

Perception Of Teacher Educators Towards Teaching Efficacy

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Abstract

Teaching efficacy is an ability of effective teaching and students' good learning outcomes. It helps to effectively managing time and teaching resources of teacher educators. The aim of this study is to ascertain the level and significant differences in perception of teacher educators towards teaching efficacy. This study conducted by descriptive survey method, this method has been applied for data collection from 300 teacher educators based on the stratified random sampling technique in some colleges of education at Namakkal and Salem districts of Tamilnadu. The findings of the study are revealed that the perception of teacher educators have high level of teaching efficacy. Further the categorical variables such as gender and stream of subject wise analyses indicated that there is a significant difference in perception of teacher educators towards teaching efficacy. Also the remaining categorical variables such as locality of teacher educators' age and devices used for teaching wise analyses noticed that there is no significant difference in perception on teaching efficacy among teacher educators. The suggestions of the study are the teaching efficacy helps to rectify the teacher educator's teaching burdens. It also assists to increase the student's academic outcomes and strengthening the teaching and learning activities among teacher educators and learners. The recommendations of the study are the teacher educators should be applied the innovative technology devices in their classroom teaching and online teaching. The educational institutions must provide the innovative and AI educational tools for access and assess the teacher's teaching skills and student's assignment.

Keywords: Teacher Educator, Teaching Efficacy and Perception.

INTRODUCTION

Teaching is a noble profession in the world; it plays a pivotal role in sketching the future of our society. Effective teaching involves not only imparting knowledge and also inspiring, nurturing and guiding students towards success. Further, effective teaching has been generating the effective and efficient teachers. Also, it helps to create the good teaching experience among teachers and increase the best learning environment, and learning outcomes among students. Teaching efficacy is consists of teacher effectiveness in their teaching activities and teachers confidence and teaching capabilities. Youyan Nie, Shun Lau and Albert K.Liau (2012) referred that teaching efficacy is a judgement of the teacher's capabilities and to bring about the desired outcomes of students. Teaching efficacy is fully depends on the teaching materials and innovative teaching devices, because each and every teachers are assessment and recalibrating their teaching abilities based on the utilisation of digital teaching devices and innovative teaching tools. These are all helps to improve the teaching efficacy among teachers. Also teaching efficacy has been integrating with teaching skills and innovative technological devices for effective teaching.

Now-a-days artificial intelligence is emerging innovative teaching technology it enhancing teaching skills for effective teaching and good performance. According to Adebawale O.A., (2025) suggested that AI is among emerging technologies. Also the innovative AI technology is integrating in teaching to help easy teaching activities, and effective results. The teaching efficacy is combining with innovative technology in teaching in educational institutions; it assists to provide the knowledge based students and society. Yigezu (2021) said that digital technology integration in teaching and learning in

higher educational institutions of learning is important to prepare the citizens for knowledge based economy. Therefore this article concentrates on perception on teaching efficacy among teacher educators.

RELATED STUDIES

The previous studies were explained and suggested that the teaching efficacy at various levels. Some of the studies were related to the perception on teaching efficacy. According to Jaime Segara and Carme Julia (2021) analysed that the mathematics teaching efficacy belief and attitude of pre-service teachers and academic achievement. The findings of the study were revealed that both teacher's efficacy beliefs and attitude towards mathematics were key factors for pre-service teacher's mathematics academic achievement. Furthermore, results where manifest that personal mathematics teaching efficacy is the most determining subscale for academic achievement.

Similarly Meral Takunyaci and Mithat Takunyaci (2014) explained that the preschool teachers' mathematics teaching efficacy belief. The study was determined that teachers have low efficacy beliefs on teaching mathematics and most of the subjects strongly agreed that they would generally teach mathematics ineffectively. Further; Mohd Ariff Ahmad Tarmizi et al., (2010) explained that the extent of humanising mathematics among secondary mathematics teachers based on students' perception of their teachers practices in the classroom. The result of the study was revealed that the means scores for students' beliefs in their teacher's role and functioning in the mathematics classroom were positive with high ratings on showing step by step by step procedures in solving mathematics problems. Next, Liu., Cheu,L., and Yao, Z., (2022) suggested that improving teaching efficacy and critical intelligence associated teaching tools can effectively relieve teachers teaching burdens and improve the accuracy of teaching quality assessment. Furthermore, Jeong Rang Kim (2022) analysed that the contexts of artificial intelligence convergence education method subjects and verification of teaching efficacy effectiveness for elementary and secondary teachers. The result was noticed that there were significant difference in information teaching values and information teaching strategies and the effectiveness of the information education teaching efficacy was verified.

OBJECTIVES OF THE STUDY

- ❖ To find out the level of perception of teacher educators towards teaching efficacy is high.
- ❖ To find out the significant difference in perception of teacher educators towards teaching efficacy with respect to their following categorical variables such as gender, locality of teacher educators, and stream of subject.
- ❖ To find out the significant difference in perception of teacher educators towards teaching efficacy with respect to their age and utilising digital device in teaching.

HYPOTHESES OF THE STUDY

- ❖ The level of perception of teacher educators towards teaching efficacy is high.
- ❖ There is no significant difference in perception of teacher educators towards teaching efficacy with respect to their following categorical variables such as gender, locality of teacher educators, and stream of subject.
- ❖ There is no significant difference in perception of teacher educators towards teaching efficacy with respect to their age and utilising the digital devices in teaching.

METHODOLOGY OF THE STUDY

The study employed a descriptive survey method (Quantitative approach) for describe the 'Perception of teacher educators towards teaching efficacy'.

POPULATION, SAMPLE AND SAMPLING TECHNIQUE

The research population consists of teacher educators who are working in Colleges of Education in Namakkal and Salem districts of Tamilnadu, India. The samples 300 teacher educators were selected through the stratified random sampling technique.

RESEARCH INSTRUMENT OF THE STUDY

In the study, the investigator self made questionnaire (Likert type - Four point scale) used to measure the "Perception of teacher educators towards teaching efficacy". The tool was developed by the researcher and research supervisor. The tool was consists of 30 statements, the Cronbach's alpha method was used to found the internal consistency of reliability value of the tool was 0.78 and the content validity was applied.

DATA COLLECTION AND STATISTICAL ANALYSES OF THE STUDY

For the study, the investigator collected the data from teacher educators who were employed in Colleges of Education in Namakkal and Salem districts of Tamilnadu, India. The study has been adopted both statistical analyses such as descriptive (Mean and SD)and inferential analyses ('t' and 'F' tests) with the help of SPSS(version 22) software.

TESTING OF HYPOTHESES

H₁: The level of perception of teacher educators towards teaching efficacy is high.

Table No: 01 Level of perception of teacher educators towards teaching efficacy

Maximum Score : 120

Maximum Score : 120

Sl.No.	VARIABLES	SUB VARIABLES	N	MEAN	SD
1	Gender	Male	126	96.75	7.54
		Female	174	98.96	7.04
2	Locality of Teacher Educator	Rural	203	98.57	7.40
		Urban	97	96.91	7.06
3	Stream of Subject	Arts	167	97.23	7.42
		Science	133	99.04	7.10
4	Age	Below 30	64	98.50	7.44
		Between 30-40	123	97.82	7.28
		40 Above	113	98.03	7.36
5	Devices used for teaching	Mobile	109	97.78	7.39
		Tablet	38	97.58	7.33
		PC/Laptop	153	98.33	7.30
Average			N=300	98.03	7.32

From the table (1) is inferred that the calculated mean value 98.03is greater than the midscore 60 of maximum score (120).Consequently the calculated mean value is high. Hence, the result concluded that the teacher educators have high level of perception on teaching efficacy.

H₀₂: There is no significant difference in perception of teacher educators towards teaching efficacy with respect to their following categorical variables such as gender, locality of teacher educators, and stream of subject.

Table No.: 02 Mean difference in perception of teacher educators towards teaching efficacy with respect to their categorical variables

Sl.No.	VARIABLES	SUB VARIABLES	N	MEAN	SD	't' Value	'p' Value
1	Gender	Male	126	96.75	7.54	2.57	0.39
		Female	174	98.96	7.04		
2	Locality of Teacher Educator	Rural	203	98.57	7.40	1.89	0.31
		Urban	97	96.91	7.06		
3	Stream of Subject	Arts	167	97.20	7.42	2.14	0.25
		Science	133	99.04	7.10		

From the table (02) is inferred that the calculated 't' values 2.57 (gender) and 2.14 (stream of subject) are greater than the table value 1.96 at 0.05% level of significance. Consequently the null hypothesis is not accepted. The findings of the study are showed that there is a significant difference in perception of teacher educators towards teaching efficacy with respect to their gender and stream of subject. Furthermore, from the table (02) noticed that the calculated 't' value 1.88 (locality of teacher educators) is less than the table value 1.96 at 0.05% level of significance. Consequently the null hypothesis is accepted. The findings of the study are revealed that there is no significant difference in perception of teacher educators towards teaching efficacy with respect to their locality of teacher educator.

H₀₃ : There is no significant difference in perception of Teacher Educators towards teaching efficacy with respect to their age and utilising digital device in teaching.

Table No: 03 Significant difference in perception of Teacher Educators towards teaching efficacy with respect to their age and digital devices

Sl. No.	VARIABLES	SUB VARIABLES	N	MEAN	SD	'F'- value	'p'- value
4	Age	Below 30	64	98.50	7.44	0.182	0.834
		Between 30-40	123	97.82	7.28		
		40 Above	113	98.03	7.36		
5	Digital Devices	Mobile	109	97.78	7.39	0.26	0.771
		Tablet	38	97.58	7.33		
		PC/Laptop	153	98.33	7.30		

From the table (03) interpret that the calculated 'F' values 0.18 (age) and 0.26 (devices used for teaching) are lower than the tabulated value 2.98 at 0.05% level of significance. Consequently the calculated values are not significant, so the null hypothesis is accepted. The finding of the study is revealed that there is no significant difference in perception of teacher educators towards teaching efficacy with respect to their age and devices used for teaching.

FINDINGS OF THE STUDY

From the analyses revealed that the results, such as

- ❖ The teacher educators have high level of perception on teaching efficacy.
- ❖ The gender wise analysis showed that there is a significant difference in perception of teacher educators towards teaching efficacy
- ❖ The locality of the teacher educator wise analysis noticed that there is no significant difference in perception of teacher educators towards teaching efficacy. The stream of subject wise analysis revealed that there is a significant difference in perception of teacher educators towards teaching efficacy.
- ❖ The age wise analysis indicated that there is no significant difference in perception of teacher educators towards teaching efficacy.

- ❖ The devices used for teaching wise analysis revealed that there is no significant difference in perception of teacher educators towards teaching efficacy.

DISCUSSION AND CONCLUSION

Teaching efficacy is mainly focused on the good and effective teaching based on the innovative teaching resources and good teaching environment. These main factors are creates the effective teaching. From the analysis showed that the perception of teacher educators have high teaching efficacy and to provide the better outcomes when they teachers have been utilising innovative technological devices in their teaching. According to Ying Dong and Bingyuan (2024) explained that the application of intelligent teaching tools and simulated teaching environment has initially shown results. Similarly the innovative techno devices for teaching are to improve the quality and effective teaching.

From the testing of hypotheses explored and indicated that the gender wise analysis revealed that the female teacher educators (98.96) are better than the male teacher educators (96.75) in perception on teaching efficacy. Additionally, the locality wise teacher educators showed that rural area teacher educators (98.57) are greater than the urban area teacher educators (96.91) in perception on teaching. Next the steam of subject wise analysis noticed that the science stream teacher educators (99.04) are higher than the arts stream teacher educators (97.23) in perception on teaching efficacy. Then, the age wise analysis indicated that that below 30 age group teacher educators (98.50) are superior to above 40 age group teacher educators (98.03) and the following between 30 - 40 age group teacher educators (97.82) in perception on teaching efficacy. Further, the devices used for teaching wise analysis revealed that the teacher educators who are used PC/laptop in teaching (98.33) are better than the teacher educators who are used mobile (97.78) and the tablet (97.58) teaching in perception on teaching efficacy.

The results are concluded that the teaching efficacy helps to teachers to enhance the effectiveness and abilities in teaching activities. The innovative technology devices and resources are assists to improve the teaching efficacy among teachers. Also the teacher educators actually or basically have been good knowledge in their recent teaching technology devices and materials. Further the teacher educators have been application of technology knowledge and teaching skills and utilising the teaching objectives and competencies. Hence, the researcher concluded that the teacher educators have high and good teaching efficacy.

From the analyses the results were indicated that innovative technology and teaching devices are to increase the effective teaching. From the results the researcher suggested that the suggestions for the study are the innovative technology combine with teaching efficacy to rectify the teacher educators teaching burdens. And it's to increase the students' academic outcomes. Also it assists to enhance the teaching skills / competencies. Then, it helps to utilise the innovative teaching devices in teaching and learning. Further, teaching efficacy assist to recalibrating the teaching skills among teacher educators and also strengthening the teaching and learning activities among teachers and learners. The recommendations of the study are the teacher educators should be applied the innovative technology devices in their classroom teaching and online teaching. Also the educational institutions are must provide the innovative and AI educational tools for access and assess the teacher's teaching skills and student's assignment.

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