MULTIPLE INTELLIGENCE IN RELATION TO THE ACADEMIC ACHIEVEMENT OF COLLEGE STUDENTS OF ANDAMAN AND NICOBAR ISLANDS

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Abstract

The focal objective of present paper is to locate the relationship between the Multiple Intelligence and Academic achievement. For this purpose, 468 College students from Andaman & Nicobar Islands were selected in Stratified random sampling technique with MI scale which constructed and validated by Howard Gardner (2018) and found the result thattype of management of college plays vital role in academic achievement whereas the parental education plays significant role in improving multiple intelligence level of college students. Multiple Intelligence and academic achievement have positive relationship and conclude this result is welcoming signs of course we have put forth more efforts to improve it.

Key words: MI, Academic Achievement, Positive relationship.

Introduction

Academic achievement is generally measured through examinations or continuous assessments but there is no common agreement on how it is best evaluated or which features are most important—technical knowledge such as skills or declarative knowledge such as facts. Additionally, there are evidencescertain individual aspects successfully forecast academic performance. Further elements such as test anxiety, environments, motivation, and emotions require consideration when budding models of school achievement.Sometimes, the whole education system is revolving round enhancing the goal of students' academic achievement, even though many other outcomes must have been expected from the same system.

Multiple Intelligence concepts (Gardner, 1983) emerged as a fruit for many of the researches in the neuro-cognitive psychology field. Gardner's research on MI shown that intelligence of learners'remains pluralistic instead unitary and any subject learners make a greater progress whether they are mainly allowed for applying their subject areas of strength for mastering the subject. In his terms, intelligence remains as the ability of solving more problems or other fashion products are valued in more cultural set up differently. Eight intelligent types were proposed by Gardner (1999) and each is independently operating. Intelligences remain multiple that includeslogical-mathematical, linguistic, bodily-kinaesthetic,spatial, musical, naturalistic, interpersonal and intrapersonal. Therefore, a person can remain be more strong or even weak in

any one intelligence type irrespective of their ability. MI theory influences the educational psychology and general education field too.

Students-teachers perception was changed by MI and appropriate methodologies were suggested to deal with them according to their diverse intellectual capabilities. It had been hinted by Gardner (2009) inhis theories as educational implications. To begin with, the individual differences should be considered by the educators to design teaching- learning environment of learners. Subsequently, the topics should be watched by the educators in different methodologies for the activation of MI among the learners. In these days, studies have been taken up by many researchers for identifying the learners' MI profile belonging to educational grades; thereby it could be highly nourished for optimizing their academic achievement.

Literature review

Priyanka (2018),Fayazi-Nasab, and Ghafournia (2016), Ahvan, and Pour (2016), Islam (2015), Peters (2015),Kassim (2015),Younas et al.(2015), Koura & Al-Hebaishi (2014), Piengkas et al. (2014),Saadamanesh (2014),Jing (2012),Annaraja (2007), Meqbali (2007), Afaneh and Khazendar (2004), Krishna (2004)Janet et al (2002), Chandra (2002), Pajkos and Klein (2001).Theseinvestigators were studied the relationship between multiple intelligenceand achievementsof different subjects

Research Gap

Based on the abovereviewed literaturethe investigator could observe thatthe most of researchers put their effort for finding out whether any relationship is existed between any particular intelligence type of the learners' and their academic achievement in any particular subject like English learning especially grammar learning and mathematical ability and so on,Studies related to college students is very scanty. In order to fill up the gap,the present investigators selected the title as **"MultipleIntelligence in relation to the Academic Achievement of College Studentsof Andaman & Nicobar Islands"**.

Objectives of the Study

1. To study the level of Academic achievement of college students of Andaman & Nicobar Islands.
2. To study the level of Multiple Intelligence of the college students of Andaman & Nicobar Islands.
3. To find out whether there is any significant difference in Academic Achievement among college students of Andaman & Nicobar Islands with respect to sub-samples of type of management and parental educational qualification.
4. To find out whether there is any significant difference in Multiple Intelligence among college students of Andaman & Nicobar Islands with respect to sub-samples of type of management and parental educational qualification.
5. To find out whether there is any significant relationship between Multiple Intelligence and Academic Achievement of college students of Andaman & Nicobar Islands with respect to entire sample.

Hypotheses of the study

1. The level of Academic achievement of college students of Andaman & Nicobar Islands is low.
2. The level of Multiple Intelligence of the college students of Andaman & Nicobar Islands is low.
3. There is no significant difference in Academic Achievement among college students of Andaman & Nicobar Islands with respect to sub-samples type of management and parental educational qualification.
4. There is no significant difference in Multiple Intelligence among college students of Andaman & Nicobar Islands with respect to the sub-samples type of management and parental educational qualification.
5. There is no significant relationship between Multiple Intelligence and Academic Achievement of college students of Andaman & Nicobar Islands with respect to entire sample.

Methodology

Normative Survey method was adopted in this study with 468 college students selected as samples in Andaman & Nicobar Islands with the following tools used as data collecting device.

1. Multiple Intelligence scale constructed and validated by Howard Gardner (2018).
2. Annual marks percentage collected from college records.

Sample Distribution

Stratified Random Sampling technique used in this study, the following table explains distribution of sample utilised in this analysis.

Table - 1

SAMPLE DISTRIBUTION OF THE STUDY

Sl.No.	Demographic Variables	Sub - Samples	N	Percentage
1	Type of Management	Govt.	392	84%
		Govt.-Aided	76	16%
2	Parental Education	School level	356	76%
		College level	112	24%

Analysis and Results

Hypothesis – 1: The level of Academic achievement of the college students of Andaman & Nicobar Islands is low.

Table - 2

Levels of Academic Achievement Scores

Variable	Sl.No.	Method	Mean	SD	Score	Category
Academic Achievements	1	Mean + SD	74.18 + 10.22		84 & above	High
	2	In-between Score			65 to 83	Average

3	Mean - SD	74.18 – 10.22	64 & below	Low

Table - 2(a)

Mean and Standard Deviation of the Academic Achievement Scores

Sl.No.	Sub – Samples		N	Mean	SD
	Entire Sample		**468**	**74.18**	**10.22**
1	Types of Management	Government	392	73.60	9.238
		Govt. - Aided	76	78.32	9.526
2	Parental Education	School Level	356	74.41	9.307
		College Level	112	74.24	9.882

From the above table 2 and 2 (a) it is observed that the Mean and Standard Deviation value of entire sample are 74.18 and 10.22, which indicates that the mean score lies between the Average values (65 to 83). It is true in the case of all the categories of sub samples. Among the sub samples Government aided college students are having highest mean value 78.32whereas Government college students are having lowest mean value 73.60. It is inferred that the Academic Achievementscores of college students is average. So, the framed hypothesis is rejected. Hence it is concluded that the **Andaman & Nicobar Islands college students have the average level of academic achievement.**

Hypothesis -2: The level of Multiple Intelligence of the college students of Andaman & Nicobar Islands is low.

Table -3

Levels of Multiple Intelligence Scores for Entire Sample

Variable	Sl.No.	Method	Mean	SD	Score	Category
Multiple Intelligence	1	Mean + SD	82.39 + 18.17		101 & above	High
	2	In-between score			65 to 100	Average
	3	Mean – SD	82.39 - 18.17		64 & below	Low

Table – 3(a)

Mean and Standard Deviation of the Multiple Intelligence Scores

Sl.No.	Sub – Samples		N	Mean	SD
	Entire Sample		**468**	**82.39**	**18.17**
1	Types of Management	Government	392	82.24	18.784
		Govt. - Aided	76	83.12	14.698
2	Parental Education	School Level	356	81.43	16.273
		College Level	112	85.44	23.022

From the above table 3 and 3 (a) it is observed that the Mean and Standard Deviation value of entire sample are 82.39 and 18.17, which indicates that the mean score lies between the Average values (65 to 100). It is true in the case of all the categories of sub samples too. Among the sub samples thosecollege students whose parental education is up to college level are having highest mean value 85.44 whereas those of which are up to School levelare having lowest mean value 81.43. It is inferred that the Multiple Intelligence scores of college students is average. So, the framed hypothesis rejected. Hence it is concluded that the **Andaman & Nicobar Islands college students have average level of Multiple Intelligence.**

Hypothesis – 3: There is no significant difference in Academic Achievement among college students of Andaman & Nicobar Islands with respect to the sub-samples type of management and parental educational qualification.

Table –4

't' Value for Academic Achievements Scores – Sub Samples Wise

Variables	Sub Samples	N	Mean	SD	't' Value	Remarks
Types of Management	Government	392	73.60	9.238	-3.967	**Significant**
	Govt. - Aided	76	78.32	9.526		
Parental Education	School Level	356	74.41	9.307	0.162	Not Significant
	College Level	112	74.24	9.882		

From the above table 4, it is observed that,

1. In the case types of management, the calculated 't' value is found to be-3.967, this value is greater than the table value at 0.05 level, hence the formulated hypothesis is rejected and it is inferred that thecollege students **differ in their academic achievement based on their college management.**
2. In the case Parental Education, the calculated 't' value is found to be 0.162, this value is less than the table value at 0.05 level, hence the formulated hypothesis is accepted and it is inferred that thecollege students **do not differ in their academic achievement based on their Parental educational qualification.**

Hypothesis – 4: There is no significant difference inMultiple Intelligence among college students of Andaman & Nicobar Islands with respect to the sub-samples types of management and parental educational qualification.

Table –5

't' Value for Multiple Intelligence Scores – Sub Samples Wise

Variables	Sub Samples	N	Mean	SD	't' Value	Remarks
Types of Management	Government	392	82.24	18.784	-0.383	Not Significant
	Govt. - Aided	76	83.12	14.698		
Parental Education	School Level	356	89.91	16.292	-2.044	**Significant**
	College Level	112	96.21	19.761		

From the above table 5, it is observed the following observations

1. In the case types of management, the calculated 't' value is found to be -0.383 which is less than the table value at 0.05 level, hence the formulated hypothesis is accepted and it is inferred that the **students do not differ in their Multiple Intelligence based on their college management.**

2. In the case parental education, the calculated 't' value found to be-2.044 this value is greater than the table value at 0.05 level, hence the formulated hypothesis is rejected and it is inferred that the **students differ in their Multiple Intelligence based on their Parental educational qualification.**

Hypothesis – 6: There is no significant relationship between Multiple Intelligence and Academic Achievement of college students of Andaman & Nicobar Islands with respect to entire sample.

Table – 6

Relationship between Multiple Intelligence and Academic Achievement

Correlations		Academic Achievement	MI
Academic Achievement	Pearson Correlation	1	.402
	Sig. (2-tailed)		.000
	N	468	468
Multiple Intelligence	Pearson Correlation	.402	1
	Sig. (2-tailed)	.000	
	N	468	468

From the above table – 6it is observed that the calculated 'r' value is 0.402 hence it is inferred that there exists **positive relationship** between the Academic achievement (DV) and Multiple Intelligence (IV), college students of Andaman and Nicobar Islands. Hence the formulated hypothesis is rejected and it is concluded that there is positive relationship between these two variables.

Findings of the study

- Andaman & Nicobar Islands college students have the average level of academic achievement
- Andaman & Nicobar Islands college students have the average level of Multiple Intelligence.
- Andaman & Nicobar Islands college students differ in their academic achievement based on their college management.
- Andaman & Nicobar Islands College students do not differ in their academic achievement based on their Parental educational qualification.

- ✍ Andaman & Nicobar Islands College students do not differ in their Multiple Intelligence based on their college management.
- ✍ Andaman & Nicobar Islands College students differ in their Multiple Intelligence based on their Parental educational qualification.
- ✍ There exists positive relationship between the Academic Achievement (DV) and Multiple Intelligence (IV) of Andaman&Nicobar Islands college students.

Discussion

This study revealed that thereexists positive relationship between the Academic Achievement (DV) and Multiple Intelligence (IV) of college students, same result revealed by Koura & Al-Heishi (2014), Fernando and Cabrera (2009) and reverse result by Salehi & Gerami (2012) Shahzada et al (2011). Further the levels academic achievement and multiple intelligence of Andaman and Nicobar Islands college students are at average level. This is in accordance with the results of Kassim (2015), Janetet.al. (2002) and Krishna (2004) in their respective studies.There exists difference among college students in these variables selected with respect to type of management of college and parental education. This is in accordance with the studies of Islam (2015), Annaraja (2007) and Chandra(2002).

Conclusion

Since the college students of Andaman and Nicobar Islands are having average level of multiple Intelligence and academic achievement,though the Islands are separated from mainland the students are up to the level,ofcourse no doubt they have to improve to higher level. Type of management of college plays vital role in academic achievement whereas the parental education plays significant role in improving multiple intelligence level ofcollege students.And also there is positive significant relationship exists between multiple intelligence and academic achievement of Andaman and Nicobar islands college students. All these are welcoming signs of course we have put forth more efforts to improve itfurther.

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