



# Academic Resilience & M-Learning of Undergraduate Students: A Correlational Study

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<p><b>Received:</b> 03/05/2024</p> <p><b>Accepted:</b> 20/06/2024</p> <p><b>Published:</b> 09/07/2024</p>	<p><b>Abstract:</b> <i>Academic resilience and m-learning are the two essential parts in the field of education. Academic resilience is the capability to bounce back from adversity and stress while m-learning is the process of learning through any kind of technological devices. The present study aims to seek if there is any relationship between academic resilience and m-learning of undergraduate (UG) students of West Bengal. It also aims to find out the differences in them in regard to gender and location of residence. It is a Descriptive Survey research. Data collection for the study has been done from 200 UG students using simple random sampling technique administering 'Academic Resilience Scale' by Cassidy (2016) and 'Mobile-Learning Perception Scale' by Uzunboylu &amp; Ozdamli (2011). The data was analysed using mean, standard deviation, coefficient of correlation and 't' test. The outcome demonstrated the substantial association between academic resilience and m-learning that has been observed among UG students of Purulia, West Bengal. Male and female UG students of Purulia district retains almost same academic resilience but there is substantial difference between rural and urban UG students. And in terms of m-learning, significant difference has been observed both in terms of gender and location of residence.</i></p> <p><b>Keywords:</b> <i>academic resilience, m-learning, UG students.</i></p>
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## Introduction

Every day, students encounter social and intellectual pressure in their homes, towns, classrooms, and institutions. This pressure can undermine their academic success and cause them to drop out of school. However, despite these challenging conditions, some students are able to overcome them and achieve high levels of academic success because they think that hard work and determination, rather than just talent, are the keys to successful learning. Those pupils are termed as academically robust students. In short, the ability to bounce back from adversity and stress is a sign of resilience. In difficult circumstances, people can draw upon their mental fortitude to go through difficult times without crumbling (Radhamani & Kalaivani, 2021). In this modern era, another important key aspect in the field of education is m-learning. Learning that occurs through a portable, handheld electronic device is known as mobile learning. It also includes studying through other mobile devices including e-readers, tablet PCs, and netbooks (Joan, 2013). Mobile learning, as defined by McQuiggan et al. (2015), is instantaneous, optionally available, anywhere, anytime learning that fosters knowledge creation, satisfies curiosity, fosters interpersonal collaboration, and enriches experiences. The study intentioned to find out the relationship between academic resilience and m-learning of UG students of Purulia, West Bengal.

## Review of Related Literature

A study by Mahato, Gayen, and Mahato (2023) on the internet addiction and academic resilience of UG students found no significant correlation between the two. Pai and Sekhar PM (2023) directed a study on academic resilience among young adults and found no such differences in it in regard to gender and stream of study. The relationship between high school students' academic resilience was investigated by Romano et al. (2021) and showed a relationship between perceived emotional support from teachers and academic resilience. Even after controlling for family-related and personal protective factors, Fallon (2010) found significant relationship between academic achievement and academic resilience for students with multiple risk factors. She also found a significant relationship between academic optimism of schools and academic resilience of students. In a study conducted by Mahato, Gayen, and Mahato (2023) examined the relationship between m-learning and self-efficacy among UG students in Purulia, West Bengal, and discovered that there was none. Hassan et al. (2023) conducted a study on m-learning and revealed significant shortcomings in the current learning applications with respect to the requirements of slow learners, especially in terms of learnability and user-friendliness, which contributed to their discontent. To overcome these obstacles, the study offers a methodology that makes use of a hybrid recommendation system. An SLR was conducted by Kumar and Mohite (2018) to assess usability elements in the M-Learning application. They discovered that, in addition to being a crucial success element for M-Learning, usability also faces a number of difficulties, including limited input options and small screens.

## Objectives of the Study

1. To study the relationship between academic resilience and m-learning of UG students.
2. To find out the difference in academic resilience of UG students in regard to gender.
3. To find out the difference in academic resilience of UG students in regard to location of residence.
4. To find out the difference in m-learning of UG students in regard to gender.
5. To find out the difference in m-learning of UG students in regard to location of residence.

## Hypotheses of the Study

**H<sub>01</sub>** There is no significant relationship between academic resilience and m-learning of UG students.

**H<sub>02</sub>** There is no significant difference in academic resilience between male and female UG students.

**H<sub>03</sub>** There is no significant difference in academic resilience between rural and urban UG students.

**H<sub>04</sub>** There is no significant difference in m-learning between male and female UG students.

**H<sub>05</sub>** There is no significant difference in m-learning between rural and urban UG students.

## Methodology

- i. Method:** Descriptive Survey method has been used in this study.
- ii. Population:** All the UG students of general degree colleges of Purulia district is the population for the current study.
- iii. Sample & Sampling Technique:** Data was gathered from 200 UG students of general degree colleges of Purulia district using simple random sampling technique.
- iv. Tools Used:**
  - a) Academic Resilience Scale by Cassidy (2016)*



b) *Mobile-Learning Perception Scale by Uzunboylu & Ozdamli (2011).*

**Analysis of Data**

Descriptive Statistics			
	Mean	Std. Deviation	N
<i>Academic Resilience</i>	99.00	15.120	200
<i>M-Learning</i>	32.51	6.250	200

Table 1: *Descriptive Statistics of Academic Resilience and M-Learning of UG Students*

Table 1 shows the descriptive statistics of academic resilience and m-learning of 200 UG students of Purulia, West Bengal. The mean and standard deviation of academic resilience is 99.00 and 15.120 respectively. On the other hand the mean and standard deviation of m-learning is 32.51 and 6.250 respectively.

Correlations			
		Academic Resilience	M-Learning
<b>Academic Resilience</b>	Pearson Correlation	1	.193**
	Sig. (2-tailed)		.006
	N	200	200
<b>M-Learning</b>	Pearson Correlation	.193**	1
	Sig. (2-tailed)	.006	
	N	200	200

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

Table 2: *Coefficient of Correlation of Academic Resilience and M-Learning of UG Students*

In table 2 the coefficient of correlation value between academic resilience and m-learning is 0.193 that is significant at 0.01 level. So, significant relationship is there between academic resilience and m-learning. So, the null hypothesis (H01) “There is no significant relationship between academic resilience and m-learning of UG students” is rejected. Thus, the alternative hypothesis (Ha1) “There is significant relationship between academic resilience and m-learning of UG students” is accepted.

	Pair of Comparison	N	Mean	SD	MD	df	Calculated 't' value	Critical 't' value	Remarks
Academic Resilience	Male	118	98.75	16.044	0.62	198	.285	1.96 (0.05) & 2.58 (0.01)	Not Significant
	Female	82	99.37	13.769					
	Rural	161	100.12	15.162	5.74	198	2.144	1.96 (0.05) & 2.58 (0.01)	Significant
	Urban	39	94.38	14.216					

Table 3: *Descriptive Statistics and 't' value of Academic Resilience of UG Students*

The mean score of academic resilience of male and female UG students are 98.75 and 99.37 respectively. The standard deviations are 16.044 and 13.769 respectively. The calculated 't' value is 0.285. The resulted 't' value is not significant at 0.05 level as it is less than table value for the df 198. Result discovered no significant difference in academic resilience between male

and female UG students. So, the null hypothesis (H02) “There is no significant difference in academic resilience between male and female UG students” is retained.

The mean score of academic resilience of rural and urban UG students are 100.12 and 94.38 respectively. The standard deviations are 15.162 and 14.216 respectively. The calculated ‘t’ value is 2.144. The resulted ‘t’ value is significant at 0.05 level as it is greater than table value for the df 198. Result discovered significant difference in academic resilience between rural and urban UG students. So, the null hypothesis (H03) “There is no significant difference in academic resilience between rural and urban UG students” is rejected. Thus, the alternative hypothesis (Ha3) “There is significant difference in academic resilience between rural and urban UG students” is accepted.

	Pair of Comparison	N	Mean	S.D	MD	df	Calculated ‘t’ value	Critical ‘t’ value	Remarks
M-Learning	Male	118	31.53	6.245	2.40	198	2.715	1.96 (0.05) & 2.58 (0.01)	Significant
	Female	82	33.93	6.016					
	Rural	161	33.11	6.129	3.06	198	2.784	1.96 (0.05) & 2.58 (0.01)	Significant
	Urban	39	30.05	6.219					

Table 4: *Descriptive Statistics along with ‘t’ value of M-Learning of UG Students*

The mean score of m-learning of male and female UG students are 31.53 and 33.93 respectively. The standard deviations are 6.245 and 6.016 respectively. The calculated ‘t’ value is 2.715. The resulted ‘t’ value is significant at 0.01 level as it is greater than table value for the df 198. Result discovered significant difference in m-learning between male and female UG students. So, the null hypothesis (H04) “There is no significant difference in m-learning between male and female UG students” is rejected. Thus, the alternative hypothesis (Ha4) “There is significant difference in m-learning between male and female UG students” is accepted.

The mean score of m-learning of rural and urban UG students are 33.11 and 30.05 respectively. The standard deviations are 6.129 and 6.219 respectively. The calculated ‘t’ value is 2.784. The resulted ‘t’ value is significant at 0.01 level as it is greater than table value for the df 198. Result revealed significant difference in m-learning between rural and urban UG students. So, the null hypothesis (H05) “There is no significant difference in m-learning between rural and urban UG students” is rejected. Thus, the alternative hypothesis (Ha5) “There is significant difference in m-learning between rural and urban UG students” is accepted.

### Major Findings

Academic resilience and m-learning of UG students of Purulia, West Bengal are related to each other as significant relationship has been observed between them. Male and female UG students of Purulia, West Bengal possess approximately same academic resilience as significant difference has not been observed between them but in terms of rural and urban UG students, significant difference has been observed between them. And in terms of m-learning, significant difference has been found in regard to both gender and location of residence.

### Conclusion

In this modern century of technological wonder and innovation, education can't be imagined without technological support. And in this crucial juncture, m-learning has emerged as an important aspect in the field of education. The present study also finds out that academic resilience of UG students has impacted by m-learning as significant relationship has been found between them.

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