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Attitude Towards Blended Learning among School Teachers in Tamil Nadu – A Study Blended Learning

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The perfect blended learning program includes web-based training supported by human touch and media. It optimizes the achievement of learning objectives with the application of appropriate learning technologies to match the personal learning style. It refers to an education program that combines teaching methods of the traditional classroom and online learning. Traditional face-to-face learning is combined with methods of eLearning so that learners can reach their full potential. Every learner has different needs and learning styles so, with this education program, they have greater flexibility of learning at their own pace.

This learning approach works best for organizations, which is why it has become a buzzword in the business world. Creating a blended learning approach demands time because organizations need to identify the “right” content for online, in-person training along with timings for virtual classrooms and in-person sessions.

Blended learning increases the options for greater quality and quantity of human interaction in a learning environment. Blended learning offers learners the opportunity “to be both together and apart”. A community of learners can interact at anytime and anywhere because of the benefits that computer – mediated educational tools provide. Blended learning provides a ‘good’ mix of technologies and interactions, resulting in a socially supported, constructive, learning experience; this is especially significant given the profound effect that it could have on distance learning.

Definition Blended Learning

Blended learning can combine the positive aspects of the two learning environments, classroom – based learning and e-learning (Bonk & Graham, 2006). However, some experts are now taking broader view in that it goes beyond e-learning and classrooms;

Blended learning is a mix of delivery methods that have been selected and fashioned to accommodate the various learning needs of a diverse audience in a variety of subjects. This method can include any combination of any of the above delivery methods (McSporran & King 2002) .

The Growth of Blended Learning

Blended learning models are very effective in educating students. Students demonstrate increased **learning** and achievement in **blended learning** models because they respond to the use of technology combined with traditional **classroom** sessions. Furthermore, student retention is higher when **blended learning** models are used.

Mastering the **Blend** is designed as a professional **development** opportunity to enhance **teachers'** face-to-face **classroom** instruction. The focus of the program as a whole is to assist K-12 **teachers** in developing the skills needed to design, develop, and facilitate student-centered **blended learning** environments.

The appeal of Blended Learning

Blended Learning Expands Reach. **Blended learning** brings together the best of both **classroom learning** and eLearning, to reach and **appeal** to a wider variety of **learning** styles and circumstances. ... With online methods, **learners** can move through content at their own pace, and even revisit content for additional clarity.

Blended learning in the classroom

Blended learning combines **classroom learning** with online **learning**, in which students can, in part, control the time, pace, and place of their **learning**. I advocate a teacher-designed **blended learning** model, in which teachers determine the combination that's right for them and their students.

Types of Blended Learning



Models

There is not one specific way to describe blended learning. Because blended learning is relatively new, it's not proven that one method shows the best results. But depended on the age your participants are, you can decide which method could work best for your participants (this considers mostly motivation). I will give you some examples of a few blended learning models.

Rational Model

You have some students who get instruction from their teacher, some students work together in a collaboration and some students work on their computers. They rotate throughout those stations throughout the day.

Flipped Classroom Model

Students are expected to come to class and already have watched some videos or other kind of instruction. Students are able to pause the video and work at their own pace. For example you can fast forward your lecture if you don't have enough time. Students can do their homework and ask questions in class.

Open classroom Model

Students can work on their computers and teachers will help them. It seems like a good solution, because children like being on a computer, but teachers have to really motivate their children. If you don't motivate the children, it's the same as giving a kid a textbook and say: 'Entertain yourself!'

Blended Course or Education

'Busy' a common answer people will give when you ask them you they are doing. Blended learning may be a good solution for people who are always in a hurry. They can partly work at their own pace and still have the face-to-face education. You can even have your diner and a the same time watch a lecture on your computer, not something that is allowed to happen in a classroom. Not all children are able to get themselves motivated to follow the instructions on their computers. A teacher is needed to keep an eye on the children.

The Impact of a Blended Learning Approach

Blended learning takes the best of face-to-face and online training methods. When done right, it can benefit an organization's training program in many ways, including expanding reach, increasing engagement, providing references, facilitating collaboration, and simplifying assessment processes.

1. Blended Learning Expands Reach

Blended learning brings together the best of both classroom learning and eLearning [2] to reach and appeal to a wider variety of learning styles and circumstances. Classroom learning allows for direct interaction between learners and the trainer, as well as learning through hands-on activities. With online methods, learners can move through content at their own pace, and even revisit content for additional clarity. From these examples, it's apparent that blending classroom and online methods could be the ideal training solution.

2. Blended Learning Increases Engagement

A blended approach to learning involves the use of a variety of content types. As learners participate in face-to-face training and interact with relevant and actionable video, audio, text, presentations, and other types of bite-sized content, they are more likely to engage, retain information, and apply what they learn to their job.

3. Blended Learning Provides Useful References

Online learning, in conjunction with face-to-face learning, provides a platform for organizing and presenting material that learners might need to reference to prepare for in-class activities. For example, learners might be asked to complete an online reading assignment and online quiz before attending class, where they'll have a related discussion and be better prepared to participate.

4. Blended Learning Facilitates Collaboration

Delivering a blended learning strategy increases the opportunities for students to collaborate, which results in a deepened learning experience [3] and improved business performance and profitability [4]. By utilizing online tools to complete certain tasks like lecturing or presenting content, more face-to-face training time will be available for collaborative work, problem-solving, and guided practice.

5. Blended Learning Simplifies Assessment

Supplementing face-to-face learning with online tools simplifies the assessment process for trainers. Using online tools, they can quickly and easily administer quizzes or tests to assess how learners are doing.

If this list of benefits doesn't convince you, research shows that "blended learning has the proven potential to enhance both the effectiveness and efficiency of meaningful learning experiences" The impact of effective blended learning is clear.

Benefits of blended learning

Enables students to learn at their own pace: Due to the **flexibility** of blended learning and the ability to access internet resources allows students to learn at their own pace, meaning a teacher can help **speed up** the learning process or give more advanced resources if necessary.

The teaching landscape is rapidly changing, the technological rise of the 21st century and widespread integration of those technologies into our society, combined with access to the internet has integrally changed teaching in just a few years.

Our children and their following generations are already and will continue to grow up in a world that's a stark reminder of how rapidly the human civilization has changed, a society and world where smart phones and tablets are widespread, affordable, and replacing most computers and laptops.

Needs and Importance of Blended Learning

Teaching students or training employees, blended learning works because it can make your teaching more effective.

Blended learning is important because it breaks down the traditional walls of teaching, ones that don't work for all students and now with access to present day technologies and resources we can tailor the **learning** experience for each student.

1. Boosts learner's efficiency
2. Builds engagement
3. Better communication
4. Improved collaboration
5. Keeping track of learners' progress
6. Enhancing teaching efforts

To improve information retention, engagement, and teaching, blended learning is more important than ever, irrespective of the industry. A good blend of learning formats goes a long way in offering efficient training to your workforce, curtailing costs, and extending the training accessibility.

The important features of blended learning environment are:

- Increased student engagement in learning.
- Enhanced teacher and student interaction.
- Responsibility for learning.
- Time management.
- Improved student learning outcomes.
- Time flexibility.
- Enhanced institutional reputation.
- More flexible teaching and learning environment.

Significance of the study

1. The study will help to know the relationship between attitude towards blended learning among school teachers.
2. This study will help to estimate the level of "attitude towards blended learning".
3. This study will help to know the concept – Blended Learning.

Objective of the study

- To find out the attitude towards blended learning of school teachers in Tamilnadu.
- To find the variation in the attitude towards blended learning of school teachers due to different personal and demographic variables.

Hypotheses of the study

The investigator of the present study framed the following hypotheses based on the objectives framed earlier.

- There is no significant mean difference between male and female teachers with respect to attitude towards blended learning.
- There is no significant mean difference between rural and urban area teachers with respect to attitude towards blended learning.
- There is no significant mean difference between married and unmarried teachers with respect to attitude towards blended learning.

- There is no significant mean difference between Government and Private school There is no significant mean difference between Government and Private teachers with respect to attitude towards blended learning
- teachers with respect to attitude towards blended learning
- There is no significant mean difference between private and Aided school teachers with respect to attitude towards blended learning
- There is no significant mean difference between the teachers experience as below 10 years and 10 – 20 years with respect to attitude towards blended learning
- There is no significant mean difference between the teachers experience as below 10 years and above 20 years with respect to attitude towards blended learning
- There is no significant mean difference between the teachers experience as below 10 – 20 years and above 20 years with respect to attitude towards blended learning

The Method

In the present study, the investigator applied normative survey method. The normative survey method studies, describes and interprets what exists at present.

A Review of Related Literature

Boyle, J. T. & Nicol, D. J. (2003)

Teaching methods that promote interaction and discussion are known to benefit learning. However, large class sizes make it difficult to implement these methods. Research from the United States has shown that an electronic classroom communication system (CCS) can be used to support active discussion in large lecture classes. This CCS technology in the context of two different modes of discussion — peer-group and class-wide discussion. With CCS technology, students' answers to multiple-choice concept tests are collated in real time with the class results fed back as a histogram.

Boyle, T. (2005)

The focus of this paper is how to improve a course using a blended learning approach. The paper advocates a methodology that is pedagogically driven. The nature of the blend is determined by an analysis of the range and nature of the problems faced by learners. The components and relationships in the blend are developed to tackle these problems systematically to produce an overall solution that makes a measurable impact on student performance. The methodology is illustrated by a major case study where a marked impact on student performance was demonstrated. The paper concludes by discussing how better conceptual representation can underpin the evolution of more powerful methodologies for blended learning development.

Derntl, M. & Motschnig-Pitrik, R. (2005)

One of the ways student-teacher interactions takes place is through learning communities on social learning networking sites which have become one of the most common features of online learning today. Derntl and Motschnig-Pitrik (2005) have regarded strongly the current conception of the whole complex phenomenon of online learning, where delivering learning content is made possible anytime and everywhere. Thus, the process of creating and sustaining learning communities with a common objective has become more prevalent. ...

Smith, J. (2001).

This paper reports on a case study aimed at developing a better understanding of the different dimensions of blended learning technology. Drawing upon learners' experiences, it examines the circumstances in which learners are more likely to choose among different learning preferences and explores learners' preferences for human and online learning support environments and the factors driving their choices. Finally the paper describes an instructor's selection of and experiences in the use of technology to support students' learning and how technology has impacted face-to-face interaction with students. The study concludes with a summary of the different dimensions of blended learning and how an understanding of these dimensions impacts the theory and practice of blended learning within the educational environment.

Singh, 2003, Collis, 2002

The articulation of the concept of blended learning began in the corporate world. Corporate researchers and practitioners noted that technology enhanced learning alone was not enough, arguing that people needed experiential learning for the mastery and retention of knowledge and skills achieved through the blending of technology and face-to-face interaction (Singh, 2003, Collis, 2002).

Collis and Moonen,2001

Blended learning means different things to different people. There is a growing literature that associates blended learning with flexible delivery of instruction (Collis and Moonen,2001). Others regard blended learning as an important building block of the new schoolhouse, which offers students both flexibility and convenience, important characteristics for working adults who decide to pursue postsecondary degrees (Rovai & Jordan, 2004). Collis and Moonen (2001) argue that blended learning is a hybrid of traditional face-to-face and online learning so that instruction occurs both in the classroom and online, and where the online component becomes a natural extension of traditional classroom learning.

RESEARCH METHODOLOGY**Statement of Problem:**

To study the Attitude towards blended learning among school teachers in Tamil Nadu. Adaptation of a suitable methodology can raise the efficiency and dignity of the research work. This chapter gives details about the sample selected tools used, statistical technique employed and the procedures followed in the different stages of the present study.

Sample

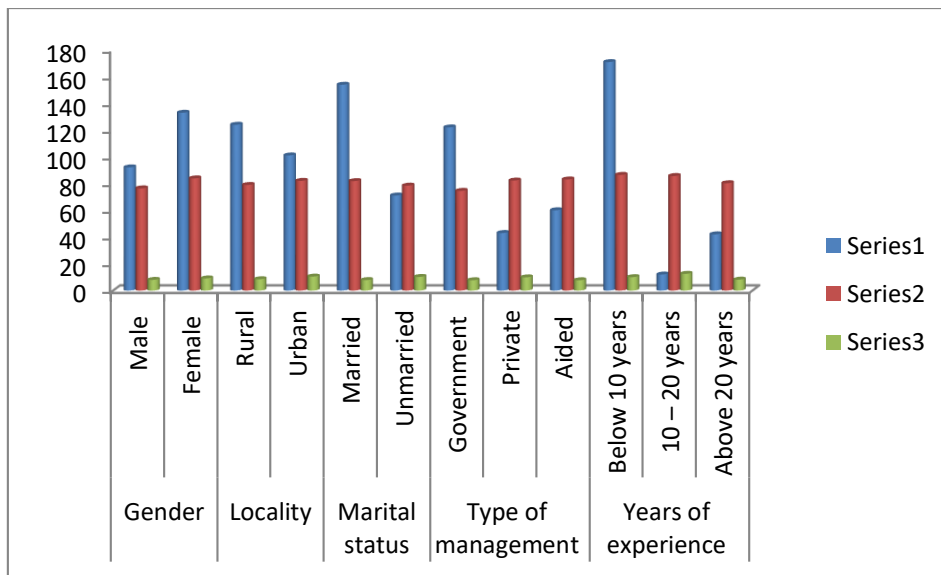
The present study consists of 450 teachers working in higher secondary schools situated in Tamil Nadu. The sample was selected by using simple random sampling technique. The sample forms a representative sample of the entire population. The proportionate weightage was given to various sub-samples.

Table showing the mean and standard deviation of attitude towards blended learning scores of teachers

S.No.	Variable	Sample	N	Mean	S.D
1	Gender	Male	92	76.35	7.98
		Female	133	83.81	9.07
2	Locality	Rural	124	78.89	8.47
		Urban	101	81.96	10.43
3	Marital status	Married	154	81.78	7.83
		Unmarried	71	78.38	10.19
4	Type of management	Government	122	74.48	7.72
		Private	43	82.18	9.86
		Aided	60	83.02	7.72
5	Years of experience	Below 10 years	171	86.41	10.03
		10 – 20 years	12	85.58	12.5
		Above 20 years	42	80.19	8.17
Entire sample			225	77.28	8.12

In order to find out the Attitude towards blended learning school teachers in Tamil Nadu district the investigator calculated mean and SD. It is given in the table the mean value of the entire sample is 77.28 and S.D 8.12. The calculated mean value is higher than the percentile 50 (76). Hence it is inferred that school teachers are having favorable attitude towards blended learning. The mean values of the different sub sample used in the present study are ranging from 74.48 to 86.41. These mean values are higher than percentile 50 (76). Hence it is inferred that irrespective of sub samples the school teachers are having favorable attitude towards blended learning.

Bar chart showing the mean and standard deviation of attitude towards blended learning scores of teachers



Differential analysis

This part deals with the differential analysis of data collected, one among the important objectives stated earlier was to study whether there is any significant difference between selected sub-samples of the present investigation with respect to attitude towards blended learning. For this purpose, the investigator used the test of significance ('t' test). The investigator also framed null hypotheses for testing. The calculated values are given in the following tables.

Analysis of attitude towards blended learning scores of male and female teachers

Null hypothesis No. 1

There is no significant mean difference between male and female teachers in attitude towards blended learning

Table 1

Showing the mean, S.D and t values of male and female teachers in attitude towards blended learning

Gender	N	Mean	SD	T value	Level of significance
Male	92	76.33	7.98	6.01	Significant
Female	133	83.81	9.07		

In order to find out the significant mean difference between male and female teachers attitude towards blended learning score, the investigator calculate 't' value. It is given in the table it is found to be 6.01, which is significant at 0.05 level. Hence the framed null hypothesis is rejected. It is inferred that male and female teachers differ significantly in their attitude towards blended leaning.

Fig - 1

Showing the mean, S.D and t values of male and female teachers in attitude towards blended learning

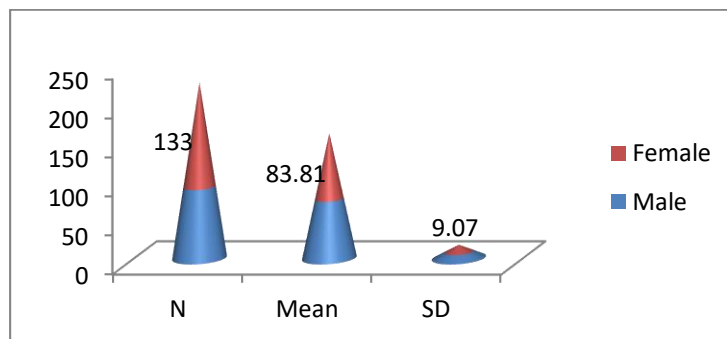


Table - 2

Showing the mean, S.D and t values of rural and urban area teachers in attitude towards blended learning

Locality	N	Mean	SD	T value	Level of significance
Rural	124	78.89	8.44	2.65	Significant
Urban	101	81.96	10.43		

In order to find out the significant mean difference between rural and urban area teachers attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 2.65, which is significant at 0.05 level. Hence the framed null hypothesis (2) is rejected. It is inferred that rural and urban area teachers differ significantly in their attitude towards blended leaning.

Fig - 2

Showing the mean, S.D and t values of rural and urban area teachers in attitude towards blended learning

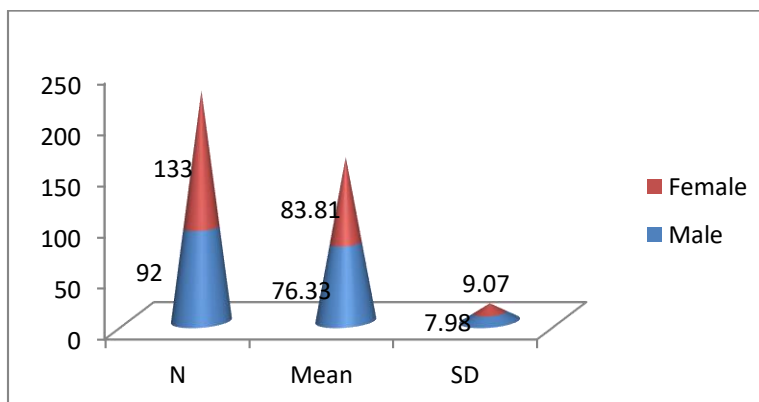


Table 3

Showing the mean, S.D and t values of married and unmarried teachers in attitude towards blended learning

Marital status	N	Mean	SD	T value	Level of significance
Married	154	81.78	7.83	2.30	Significant
Unmarried	71	78.38	10.19		

In order to find out the significant mean difference between married and unmarried teachers attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 2.30, which is significant at 0.05 level. Hence the framed null hypothesis (3) is rejected. It is inferred that married and unmarried teachers differ significantly in their attitude towards blended leaning.

Fig - 3

Showing the mean, S.D and t values of married and unmarried teachers in attitude towards blended learning

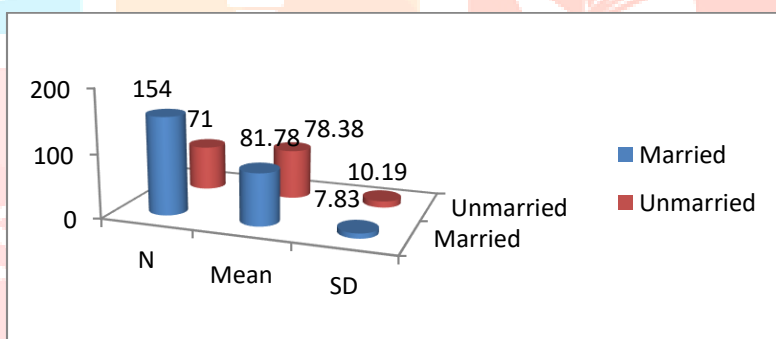


Table 4

Showing the mean, S.D and t values of Government and Private school teachers in attitude towards blended learning

Management	N	Mean	SD	T value	Level of significance
Government	122	74.48	7.72	3.47	Significant
Private	43	82.18	9.86		

In order to find out the significant mean difference between government and private teachers attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be

3.47, which is significant at 0.05 level. Hence the framed null hypothesis (4) is rejected. It is inferred that government and private teachers differ significantly in their attitude towards blended leaning.

Fig - 4

Showing the mean, S.D and t values of Government and Private school teachers in attitude towards blended learning

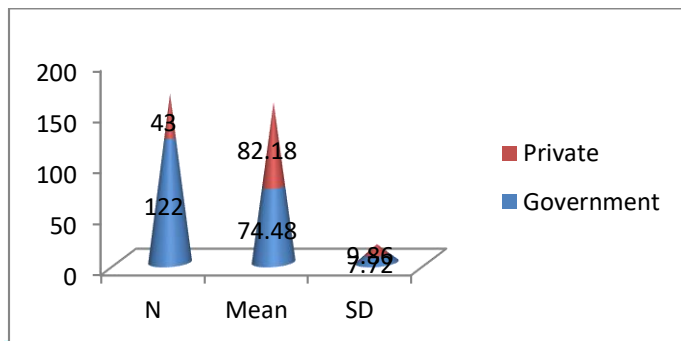


Table 5

Showing the mean, S.D and t values of Government and Aided school teachers in attitude towards blended learning

Management	N	Mean	SD	T value	Level of significance
Government	122	74.48	7.72	6.00	Significant
Aided	60	83.02	8.14		

In order to find out the significant mean difference between government and aided teachers attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 6.00, which is significant at 0.05 level. Hence the framed null hypothesis (4) is rejected. It is inferred that government and aided teachers differ significantly in their attitude towards blended leaning.

Fig - 5

Showing the mean, S.D and t values of Government and Aided school teachers in attitude towards blended learning

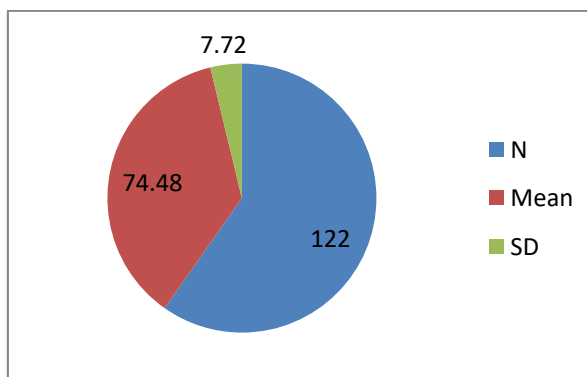


Table 6

Showing the mean, S.D and t values of Private and Aided school teachers in attitude towards blended learning

Management	N	Mean	SD	T value	Level of significance
Private	43	82.18	9.86	0.42	Not
Aided	60	83.02	8.14		Significant

In order to find out the significant mean difference between private and aided teachers attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 0.42, which is not significant at 0.05 level. Hence the framed null hypothesis (5) is accepted. It is inferred that private and aided school teachers do not differ significantly in their attitude towards blended leaning.

Fig - 6

Showing the mean, S.D and t values of Private and Aided school teachers in attitude towards blended learning

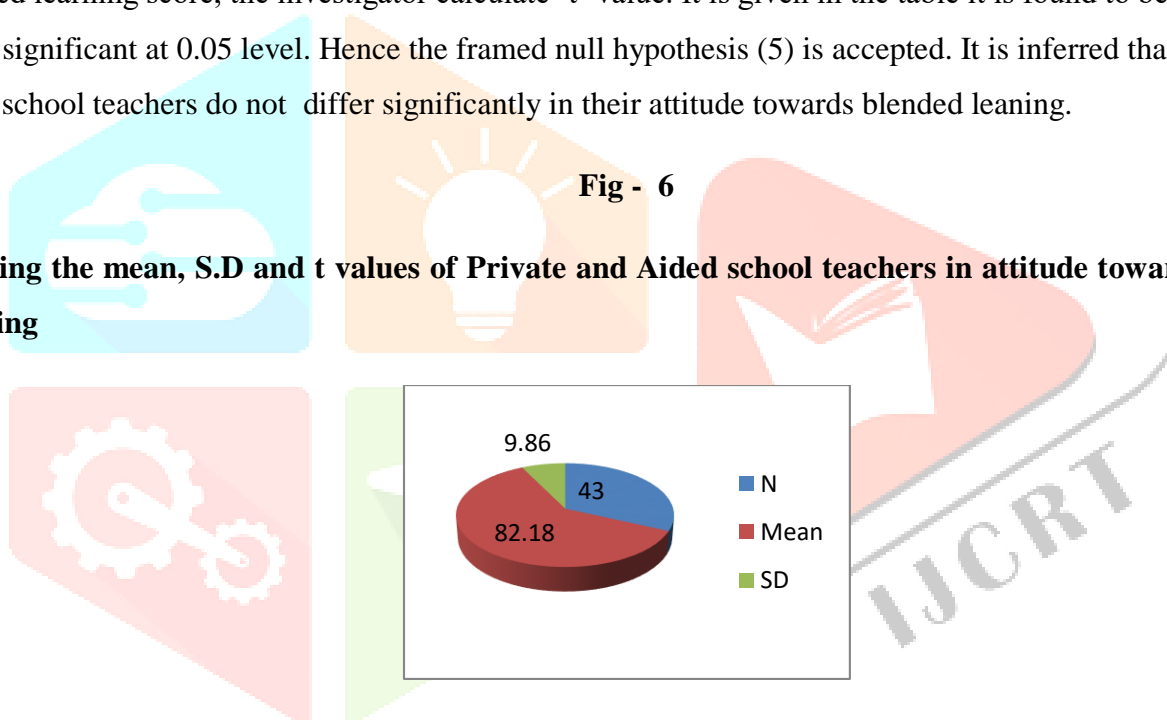


Table 7

Showing the mean, S.D and t values of the teachers experience in attitude towards blended learning

Management	N	Mean	SD	T value	Level of significance
Below 10 years	171	86.41	10.03	0.22	Not
10 – 20 years	12	85.58	12.50		Significant

In order to find out the significant mean difference between the teachers experience as below 10 years and 10 – 20 years attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 0.22, which is not significant at 0.05 level. Hence the framed null hypothesis (6) is

accepted. It is inferred that below 10 years and 10 – 20 years school teachers do not differ significantly in their attitude towards blended leaning.

Fig - 7

Showing the mean, S.D and t values of the teachers experience in attitude towards blended learning

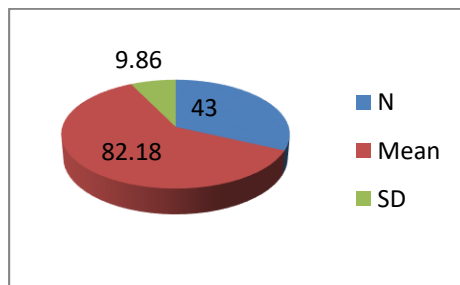


Table - 8

Showing the mean, S.D and t values of the teachers experience in attitude towards blended learning

Management	N	Mean	SD	T value	Level of significance
Below 10 years	171	86.41	10.03	1.35	Not Significant
above 20 years	42	80.19	8.17		

In order to find out the significant mean difference between the teachers experience as below 10 years and above 20 years attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 1.35, which is significant at 0.05 level. Hence the framed null hypothesis (7) is accepted. It is inferred that the teachers experience as below 10 years and above 20 years do not differ significantly in their attitude towards blended leaning.

Fig - 8

Showing the mean, S.D and t values of the teachers experience in attitude towards blended learning

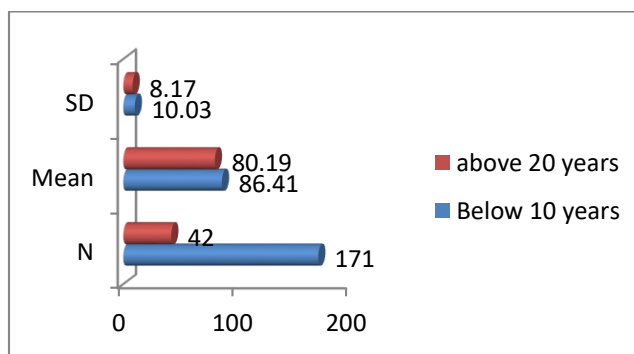


Table - 9

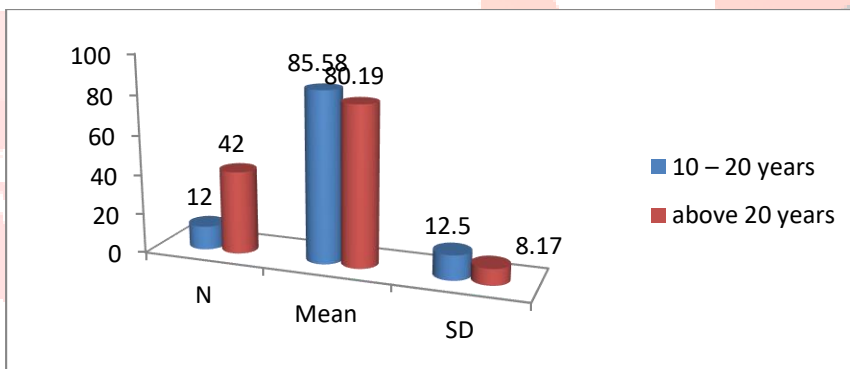
Showing the mean, S.D and t values of the teachers experience in attitude towards blended learning

Management	N	Mean	SD	T value	Level of significance
10 – 20 years	12	85.58	12.50	0.99	Not Significant
above 20 years	42	80.19	8.17		

In order to find out the significant mean difference between the teachers experience 10 – 20 years and above 20 years attitude towards blended learning score, the investigator calculate ‘t’ value. It is given in the table it is found to be 0.99, which is significant at 0.05 level. Hence the framed null hypothesis (8) is accepted. It is inferred that the teachers experience 10 – 20 years and above 20 years do not differ significantly in their attitude towards blended leaning.

Table - 9

Showing the mean, S.D and t values of the teachers experience in attitude towards blended learning



Summary of Findings

The hypotheses formulated at the beginning of the study have been examined in the light of the data gathered. The following are the main findings of the present investigation.

1. The school teachers are having favorable level of attitude towards blended learning and irrespective of sub samples the school teachers are having favorable level of attitude towards blended learning.
2. Male and female teachers differ significantly in their attitude towards blended learning scores.
3. Rural and urban area teachers differ significantly in their attitude towards blended learning scores.
4. Married and unmarried teachers differ significantly in their attitude towards blended learning.
5. Government and aided school teachers differ significantly in their attitude towards blended learning.
6. Private and aided school teachers don not differ significantly in their attitude towards blended learning.

7. Private and aided school teachers do not differ significantly in their attitude towards blended learning.
8. The teachers experience as below 10 years and 10 – 20 years do no differ significantly in their attitude towards blended learning.
9. The teachers experience as below 10 years and above 20 years do not differ significantly in their attitude towards blended learning.
10. The teachers experience as 10 - 20 years and above 20 years does not differ significantly in their attitude towards blended learning.

Recommendation

The present study gives clear – cut view about the attitude towards blended learning of school teachers in Tamil Nadu. Based on the important findings stated earlier the following recommendations were made.

1. The school teachers are having favourable level of attitude towards blended learning and irrespective of sub samples the school teachers are having fvouranle level of attitude towards blended learning. So the teacher should improve them to clear idea about blended learning.
2. The sub samples of year of experience do not differ significantly in their attitude towards blended learning but the sub samples of gender, locality, marital status and type of management differ significantly in their attitude towards blended learning.

Suggestion for further Research

The following are some of the suggested research problems for future researcher and for healthy research outcomes o this present theme.

1. Replica of the present study could be undertaken at various levels of school education.
2. A study could be made on school environment and attitude towards blended learning of students.
3. A study could be made on the influence of college environment on developing attitude towards blended learning.
4. A study could be made on the awareness and attitude towards blended learning of students studying in various levels.
5. A study could be on attitude towards blended learning and academic achievement.
6. The present study could be undertaken at various states in India.

Conclusion

The schools teachers are having favorable level of attitude towards blended learning an irrespective of sub samples the school teachers is having favorable level of attitude towards blended learning. So the teacher should improve them to clear idea about blended learning. The sub samples of year of experience do not differ significantly in their attitude towards blended learning but the sub samples of gender, locality, marital status and type of management differ significantly in their attitude towards blended learning.

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