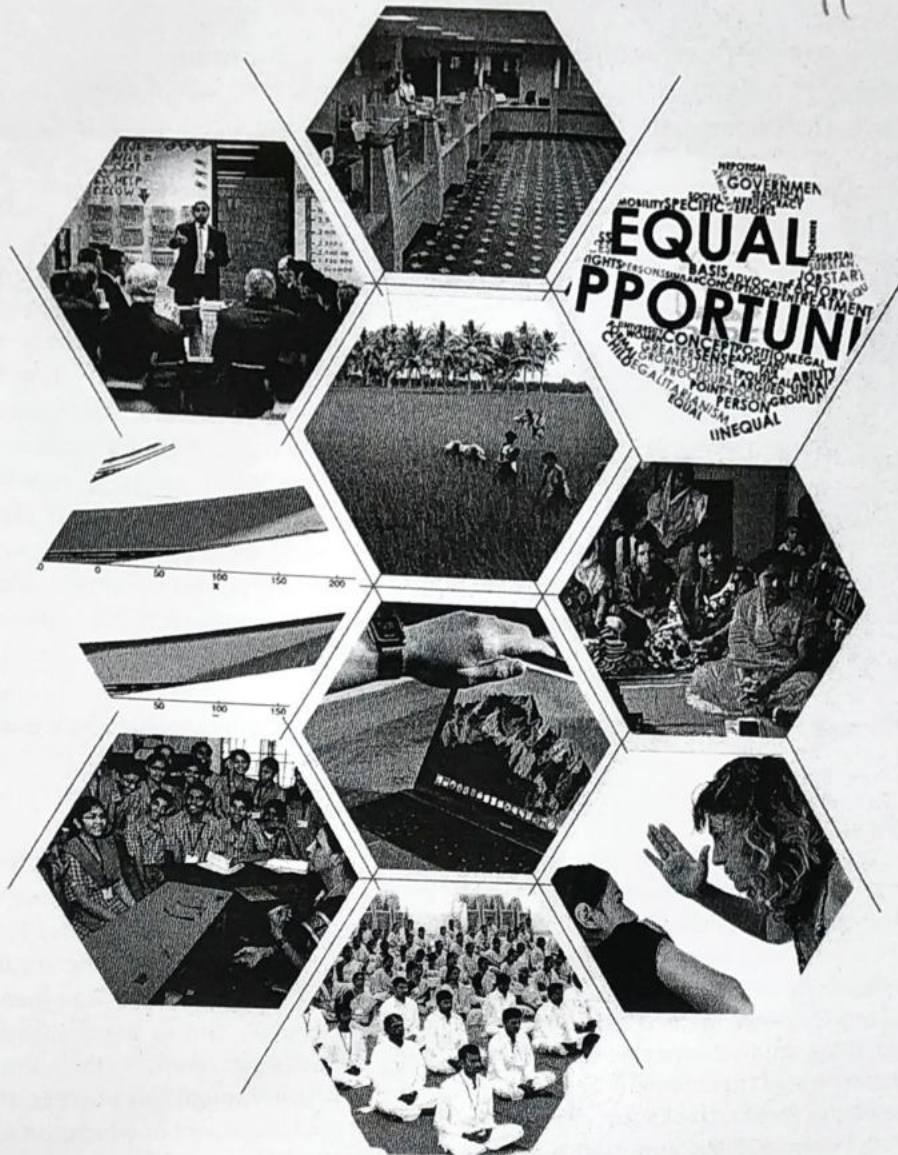


# International Research Journal of India

ISSN No- 2454-8707 | Volume - II | Issue- I | Sept- 2016 | Impact Factor - 1.3652 (JIIF)

Chief Editor  
Dr. Mahendra Suhas Kavale







# INTERNATIONAL RESEARCH JOURNAL OF INDIA

ISSN 2454-8707

VOLUME-II,ISSUE-I, SEPT-2016

## PREDICTING STUDENT ENGAGEMENT WITH INSTITUTIONAL CLIMATE, TEACHER STUDENT RELATIONSHIP AND ACHIEVEMENT MOTIVATION

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### ABSTRACT:

This paper is an attempt to study the relationship between "student engagement with "Institutional climate", Teacher Student Relationship and Achievement Motivation among the student teachers. It also checks whether Institutional Climate, Teacher Student Relationship and Achievement Motivation can jointly predict the Student Engagement of student teachers. The findings show that there exists a significant positive correlation between these variables. It also shows that these variables can jointly predict Student Engagement and among these factors Achievement Motivation was found to be the best predictor of student engagement.

### KEYWORDS:

Student Engagement, Institutional Climate, Teacher Student Relationship, Achievement Motivation, B.Ed Students.

### INTRODUCTION

Student engagement has been used to describe a variety of Student behaviour for the past forty years. Available Literature on student engagement shows that Student Engagement constitutes 'the amount of time and effort' that a student invests into educational activities which directly lead to desired outcomes (Kuh, 2001). This concept can be strengthened from the views of various researchers who studied Student engagement in depth. According to Harper and Quaye (2009), "Engagement is more than involvement or participation. It requires feelings and sense making as well as activity". This is applicable for Student Engagement also. If the students are able to involve physically, mentally and emotionally in the process of learning, then it can be said that they are 'engaged' in learning, because through this process, the learning will become meaningful. Hence, this kind of engagement is needed in all the aspect of education especially in teacher education, because of the importance of teachers in the teaching-learning process. According to Coates (2005), "The concept of student engagement is based on the constructivist assumption that learning



is influenced by how an individual participates in educationally purposeful activities. Learning is seen as a 'joint proposition', however, which also depends on institutions and staff providing students with the conditions, opportunities and expectations to become involved. However, individual learners are ultimately the agents in discussions of engagement". It is clear from this statement that 'there are other personal and environmental factors involved in the engagement by the student'.

In this present study the Institutional climate is taken as one of the influencing factor on student engagement. According to Litwin and Stringer (1968), climate in an institution is measured along the following dimensions such as the structure, responsibility, warmth, support, reward, conflict, standards, identity, and risk. Studies conducted by Conchas (2001), Newmann, Wehlage & Lamborn (1992) and Marks (2000) supports the argument that the Climate of the institution influences the Student Engagement positively.

Another factor selected in the study which can positively influence the Student engagement is the 'Teacher Student Relationship'. Studies conducted by Connell & Wellborn (1991), Skinner & Belmont (1993), Brich & Ladd (1997) and Valeski & Stipek (2001) supports this observation. The teacher in the teacher education institution (teacher educator) has a crucial role to play. The roles of teachers in the class room are changing day by day, and the importance is increasing rapidly. The teacher educators have the responsibility to be the role model for the future teachers who will in turn become teachers for the young learners. The personality, teaching style, interaction style etc of the teacher educators will be taken up as a model by the student teachers. The intimacy that the teacher educator has with the student teacher will not only influence their engagement in the teacher education program, but also, it will influence their behavior in future when they become teachers for the young learners.

Achievement Motivation is another factor which seemed to positively influence the student engagement. Studies conducted by Ergene (2011), Martin & Dowson (2009) and Skinner et al (2008) support this interpretation. This can be considered as a personal variable. Johnson et al (2001) says that, "Motivation is an internal state that arouses students to action, pushes them in specific directions and keeps them engaged in activities". Student's motives often determine the extent of learning, irrespective of their understanding capacity. This is true in the case of teacher education program. If the student teachers have motives to become good quality teachers then certainly they will engage themselves more in the teacher education program.

This study is dealt with the relationship existing between the student engagement and other variables such as Institutional Climate, Teacher Student Relationship and Achievement Motivation. It also tries to understand whether Institutional Climate, Teacher Student Relationship and Achievement Motivation can jointly predict the Student Engagement.

## **OBJECTIVES**

- 1.To test whether there exists any significant correlation between student engagement and institutional climate of student teachers.
- 2.To test whether there exists any significant correlation between student engagement and teacher student relationship of student teachers.
- 3.To test whether there exists any significant correlation between student engagement and achievement motivation of student teachers.
- 4.To test whether institutional climate, teacher student relationship and achievement motivation can jointly predict the student engagement of student teachers.

## **HYPOTHESES**

- 1.There exists significant correlation between student engagement and institutional climate of student



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 titutional climate, teacher student relationship and achievement motivation can jointly predict the  
 ent engagement of student teachers.

**METHODOLOGY**

The data was collected from 1601 students pursuing B.Ed. course in various colleges in Kerala State. The data was gathered using four standardized tools. The tools used were 'Student Engagement scale' by Sreelatha and Amruth G. Kumar (2015), 'Institutional Climate scale' by Sreelatha and Amruth G. Kumar (2015), 'Teacher Student Relationship scale' by Sreelatha and Amruth G. Kumar (2015) and 'Achievement Motivation scale' by Sreelatha and Amruth G. Kumar (2015). All the tools were standardized using item analysis and the reliability was established using split half method. For the Student Engagement Scale there were 58 items. It was found that the reliability value of Cronbach's Alpha was 0.850 and that of Guttman Split - Half Coefficient was 0.875 and that of Guttman Split- half coefficient was 0.903. For the Institutional Climate scale, it was found that the reliability value of Cronbach's Alpha was 0.956 and that of Guttman Split - Half Coefficient was 0.92. There were 64 items in Institutional Climate Scale. For the Teacher Student Relationship scale, it was found that the reliability value of Cronbach's Alpha was 0.912 and that of Guttman Split-Half Coefficient was 0.87. There were 36 items in Teacher Student Relationship Scale. For the Achievement Motivation scale, it was found that the reliability value of Cronbach's Alpha was 0.850 and that of Guttman Split-Half Coefficient was 0.834. There were 38 items in Achievement Motivation Scale. Correlations were calculated and multiple regression analysis was carried out with the data gathered. The results are discussed below.

**RESULTS AND DISCUSSION**

**CORRELATION ANALYSIS:**

**Table 1: Relationship between Student Engagement with Institutional Climate, Teacher Student Relationship and Achievement Motivation of B.Ed. Students**

Variable	N	r	Significance Level	Confidence Interval		Shared Variance
				Lower Limit	Upper Limit	
Institutional Climate	1601	0.387*	0.001	0.345	0.427	14.97
Teacher Student Relationship	1601	0.387*	0.001	0.345	0.427	14.97
Achievement Motivation	1601	0.650*	0.001	0.621	0.677	42.25

relation is significant at the 0.01 level (2-tailed).

It can be seen from Table-1 that the correlation value obtained between Student Engagement and Institutional Climate is 0.387 and is found to be significant with p value of 0.001. The 0.05 confidence interval was found to be between 0.345 and 0.427. The shared variance of Student Engagement with Institutional Climate is 14.97.



The correlation value obtained between Student Engagement and Teacher Student Relationship is 0.387 and is found to be significant with p value of 0.001. The 0.05 confidence interval is found to be between 0.345 and 0.427. The shared variance of Student Engagement with Teacher Student Relationship is 14.97.

The correlation value obtained between Student Engagement and Achievement Motivation is 0.65 and is found to be significant with p value of 0.001. The 0.05 confidence interval is found to be between 0.62 and 0.677. The shared variance of Student Engagement with Achievement Motivation is 42.25.

All the correlation values are significant at 0.05 level and have a p value of 0.001. It means that there exists a real relationship between the variables. All the values are positive. When the relationship is positive it means that an increase in one variable will result a corresponding increase in the other variable. The relationships between the variables can be verbally interpreted as moderate for institutional climate and teacher student relationship. Hence any improvement in Institutional Climate or teacher student relationship will results in the increase in Student Engagement. This finding appears to be consistent with the findings of the earlier researches as well. The studies conducted by Connel (1990), Marks (2000), Nystrand & Gamoran (1991), Connel & Wellborn (1991), Fredricks, Blumenfeld, Friedel & Paris (2002), Moos (1979), Fraser (1991), Brophy & Everston (1976) and Doyle (1986) support the finding of the present study. All these studies say that there is a positive relationship between Student Engagement and Institutional Climate. The studies conducted by Skinner & Belmont (1993), Valeski & Stipek (2001), Battistich, Solomon, Watson & Schaps (1997), Marks (2000), Connel & Wellborn (1991), Fredricks, Blumenfeld, Friedel & Paris (2002), Ryan, Stiller & Lynch (1994) support the findings of the present study that there exists a positive relationship between Student Engagement and Teacher Student Relationship. The finding of the studies conducted by Rajput (1984), Singh (1984) and Sontakey (1986) contrasts with the findings of the present study. Cultural factors might be an important reason for these diversions. However accommodating a space for the cultural factors in future studies would be more insightful in this regard.

While considering Achievement Motivation the relationship can be verbally interpreted as high correlation. Hence if opportunities are provided to improve Achievement Motivation it will result in the increase in Student Engagement. This finding appears to be consistent with the findings of the earlier researches as well. The studies conducted by Ang and Chang (1997), Chang and Wong (2008), Tao and Hong (2000), Martin and Dowson (2009), Mboya (1986), Samdal et al. (1999), Patall, Cooper and Wynn (2010), Meijer et al., (2004), Mitra (1985), Singh (1984), Verma (1990), Yeh Hsiang-Yeng (1991), Ergene (2011), Duda and Nivholls (1992), Emerick (1992), Weigfield (1994), Deshmukh (2000) support this finding. The lower and upper limits of Confidence interval at 0.05 level shows that if the correlation is worked out for the same variable for the whole population, the resulting correlation will be between these intervals at 0.05 level of probability. The shared variance gives the percentage of what is measured by Institutional Climate is related to Student Engagement.

#### MULTIPLE REGRESSION ANALYSIS:

**Table 2: Model Summary to Predict Student Engagement Using Achievement Motivation, Institutional Climate and Teacher Student Relationship**

R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error of the Estimate
0.673*	0.454	0.453	16.362

a. Predictors: (Constant), Achievement Motivation, Institutional Climate and Teacher Student Relationship

b. Dependent Variable: Student Engagement

From Table-2, the R value of 0.673 represents the correlation of Student Engagement with



Achievement Motivation, Teacher Student Relationship and Achievement Motivation. The value of R<sup>2</sup> is 0.454, which denotes that Achievement Motivation, Institutional Climate and Teacher Student Relationship together can account for 45 % of the variation in Student Engagement.

**Table 3: ANOVA to Predict Student Engagement using Achievement Motivation Institutional Climate and Teacher Student Relationship**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	354846.163	3	118282.054	441.805	0.001 <sup>b</sup>
Residual	427556.353	1597	267.725	-	-
Total	782402.516	1600	-	-	-

a. Dependent Variable: Student Engagement

b. Predictors: (Constant), Achievement Motivation, Institutional Climate and Teacher Student Relationship  
 From Table-3, the F value is 441.805, which is significant ( $p < 0.05$ ). The significant F value shows that Achievement Motivation, Institutional Climate and Teacher Student Relationship are good predictors of Student Engagement of B.Ed. students.

**Table 4: Coefficient to Predict Student Engagement using Institutional Climate, Teacher Student Relationship and Achievement Motivation**

Model	Un standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	74.026	4.239	-	17.463	0.001
Institutional Climate	0.097	0.014	0.147	6.756	0.001
Teacher Student Relationship	0.095	0.028	0.075	3.337	0.001
Achievement Motivation	0.741	0.027	0.566	27.223	0.001

a. Dependent Variable: Student Engagement

b. Predictors: (Constant), Institutional Climate, Teacher Student Relationship and Achievement Motivation  
 From Table-4, the B values 0.097, 0.095 and 0.741 represents the change in the outcome associated with a unit change in the predictor. The beta values 0.147, 0.075 and 0.566 are found to be significant ( $p < 0.01$ ). The observed significance (0.001) is less than 0.01 and the result reflects a genuine effect of Student Engagement while predicting with Institutional Climate, Teacher Student Relationship and Achievement Motivation. So Institutional Climate, Teacher Student Relationship and Achievement Motivation make a significant contribution ( $p < 0.01$ ) to predict Student Engagement. The R<sup>2</sup> for Institutional Climate, Teacher Student Relationship and Achievement Motivation together is found to be 0.454 which shows that 45% of the variance in Student Engagement was accounted by the variance of Institutional



Climate, Teacher Student Relationship and Achievement Motivation together.

The findings show that Institutional Climate, Teacher Student Relationship and Achievement Motivation can predict the Student Engagement. Furrer & Skinner (2003) and Roser, Midgley & Urdan (1996) through regression analysis has found that Teacher Student Relationship can Predict Student Engagement. Calsyn and Kenny (1977), Cokley (2000), Akey (2006) and Peterson (2000) through regression analysis found that Achievement Motivation is a predictor for Students Success in their studies. The present study also shows that these variables can predict Student Engagement. Ayishaki (1987) study is not well supported by the research literature. But still, the contextual factors accounting for predictive capacity of Achievement Motivation has to be considered seriously. The present study has a robust design and it well dovetail with existing literature.

## CONCLUSION

From the results of the correlations it can be concluded that there exists a positive relationship between Student Engagement and Institutional Climate. The reason behind this is a well-known fact that the background setup will have direct relationship with any outcome. Here the academic and non-academic climate provided in the B.Ed. institutions has a positive relationship with the Engagement of Students in their course. A good academic climate with freedom, democracy, mutual respect, sensible rules and regulations, shared responsibilities, moral and personal supports will lead a student to involve more in the course. It is also seen that there exists a positive relationship between Student Engagement and Teacher Student Relationship. The possible reason is again based on the fact that better the Teacher Student Relationship better will be the involvement in studies and other activities related to studies. Due to a good teacher student relationship the teacher might be involving in academic and personal deeds of the students. The freedom and the support that a teacher gives to the students for doing their works will definitely lead to a good output. If such an output is satisfactory obviously the student will get more engaged in the course. The poor the teacher student relationship is the lesser will be the student Engagement. There exists a strong positive correlation between Student Engagement and Achievement Motivation also. The possible reasons could be that Achievement Motivation is a personal factor unlike Institutional Climate and Teacher Student Relationship. Student Engagement Again is a personal factor. The high percentage of overlapping also shows that a student with high Achievement motivation will have high Student Engagement. Achievement Motivation could have drawn from outside or from within the individual. So a student with more interest in becoming a good quality teacher will evidently have good amount of Achievement Motivation to attain this goal and so will be certainly show greater engagement in the course. It can also be said that a student with low achievement motivation can be expected to show less Student Engagement.

The results of the regression can be concluded that, the Institutional Climate, Teacher Student Relationship and Achievement Motivation can predict the Student Engagement. Assessing this variables in given time intervals can give indications about the Student Engagement. This would help the institutions to make necessary changes to be done within it so as to ensure high engagement of students.

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