwest local government area, Oyo state, Nigeria. *Global Journal of Educational Research*, 17, 61-71.
2. D. Hijazi, The Relationship between Students' Reading Comprehension and Their Achievement in English, *US-China Foreign*

Language, Wilmington, DE, USA, 2018.

Research Scholar, University Maharaja Agrasen  
Himalayan Garhwal University (Pauri).

3. M. Yıldız, "The role of the reading motivation, reading fluency and reading comprehension on Turkish 5th graders' academic achievement," *Turkish Studies International Periodical for the Languages Literature and History of Turkish or Turkic*, vol. 8, no. 4, pp. 1461–1478, 2013.
4. K. Bertolini, A. Stremmel, and J. Thorngren, *Student Achievement Factors*, South Dakota State University Press, Brookings, SD, USA, 2012.
5. C. H. Cheng, Y. C. Wang, and W. X. Liu, "Exploring the related factors in students' academic achievement for the sustainable education of rural areas," *Sustainability*, vol. 11, no. 21, 2019.
6. G. Kaur and M. Bhardwaj, "Study of self-esteem and academic achievement in relation to home environment among adolescents," *European Journal of Molecular & Clinical Medicine*, vol. 8, no. 1, 2021.
7. Engin, G. (2020). An Examination of Primary School Students' Academic Achievements and Motivation In Terms of Parents' Attitudes, Teacher Motivation, Teacher Self-efficacy and Leadership Approach. *International Journal of Progressive Education*, 16(1), 257-276. doi: 10.29329/ijpe.2020.228.18
8. Mebratu Mulatu Bachore, "English Language Literacy Skills and Academic Achievement of Urban and Rural Secondary Schools: The Case of High and Low Achievers", *Education Research International*, vol. 2022, Article ID 2315426, 8 pages, 2022. <https://doi.org/10.1155/2022/2315426>
9. S. Sen and I. Pal, "Mahalanobis distance: a study on achievement of science and mathematics," *International Journal of Creative Research Thoughts (IJCRT)*, vol. 8, no. 7, pp. 2542–2547, 2020.
10. E. A. Ahmed, M. Banerjee, S. Sen, and P. Chatterjee, "Application of Mahalanobis  $\Delta^2$  on achievement tests on mathematics: a study on higher secondary level students," *Indian Journal of Psychology and Education*, vol. 10, no. 1, pp. 36–40, 2020.

---

#### Corresponding Author

Rashmi Bahukhandi\*