

# SELF- REGULATED LEARNING STRATEGIES AND ACADEMIC PERFORMANCE OF STUDENT TEACHERS

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**Abstract:** This study aims at investigating the role of self-regulated learning ability as measured by the Motivated Strategies for Learning Questionnaires (MSLQ) to predict academic performance among the student teachers. A total of 500 students who were undergoing the one year B.Ed. course in the Colleges of Education in and around Kumbakonam, Thanjavur District participated in the study. The consolidated marks they have obtained in the three year undergraduate course is taken as their Academic performance. The results show that the Motivated Strategies for Learning Questionnaires (MSLQ) is a reliable tool but not a significant predictor of student teachers' academic performance and there does not exist any significant relationships between SRL and academic performance.

**Key words:** Self-regulated Learning, Academic Performance, Higher Education, Student Teachers

## I. INTRODUCTION

The concept of Self-regulated Learning (SRL) has been developed in the 1980s and began receiving widespread attention in the 1990s. It is used for upgrading the transfer of knowledge and skills through real life situations. It helps the students to enhance their knowledge base independently. Social Learning theory believes that there is a significant relationship between Motivation, Self-regulated Learning and Academic Performance. A considerable number of researches were documented in foreign countries on motivation, learning strategies and Academic Performance but not in India. The present study analyzes whether the self regulated learning predicts academic performance among the Student Teachers.

## SELF- REGULATED LEARNING

Pintrich et. al. (1991) defined Self- regulated Learning is Meta cognition. Meta cognition refers to the awareness, knowledge, and control of cognition- The three processes that make up Meta cognitive self-regulatory activities are planning, monitoring, and regulating.

## REVIEW OF LITERATURE

**Kitsantas et al. (2011)** found significant relationships between self-regulation and motivation variables. Measures of Achievement, self-regulated learning strategies and mastery goal orientation were fairly related to all GPA measures ( $r = .29 - .43$ ,  $p < .05$ ); however, no impact was found when these measures were connected to future SOL performance. The most interesting finding within this study was that the only variable consistent in predicting GPA across all subject areas was the use of self-regulation strategies.

**Tanriseven and Dilmac (2013)** conducted research in using a correlation study to investigate the predictive relationship in motivational beliefs, human values, and self-regulation learning strategies in secondary students. The sample of this study consisted of 794 students in Istanbul at six different secondary schools in grades 9 through 12. Of the 794 students, 326 were in the 9th grade, 161 were in grades 10, 153 were in grade 11, and 154 were in grades 12. Motivated Strategies for Learning Questionnaire (MSLQ) was used to assess students' self-regulation learning strategies. It is concluded that there are positive correlations between the above variables irrespective of grades on the basis of self regulated learning strategies questionnaires.

**Tanriseven and Dilmac (2014)** study showed motivational beliefs were a significant predictor of self-regulation learning strategies. Results also revealed that human values were a significant predictor of motivational beliefs and also, findings from the study showed that human values were not significant predictors of self-regulation learning strategies; however, human values did have an indirect effect on self-regulation learning strategies by having an impact on motivational beliefs.

**Tanriseven and Dilmac (2015)** found that the correlation between students' motivational beliefs and human values was .54. Tanriseven and Dilmac revealed that the correlation between self-regulation learning strategies and motivational values was .82. Regression analysis for the motivational beliefs predicted Self-regulated Learning Strategies were significant ( $p < .01$ ) at .72. Tanriseven and Dilmac did not find a meaningful relationship between self-regulation learning strategies and human values. It was calculated that human values is predictive of self-regulation learning strategies via motivation with a predictive power of .35. In conclusion, there is a significant relationship between motivational beliefs and self-regulation strategies, as well as motivational beliefs and human values. Tanriseven and Dilmac's findings support further research to examine the effects of self-regulation strategies and motivation.

## OBJECTIVES OF THE STUDY

The main objectives of the study are

1. To find out the significance of the relationship between Motivated Self-regulated Learning Strategies and academic performance of Student Teachers
2. To find out the level of prediction of various components of Motivated Self-regulated Learning Strategy on the academic performance of Student Teachers.

### HYPOTHESES

1. There is no significant relationship between the Motivated Self-regulated Learning strategies and the Academic Performance of Student Teachers.
2. The subscales of Motivated Self-regulated Learning Strategies are the predictors of Academic Performance of the Student Teachers.

### RESEARCH STRATEGY

Motivated Self-regulated Learning is a psychological feeling which is represented by the behaviour and attitude of the man at work. Since direct measurement is not possible the indirect measurement is used for checking the extent to which the student is achieving the goal. The normative survey method was used for this study since this method helps to gather / collect data from a relatively large number of cases at a particular time.

### TOOLS USED

The Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich et al. (1991) was used to assess Motivated Self-regulated Learning strategies among the student teachers. This MSLQ has two dimensions: Motivation and Learning Strategies. The motivation dimension is designed to assess students' goals and beliefs for a course, their beliefs about their skills to succeed in a course, and their anxiety about tests in a course. The motivation dimension has 6 sub scales with 31 items. The learning strategies dimension is with regard to students' use of different cognitive and meta-cognitive strategies as well as management of various resources. Thus, the learning strategies dimension has 9 sub scales with 50 items. These sub scales are modular and can be used single or together depending on the researchers' purpose. Regression and correlation analysis were used to find out the relationship between self-regulated learning and academic performance. A five point continuum was given along with each statement of the tool for the reason that the sample can express their opinions more precisely and accurately by understanding the continuum.

### SAMPLE

All the Student Teachers undergoing the one year B.Ed. course in the Colleges of Education in Tamilnadu were identified as the target population of this study. However, it is appropriate to define an accessible population since it is not easy to come into contact with the entire target population. The accessible population was determined as student teachers in Tanjore district of Tamilnadu. The population being sampled in this study was 25 colleges of education. A sample of five colleges of Education was selected randomly for this study (20 % of the accessible population). Accordingly, the desired sample size was determined as 500 student teachers, which is to generalize the whole population.

### RESULTS AND DISCUSSION

H1: There is no significant relationship between the Motivated Self Regulated Learning Strategies and the Academic Performance of Student Teachers.

**Table - 1: Relationship between the Motivated Self Regulated Learning Strategies and the Academic Performance of Student Teachers**

Component	"r" Value	Sig. Level
Motivated Self Regulated Learning vs Academic Performance	-0.092	p<0.05
Motivation vs Academic Performance	-0.026	p>0.05
Learning Strategies vs Academic Performance	-0.119	P<0.05

Table 1 shows that there exists negative relationship between the Motivated Self Regulated Learning Strategies and the Academic Performance of Student Teachers.

### REGRESSION ANALYSIS

Regression analysis was carried out to find out the subscales of Motivated Self Regulated learning Strategies contributing to the Academic Performance of the Student Teachers.

H2: The subscales of Motivated Self-regulated Strategies are the predictors of Academic Performance of the Student Teachers.

**Table -2 Regression Analyses of subscales of Motivated Self-regulated Learning**

## Strategies on Academic Performance

R	R square	Adjusted R <sup>2</sup>	SE	F(15,484)	P
0.216	0.0467	0.017	11.41	1.584	0.074
Predictors	Unstandardised coefficient		Standardised coefficient	'r' with constant	Contribution to R <sup>2</sup>
	Beta	S.E.	beta		
Constant (Academic Performance)	80.806	6.096			
Intrinsic Goal Orientation	0.149	0.259	0.032	0.002	0.000064
Extrinsic Goal Orientation	0.246	0.269	0.050	0.062	0.003100
Task Value	0.004	0.205	0.001	0.019	0.000019
Control of Learning Beliefs	-0.091	0.221	-0.021	-0.054	0.001134
Self-efficacy	0.159	0.176	0.055	0.034	0.001870
Test Anxiety	-0.013	0.140	-0.005	-0.109	0.000545
Rehearsal	0.048	0.259	0.010	-0.038	0.000380
Elaboration	-0.034	0.203	-0.010	-0.040	0.000400
Organisation	0.182	0.252	0.042	-0.002	-0.000084
Critical Thinking	-0.034	0.228	-0.009	-0.084	0.000756
Metacognition	-0.356	0.130	-0.174	-0.106	<b>0.028884</b>
Time & Study Management	-0.230	0.157	-0.087	-0.133	<b>0.011571</b>
Effort Regulation	0.237	0.256	0.050	-0.047	-0.002350
Peer learning	0.159	0.296	0.027	-0.031	-0.000837
Help seeking	-0.165	0.251	-0.036	-0.055	0.001980
<b>Total (R<sup>2</sup>)</b>					<b>0.046672</b>

Sources: primary data

Table 2 shows that the F value 1.584 for (15,484) df shows that there is no significant contribution of the sub scales of the Motivated Self-regulated Learning Strategies to the Academic Performance of the student teachers from the R square value (R<sup>2</sup>=0.0467). It is evident that only 4.67% of the total variance in Academic Performance is explained by the variance of the linear combinations of the sub scales of the Motivated Self-regulated Learning Strategies. It is further revealed that only the sub scales meta-cognition is highly contributed to the Academic Performance than the other sub scales. It is therefore concluded that the efficiency of prediction of the sub scales of Motivated Self regulated Learning Strategies is very less and negligible on academic performance of the student teachers.

## CONCLUSION

This study was undertaken to investigate the relationship between Self-regulated learning Strategies and Academic Performance among the Student Teachers. Data were obtained from five hundred student teachers undergoing the one year B.Ed. degree course. The data were collected through Motivated Strategies for Learning Questionnaire (MSLQ), an eighty-one item survey that measured motivation and learning Strategies.

Pearson correlations showed a statistically significant positive relationship between Motivated Self-regulated Learning Strategies and its sub scales, between motivation and learning strategies, between motivation and sub scales of learning strategies and between learning strategies and the sub scales of motivation.

Pearson correlations showed that the Academic Performance of student teachers has statistically significant negative relationship with the Motivated Self Regulated Learning Strategies, use of learning strategies, test anxiety, meta cognition and study & time management but no relationship with other sub scales. It is concluded that the efficiency of the prediction of sub scales of Motivated Self Regulated Learning Strategies is very less and negligible on Academic Performance of the Student Teachers.

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