

ACADEMIC ACHIEVEMENT: CORRELATION WITH APTITUDE, ATTITUDE AND ANXIETY

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ABSTRACT

Teaching is a wholesome activity. The personality of the teachers plays an equally important role along with the academic parameters. The present research is designed to study the correlation of academic achievement with teaching aptitude, attitude and anxiety in M.Ed. students. A sample of 296 M.Ed. students from the department and colleges of Education affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad was selected randomly for the study. Standardized test were used for assessment of teaching aptitude, attitude and anxiety in M.Ed. students. Pearson Product moment correlation coefficient and its significance value (p-value) were calculated to test the hypothesis. Study shows that teaching aptitude and attitude is positively correlated to academic achievement while anxiety is correlated negatively. Anxiety had a significant moderate negative correlation with academic achievement. The study recommended that, more research should be carried out in this area and measures should be taken to lower the level of anxiety in the M.Ed. students.

Keywords: Teaching Aptitude, Teaching Attitude, Anxiety, Academic Achievement, Teacher Education

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Introduction and Literature Review

Good teaching is, in fact, complex and challenging, and even the best teachers' face difficulties translating formal knowledge into effective practice. There is always a debate on the role of gender in a teachers' classroom performance which is related to their various personality parameters like aptitude, attitude and anxiety. In the recent years, there has come to be a gradual recognition of the fact that personality and motivational variables are important correlates of scholastic achievement along with the intellectual aptitudes. Teacher Aptitude is not something a teacher acquire at one moment in his professional development and then maintains in that same form thereafter. Rather it is an ever-changing requirement based on continuing professional development and critical reflection about one's own teaching. Teacher's attitude towards teaching profession should be good as to perform their responsibilities. Anxiety is a mood-state characterized by marked negative effect, bodily symptoms of tension, and apprehension about future. High levels of anxiety have always proved to be a barrier in the performance of an individual.

Teaching aptitude and teaching attitude being an important parameter, several studies have been conducted in this area of research. Studies have indicated that teaching aptitude has a positive correlation with academic achievement (Dushyant Kaur, 2007 and Arya Saurabh, 2013) and has a significant relationship with academic achievement (M.B. Ushakumari, 2008). The relationship between Teaching Attitude and academic achievement was not found to be significant (GCPI, 1981 and Mamta Garg & Sudesh Gakhar, 2009). The teaching aptitude of male and female teachers varies significantly (S.M Ganoje, 2011) with female trainees have higher teaching aptitude than male trainees (Anita Devi, 2013 and Arya Saurabh, 2013). Teaching Attitude was generally found positive, the attitude of girls was more positive as compared to boys and Government college students had a more positive attitude towards teaching profession as compared to private colleges (Pradeep V Patil, 2000).

It was found that elementary school teachers have more teaching aptitude than the secondary school teachers (Jan Tasleema, Malik Muddasir Hamid, 2012) and the secondary school men and women science teachers have a significant difference in their teaching aptitude with the men

science teachers having a higher teaching aptitude than women science teachers (Rao D B, 2013) but the teaching aptitude did not vary significantly for government financed and self financed teachers (Anita Devi, 2013). There was no difference in the attitude of teachers in aided and unaided schools with reference to gender, experience, academic qualification, pay-scale and level of education (Thilakan Sindhu, 2013 and Mishra SG, 2007). There is no significant correlation between the job satisfaction and teaching aptitude (Rajnishumar Kumar Singh, 2013) but, job satisfaction and attitude towards teaching were positively related to each other (Singh, 2002). Teaching aptitude was found to be significantly positively correlated to English Language Teaching Ability, motivation and teaching competence (Prasad Kanbhampati, 2013). In pre-service teacher educators it was indicated that there is an overall trend of positive attitudes towards mathematics and teaching mathematics (Beth Southwell, Jenni Way, Allen White, Bob Perry, 2005). A significant positive correlation was found between the admission test score and teaching attitude but negative correlation with academic achievement (Mishra SG, 2007)

Anxiety and its relationship to academic achievement is not widely studied especially in the area of teacher education. The relationship between test anxiety and scholastic achievement is negative and significant i.e., the more anxious the student is, the less achievement is his/her performance in the examination for statistics, mathematics and medical students (Ilangoan K.N & Rangaraj K.R, 2001; Yeh YC and others, 2007 and El-Anzi & Freih Owayed, 2005). Another study concluded that there is a significant difference in the anxiety of intermediate arts and science students and the anxiety is negatively correlated to academic achievement (Talwar Vibha, 2013). Academic achievement could be enhanced by manipulating the levels of anxiety, emotional maturity and social maturity and anxiety showed negative relationship with academic achievement (Singh Surjit, 2013). The successful (passed) science male students had significantly high anxiety than the successful female science students but there was no significant difference between the anxiety of male and female failed students (Vandana Gupta, 2014).

A negative relationship exists between statistics anxiety and attitudes about statistics (Fadia Nasser, 1999). The students of physical education were found to be moderately anxious and concerned on teaching practice (Susan A Capel, 1997). For the pre-service teachers the mathematics anxiety was associated with efficaciousness toward mathematics teaching practices

and was the basis for their mathematics teaching efficacy beliefs (Gina Gresham, 2008). There were statistically significant differences in mathematics teaching anxiety between convergent and the other three types of learners: divergent, accommodator, and assimilator with convergent learners having less mathematics teaching anxiety than the other types of learners and divergent learners showed the highest level of mathematics teaching anxiety (Murat Peker, 2009). The anxiety level also differed significantly gender wise in some studies whereas in some studies no such significant differences were observed. The anxiety of female college students was significantly more than male students (Sultania MK, 2009). Boys and girls as well as rural and urban students differed significantly on the basis of their anxiety (Singh Surjit, 2013). It has also been found that there is no significant difference between Academic Anxiety of the male and female students of Xth class in both Private and Government Schools (Dhull Jitendra, 2013). Boys and girls did not differ significantly with respect to their mean score on academic anxiety, but still the mean score of girls was higher than boys indicating girls possess higher academic anxiety in comparison to boys (Kanchan Bala, 2014).

In a study to examine pre-service teachers' practicum-based mathematics classroom teaching experiences and its contribution to their anxiety, it was found that locus of control played an integral part in increasing vs. decreasing mathematics teaching anxiety (Amy Brown, Arla Westenskow & Patricia Moyer-Packenham, 2012). The teaching effectiveness and anxiety were negatively correlated with each other in the case of teacher educators working in Government as well as self financed teacher education institutions (Satish Kumar, 2013). The studies recommended that efforts be made to test the teaching aptitude more comprehensively in the admission test and its weightage may also be increased. Though teaching attitude was not found to be significant correlate of academic achievement, it had significant correlation with job satisfaction. Anxiety was found to be significant correlate with academic achievement. The studies showed that mild level of anxiety actually helped in academic achievement but higher levels of anxiety resulted in lower academic achievement.

The present study deals with the study of correlation of teaching aptitude, attitude and anxiety in M.Ed. students with their academic achievement. This research is a part of the comprehensive relationship analysis of the teaching aptitude, attitude and anxiety with academic achievement of the M.Ed. students.

Objectives

1. To study the correlation of aptitude score of M.Ed. students with their academic score
2. To study the correlation of attitude score of M.Ed. students with their academic score
3. To study the correlation of anxiety score of M.Ed. students with their academic score

Hypothesis

1. There is positive correlation between aptitude score and academic achievement score.
2. There is positive correlation between attitude score and academic achievement score.
3. There is negative correlation between anxiety score and academic achievement score.

Procedure

The research methodology used for this study is Survey Method. The researcher collected the data regarding the aptitude, attitude and anxiety of the M.Ed. students using the following standardized tools:

- Teacher Aptitude test developed by Jai Prakash and R.P. Shrivastava – A highly valid and reliable test of teaching aptitude consisting of 150 items with 10 sub-tests consisting of 15 items each.
- Teacher Attitude Inventory developed by S.P. Ahluwalia – A very popular valid and reliable inventory for assessment of Teaching Attitude. It is a 90 item Likert instrument consisting of six sub-scales.
- Comprehensive Anxiety Test developed by Sharma, R. L. Bharadwaj and M. Bhargava – This highly reliable and valid test has 90 items relating to the symptoms of the anxiety and possess the capacity to evoke the responses correctly.
- The academic achievement score is the final percentage of marks obtained in B.Ed. course. It was collected using a self-made form.

A random sample of 296 M.Ed. students was selected from the students enrolled for the M.Ed. (pre-service) course in Education in the university department and various colleges of education affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. There were 169 female and 127 male M.Ed. students in the selected sample. The researcher personally administered the tool to the sample and collected the data. The tests were scored; tabulated and descriptive statistics were calculated using MS Excel. The data was analyzed and Pearson product moment correlation was calculated. The individual p-values for significance of correlation coefficient were also calculated.

Findings

1. The correlation between achievement score and aptitude score is 0.321 (p-value=0.0187)
2. The correlation between achievement score and attitude score is 0.2969 (p-value=0.0173)
3. The correlation between achievement score and anxiety score is -0.4863 (p-value=0.0283)

Hypothesis Testing

1. There is positive correlation between aptitude score and academic achievement score.

To test this hypothesis, the researcher calculated the coefficient of correlation between aptitude score and achievement score. The calculated value for coefficient of correlation was 0.321. Also, the calculated r has a p-value (0.0187) less than 0.05, so it is significant at 0.05 level of significance. Thus there is positive low correlation between aptitude score and achievement score.

Hence the hypothesis is accepted.

2. There is positive correlation between attitude score and academic achievement score.

To test this hypothesis, the researcher calculated the coefficient of correlation between attitude score and achievement score. The calculated value for coefficient of correlation was 0.2969. Also, the calculated r has a p -value (0.0173) less than 0.05, so it is significant at 0.05 level of significance. Thus there is positive low correlation between attitude score and achievement score.

Hence the hypothesis is accepted.

3. There is negative correlation between anxiety score and academic achievement score.

To test this hypothesis, the researcher calculated the coefficient of correlation between anxiety score and achievement score. The calculated value for coefficient of correlation was -0.4863. Also, the calculated r has a p -value (0.0283) less than 0.05, so it is significant at 0.05 level of significance. Thus there is negative moderate correlation between anxiety score and achievement score.

Hence the hypothesis is accepted.

Conclusion

In the present study it is found that the teaching aptitude and attitude both are positively correlated to academic achievement. The value of coefficient of correlation calculated is low but significant. Anxiety has a significant negative correlation with academic achievement but of moderate level. Hence it is concluded that M.Ed. students having high anxiety had low academic achievement. It is recommended that more study should be done in this area for the role of anxiety in academic achievement. Also, anxiety should be considered as an important variable in the future researches in the field of teacher education.

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