



## A CORRELATIONAL STUDY ON LEARNING STYLE AND ACADEMIC ACHIEVEMENT OF GENERATION Z LEARNERS

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**Abstract-** In this paper the researcher emphasis the Learning Style and Academic Achievement of Generation Z Learners. This notion of individualized learning styles has gained widespread recognition in education theory and classroom management strategy. Individual learning styles depend on cognitive, emotional, and environmental factors, as well as one's prior experience. The population of the study consists of college students in Andaman Nicobar Islands. The investigator has used a stratified random sampling technique. 331 students are randomly selected from a different college. To find out the significant difference in the learning styles and its dimensions of College students concerning background variables such as Mainstream, gender, and location. there is no significant difference between Arts and science college students in their Linguistic learning style, Logical learning style, Spatial learning style, Bodily-Kinesthetic learning style, and Intrapersonal learning style. The current study investigated the effects of learning style and academic achievement. The major findings are as follows: (a) learning styles have no significant effect on academic achievement; (b) students with different learning styles do not statistically significantly different in their academic performance based on the form of their study.

**Keywords:** learning style, academic achievement, and Generation Z Learners, etc.

### I. INTRODUCTION

learning styles expresses the understanding that every student learns differently. Technically, an individual's learning style refers to the preferential way in which the student absorbs, processes, comprehends and retains information. For example, when learning how to build a clock, some students understand the process by following verbal instructions, while others have to physically manipulate the clock themselves. This notion of individualized learning styles has gained widespread recognition in education theory and classroom management strategy. Individual learning styles depend on cognitive, emotional, and environmental factors, as well as one's prior experience. In other words: everyone's different. Educators need to understand the differences in their students' learning styles so that they can implement best practice strategies into their daily activities, curriculum and assessments. Learning styles are powerful components that should be considered when planning and leading exercises. Even though there are numerous methods of arranging learning styles, research by Dunn, Beaudry, and Klavas (2002) infers that perceptual tendencies impact three-fourths of all understudies at school. Hence, this examination centers around the three most basic learning styles, to be specific visual, hear-able, and material. Understudies are special people, which implies that they all learn in their very own manners that are affected by their inclinations. partition their undertakings to encourage learning, all things considered. People ought to be urged to utilize their favored learning styles. Henceforth, to have the option to do suitable undertakings and exercises and in this manner, upgrade understudies' learning results, it is fundamental that each educator comprehends the distinctions and qualities of learning styles just as individual contrasts among the understudies, like sexual orientation, age, grade level, grade point normal and others, which have been appeared to affect the learning interaction, the language learning measure specifically.

Quite possibly the main difficulty in learning is for people to assume liability for their learning. At the point when students assume liability for their learning, they property significance to the way toward getting the hang of, prompting viable learning (Nzesei, 2015). Instructors need to comprehend the interaction of individual learning. In the learning cycle, people are interfacing with the climate, i.e., remarkably handling the data and requiring a one-of-a-kind climate for learning. In this manner, tending to the test in encouraging learning conditions while sorting out such communications ought to be thought-about to assist people with advancing their learning (Sighn, 2017).

## II. REVIEW OF LITERATURE

Serkan Demirtas and Hatice Onuray Egilmez (2018) decide the learning styles of understudies studying Music Education Departments in Turkey and consequently create a scale on learning styles to be utilized in piano exercises. Also, it is planned to uncover the relationship between understudies' learning styles recognized by the created scale and their scholarly exhibition in piano exercises. In this sense, an accomplishment test was created to evaluate understudy's exhibitions in piano exercises. The examination was figured by social screening model among the screening models. The number of inhabitants in the exploration is made out of third-grade understudies studying Music Education Departments in Turkey. The example of the exploration comprises 473 3rd grade understudies out of 730 3'rd year understudies concentrating in Music Education Departments. Created by the specialists to survey understudies' presentation in piano exercise, the scales named "Pamukkale Piano Learning Style" and "Piano Performance Test" have been utilized. Considering the outcomes got from the investigation, a learning style model has been created to learn a piano instrument. As indicated by this model, understudies' free, scientific, reliant, and enthusiastic learning styles have been distinguished. As indicated by the exploration results, there is no high-level connection between all learning styles and piano scholastic execution.

Udhaya Mohan Babu, R., and G. Kalaiyaran (2020) investigate the learning style of the understudies and social change in the student and when they note the steadiness of this change. Learning occurs in stages, and at each stage, understudies learn unexpectedly. Troubles that emerge at home, tutoring are frequently because of contrasts in learning styles. It has been recommended that instructors ought to survey the learning styles of their understudies and adjust their homeroom strategies to best fit every understudy's learning style. These had learning styles assume an imperative part in choosing their degree of accomplishment. This accomplished grade decides their future vocation. The desire and yearnings of our understudies are to a great extent administered by their mastering abilities embraced by the understudies. There is no critical distinction among XI and XII standard higher auxiliary school understudies in their learning styles in the measurements. This examination will be more productive when ideas given by the specialist are applied for additional investigation and it will be of extraordinary assistance for the individuals who need to concentrate further in this field.

### **Need and significance of the study**

Samadi (2011), learns about the learning styles that began during the 1950s and in the mid-1960s because of the premium in the impact of the individual contrasts in the learning interaction. This model incorporates singular educating and learning styles and shows how the expressive characteristics of educators and understudies can upgrade the nature and nature of the learning (Grasha, 1996). It depends on the thought that; one should comprehend singular learning styles. Grasha (1996) distinguished the particular learning styles dependent on the individual understudy's disposition towards learning. These proposed styles can be changed by the predictable utilization of one instructing technique. Grasha additionally suggested that understudies normally select the most beneficial style. Avoidant understudies will in general be at the lower end of the evaluation dissemination. They will in general have high non-appearance, they coordinate their work ineffectively, and they assume little liability for their learning. Participative understudies are described by their eagerness to acknowledge obligation regarding self-learning and relate well to their friends. Serious understudies are depicted as dubious of their friends prompting rivalry for remunerations and acknowledgment. Collective understudies appreciate working amicably with their companions. Subordinate understudies normally become baffled when confronting new difficulties not straightforwardly tended to in the homeroom. Autonomous understudies like to work alone and require little bearing from the educator.

### **Method Adopted in the Present Study**

The survey method is selected for the present study. Survey research deals with the incidence, distribution, and relationships of educational and sociological variables. The survey is a procedure in which data were systematically collected from a population through some direct solicitations such as face-to-face interviews, questionnaires or schedules, observation.

### **Tools Used in the Present Study**

The investigator used the following tools for collecting data that were very useful for fulfilling various objectives of his study.

1. General Data Sheet
2. Learning Styles Scale

### The population of the Study

The population of the study consists of college students in Andaman Nicobar island. The investigator has used a stratified random sampling technique. 331 college students are randomly selected from a different college.

### Objectives of the study

- To find out the significant difference in the learning styles and its dimensions of College students concerning background variables such as Mainstream, gender, and location.
- To find out the significant difference in the academic achievement of college students concerning background variables such as Mainstream, gender, and location.

### Hypotheses of the study

#### Learning Style

- There is no significant difference between Arts and Science College students in their learning styles and dimensions.
- There is no significant difference between male and female college students in their learning styles and dimensions.
- There is no significant difference between urban and rural college students in their learning styles and dimensions.

#### Academic Achievement

- There is no significant difference between Arts and Science College students in their Academic Achievement.
- There is no significant difference between male and female college students in their Academic Achievement.
- There is no significant difference between urban and rural college students in their Academic Achievement.

### Correlation of the study

There is no significant relationship between learning style and Academic Achievement.

### Testing the hypothesis

#### Null hypothesis 1

There is no significant difference between Arts and science college students in their learning style and its dimensions.

**Table 1**

#### DIFFERENCES BETWEEN ARTS AND SCIENCE COLLEGE STUDENTS IN THEIR LEARNING STYLE AND ITS DIMENSIONS

Dimension	Category	N	Mean	SD	't' value	Remarks
Linguistic	Arts	178	32.89	7.244	0.529	NS
	Science	153	32.45	7.689		
Logical	Arts	178	27.51	5.726	0.260	NS
	Science	153	27.32	7.387		
Spatial	Arts	178	21.11	4.856	1.273	NS
	Science	153	23.29	20.772		
Musical	Arts	178	26.12	5.236	2.826	S
	Science	153	24.38	5.861		
Bodily Kinesthetic	Arts	178	15.12	3.478	0.782	NS
	Science	153	15.42	3.488		
Interpersonal	Arts	178	21.66	4.745	1.753	NS
	Science	153	20.78	5.002		
Intrapersonal	Arts	178	35.08	7.094	2.380	S
	Science	153	33.03	8.392		

Total	Arts	178	179.49	25.587	0.884	NS
	Science	153	176.61	32.461		

(At 5%level of significance the table value of 't' value is 1.96)

It is inferred from the above table that there is no significant difference between Arts and science college students in their Linguistic learning style, Logical learning style, Spatial learning style, Bodily-Kinesthetic learning style, and Intrapersonal learning style.

But there is a significant difference between Arts and science college students in their Musical learning style and Intrapersonal learning style.

**Null hypothesis 2**

There is no significant difference between male and female college students in their learning style and its dimensions.

**Table 2**

**DIFFERENCE BETWEEN MALE AND FEMALE COLLEGE STUDENTS IN THEIR LEARNING STYLE AND ITS DIMENSIONS**

Dimension	Category	N	Mean	SD	't' value	Remarks
Linguistic	Male	165	32.54	7.509	0.356	NS
	Female	166	32.83	7.400		
Logical	Male	165	27.01	6.416	1.158	NS
	Female	166	27.84	6.647		
Spatial	Male	165	22.00	14.772	0.146	NS
	Female	166	22.23	14.431		
Musical	Male	165	25.32	5.637	0.023	NS
	Female	166	25.31	5.566		
Bodily kinesthetic	Male	165	15.35	3.354	0.462	NS
	Female	166	15.17	3.609		
Interpersonal	Male	165	21.05	4.867	0.639	NS
	Female	166	21.40	4.904		
Intrapersonal	Male	165	33.82	7.816	0.726	NS
	Female	166	34.45	7.749		
Total	Male	165	177.09	28.987	0.669	NS
	Female	166	179.22	28.978		

(At 5%level of significance the table value of 't' value is 1.96)

It is inferred from the above table that there is no significant difference between male and female college students in their learning style and its dimensions.

**Null hypothesis 3**

There is no significant difference between rural and urban college students in their learning style and its dimensions.

**Table 3**

**DIFFERENCE BETWEEN RURAL AND URBAN OF COLLEGE STUDENTS IN THEIR LEARNING STYLE AND ITS DIMENSIONS**

Dimension	Category	N	Mean	SD	't' value	Remarks
Linguistic	Rural	234	32.77	7.687	0.332	NS

	Urban	97	32.48	6.859		
Logical	Rural	234	27.33	6.559	0.407	NS
	Urban	97	27.65	6.510		
Spatial	Rural	234	21.69	12.577	0.713	NS
	Urban	97	23.15	18.582		
Musical	Rural	234	25.16	5.755	0.822	NS
	Urban	97	25.69	5.191		
Bodily Kinesthetic	Rural	234	15.16	3.275	0.742	NS
	Urban	97	15.49	3.940		
Inter personal	Rural	234	21.12	4.972	0.635	NS
	Urban	97	21.48	4.668		
Intra personal	Rural	234	33.91	7.965	0.865	NS
	Urban	97	34.69	7.313		
Total	Rural	234	177.13	29.579	1.040	NS
	Urban	97	180.65	27.389		

(At 5%level of significance the table value of 't' value is 1.96)

It is inferred from the above table that there is no significant difference between rural and urban college students in their learning style and its dimensions.

### Academic Achievement

#### Null hypothesis 4

There is no significant difference Between Arts and Science college students in their Academic Achievement.

**Table 4**

#### SIGNIFICANT DIFFERENCE BETWEEN ARTS AND SCIENCE COLLEGE STUDENTS IN THEIR ACADEMIC ACHIEVEMENT

Category	N	Mean	SD	't' value	Remarks
Arts	178	9.50	2.473	2.082	S
Science	153	10.16	1.823		

(At 5%level of significance the table value of 't' value is 1.96)

It is inferred from the above table that there is a significant difference Between Arts and Science college students in their Academic Achievement.

#### Null hypothesis 5

There is no significant difference between male and female college students in their Academic Achievement.

**Table 5**

#### DIFFERENCE BETWEEN MALE AND FEMALE COLLEGE STUDENTS IN THEIR ACADEMIC ACHIEVEMENT

Category	N	Mean	SD	't' value	Remarks
Male	165	9.63	2.309	1.444	NS
Female	166	9.98	2.116		

(At 5%level of significance the table value of 't' value is 1.96)

It is inferred from the above table that there is no significant difference between male and female college students in their Academic Achievement.

### Null hypothesis 6

There is no significant difference between rural and urban college students in their Academic Achievement.

**Table 6**

#### **DIFFERENCE BETWEEN RURAL AND URBAN COLLEGE STUDENTS IN THEIR ACADEMIC ACHIEVEMENT**

Category	N	Mean	SD	't' value	Remarks
Rural	234	28.07	9.817	0.208	NS
Urban	97	27.81	10.496		

(At 5% level of significance the table value of 't' value is 1.96)

It is inferred from the above table that there is no significant difference between rural and urban college students in their Academic Achievement.

### Null hypothesis 7

There is no significant relationship between learning style and Academic Achievement.

**Table 7**

#### **RELATIONSHIP BETWEEN LEARNING STYLE AND ACADEMIC ACHIEVEMENT**

Variable	Calculated 'γ' value	Remarks
Learning style and Academic Achievement	-0.023	NS

(At 5% level of significance for 2 df, the table value 'γ' is 0.113)

It is inferred from the above table that there is no significant relationship between learning style and Academic Achievement

### III. RESULTS AND FINDINGS

It is inferred from the above table that there is no significant difference between Arts and science college students in their Linguistic learning style, Logical learning style, Spatial learning style, Bodily-Kinesthetic learning style, and Interpersonal learning style. But there is a significant difference between Arts and science college students in their Musical learning style and Intrapersonal learning style.

It is inferred from the above table that there is no significant difference between male and female college students in their learning style and its dimensions. It is inferred from the above table that there is no significant difference between rural and urban college students in their learning style and its dimensions.

It is inferred from the above table that there is a significant difference Between Arts and Science college students in their Academic Achievement. It is inferred from the above table that there is no significant difference between male and female college students in their Academic Achievement.

It is inferred from the above table that there is no significant difference between rural and urban college students in their Academic Achievement. It is inferred from the above table that there is no significant relationship between learning style and Academic Achievement.

### IV. CONCLUSION

The current study investigated the effects of learning style and academic achievement. The major findings are as follows: (a) learning styles have no significant effect on academic achievement; (b) students with different learning styles do not statistically significantly different in their academic performance based on the form of their study.

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