_____

ACADEMIC SELF EFFICACY BELIEFS AMONG ENGINEERING COLLEGE STUDENTS AND THEIR IMPACTS ON EFFECTIVE ENGLISH LEARNING IN TIRUNELVELI DISTRICT – AN ANALYTICAL STUDY

_____

E.S.Uma Maheswari

Associate Professor / Department of English

Government College of Engineering, Tirunelveli, Tamil Nadu, India.

_____

Abstract

The prime object of the present study is to measure the academic self efficacy beliefs among Engineering college students and their impacts on effective English learning in Tirunelveli District, Tamil Nadu. To shed light on this issue, researcher has tried to consider some affective factors, such as the effective learners' beliefs in themselves in performing a task, their perceptions of the task and some other individual differences such as learning strategies and motivation. Higher education institutions are continuously seeking new and functional technologies to enhance productivity and to effectively reconstruct the curriculums in order to meet the needs and expectations of diverse students. The present research concentrated on the area of academic self-efficacy which relates to students' motivation and it refers to students' confidence in their capability to learn particular tasks. Those students who have high self-efficacy go through demanding tasks regularly and have tendency to gain higher than students with low self-efficacy. On the other hand, those students who have low self-efficacy stop continuing their attempts in the case of failure which reduces their success and sense of self-efficacy. With recent emphasis on developing English for Occupational Purposes competencies of students in mind, this study is focused on how students with varying self efficacy levels and academic standings differ in their adoption of academic goals and college achievement with Gender and Locality variables. The sample consisting of 120 students studying in government and private self finance. Results suggest that students are indeed affected by their self-efficacy and technological acceptance.

Keywords: Academic goal, English Learning, Engineering Students, Self – Efficacy,
                  Technology acceptance model.

Introduction

Globalization and computer technology have increasingly transformed higher education institutions all over the world. In addition, there is growing diversity in the student populations in many universities around the globe. Hence, higher education institutions are

_____

_____

continuously seeking new and functional technologies to enhance productivity, to strategically manage development, and to effectively reconstruct curriculums in order to meet the needs and expectations of diverse students and to engage students in learning. At present, the focus of learning has moved from the teacher to the learner. Learners learn the target language better when they are motivated. Self-efficacy is a personal belief in one's ability to accomplish particular tasks. Academic self-efficacy relates to one's belief in ability to accomplish learning activities (Bandura, 1977).

In this modern era of education, Self-efficacy beliefs among Engineering College students and their impacts on effective English learning are significant concerns for all learners. On the other hand, student engagement is the involvement, keenness, attention, and desire of learners that keep them in touch with their learning. College life that requires student initiation, independence, and self-monitoring can be challenging and stressful for incoming, inexperienced students When students are faced with academic demands, the way they approach academic tasks and view themselves can play a significant role in their academic success.Several researchers and the various studies have revealed that both self-efficacy beliefs and impacts on effective learning are crucial and how it turns learner to overcome on certain problems and factors during their learning in Engineering College.

Statement of the problem
The problem posed in this study is establish the relationship between an Academic Self Efficacy Beliefs Among Engineering College Students and their Impacts on Effective English Learning in Tirunelveli District.

Objectives of the study
 ➢ To study the relationship between Self Efficacy and impacts on English learning among Engineering College students.
 ➢ To find out the significance of relationship between dimensions of Academic Self Efficacy and students impacts on effective English learning among Engineering Colleges.
 ➢ To find out the significance of difference between the demographic and professional variables in respect of Self Efficacy, students English learning among Engineering Colleges.

Hypotheses
 ➢ There is no significance of relationship between Academic Self Efficacy and students English learning.
 ➢ There is no significance of relationship between the dimensions of Academic Self Efficacy and impacts on English learning among Engineering Colleges.

➢ Students considered under Sex, Locality, Medium of Study, Qualification and Type of Institution do not differ significantly in their Self Efficacy and on effective English learning.

Tools

After developing and standardizing these two tools following the predictive validity as suggested by John, W.Best and James V.Khan and fresh scales are prepared for administration with specific instructions. Each statement of Self Efficacy tool is followed the five alternatives as suggested by Likert's methods of summated rating technique. Those five alternative techniques are Strongly Agree (SA), Agree(A), Neutral (N), Disagree (DA), Strongly Disagree (SDA). Whereas, impacts on effective English learning tool is consists of four alternatives namely, Very Often (VO), Often (O), Sometimes (S) and Rarely (R). A clear instruction was given to the respondents to express their opinion while putting a tick aganist the response category to which they are agreed with. Each scale is stated with the personal data sheet. These two scales are administered to 147 students studying in Engineering Colleges in Tirunelveli District.

Collection of Data

For collection of data, the investigator personally visited each Engineering Institution and administered these scales to the sample of Engineering students in learning English. The teaching faculty in Engineering Institutions advised the investigator to put the Respondents name, Sex, Qualification, Medium of Study and Type of Institution are mentioned in the demographic data sheet provided to each tool. The students are further requested not to leave any item of the tool. Thus these two tools collected are scored according to the scoring procedure.

Scoring

The responses scored according to the key of Academic Self Efficacy and impacts on Effective English learning tools. The Self Efficacy tool is constructed with 33 statements provided five alternatives with weightages given from 5 to 1 to all the positive items namely, Strongly Agree (SA) - 5, Agree(A) - 4, Neutral (N) - 3, Disagree (DA) - 2, Strongly Disagree (SDA) – 1 and the weightage is given in the reverse order in respect of negative items. Thus, the total scores of Academic Self Efficacy is lies in between 33 – 165. Whereas, impacts on Effective English learning tool is designed with 24 items, which provided with four alternatives provided against each statement with weightage of 4 to 1 namely, Very Often (VO) - 4, Often (O) - 3, Sometimes (S) - 2 and Rarely (R) – 1 and the weightage is given from 1 to 4 in respect of negative items. Hence, the tool score of impacts on Effective English learning is lies between 24 - 96.

Sample

To study the Academic Self Efficacy Among Engineering College Students and their Impacts on Effective English Learning, the investigator has confined her study to 147 students from 23 Engineering Colleges in Tirunelveli District. To measure the Self Efficacy and Effective English learning of the selected sample of students of Engineering Colleges, the collected data was categorized variable wise namely, Sex (Male - 89; Female - 58),Locality (Rural -69; Urban - 78), Age (20 years - 57; 22 years - 90), Branches (Circuit Branches - 92; Non Circuit Branches - 55). Qualification (Under graduates - 95; PG (M.E.) with Ph.D. - 52). Medium of study (English Medium - 63; Tamil Medium - 84), Type of Institutions (Government Engineering College - 49; Private Self finance Colleges -98) Thus, the total sample of Engineering College Student is 147 and it is found to be a satisfactory sample. The sample is believed to be an adequate to test the hypotheses.

Delimitation of the Study

This study is delimited to the Engineering College Students in Tirunelveli District,Tamil Nadu only. To measure the opinion of students in their Academic Self Efficacy and Work Orientation self – rating scale is used.

Statistical Procedure Adopted

After presenting the methodological aspects, the statistical procedure was used to establish the relationship between the two aspects namely, Academic Self Efficacy and Impacts on Effective English Learning values are computed. To measure the significance of differences between these two variables in relation to the demographic variables means, standard deviations and critical ratio values are computed.

Analysis of Data

The following statistics were calculatyed for arriving at conclusions like co-efficient correlation to find the relationship between Academic Self Efficacy and Impacts on Effective English Learning and also obtained the critical ratio values variables wise.

Table 1: Table showing significance of 'r' between students studying in Engineering Colleges in their Academic Self Efficacy and Impacts on Effective English Learning

Variable Category	N	Df	'r'	Probability
Academic Self Efficacy Impacts on Effective English Learning	147	145	0.67	Significant at 0.01Level

The value of 'r' is significant and hence, the hypothesis stated that 'there is no significance of relationship between Academic Self Efficacy and Impacts on Effective English Learning among Engineering College Students is rejected.

Table 2: Table showing the inter-correlation matrix of various dimensions of Students

Academic Self Efficacy

	Mastery learning	Vicarious learning	Social learning	physiological & Psychological learning
Mastery learning	1.00	0.39	0.48	0.56
Vicarious learning		1.00	0.61	0.57
Social learning			1.00	0.64
physiological & Psychological learning				1.00

From the above table it can be concluded that the obtained 'r' values are significant at 0.01 levels respectively. The dimensions of Academic Self Efficacy is correlated and statistically corroborated. Hence, the null hypotheses is rejected.

Table 3: Table showing the inter-correlation Matrix of various Dimensions of students Impact on Effective English Learning scale

	Achievement in learning English	Perseverance in learning English
Achievement in learning English	1.00	0.32
Perseverance in learning English		1.00

From the above table it is conducted that the obtained 'r' values are significant at 0.01 levels respectively. The dimensions of Impacts on Effective English Learning factors namely, Achievement and Perseverance in learning English aspects of Engineering College Students are correlated and statistically corroborated. Hence, the null hypothesis that there is no significance of relationship between the dimensions of Effective English Learning is rejected.

Table 4: Table showing the significance of difference of Means between students studying in Engineering Colleges in their Academic Self Efficacy and Impacts on Effective English Learning

Variable Category	Mean	S.D	N	C.R	Mean	S.D	N	C.R
Male	136.92	31.65	89	2.16^{Δ}	69.36	11.25	89	2.06^{Δ}
Female	124.78	34.42	58		61.02	12.34	58	
Rural	127.61	29.83	69	$1.39\neq$	71.86	12.23	69	$3.2^{\Delta\Delta}$
Urban	134.45	29.61	78		65.09	11.47	78	
20 years Age	136.51	34.41	57	1.99^{Δ}	74.86	12.35	57	$4.75^{\Delta\Delta}$
22 years Age	125.24	31.58	90		65.31	11.23	90	

Circuit Branches Non-Circuit Branches	132.97	31.43	92	0.56≠	63.89	11.21	92	4.46$^{\Delta\Delta}$
	129.74	34.45	55		72.96	12.33	55	
Under graduates	123.49	31.29	95	1.97$^{\Delta}$	70.65	11.19	95	2.94$^{\Delta\Delta}$
PG(M.E.)with Ph.D.	134.87	34.48	52		64.59	12.35	52	
English Medium Tamil Medium	132.89	34.37	63	2.31$^{\Delta}$	63.87	12.29	63	4.57$^{\Delta\Delta}$
	120.06	31.68	84		72.93	11.27	84	
Government Engineering College	126.73	34.52	49	1.53≠	74.55	12.32	49	4.51$^{\Delta\Delta}$
Private Self finance Colleges	135.69	31.17	98		65.11	11.21	98	

$^{\Delta\Delta}$Significant at 0.01 level

$^{\Delta}$ Significant at 0.05 level

≠Not signicant at any level

From the above table it can be concluded that the critical ratio values in respect of variables Sex, Age, Qualification and Medium of study in their Self Efficacy is more than 1.96 but less than 2.58, which is significant at 0.05 and 0.01 levels respectively. Hence, the null hypotheses in respect of these variables are rejected. Further, it is also concluded that though there is significance of difference between the Students considered under Locality, Circuit & Non-circuit Branches and Type of Institutions, statistically they are not corroborated; hence, the null hypotheses are accepted.

Table 5: Table showing the Mean values of the Dimensions in respect of Academic Self Efficacy and Impacts on Effective English Learning Among Engineering College Students (N – 147)

Academic Self Efficacy	Mean	S.D	Impacts on Effective Learning	Mean	S.D
Mastery learning	38.42	8.62	Achievement in learning English	28.16	5.19
Vicarious learning	36.42	8.43	Perseverance in learning English	25.46	4.87
Social learning	33.56	7.95			
physiological & Psychological learning	38.51	7.41			

From the above table it can be stated the physiological & Psychological learning aspect is possessed highest mean score followed by, Mastery learning, Vicarious learning, and Social learning aspects of academic self efficacy. Similarly, in respect of students impacts on effective learning – Achievement in learning English aspect is possessed highest mean score followed by Perseverance in learning English aspect.

Results and Discussions

The students Academic Self Efficacy aspect is influencing the students impact on learning English. Further, the result of the study disclosed that the student efficacy aspect is influemced by the variables like Sex, Age, Qualification and Medium of study, whereas the students impact on learning English aspect is influenced by all the variables like Sex, Locality, Age, Circuit & Non circuit branches, qualification, Medium of Study and Type of Institutions. In view of the above, more attention is invited to invent the causes of differentiation among the students studying in Engineering Colleges with their efficacy and impacts of learning English. So as to take initiation to enhance the quality in learning effective English.

Conclusion

This study analysis will enhance our understanding of college students' English learning behaviour. The integration of information and technology into instructional practices has changed the classroom-based learning significantly. In addition, future work will focus on how students' technology acceptance, motivation and self-efficacy account for their learning performances, and to what extent does each component justify students' learning outcomes.

References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84(2),* 191–215. https://doi.org/10.1037/0033-295X.84.2.191
- Chemers M. (2001). Academic self-efficacy and first-year college student performance and adjustment. J. Educ. Psychol. 93, 55–64. 10.1037/0022-0663.93.1.55
- DeWitz S. J., (2002). Self-efficacy and college student satisfaction. J. Career Assess. 10, 315–326. 10.1177/10672702010003003
- Diep A. N., (2016). Who and What contributes to student satisfaction in different blended learning modalities? Br. J. Educ. Technol. 48, 473–489. 10.1111/bjet.12431

_____

- Doménech-Betoret F., (2014). Personal variables, motivation and avoidance learning strategies in undergraduate students. Learn. Individ. Differ. 35, 122–129. 10.1016/j.lindif.2014.06.007

- Keskin H. K. (2014). A path analysis of metacognitive strategies in reading, self-efficacy and task value. Int. J. Soc. Sci. Educ. 4, 798–808.

- Kitikanan, P. (2016). L2 English fricative production by Thai learners. (PhD thesis), School of Education, Communication and Language Sciences, Newcastle University, Newcastle.

- Lent R. W. (2008). Longitudinal relations of self-efficacy to outcome expectations, interests, and major choice goals in engineering students. J. Vocat. Behav. 73, 328–335. 10.1016/j.jvb.2008.07.005