

## Emotional Intelligence and Teacher Efficacy as Predictors of Teacher Effectiveness among Pre-Service Teachers in Some Nigerian Universities

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### ABSTRACT

Evidence from teacher-effectiveness studies indicates that teacher effectiveness has yielded a wealth of understanding about the impact that teacher ability has on student growth. However, much is yet to be known on some psychological factors that could influence teaching effectiveness particularly among pre-service teachers. The purpose of the present study was to investigate the effect of emotional intelligence, and teacher efficacy, on the teacher effectiveness of pre-service teachers. Two validated instruments (Emotional intelligence scale; teacher efficacy scale) were administered on 300 students randomly selected from two Universities in the South-West region of Nigeria. Data were analysed using Pearson Product Moment Correlation and Multiple regression. The findings of this study demonstrated that emotional intelligence and teacher efficacy had predictive influence on teacher effectiveness. Based on these findings, it is suggested that appropriate strategies and policies for fostering teacher efficacy and emotional intelligence would go a long way in enhancing effective teaching among pre-service teachers.

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## 1. INTRODUCTION

In championing the cause of repositioning the state of education in the country, remarkable and immeasurable efforts have been geared towards improving the effectiveness of teachers. Nonetheless, it is observed that there is complacency towards extending these gestures to pre-service teachers, which may be creating a lacuna that encourages the recurrent decimal of the falling standard of education that has continually been reported [1],[2]. Perhaps, it may be conceived that the educational training provided pre-service teachers should bridge the gap in their effectiveness. Nevertheless, according to [3], one is also in doubt if the curricula of the training institutions could provide good and effective teachers with the required cognitive, personal and professional qualities. This perceived doubt is further affirmed by reports of withdrawal tendencies among pre-service teachers [4], in addition to considering that the teachers being empowered to be effective were at once pre-service teachers.

Notably, evidence [5]-[7] from teaching effectiveness studies indicates that the students' engagement in learning is to be valued above curriculum plans and materials. This is because teacher effectiveness studies tend to have met the growing call for teacher evaluation to focus not only on teacher-related behaviours but also to translate it into student outcome [8],[5]. To this end, research on teacher effectiveness has yielded a wealth of understanding about the impact that teacher ability has on student

growth. For instance, effective teachers run more orderly classrooms [7] and have more students in their classes engaged in learning throughout the day [6].

In addition, effective teachers provide a variety of opportunities for students to apply and use knowledge and skills in different learning situations [7]. However, while it is noted that teacher effectiveness is influenced by certain characteristic functioning [9] such as their efficacy beliefs in teaching [10]-[12], investigations into having pre-service teachers imbued with teachers effectiveness is giving little or no concern. This if not considered may well hamper on-going effort to revive teacher effectiveness. Since pre-service teachers are teachers of the nearest future and are significant in the search for productive and sustainable educational standard, it is imperative that their effectiveness as teachers be evaluated as well. Based on this, study seeks to investigate the perceived effect of emotional intelligence and teacher efficacy on the effectiveness of pre-service teachers.

### **Emotional intelligence and Teaching effectiveness**

Emotional intelligence is described as the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others [13]. A review of the literature focusing on the models of emotional intelligence for two decades now, allows different classifications of the construct, but these classifications are, in some sense, compelling and complementary. As a first division, it is perceived as pseudo-scientific proposals with a noticeably commercial intention, and with divulgation rather than scientific purposes [14], [15]. On the other hand, as a second division, it could be distinguish that emotional intelligence models propose a theoretical explanation of their components. These models are based on the review of previous literature, conduct controlled empirical studies to validate them, and use measurement instruments developed with this purpose [16],[17]. In general, these approaches try to discover the emotional components that underlie emotionally intelligent people and the mechanisms and processes that set off the use of these abilities in our everyday life.

It has been reported that emotionally intelligent individuals tend to make better team players, and they are more effective at motivating themselves and others [18]. A growing body of research has focused on the importance of Emotional intelligence characteristics as positive attributes in predicting the success of students and leaders effectiveness, [1],[19],[20]. Studies have found that a positive mood is associated with effective teaching [19],[21],[22]. In addition, people in positive moods tend to be more optimistic and have greater determination to achieve future success for themselves and others [23]. Hence, it can be said that the study of emotional intelligence has since beginning to redefine what it means to be intelligent. Corroborating this, [20] stated his belief that the future area of emphasis for emotional intelligence training will be in the schools as they focus on educating the whole person. In this light, it can be ascertain that when pre-service teachers are imbued with emotional intelligence they may be tending towards becoming effective in teaching.

### **Teacher efficacy and Teaching effectiveness**

The construct of teacher efficacy takes root from the social cognitive theory of [24]. According to [25] teaching efficacy is explained as a belief in one's ability to teach effectively and the teaching will have a positive effect on student learning. That said, it was concluded that the teachers' personal beliefs and convictions about their own performance have much influence on the actual performance [26],[27]. It was explained by [28] that teachers who believe student learning can be influenced by effective teaching (outcomes expectancy beliefs) and who also have confidence in their own teaching abilities (self-efficacy beliefs) would persist longer, provide a greater academic focus in the classroom. The authors add that these teachers would exhibit different types of feedback than teachers who have lower expectations concerning their ability to influence student learning. These further suggest that teachers with high levels of self-efficacy would have a strong academic and peoples orientation.

Hence, the research on efficacy of teachers suggests that behaviours such as persistence on a task, risk taking, and use of innovations are related to degrees of efficacy [29],[30]. For example, highly efficacious teachers have been found to be more effective than lowly efficacious teachers [10]-[12],[28], [31],[32]. In addition, it is reported that classrooms where teachers have high level of teaching efficacy, high levels of learning occur [32]. The literature on pre-service teachers and self-efficacy indicates pre-service teachers begin their training with high self-efficacy [33],[34], however this is believed to change with time and experience leading to a decrease in the power of teaching [35]. Understanding changes in efficacy levels along with potential teachers' evolving teaching skills may be one aspect of assisting them in making the transition to the classroom. It is to this end that this study was conducted.

**2. RESEARCH METHOD**

The study employed descriptive survey design utilizing the *ex-post facto* type.

**Sample**

The study was carried out with students of the University of Ibadan, Oyo State and Osun State University, both in South-West Nigeria. Using the simple random sampling technique a sample of three hundred (300) students were selected for the study (200 from the University of Ibadan and 100 from Osun State University). The participants were all registered students of the two Universities as at the time this study was conducted. The age of the participants ranged between 21 and 29years with a mean age of 24.7years.

**Instrumentation**

The study employed the following two standardized instrument.

**Emotional Intelligence Scale (EIS)**

This was assessed with emotional intelligence questionnaire developed by [36]. It is a thirty three (33) item scale structured in a 5-point likert format. Example of items in the scale are “I know when to speak about my personal problems to others”, “I expect good things to happen”. High score indicate increased level of emotional intelligence, while low scores indicated decreased level of emotional intelligence. It has cronbach alpha value of .88.

**Teacher self-efficacy scale**

The degree to which participants feel efficacious in their future job as teachers was measured by the Teacher Self-efficacy Scale-Short Form [37]. Participants were required to access their confidence in achieving 12 work-related behaviors and to rate these on a 5-point scale from none at all to a great deal. Typical item in the scale include “How much can you do to help your students think critically”, “How much can you do to get through the most difficult students”. The authors reported that the scale had internal consistency reliability estimate of .90. Additionally, the authors found the scale to correlate positively with a previous measure of teacher self-efficacy ( $r = .48$ ), teacher locus of control ( $r = .33$ ), and responsibility for student achievement ( $r = .46$ ). For the current study, the internal consistency reliability of this scale was .90.

**Teaching effectiveness**

Teacher effectiveness was assessed with the Teaching Performance Assessment Scale. It is a multi-dimensional scale assessing 12 vital teaching features. It has 20 items with theoretical value varying from 1 poor to 5 very good and has a composite score of 100. The instrument was ascertained by experts as having content validity. After psychometric analysis it has reported an cronbach alpha of 0.52 and a reliability coefficient of 0.79 indicating its suitability for this study.

**Procedure**

The researchers personally distributed and collected the completed questionnaire from the students. The consent of all the participants was also sought before administration. Response rate of 100% was recorded.

**Data Analysis**

Relationship between the independent variables and the dependent variable was ascertained using Pearson product moment correlation while multiple regression was used to determine the predictive capacity of the independent variables.

**3. RESULTS AND DISCUSSION**

**Research question 1:**

What is the relationship between emotional intelligence teacher efficacy and teaching effectiveness of pre-service teachers?

Table 1. Descriptive statistics and correlation among variables

Variables	Mean	Standard deviation	Teaching Effectiveness	Emotional intelligence	Teacher Efficacy
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Teaching Effectiveness	59.60	7.3	1.00		
Emotional Intelligence	122.05	19.84	.42	1.00	
Teacher Efficacy	40.28	9.27	.61	.46	1.00

The above table shows there are significant positive relationships among the three variables in the study with Teacher efficacy and Teacher effectiveness having the strongest relationship at r-value of .61.

### Research question 11:

What is the combined effect of emotional intelligence and teacher efficacy on the teaching effectiveness of pre-service teachers?

Table 2. Summary of Regression Analysis between Predictor Variables and Teacher Effectiveness

R =	.625				
R <sup>2</sup> =	.391				
Adj R <sup>2</sup> =	.387				
std. error Estimate =	5.71586				
SOURCE OF VARIATION	DF	SUM OF SQUARES	MEANS SQUARE	F-RATIO	P
REGRESSION	2	6220.488	2079.00	95.199	.000
RESIDUAL	297	9703.308	32.671		
TOTAL	299	15923.797			

Going by the result presented in table 2, the two independent variable (emotional intelligence and teacher self-efficacy), jointly yielded a coefficient of multiple regression (R) of 0.625, a multiple correlation square (R<sup>2</sup>) of 0.391 and an adjusted multiple correlation square (R<sup>2</sup>) of 0.387. This shows that 38.7% of the total variance in teaching effectiveness of the participants is accounted for by the combination of the two independent variables. The table as well indicates that the analysis of variance of the multiple regression data produced an F-ratio value which was significant at 0.05 level [F(2,299)= 95.199, P<0.05]. The findings thus, confirm that emotional intelligence and teacher self-efficacy are potent predictors of teacher effectiveness.

### Research question III:

What are the relative contribution of emotional intelligence and teacher efficacy towards the teaching effectiveness of pre-service teachers?

Table 3. Relative Contribution of the independent variables to the prediction of Teaching Effectiveness

PREDICTOR	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	t	Sig
	B	Std. Error	Beta		
Teacher Efficacy	.411	.040	.522	10.235	.000
Emotional intelligence	.066	.019	.178	3.492	.001

From the result displayed in Table 3 above, each of the independent variables made significant contributions to the prediction of teacher effectiveness in varying weights. The results indicated that the following beta weights which represented the relative contribution of the independent variables were observed and presented in order of magnitude: Teacher efficacy ( $\beta = .522$ ,  $t = 10.235$ ,  $P < 0.05$ ) and emotional intelligence ( $\beta = .178$ ,  $t = 3.492$ ,  $P < .05$ ).

### Discussion

The analysis of relationship among emotional intelligence, teacher efficacy and the teacher effectiveness of pre-service teachers as shown in the correlation matrix of table 1 indicates that there is a significant positive correlation between the independent variables and the criterion measure. This suggests as the participants emotional intelligence, and teacher efficacy increases their teacher effectiveness increases as well.

The multiple regression analysis in table 2 shows that emotional intelligence, and teacher efficacy could significantly predict teacher effectiveness of the participants. The magnitude of this relationship in predicting the teacher effectiveness of pre-service teachers is reflected in the values of co-efficient of multiple R<sup>2</sup> (0.391) and in multiple R<sup>2</sup> adjusted (0.387) as shown in table 2. Thus, it can be said that 39.1% of the total variance in the teacher effectiveness of the pre-service teachers is accounted for by the combination of emotional intelligence and teacher efficacy. The F-ratio value [F(2,299)= 95.199, P<0.05] which is significant at 0.05 level further attests to the fact that the predictive capacity of the independent variables are not due to chance factors.

Concerning the extent to which each of the two independent variables contributes to the prediction, it could be ascertained from Table 3 that teacher efficacy is the better predictor of teacher effectiveness among the participants. Prior studies [10]-[12],[28],[31],[32], affirms the current finding. In these, it was concluded that the teachers' personal beliefs and convictions about their own performance have much influence on the actual performance[26],[27]. The implication is that with high teacher efficacy among pre-service teachers there is the increase tendency for teacher effectiveness. Furthermore, teacher efficacy being a personal judgment of an individual's belief engaging in teaching or teaching appropriately provides an explanation for a possible effective outcome. Hence, the research on efficacy of teachers suggests that behaviours such as persistence on a task, risk taking, and use of innovations are related to degrees of efficacy [29],[30]. This submission is valid in this instance.

The investigation also reveals that emotional intelligence is a significant predictor of teacher effectiveness. With regard to the nature of emotional intelligence, this should be expected. In addition, prior related research [1],[19],[20] which focused on the importance of emotional intelligence characteristics as positive attributes in predicting the success of students and leader's effectiveness corroborates with the finding. Generally, one particular attribute of emotional intelligence involves the ability to perceive accurately, appraise, and express emotion. According to [19] and [21] positive mood is associated with effective teaching. In addition, people in positive moods tend to be more optimistic and have greater determination to achieve future success for themselves and others [23]. Hence it can be argued that with increasing competency of pre-service teachers in being aware of emotions, appraise and manage one's and peoples emotions, teaching effectiveness increases.

#### 4. CONCLUSION

The major goal of this study was to examine the extent to which emotional intelligence and teacher efficacy impact on teacher effectiveness of pre-service teachers. Once again, the significance of emotional intelligence and efficacy in the training of pre-service teachers has been shown to be fundamental. If pre-service teachers are aware of which emotional intelligence and teacher efficacy competencies that can be improve their effectiveness in teaching, they may become more realistic and resilient in their focus in teaching and less inclined to become discouraged when in the practical field or school setting.

Further, the constantly renewed nationwide effort to enhance teacher effectiveness would have been better placed while still in training. In other words if these efforts are targeted at pre-service teachers, Education would have been well repositioned for success. Therefore, given the findings of this study, it is recommended that emotional intelligence training and teacher efficacy interventions should be used to enhance teaching effectiveness of pre-service teachers. In particular, programmes for enhancing emotional intelligence and teacher efficacy, should be infused into teacher education curriculum.

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