Vol. 5 No. 4 September 2017 ISSN: 2320-2653 UGC Approval No: 44213 Impact Factor: 3.008

STUDY ON MULTIPLE INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN VIRUDHUNAGAR DISTRICT

Article Particulars

Received: 11.7.2017 Accepted: 30.8.2017 Published: 30.9.2017

K.RAJASEKARAN
Assistant Professor in Mathematics,
Arasan Ganesan College of Preceptors,
Sivakasi, Tamil Nadu, India

A.P.SELVAKUMAR
Principal, Arasan Ganesan College of Preceptors,
Sivakasi, Tamil Nadu, India

Abstract

Different teaching and learning strategies can accommodate students with these different ability levels, including those who do not learn in traditional ways. Multiple intelligence can help the teachers to create a classroom which empower students to learn through multiple modalities and they can help the students direct their own learning. The main aim of the study is to know the level of multiple intelligence of primary school teachers The survey method has been adopted and data were collected from 200 primary school teachers working in Virudhunagar District, Tamilnadu, India. The present study followed stratified random sampling method. This tool consists of 90 statements. The findings of this study on multiple intelligence of primary school teachers have been described.

Introduction

Gardner (2005) theory of multiple intelligences provided a theoretical foundation for recognizing the different abilities and talents of students. This theory acknowledged that while all students may not be verbally or mathematically gifted, children might have an expertise in other areas, such as music, spatial relations, or interpersonal knowledge. Many researchers objected the way of multiple intelligences theory used in class room to improve the student behavior. Since primary school education forms a foundation for higher level learning, teachers working as Primary school teachers should have thorough knowledge and exposure to multiple intelligences. It helps them to provide opportunities for authentic learning and positive educational experiences. Multiple intelligences can allow the students to safely explore and learn in many ways, and they can help students direct their own learning.

Need for the Study

Multiple intelligence classroom acts like a 'real' world and provide opportunities for authentic learning based on students interests and talents. Multiple intelligence can provide students positive educational experiences. Being a primary school teacher, his / her multiple intelligence determines their teaching competency in their subjects and it contributes to the effective and authentic learning of students. So it is the custom to study the level of multiple intelligence of primary school teachers.

Objective of the Study

- To find out the difference in the multiple intelligence of Primary school teachers with regard to their gender, age, qualification, locality, marital status and type of school.

Hypotheses of the Study

- There is no significant difference between male and female teachers in their multiple intelligence.
- There is no significant difference between rural and urban teachers in their multiple intelligence.
- There is no significant difference between married and unmarried teachers in their multiple intelligence.
- There is no significant association between age of the teachers and their multiple intelligence.
- There is no significant association between educational qualification of the teachers and their multiple intelligence.
- There is no significant association between teaching experience of the teachers and their multiple intelligence.
- There is no significant association between in-service training of the teachers and their multiple intelligence.

Methodology

The Survey method has been adopted to study the multiple intelligence of the primary school teachers.

Sample

A sample consists of 200 primary school teachers from 20 schools situated in Virudhunagar district through stratified random sampling method. Among them 44 are male and 156 are female.

Tool used in the Present Study

Multiple intelligence inventory by J. Menair (2007) was adopted and standardized by investigator. It consists of 90 statements which fall into 9 dimensions of multiple

intelligence. The responses of teachers are expressed in terms of 5 alternatives such as (1) Statement does not describe at all (2) Statement describe very little (3) Statement describe somewhat (4) Statement describe pretty well (5) Statement describe exactly. The reliability co-efficient was calculated by test and retest method which is equal to 0.78. The content validity was also established.

Analysis and Interpretation of Data

To find the meaningful interpretation of raw scores collected from Primary School Teachers in Virudhunagar District, the data is analyzed using mean, standard deviation hadn't' test.

Null Hypothesis: 1

There is no significant difference between male and female teachers in their multiple intelligence

Table 1: Mean, Standard Deviations and t value for Level of Intelligence Scores: Gender

S. No.	Dimensions	Male (N=44)		Female(N=156)		Calculated t value	Remarks at 5% level
		Mean	S.D.	Mean	S.D.		
1.	Verbal Linguistic Intelligence	51.28	8.67	49.94	10.34	1.06	NS
2.	Visual Spatial Intelligence	47.20	9.54	50.79	10.01	2.18	S
3.	Bodily Kinesthetic intelligence	51.93	10.45	49.45	9.83	1.41	NS
4.	Interpersonal Intelligence	48.37	11.36	50.46	9.57	1.12	NS
5.	Intrapersonal Intelligence	50.08	8.81	49.98	10.34	0.07	NS
6.	Logical Mathematical Intelligence	47.68	10.07	50.65	9.91	1.73	NS
7.	Musical rhythmic Intelligence	51.22	10.23	49.66	9.94	0.90	NS
8.	Naturalistic Intelligence	49.92	8.48	50.02	10.41	0.07	NS
9	Existentialistic Intelligence	50.39	9.12	49.89	10.26	0.31	NS
Multiple Intelligence		49.79		50.09			

From table 1, the calculated 't' value is less than that of table value (1.96). It is inferred that there is no significant difference between male and female teachers in verbal linguistic intelligence, Bodily kinesthetic intelligence, Interpersonal intelligence, Intrapersonal intelligence, Logical mathematical intelligence, Musical rhythmic

intelligence and Existentialistic Intelligence but there is significant difference between male and female teachers in their Visual spatial intelligence.

While comparing their mean scores male and female teachers, the female school teachers have more visual spatial intelligence than the male school teachers.

Null Hypothesis: 2

There is no significant difference between rural and urban school teachers in their multiple intelligence

Table 2: Mean, Standard Deviations and t value for level of Intelligence Scores: Locality

S. No.	Dimensions	Rural (N=141)		Urban (N=59)		Calculated t value	Remarks at 5% level
		Mean	S.D.	Mean	S.D.		
1.	Verbal Linguistic Intelligence	49.92	10.31	50.18	0.17	1.06	NS
2.	Visual Spatial Intelligence	50.34	10.04	49.19	9.94	0.74	NS
3.	Bodily Kinesthetic intelligence	49.74	10.02	50.63	10.00	0.57	NS
4.	Interpersonal Intelligence	50.06	10.24	49.86	9.48	0.13	NS
5.	Intrapersonal Intelligence	48.87	10.27	52.70	8.83	2.66	S
6.	Logical Mathematical Intelligence	49.50	9.98	51.19	10.03	1.09	NS
7.	Musical rhythmic Intelligence	49.32	10.14	51.63	9.54	1.54	NS
8.	Naturalistic Intelligence	50.48	10.15	48.86	9.62	1.07	NS
9.	Existentialistic Intelligence	50.55	9.74	48.69	10.55	1.16	NS
Multiple Intelligence		49.86		50.32			

From table 2, the calculated't' value is less than that of table value (1.96). It is inferred that there is no significant difference between rural and urban teachers in verbal linguistic intelligence, Visual spatial intelligence, Bodily kinesthetic intelligence, Interpersonal intelligence, Logical mathematical intelligence, Musical rhythmic intelligence and Existentialistic Intelligence but there is significant difference between male and female teachers in their Intrapersonal intelligence. While comparing their

mean scores rural and urban teachers, the urban school teachers have more intrapersonal intelligence than the rural school teachers.

Null Hypothesis: 3

There is no significant difference between married and unmarried teachers in their multiple intelligence.

Table 3: Mean, Standard Deviations & t value for level of intelligence: Marital Status

S. No.	Dimensions	Married (N=162)		Unmarried (N=38)		Calculated t value	Remarks at 5% level
		Mean	S.D.	Mean	S.D.		
1.	Verbal Linguistic Intelligence	50.24	10.13	48.96	9.47	0.74	NS
2.	Visual Spatial Intelligence	49.84	9.87	50.70	10.64	0.46	NS
3.	Bodily Kinesthetic intelligence	50.44	9.80	48.13	10.76	1.21	NS
4.	Interpersonal Intelligence	50.06	10.24	49.73	9.02	0.20	NS
5.	Intrapersonal Intelligence	50.21	10.05	49.12	9.87	0.61	NS
6.	Logical Mathematical Intelligence	49.85	9.96	50.66	10.27	0.44	NS
7.	Musical rhythmic Intelligence	49.49	9.98	52.16	9.92	1.49	NS
8.	Naturalistic Intelligence	49.50	10.23	52.12	8.76	1.60	NS
9.	Existentialistic Intelligence	50.00	10.13	49.99	9.54	0.01	NS
Multiple Intelligence		49.96		50.17			

From table 3, it is inferred that there is no significant difference between married and unmarried teachers in their verbal linguistic intelligence, Visual spatial intelligence, Bodily kinesthetic intelligence, Intrapersonal Intelligence, Interpersonal intelligence, Logical mathematical intelligence, Musical rhythmic intelligence, Naturalistic Intelligence and Existentialistic Intelligence.

Null Hypothesis: 4

There is no significant association between age of the teachers and their multiple intelligence.

Table 4: Association between Age of the Teachers and their Multiple Intelligence

S. No.	Dimensions	DF	Calculated ¡² value	Remarks at 5 % level
1.	Verbal Linguistic Intelligence	4	1.69	NS
2.	Visual Spatial Intelligence		1.39	NS

3.	Bodily Kinesthetic intelligence		2.42	NS
4.	Interpersonal Intelligence		0.76	NS
5.	Intrapersonal Intelligence		1.75	NS
6.	Logical Mathematical Intelligence		2.85	NS
7.	Musical rhythmic Intelligence		1.27	NS
8.	Naturalistic Intelligence		2.26	NS
9.	Existentialistic Intelligence		0.63	NS

(At 5% level of significance for 4 DF, the table value of χ^2 is 9.488)

From table 4, it is inferred that there is no significant association between age of the teachers and in their Verbal linguistic intelligence, Visual spatial intelligence, Bodily kinesthetic intelligence, Intrapersonal Intelligence, Interpersonal intelligence, Logical mathematical intelligence, Musical rhythmic intelligence, Naturalistic Intelligence and Existentialistic Intelligence.

Null Hypothesis: 5

There is no significant association between educational qualification of the teachers and their multiple intelligence

Table 5: Association between Educational Qualification of the Teachers and their Multiple Intelligence

S. No.	Dimensions	DF	Calculated ¡² value	Remarks at 5 % level
1.	Verbal Linguistic Intelligence	4	2.60	NS
2.	Visual Spatial Intelligence		1.87	NS
3.	Bodily Kinesthetic intelligence		2.51	NS
4.	Interpersonal Intelligence		5.45	NS
5.	Intrapersonal Intelligence		3.03	NS
6.	Logical Mathematical Intelligence		0.89	NS
7.	Musical rhythmic Intelligence		1.21	NS
8.	Naturalistic Intelligence		1.20	NS
9.	Existentialistic Intelligence		5.14	NS

(At 5% level of significance for 4 df, the table value of χ^2 is 9.488)

From table 5, it is inferred that there is no significant association between educational qualification of the teachers and in their Verbal linguistic intelligence, Visual spatial intelligence, Bodily kinesthetic intelligence, Intrapersonal Intelligence, Interpersonal intelligence, Logical mathematical intelligence, Musical rhythmic intelligence, Naturalistic Intelligence and Existentialistic Intelligence.

Null Hypothesis: 6

There is no significant association between teaching experience of the teachers and their multiple intelligence.

Table 6: Association between Teaching Experience of Teachers & their Multiple Intelligence

S. No.	Dimensions	DF	Calculated ¡² value	Remarks at 5 % level
1.	Verbal Linguistic Intelligence	4	0.17	NS
2.	Visual Spatial Intelligence		2.35	NS
3.	Bodily Kinesthetic intelligence		2.73	NS
4.	Interpersonal Intelligence		4.07	NS
5.	Intrapersonal Intelligence		1.34	NS
6.	Logical Mathematical Intelligence		2.65	NS
7.	Musical rhythmic Intelligence		0.78	NS
8.	Naturalistic Intelligence		2.04	NS
9.	Existentialistic Intelligence		2.40	NS

(At 5% level of significance for 4 df, the table value of χ^2 is 9.488)

From table 6, it is inferred that there is no significant association between teaching experience of the teachers and in their Verbal linguistic intelligence, Visual spatial intelligence, Bodily kinesthetic intelligence, Intrapersonal Intelligence, Interpersonal intelligence, Logical mathematical intelligence, Musical rhythmic intelligence, Naturalistic Intelligence and Existentialistic Intelligence.

Null Hypothesis: 7

There is no significant association between in-service training of the teachers and their multiple intelligence

Table 7: Association between In-Service Training of Teachers and their Multiple Intelligence

S. No.	Dimensions	DF	Calculated ¡² value	Remarks at 5 % level
1.	Verbal Linguistic Intelligence	4	0.50	NS
2.	Visual Spatial Intelligence		1.58	NS
3.	Bodily Kinesthetic intelligence		1.57	NS
4.	Interpersonal Intelligence		0.89	NS
5.	Intrapersonal Intelligence		0.24	NS
6.	Logical Mathematical Intelligence		6.67	NS

7.	Musical rhythmic Intelligence		2.72	NS
8.	Naturalistic Intelligence		2.91	NS
9.	Existentialistic Intelligence		1.57	NS

(At 5% level of significance for 4 DF, the table value of χ^2 is 9.488)

From table 7, it is inferred that there is no significant association between in-service training of the teachers and in their Verbal linguistic intelligence, Visual spatial intelligence, Bodily kinesthetic intelligence, Intrapersonal Intelligence, Interpersonal intelligence, Logical mathematical intelligence, Musical rhythmic intelligence, Naturalistic Intelligence and Existentialistic Intelligence.

Findings

The important findings of the present study are briefly summarized below:

- There is no significant difference between male and female teachers in all dimensiosn of multiple intelligence except Visual spatial intelligence.
- There is no significant difference between rural and urban teachers in all dimensions of multiple intelligence except Intrapersonal intelligence.
- There is no significant difference between married and unmarried teachers in all dimensions of multiple intelligence.
- There is no significant association between age of the teachers and in all dimensions of multiple intelligence.
- There is no significant association between educational qualification of the teachers and in all dimensions of multiple intelligence.
- There is no significant association between teaching experience of the teachers and in all dimensions of multiple intelligence.
- There is no significant association between in-service training of the teachers and all dimensions of multiple intelligence.

Suggestions

The following are few suggestions based on the findings of the study

- Workshops and seminars on multiple intelligence may be conducted for teachers working in schools.
- Innovative modern strategies may be used to develop the interpersonal and intrapersonal intelligence.
- Training may be given to teachers in language library, digital library, e-library and CAI in order to develop verbal linguistic intelligence among teachers.
- More in-service training may be given to teachers to develop their multiple intelligence.

References

1. Howard, Gardner (2000), Intelligence Reframed: Multiple Intelligence for the 21st Century, New York.
2. Kothari, C.R. (2009). Research Methodology methods and techniques. (2nd ed). New Delhi. New Age International Publishers Pvt. Ltd.
3. Hema Nalini (2009), "A study on impact of the theory of multiple intelligences on children with autism", New Frontiers in education, Vol. 41, No.04.
4. Mulhollen and Christine (2008), Relationship between multiple intelligences and attitude toward independent learning in a high transactional distance environment, Dissertation Abstract International, Vol.67, No. 08, February 2007.
5. Raines (2003), Multiple intelligence and social work practice for studies with learning disabilities, Dissertation Abstracts International, Vol.28, No. 01, November 2003.
6. Thomas Alexander and Annaraja (2006), "Role of multiple intelligence on learning of problem students", Research and reflection on Education, Vol. 4, No. 04.