

AN EMPIRICAL STUDY ON EFFECT OF TEACHER EFFICACY ON LEARNING OUTCOME AMONG HIGHER EDUCATION STUDENTS IN COIMBATORE DISTRICT

¹Dr.N.Nirmala Devi, ²Mrs.Sinduja.R

¹Principal, ² Ph.D Research Scholar,

Dr.G.R.Damodaran Academy of Management, Coimbatore, India

ABSTRACT

In the teaching-learning process, teacher effectiveness is critical. Effective teachers are well-versed in the substance and skills of their subjects. They instil a passion of learning in their students as a result of this. They also know how kids learn concepts, topics, and skills in the most effective way. Teachers can increase self-efficacy by providing reliable communication and feedback to guide students through tasks or urge them to give it their all. Emotional state - A happy mood can improve self-efficacy beliefs, but worry can impair them. The current study focuses on the effect of teacher efficacy on the learning outcomes of the students. The researchers used a sample of 120 students from various colleges in Coimbatore. The data was analysed with the tools viz., regression, correlation and mean ranking. The study found that the teacher efficacy significantly influenced the learning outcomes of the students.

Index terms: Teacher efficacy, learning outcomes, higher education.

INTRODUCTION

Teacher efficacy is defined as Teachers' self-efficacy refers to a teacher's belief in his or her ability to execute courses of action required to successfully complete a specific teaching task in a particular context. Bandura (1977) defines self-efficacy beliefs as an individual's conviction about his or her capabilities to accomplish a task when faced with a challenge. Outcome based education, being the current trend in the field of education, changes the role of a teacher from just teaching in the classroom to being a facilitator to the students to facilitate their learning. Teacher efficacy beliefs (teachers' self-efficacy) have been related to teaching strategies, instructions, and motivation (Holzberger, Philipp and Kunter, 2013 Kleinsasser, 2014;Midgley, Feldlaufer and Eccles, 1989) as well as to student achievement (Austin, 2013). Teachers with higher teacher efficacy become more effective in the classroom and are less likely to experience burnout (Kleinsasser, 2014; Ross, 2013). If students are to achieve high standards then no less can be expected of their teachers (National Commission on Teaching & America's Future, 1996). Teachers with strong self efficacy beliefs have also been shown to be better organized, to engage in more effective planning (Allinder, 1994), and are more likely to set high performance standards for themselves as well for their students (Ross, 1995).

REVIEW OF LITERATURE

D.W.S. Tai; Y-C. Hu; Wang & J-L Chen (2012) studied about the relationship between Teacher Self Efficacy, Students' learning satisfaction and their Learning Outcomes. It was found that Students' learning satisfaction

has positive influence on Students' learning outcome and that the Teacher self efficacy has a strong association with learning satisfaction.

Keith C. Herman, Jal'et Hickmon-Rosa, Wendy M. Reinke, (2017), found that the Teacher self efficacy and Academic Outcomes of the students are closely interrelated from their study and that the teacher self efficacy can inform preventive and intervention efforts to support teachers.

Teomara Rutherford, Jennifer J.Long and George Farkas (2017), examined the association of teacher self efficacy with the student achievement outcomes and student self efficacy and found that higher the self efficacy of teachers, the more positive is the student achievement outcome.

Yi-Hsiang Pan (2014) in his study confirm the relationships among teachers' self-efficacy, and students' learning motivation, learning atmosphere, and learning satisfaction in senior high school physical education (PE). It was concluded that physical education teachers' self-efficacy affected students' learning motivation, learning atmosphere, and learning satisfaction; teachers' self-efficacy also indirectly and positively influenced learning satisfaction, mediated by learning motivation and learning atmosphere.

Ulrich Schiefele and Ellen Schaffner (2015) in their study, found that teachers' didactic interest and self-efficacy predicted teacher reports of instructional practices. In contrast, student reports of instruction were significantly associated with teachers' educational interest and mastery goals. Moreover, student motivation was related with teacher self efficacy.

Objectives of the study

- To study the relationship between Teachers' Efficacy and Learning Outcomes of the higher education students in Coimbatore District.
- To study the perception of students on the teacher efficacy and student learning outcomes.
- To study the impact of teacher efficacy on the learning outcome higher education students in Coimbatore District.

LIMITATIONS

- The result of the study is based upon the views expressed by the students of Coimbatore District.
- The statistical tools used to analyze the data have their own limitations.
- All the limitations of primary data are applicable to this study.

RESEARCH METHODOLOGY

Area of the Study: The research study was conducted among the students in select colleges in Coimbatore District.

Nature and Source of Data: The study is based on questionnaire method; primary data had been collected from students in select colleges in Coimbatore District and the secondary data have been collected from related journals, Magazines and textbooks.

Statistical Tools Used for the Study:

- Simple Percentage Analysis
- Correlation and Regression Analysis
- Mean and Ranking

Sample: 120 students from select colleges in Coimbatore district by convenience sampling method.

ANALYSIS AND INTERPRETATION

Table 1: Students from each college

	Frequency	Percent	Valid Percent	Cumulative Percent
PSGR Krishnammal College for Women	20	16.7	16.7	16.7
PSG College of Arts and Science	20	16.7	16.7	33.3
Dr.G.R.Damodaran College of Science	20	16.7	16.7	50.0
Dr.N.G.P Arts and Science College	20	16.7	16.7	66.7
Sri Ramakrishna College of Arts and Science	20	16.7	16.7	83.3
Hindusthan College of Arts and Science	20	16.7	16.7	100.0
Total	120	100.0	100.0	

Table 1 shows out of one hundred and twenty respondents, twenty (16.7%) students are taken equally taken from each college viz. PSGR Krishnammal College for Women, PSG College of Arts and Science, Dr.G.R.Damodaran College of Science, Dr.N.G.P Arts and Science College, Sri Ramakrishna College of Arts and Science, Hindusthan College of Arts and Science and finally, Hindusthan College of Arts and Science.

Table 2: Gender of the student

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	30	25.0	25.0	25.0
Female	90	75.0	75.0	100.0
Total	120	100.0	100.0	

Table 2 shows majority ninety (75%) of the students are female and thirty (25%) of the students are male.

Table 3: Stream of the Major

	Frequency	Percent	Valid Percent	Cumulative Percent
B.Com	30	25.0	25.0	25.0
B.Com. (CA)	30	25.0	25.0	50.0
BBA	30	25.0	25.0	75.0
BBA (CA)	30	25.0	25.0	100.0
Total	120	100.0	100.0	

Table 3 shows thirty (25%) respondents taking Bachelor of Commerce and Bachelor of Business Administration, each two streams considered for the study in equal proportion in which, 25% of the students are studying in Pure B.Com, next 25% students studying in B.Com. (CA), another 25% students studying in BBA and the remaining 25% of them are studying in BBA(CA).

Correlation between Teacher Self Efficacy and student Learning Outcome

H₀: There is no correlation between Teacher self efficacy and Students' learning outcome.

H₁: There is a significant correlation between Teacher self efficacy and Students' learning outcome.

Table 4: Relationship between Teacher Self Efficacy and Students' Learning Outcome

		Teacher self efficacy	Students' learning outcome
Teacher efficacy	Pearson Correlation	1	.348**
	Sig. (2-tailed)	.	.000
	N	120	120
Students' learning outcome	Pearson Correlation	.348**	1
	Sig. (2-tailed)	.000	.
	N	120	120

** Correlation at 0.01(2-tailed).

Table 4 indicates a significant correlation coefficient between teacher efficacy and students' learning outcome ($r=.348$, $p=.000$). Therefore, it can be inferred that the higher the teacher efficacy, the higher the students' learning outcome.

REGRESSION: Relationship between Teacher Efficacy and Learning Outcome

H_0 : There is no significant influence of teacher efficacy on learning outcome of the students.

H_1 : There is significant influence of teacher efficacy on learning outcome of the students.

Table 5: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.808 ^a	.653	.644	2.48844

Predictors: (Constant), Teacher efficacy

Table 6: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1348.988	1	449.663	72.616	.000 ^a
Residual	718.312	116	6.192		
Total	2067.300	119			

Predictors: (Constant), Teacher efficacy

Dependent Variable: Learning Outcome

Table 7: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.128	2.145		3.323	.001
Self efficacy	.888	.083	.751	10.650	.000

Dependent Variable: Learning Outcome

Table 5 measures the relationship between Teacher efficacy influencing learning outcome of students of the select using regression analysis. Table 6 exhibits the model significance statistically justified using ANOVA with the $F(3,116)=72.616$, $\text{Sig}.0.000$ is found significant and fit to conduct the model. Further, the value of $R=0.808$ which reflect strong correlation between independent and dependent factors and also the R - proves with the results showing 0.653 which means 65% (approx.) variance of independent variable (Teacher efficacy) influencing learning outcome among students of the select colleges. Table 7 shows beta coefficient values in which teacher efficacy proves statistically significant and influencing factor with the critical value of 10.650 ($\text{Sig}.0.000$) to reject the null hypothesis (H_0). Therefore, it is concluded that teacher efficacy significantly influenced the students learning outcome in the select colleges surveyed for the study.

Table 8: Perception Ranking of Self Efficacy and Learning Outcome

Self Efficacy	3.8	3.62	3.72	3.45	3.58	3.49	3.44	3.61	3.68	3.599
Learning Outcome	3.93	3.73	3.79	3.45	3.66	3.64	3.41	3.72	3.73	3.673

The overall perception score for the constructs viz., teacher efficacy and learning outcome shows significantly high and recorded more than the mid-point of 3. However, learning outcome achieved the first position (3.673), second was the teacher efficacy (3.599).

CONCLUSION

Strengthening weaknesses from the start can only help a teacher who has poor self-efficacy beliefs before. Students' chances of success are considerably increased when teachers know what to do, how to do it, and feel good about it. Teachers may attend sessions aimed at improving their efficiency. Teachers previously identified as low efficacious have the option to fix this with advice and assistance by focusing workshops on high efficacy and ensuring that certified and competent facilitators inculcate specific tactics and designs.

The intended learning outcomes of the students can be achieved by motivating them in their academics. The role of a teacher, in the recent past has changed to a facilitator by facilitating the students to acquire knowledge through

various modes of learning. It is also understood the teachers' self efficacy impacts the academic self-efficacy of students, which in turn brings out the learning outcomes.

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