MAJOR FINDINGS, CONCLUSIONS AND SUGGESTIONS

- Major Findings of the Study
- Discussion of Findings
- Conclusions
- Educational Implications
- Suggestions for Further Research
Major objective of the study is, to find out the predictive efficiency of the psychological teacher variables selected for the study.

This was found out by means of the following:

1. To estimate the extent of relationship of Teacher Aptitude and its four constructs with each of the five predictor variables for the total sample and subsamples.

2. To derive the Multiple Regression equation of Teacher Aptitude and its four constructs in terms of the predictor variables and to estimate the relative efficiency of the predictor variables in predicting Teacher Aptitude and each of its constructs.

3. To test whether there exists significant difference in the nature of relationship of the criterion variables with the predictor variables between relevant subsamples.

4. To test locale wise and school management wise difference in Teacher Aptitude and its four constructs.
5. To test locale wise and school management wise difference in the five predictor variables.

Major findings derived by means of the above procedures are summarised and presented in this chapter. Conclusions based on the findings, educational implications of the findings, and suggestions for further research in the area are also given in this chapter.

5.1. MAJOR FINDINGS

Major findings derived by means of the above procedures are summarised and presented as follows:

5.1.1: Pearson's Product Moment Coefficient of Correlations were estimated between the criterion variables and the predictor variables. Significant relationships were found between the following pairs of variables.

1. Teacher Aptitude with Academic Achievement in Teacher Education

   \[ r = 0.104^{**} \text{ for Total sample} \]

   \[ r = 0.101^{*} \text{ for Rural sample} \]

   \[ r = 0.125^{*} \text{ for Urban sample} \]

   \[ r = 0.107^{*} \text{ for Aided sample} \]

2. Teacher Aptitude with Attitude towards Teaching Profession

   \[ r = 0.305^{**} \text{ for Total sample} \]
Summary

3. Teacher Aptitude with Teacher Perception of Teacher Effectiveness
   \[ r = 0.363^{**} \text{ for Rural sample} \]
   \[ r = 0.283^{**} \text{ for Urban sample} \]
   \[ r = 0.242^{**} \text{ for Government sample} \]
   \[ r = 0.373^{**} \text{ for Aided sample} \]

4. Teacher Aptitude with Self Concept in Teaching
   \[ r = -0.149^{*} \text{ for Government sample} \]
   \[ r = 0.153^{*} \text{ for Urban sample} \]
   \[ r = 0.136^{*} \text{ for Aided sample} \]
   \[ r = -0.173^{*} \text{ for Unaided sample} \]

5. Instructional Awareness with Achievement in teacher Education
   \[ r = 0.123^{**} \text{ for Total sample} \]
   \[ r = 0.164^{**} \text{ for Urban sample} \]
   \[ r = 0.191^{**} \text{ for Government sample} \]
   \[ r = 0.185^{*} \text{ for Unaided sample} \]

6. Instructional Awareness with Attitude towards Teaching Profession
   \[ r = 0.187^{**} \text{ for Total sample} \]
   \[ r = 0.262^{**} \text{ for Rural sample} \]
   \[ r = 0.102^{*} \text{ for Urban sample} \]
   \[ r = 0.219^{**} \text{ for Aided sample} \]
   \[ r = 0.103^{*} \text{ for Unaided sample} \]
7. Instructional Awareness with Teacher Perception of Teacher Effectiveness
   
   \[ r = 0.116^* \text{ for Unaided sample} \]

8. Instructional Awareness with Self Concept in Teaching
   
   \[ r = -0.116^* \text{ for Rural sample} \]
   \[ r = 0.131^* \text{ for Government sample} \]
   \[ r = 0.213^* \text{ for Unaided sample} \]

9. Educational Problem Solving with Achievement in teacher Education
   
   \[ r = 0.117^* \text{ for Government sample} \]
   \[ r = -0.127^* \text{ for Aided sample} \]

10. Educational Problem Solving with Teaching Interest
    
    \[ r = 0.105 \text{ for Government sample} \]

11. Educational Problem Solving with Attitude towards Teaching Profession
    
    \[ r = 0.149^* \text{ for Total sample} \]
    \[ r = 0.306^{**} \text{ for Rural sample} \]
    \[ r = 0.172^* \text{ for Government sample} \]
    \[ r = 0.262^* \text{ for Aided sample} \]

12. Educational Problem Solving with Self Concept in Teaching
    
    \[ r = -0.174^* \text{ for Unaided sample} \]

13. Creativity with Achievement in Teacher Education
14. Creativity with Teaching Interest
   \[ r = 0.127^* \text{ for Unaided sample} \]

15. Creativity with Attitude towards Teaching Profession
   \[ r = 0.221^{**} \text{ for Total sample} \]
   \[ r = 0.281^{**} \text{ for Rural sample} \]
   \[ r = 0.205^{**} \text{ for Urban sample} \]
   \[ r = 0.158^* \text{ for Government sample} \]
   \[ r = 0.309^{**} \text{ for Aided sample} \]

16. Creativity with Teacher Perception of Teacher Effectiveness
   \[ r = -0.188^{**} \text{ for Government sample} \]
   \[ r = 0.124^* \text{ for Aided sample} \]

17. Creativity with Self Concept in Teaching
   \[ r = 0.141^* \text{ for Aided sample} \]

18. Mental Ability with Achievement in Teacher Education
   \[ r = 0.103^* \text{ for Total sample} \]
   \[ r = 0.128^* \text{ for Urban sample} \]
   \[ r = 103^* \text{ for Government sample} \]

19. Mental Ability with Attitude towards Teaching Profession
   \[ r = 0.248^{**} \text{ for Total sample} \]
   \[ r = 0.203^{**} \text{ for Rural sample} \]
[r = 0.261** for Urban sample]
[r = 0.305** for Government sample]
[r = 0.189* for Aided sample]
[r = 0.135* for Unaided sample]

20. Mental Ability with Self Concept in teaching

[r = 0.166** for Urban sample]
[r = 0.153* for Aided sample]
[r = -0.140* for Unaided sample]

Relationship is not significant in the case of the following pairs of variables:

1. Teacher Aptitude with Academic Achievement in Teacher Education

[r = 0.048 for Government sample]
[r = 0.048 for Unaided sample]

2. Teacher Aptitude with Teaching Interest

[r = 0.023 for Total sample]
[r = 0.085 for Rural sample]
[r = -0.025 for Urban sample]
[r = 0.040 for Government sample]
[r = 0.046 for Aided sample]
[r = 0.095 for Unaided sample]
3. Teacher Aptitude with Attitude towards Teaching Profession
   \[ r = 0.046 \text{ for Unaided} \]

4. Teacher Aptitude with Teacher Perception of Teacher Effectiveness
   \[ r = 0.038 \text{ for Total sample} \]
   \[ r = -0.066 \text{ for Rural sample} \]
   \[ r = -0.030 \text{ for Urban sample} \]
   \[ r = 0.086 \text{ for Aided sample} \]
   \[ r = -0.032 \text{ for Unaided sample} \]

5. Teacher Aptitude with Self Concept in Teaching
   \[ r = 0.049 \text{ for Total sample} \]
   \[ r = -0.096 \text{ for Rural sample} \]
   \[ r = -0.010 \text{ for Government sample} \]

6. Instructional Awareness with Achievement in Teacher Education
   \[ r = 0.069 \text{ for Rural sample} \]
   \[ r = 0.004 \text{ for Aided sample} \]

7. Instructional Awareness with Teaching Interest
   \[ r = 0.006 \text{ for Total sample} \]
   \[ r = 0.057 \text{ for Rural sample} \]
   \[ r = -0.053 \text{ for Urban sample} \]
   \[ r = 0.008 \text{ for Government sample} \]
   \[ r = -0.017 \text{ for Aided sample} \]
   \[ r = 0.091 \text{ for Unaided sample} \]
8. Instructional Awareness with Attitude towards Teaching Profession

\[ r = 0.089 \text{ for Government sample} \]

9. Instructional Awareness with Teacher Perception of Teacher Effectiveness

\[ r = 0.043 \text{ for Total sample} \]
\[ r = 0.005 \text{ for Rural sample} \]
\[ r = 0.061 \text{ for Urban sample} \]
\[ r = 0.019 \text{ for Government sample} \]
\[ r = 0.016 \text{ for Aided sample} \]

10. Instructional Awareness with Self Concept in Teaching

\[ r = -0.024 \text{ for Total sample} \]
\[ r = 0.019 \text{ for Urban sample} \]
\[ r = -0.037 \text{ for Aided sample} \]

11. Educational Problem Solving with Achievement in Teacher Education

\[ r = -0.015 \text{ for Total sample} \]
\[ r = -0.021 \text{ for Rural sample} \]
\[ r = 0.001 \text{ for Urban sample} \]
\[ r = -0.059 \text{ for Unaided sample} \]

12. Educational Problem Solving with Teaching Interest

\[ r = -0.003 \text{ for Total sample} \]
Summary

\[ r = 0.080 \text{ for Rural sample} \]
\[ r = -0.060 \text{ for Urban sample} \]
\[ r = -0.019 \text{ for Aided sample} \]
\[ r = -0.042 \text{ for Unaided sample} \]

13. Educational Problem Solving with Attitude towards Teaching Profession

\[ r = 0.037 \text{ for Urban sample} \]
\[ r = -0.031 \text{ for Unaided sample} \]

14. Educational Problem Solving with Teacher Perception of Teacher Effectiveness

\[ r = -0.024 \text{ for Total sample} \]
\[ r = -0.075 \text{ for Rural sample} \]
\[ r = -0.007 \text{ for Urban sample} \]
\[ r = 0.028 \text{ for Government sample} \]
\[ r = -0.094 \text{ for Aided sample} \]
\[ r = -0.001 \text{ for Unaided sample} \]

15. Educational Problem Solving with Self Concept in Teaching

\[ r = -0.006 \text{ for Total sample} \]
\[ r = 0.064 \text{ for Rural sample} \]
\[ r = -0.028 \text{ for Urban sample} \]
\[ r = 0.012 \text{ for Government sample} \]
\[ r = 0.037 \text{ for Aided sample} \]
16. Creativity with Academic Achievement in Teacher Education
   
   \[ r = 0.071 \text{ for Total sample} \]
   
   \[ r = 0.064 \text{ for Urban sample} \]
   
   \[ r = -0.034 \text{ for Government sample} \]
   
   \[ r = -0.012 \text{ for Unaided sample} \]

17. Creativity with Teaching Interest
   
   \[ r = 0.037 \text{ for Total sample} \]
   
   \[ r = 0.094 \text{ for Rural sample} \]
   
   \[ r = 0.002 \text{ for Urban sample} \]
   
   \[ r = 0.037 \text{ for Government sample} \]
   
   \[ r = 0.083 \text{ for Aided sample} \]

18. Creativity with Attitude towards Teaching Profession
   
   \[ r = -0.031 \text{ for Unaided sample} \]

19. Creativity with Teacher Perception of Teacher Effectiveness
   
   \[ r = -0.057 \text{ for Total sample} \]
   
   \[ r = -0.080 \text{ for Rural sample} \]
   
   \[ r = -0.051 \text{ for Urban sample} \]
   
   \[ r = -0.090 \text{ for Unaided sample} \]

20. Creativity with Self Concept in Teaching
   
   \[ r = 0.055 \text{ for Total sample} \]
   
   \[ r = -0.090 \text{ for Rural sample} \]
   
   \[ r = 0.096 \text{ for Urban sample} \]
Summary

21. Mental Ability with Achievement in Teacher Education
   \[ r = -0.057 \text{ for Government sample} \]
   \[ r = -0.001 \text{ for Unaided sample} \]

22. Mental Ability with Teaching Interest
   \[ r = -0.028 \text{ for Total sample} \]
   \[ r = -0.058 \text{ for Rural sample} \]
   \[ r = -0.027 \text{ for Urban sample} \]
   \[ r = -0.045 \text{ for Government sample} \]
   \[ r = -0.002 \text{ for Aided sample} \]
   \[ r = 0.011 \text{ for Unaided sample} \]

23. Mental Ability with Teacher Perception of Teacher Effectiveness
   \[ r = -0.021 \text{ for Total sample} \]
   \[ r = -0.020 \text{ for Rural sample} \]
   \[ r = -0.046 \text{ for Urban sample} \]
   \[ r = 0.046 \text{ for Government sample} \]
   \[ r = 0.044 \text{ for Aided sample} \]
   \[ r = -0.056 \text{ for Unaided sample} \]

24. Mental Ability with Self Concept in Teaching
   \[ r = 0.057 \text{ for Total sample} \]
   \[ r = -0.050 \text{ for Rural sample} \]
   \[ r = 0.054 \text{ for Government sample} \]
5.1.2: When stepwise Multiple Regression Analysis was done to estimate the predictive efficiency of the predictor variables to predict the criterion variable, Teacher Aptitude and its four constructs, major findings evolved are the following.

1. Criterion variable, *Teacher Aptitude (X₇)* can be significantly predicted by only one predictor variable, *Attitude towards Teaching Profession (X₁)*.  
   The regression equation developed is,
   
   \[ X₇ = 0.147 X₁ + 34.506 \]

   Predictive efficiency of the variable Attitude towards teaching profession is 9.30 per cent indicating that 9.30 per cent of the variable in Teacher Aptitude is accounted for by the predictor variable, Attitude towards Teaching Profession.

2. Predictor Variables, *Attitude towards Teaching Profession (X₁) and Achievement in Teacher Education (X₂)* are capable of predicting significantly *Instructional Awareness (X₃)*.  
   The regression equation developed is,
   
   \[ X₃ = 0.022X₁ + 0.026X₂ + 10.320 \]

   Predictive efficiency of the two variables are 3.35 per cent and 1.35 per cent respectively. So that 4.70 per cent of the variable in Instructional
Awareness is accounted for by Attitude towards Teaching Profession and Achievement in Teacher Education.

3. *Attitude Towards Teaching Profession* ($X_1$) is the single predictor variable capable of predicting *Educational problem solving* ($X_4$), the second construct of Teacher Aptitude.

The regression equation developed is,

$$X_4 = 0.012X_1 + 16.128$$

Predictive efficiency of the variable Attitude towards teaching profession is 2.20 per cent, indicating 2.20 per cent of the variance in Educational Problem Solving is accounted for by Attitude Towards Teaching Profession.

4. *Creativity* ($X_5$), the third construct of Teacher Aptitude can be predicted significantly by the single, predictor variable *Attitude towards teaching profession* ($X_1$)

The regression equation developed is,

$$X_5 = 0.079X_1 + 7.120$$

Predictive efficiency of Attitude towards teaching profession is 4.88 per cent indicating that 4.88 per cent of the variance is Creativity is accounted for by Attitude towards Teaching Profession.
5. Mental Ability ($X_6$), the fourth construct of Teacher Aptitude can be predicted significantly by three predictor variables, Attitude towards Teaching Profession ($X_1$), Teaching Interest ($X_8$), and Achievement in Teacher Education ($X_2$).

The regression equation developed is,

$$X_6 = 0.026X_1 - 0.040X_8 + 0.018X_2 + 0.897$$

Predictive efficiency of the three variables are 6.70 per cent, 0.30 per cent and 1.00 per cent respectively. This indicates 8.00 per cent of the variance in Mental Ability is accounted for by the predictor variables Attitude towards Teaching Profession, Teaching Interest and Achievement in Teacher Education.

5.1.3: When nature of relationship of the criterion variables and the predictor variables between relevant sub samples were compared, it was found that, the nature of the relationship of the following variables differ significantly.

1. Educational Problem Solving with Attitude Towards Teaching Profession

   \[t' = 3.05** \text{ for rural with urban}\]

2. Teacher Aptitude with Attitude Towards Teaching Profession

   \[t' = 3.976** \text{ for rural and urban}\]
3. Educational Problem Solving with Attitude Towards Teaching Profession

\[ t' = -2.069^* \text{ for Unaided with Aided} \]

4. Creativity with Attitude Towards Teaching Profession

\[ t' = -2.500^* \text{ for Unaided with Aided} \]

5. Teacher Aptitude with Attitude towards Teaching Profession

\[ t' = -2.930^{**} \text{ for unaided with Aided} \]

The remaining relationships do not differ significantly between the relevant sub samples studied.

4.5.4: When locale wise difference in the criterion variables and the predictor variables were estimated, the following are the findings.

1. Rural and urban groups differ significantly in the mean scores of Mental Ability. Teacher Aptitude, Instructional Awareness, Educational Problem solving and Creativity do not differ significantly between rural and urban groups.

2. Rural and Urban groups differ significantly in the five predictor variables except Teacher Perception of Teacher Effectiveness.

When management wise difference in the criterion variables and the predictor variables were estimated, the following are the findings.
3. Government, Aided and Unaided groups differ significantly in the mean scores of *Teacher Aptitude* and its four constructs.

4. Government, Aided and unaided groups differ significantly in the mean scores of Achievement in Teacher Education, Attitude towards teaching Profession and Self concept in Teaching. Teaching Interest and Teacher Perception of Teacher Effectiveness do not differ significantly between the these three groups.

5.2. DISCUSSION OF FINDINGS

Major objective of the study was to find out the efficiency of the psychological teacher variables in predicting the criterion variables Teacher Aptitude and its four constructs. For this, firstly, relationships of the criterion variables viz., Teacher Aptitude and its four constructs with each of the predictor variables for the total sample and subsamples were estimated. Out of the 150, such, correlations, 57 were found significant and 93, not significant. Among the 57 correlations, the predictor variable, Attitude Towards Teaching Profession has the highest correlation with all the criterion variables. Almost all the reviewed studies in this area emphasize the important relationship of Attitude towards Teaching Profession with teaching related variables Studies of Sharma (1971), Roy (1971), Mahapatra (1987), Ramakrishnaih (1989), Ruscoe, et al, (1991)

The predictor variables viz., Teaching Interest and Teacher perception of Teacher Effectiveness have the least significant correlations with the criterion variables. Teaching Interest is related to only one predictor variable, that is, to Attitude Towards Teaching Profession. The same finding was revealed in the studies of Suja (2007) and Kadijevich (2008).

When the nature of relationships between the relevant sub samples were considered, out of the 100 relationships only five relationships differ significantly. These results suggest that the nature of relationships between the relevant subsamples do not differ significantly. That is, the nature of relationships between criterion variables and predictor variables do not differ significantly between teacher trainees according to their institution locale and type of management of institutions. Locale wise differences are found in the mean scores of the five predictor variables, where as, management wise differences are found in the mean scores of all the five criterion variables.

revealed that significant difference due to gender and locale of institutions exists in the teaching related variables.

When the predictive efficiency of the predictor variables were estimated Attitude towards Teaching Profession has the highest predictive efficiency in predicting the criterion variables viz., Teacher Aptitude and its four constructs.

This is supported by the studies of Roy (1971), Mahapatra (1987) Mathai (1992), Cornelius (2000) and Devi (2005).

With regard to the constructs of Teacher Aptitude, besides Attitude towards Teaching Profession, the predictor variables like, Achievement in Teacher education and Teaching Interest have also the capability of predicting Mental Ability.

This suggest that Teacher Aptitude of teacher trainees can be highly predicted by their Attitude Towards Teaching Profession. Achievement in Teacher Education is also a predictor to predict teaching ability, though it is not entered as a predictor for testing the predictive efficiency of Teacher Aptitude.

Out of the five teachers related psychological variables selected in the study, only two variables viz., Attitude Towards Teaching Profession and Achievement in Teacher Education are significantly related to Teacher Aptitude and capable of predicting Teacher aptitude. In all the cases, Teaching Interest was found as the least related variable. However, the reviewed studies related to the area of the present study reveal that there are so many variables, related to psychological or classificatory, which are not entered in the study, directly or indirectly affecting teacher ability.

Another teacher variable notable is Teaching Interest. This variable has no relationship with Teacher Aptitude, its constructs like, Instructional Awareness, Educational Problem Solving, Creativity and Mental Ability and with the predictor variables like, Achievement in Teacher Education, Teacher Perception of Teacher Effectiveness, and Self Concept in Teaching. The only variable having relation with Teaching Interest was found as Attitude towards Teaching Profession. This suggests that even though teacher trainees have the capacity to teaching and a favourable Attitude towards Teaching Profession, they are not interested in doing teaching or teaching related activities, pointing to the development of a group of non committed teachers.
5.3. CONCLUSIONS

Among the five predictor variables of the study, *Attitude towards Teaching Profession is the single variable* having significant relationship with Teacher Aptitude and all of its four constructs, viz., Instructional Awareness, Educational Problem Solving, Creativity and Mental Ability. So also, *Attitude towards Teaching Profession is the single variable capable of predicting* significantly Teacher Aptitude and its four constructs.

Again, it is the only relationship between Teacher Aptitude and Attitude towards Teaching Profession which differ significantly between sub samples like rural with urban and unaided with aided.

The second predictor variables that comes to this line is, Achievement in Teacher Education.

Achievement in Teacher Education has significant relation with Teacher Aptitude, but not a predicting variable. Achievement in Teacher Education is related with two constructs of Teacher Aptitude viz., Instructional Awareness and Mental Ability and in these two cases, Achievement in Teacher Education becomes a predicting variable.

Thus the study has found Attitude towards Teaching Profession as the major variable having relation with Teacher Aptitude and capable of predicting Teacher Aptitude and its four constructs. The second in this
position is Achievement in Teacher Education which is related with Teacher Aptitude but not capable of predicting.

5.4. EDUCATIONAL IMPLICATIONS

Primary teacher education and period of internship plays an important role in the field of elementary teacher education. As it is the cornerstone of the educational developments and achievements of a student, the selection of apt persons to the teaching profession is highly significant. As such, findings of this study are highly worthy and notable.

Among the five predictor variables of the study, Attitude towards Teaching Profession is the single variable having significant relationship with Teacher Aptitude and all of its four constructs. So also Attitude towards Teaching Profession is the single variable capable of predicting significantly Teacher Aptitude and its four constructs.

Achievement in Teacher Education has significant relation with Teacher Aptitude, but not a predicting variable. Achievement in Teacher Education is related with the two constructs of Teacher Aptitude viz., Instructional Awareness and Mental Ability and in these two cases Achievement in Teacher Education becomes predicting variable.

Another teacher variable noted is Teaching Interest. This variable has no relationship with Teacher Aptitude, its four constructs or with
Achievement in Teacher Education, Teacher Perception of Teacher Effectiveness and Self Concept in Teaching. The only variable having relation with Teaching Interest was found as Attitude towards Teaching Profession. This suggests that even though teacher trainees have the capacity to teaching and a favourable Attitude towards Teaching Profession, they are not interested in doing teaching or teaching related activities, pointing to the development of a group of non committed teachers.

The investigator finds some of the implications additional to note are:

1. Attitude towards Teaching Profession was found as the major factor related with Teacher Aptitude and its four constructs. Therefore at least at the beginning of pre service training, students are to be tested for either Teacher Aptitude or for Attitude towards Teaching Profession and evolve measures for developing their capacity to teach.

2. Evolve strategies and techniques by way of giving exposures to good teaching and realise them the outcomes of such teaching.

3. Ask them to prepare the life histories of successful teachers within India and outside and to narrate their contributions to the society.
4. A teacher becomes a committed teacher only when the teacher possesses the talent for teaching, Attitude towards Teaching and interest in it. Therefore, pre service teacher educators are to find out ways and means of developing Teaching Interest also along with other factors.

5. Educational administrators are to adopt a selection criteria for the primary teacher trainees by giving weightages to the Test of Teacher Aptitude and Attitude towards Teaching Profession.

6. Academic Achievement of the teacher trainees is to be seen as a determinantal factor for the selection of teaching profession.

7. At the time of preservice training, more experiences are to be given to update their Instructional Awareness.

8. By giving lively, practical and educational problematic situations for finding solutions, the ability of Educational Problem Solving can be developed.

9. Provide them with learning activities involving fluent, flexible and imaginative solution so that their creative thinking will be enhanced.

10. During preservice training, promote trainees sufficient opportunities for attending video clippings of talented teacher's classes and ask them to make creative criticisms based on those
which will create Teaching Interest and a positive attitude towards Teaching Profession.

5.5. SUGGESTIONS FOR FURTHER RESEARCH

The studies reviewed and the findings of this study led the investigator to suggest the following areas for further research.

1. Study of the affective correlates discriminating between teacher trainees with high and low Teacher Aptitude.

2. Affective factor structure of teacher trainees with high Teaching Aptitude.

3. The forecasting efficiency of Teacher Aptitude when the trainees enter into teaching profession.

4. A study on the techniques and strategies to develop Attitude towards Teaching Profession.

5. The efficiency of Achievement in Teacher Education and Attitude towards Teaching Profession in predicting success in Teaching.

6. Developing a preservice training programme so as to produce teachers with favourable Attitude towards Teaching and Teaching Interest.

7. Study of socio-familial characteristics associated with High and Low Teacher Aptitude.