CHAPTER 8

CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS
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8.1.0 INTRODUCTION

In the preceding chapters, twelve hypotheses in correspondence to four objectives had been examined through bivariate approach (except Anova) and multivariate approach. The bivariate approach was used to study the variables individually and to find out the relationship between them, whereas multivariate approach was applied to attain economic explanation and meaningfulness of the results. This chapter is devoted to the presentation of conclusions of the study, their implications and suggestions.

Before proceeding to any of the conclusions and their implications it may be mentioned here that the generalisations based on the study are only dependent upon the condition (in which the data were collected), sample and tools used, further these are only applicable to the population as explained vide caption 2.3. As the conclusions speak of groups, so greater confidence can be placed when applied to groups than to the individuals. The conclusions have their applications in the field of teacher education (preservice and inservice), recruitment of the subject teachers, classroom teaching, research in teaching and teacher behaviour.
8.2.0 CONCLUSIONS AND THEIR IMPLICATIONS

The study was conducted in two parts, the presage-process and process-product. The hypotheses related to these two parts were tested to achieve the five objectives (mentioned in caption 1.4.0). Teacher behaviour in terms of indirect/direct (i/d) ratio, was the main criterion variable on which the major conclusions were drawn. The conclusions are reported hypothesis-wise under each part of the study (the study had two parts), and implications based on these conclusions are given at the end of the chapter (in caption 8.3.0). Further, it may be noted here that major conclusions related to the hypothesis are given in the first paragraph and the subsidiary analytical findings are given in the following paragraphs.

8.2.1 Presage-Process Study

It includes conclusions based upon the results for eight hypotheses concerning demographic variables of (age, sex, qualifications), professional variables (teaching experience, professional status, subject taught) teacher attitudes and adjustment. The conclusions are given below:

1) Age and Teacher Behaviour:

Younger teachers were more indirect in their classroom behaviour than older teachers. There was a negative relationship between the age of the teachers and
indirect/direct behaviour.

Younger teachers had higher mean scores for the FIACS indices of I/D, i/d, extended indirect behaviour, total use of praise, praise in teacher talk, constructive reaction to pupil responsive talk, constructive reaction in pupil self-initiated talk, pupil initiation ratio, and pupil responsive talk following praise than the older teachers.

2) Sex and Teacher Behaviour

The male and female teachers did not differ in indirect-direct teacher classroom behaviour.

3) Qualifications and teacher Behaviour

The teachers with bachelors degrees were more indirect in their classroom behaviour than teachers with masters degree.

Indirect/direct behaviour (I/D and i/d), extended indirect behaviour, teacher question ratio, constructive integration in teacher steady state, questions in context of pupil responsive talk, questions in context of pupil self-initiated talk, pupil initiation ratio and pupil responsive talk were higher in the classes of teachers with bachelors degree than the classes of teachers with masters degree.

4) Experience and Teacher Behaviour

Teachers with low teaching experience were more indirect in their classroom behaviour than teachers with high
teaching experience. Further, lower was the teaching experience the more was the indirect teacher classroom behaviour.

Teachers with low teaching experience had higher mean scores for indirect/direct ratio (I/D and i/d), extended indirect behaviour, praise in teacher talk, constructive reaction to pupil responsive talk, constructive reaction to pupil self-initiated talk, pupil initiation ratio and pupil responsive talk.

5) Professional status and Teacher Behaviour

Trained Graduate Teacher (TGTs) and Post Graduate teachers (PGTs) had similar classroom behaviour, pertaining to indirectness/directness.

6) Subject Taught and Teacher Behaviour

Science teachers were more indirect in their classroom behaviour than arts teachers.

Science teachers had higher mean score than arts teachers, for indirect/direct ratio (I/D and i/d), extended indirect behaviour, teacher question ratio, total use of praise, praise in teacher talk, questions in context of pupil responsive talk, questions in context of pupil self initiated talk, pupil initiation ratio, pupil responsive talk, pupil responsive talk following teacher questions and pupil self initiated talk following teacher questions.
7) Attitudes and Teacher Behaviour

Teachers with positive attitudes were more indirect in their classroom behaviour than teachers with negative attitudes.

There was positive relationship between teacher attitudes and I/D, i/d, extended indirect behaviour, total use of praise, praise in teacher talk, praise in reaction to pupil talk, pupil initiation ratio and pupil responsive talk. There was significant negative relationship between teacher attitudes and extended direct behaviour, order following pupil responsive talk, and order following pupil self initiated talk.

8) Adjustment and Teacher Behaviour

Teachers who were poorly adjusted, were more direct in their classroom behaviour than teachers who were well adjusted.

The teachers who were well adjusted for home, health, socially, emotionally and occupationally were more indirect in their classroom behaviour than teachers who were poorly adjusted for the above mentioned five aspects of adjustment.

The well adjusted teachers showed more I/D, i/d, total use of praise, praise in teacher talk, constructive reaction
to pupil self initiated talk, pupil initiation ratio and pupil responsive talk, than teachers who were poorly adjusted.

8.2.2 Process-Product Study

It includes the conclusions based upon the results for four hypotheses concerning variables of students liking, rating by peers, principals and self. The conclusions are given below:

9) Teacher Behaviour and Students Liking

The teachers who were indirect in their classroom behaviour were more liked by students for their behaviour in the school than teachers with direct classroom behaviour.

The indices of teacher behaviour (FIACS) like: I/D, i/d, total use of praise, praise in teacher talk, pupil initiation ratio, showed positive relationship with students liking. There was negative relationship between indices of teacher behaviour like: extended direct, order following pupil responsive talk, and order following pupil self-initiated talk and the students liking for teacher behaviour.

The criterion teacher behaviour variable i/d had significant relationship with the four aspects of students liking, namely -- students liking for teacher behaviour with students inside the class, students liking for teacher behaviour with students outside the class, students liking for teacher behaviour with colleagues, and students liking for teacher behaviour with management.
10) Teacher Behaviour and Peers Rating

The teachers with indirect classroom behaviour were rated higher by peers for their behaviour in the school than the teachers with direct classroom behaviour.

The coefficient of correlation was significant between the five indices of teacher behaviour, namely -- I/D, i/d, extended indirect, total use of praise and the praise in teacher talk, and the peers' ratings for teacher behaviour. There was a negative relationship between the indices of teacher behaviour namely - teacher steady state, pupil steady state and total peers rating.

The criterion variable of teacher behaviour i/d showed significant relationship with three aspects of peers rating out of the four aspects. These three aspects were: peers rating for teacher behaviour with students inside the class, peers rating for teacher behaviour with students outside the class, and peers rating for teacher behaviour with colleagues. There was no significant relationship between i/d and peers rating for teacher behaviour with management.

11) Teacher Behaviour and Principals Rating

(a) The teachers with indirect classroom behaviour were rated higher by principals for their behaviour in the school than the teachers with direct classroom behaviour.
(b) There was significant positive relationship between the indices of teacher behaviour (I/D, i/d, content cross, content in teacher talk, content in pupil talk, praise in teacher talk, questions in context of pupil self-initiated talk) and total principals rating. There was significant negative relationship between teacher behaviour indices like: teacher steady state ratio and pupil steady state ratio, and total principals rating score.

The criterion variable of teacher behaviour i/d showed significant relationship with principals rating for teacher behaviour with students inside the class, principals rating for teacher behaviour with students outside the class, and principals rating for teacher behaviour with colleagues. But there was no significant relationship between i/d and principals rating for teacher behaviour with management.

12) Teacher Behaviour and Self-rating

The teachers with indirect classroom behaviour rated themselves higher for their own behaviour in the school, than teachers with direct classroom behaviour.

There was significant relationship between indices of the FIACS like: I/D, i/d, extended indirect, total use of praise, praise in teacher talk, praise in reaction to pupil talk, constructive reaction to pupil self-initiated talk, pupil initiation ratio, pupil responsive talk, and pupil self-initiated talk following praise, and total self rating score.
Indices of the FIACS like: extended direct and order following pupil responsive talk, had negatively significant relationship with total self rating score.

The criterion variable of the FIACS (i/d) had significant relationship with the three aspects of self rating namely - self rating for teacher behaviour with students inside the class, self rating for teacher behaviour with students outside the class, and self rating for teacher with colleagues. The relationship between i/d and self rating for teacher behaviour with management was not significant.

3.2.3 Presage-Process-Product Study

To attain parsimony and meaningfulness of the results, the multivariate analysis was applied. But the variables of demographic factors and professional factors were not included in the multivariate analysis for the fear that these might influence the nature of the analysis as many of these variables were coded. The results of multivariate approach were based on the principal component axes.

When principal-axes method of factor analysis of the correlation-matrix (70 x 70) was carried out, nine factors were extracted. These factors were rotated to achieve the criteria of simplicity. The names of the nine varimax factors along with the percentage of common variance
explained by them are given below:


As per the communalities expressed by the variables, the varimax factor structure (nine factor solution) represented twenty eight variables having communalities ranging from .401 to 1.00 of all these variables, the most represented variable in the above nine factors was 'Pupil Talk' and the least covered variable was 'Principals Rating for Teacher Behaviour with Management'.

8.3.0 EDUCATIONAL IMPLICATIONS

Keeping in view the available resources of money and personnels, following are the recommendations, made on the bases of findings of this study. The study was having two parts (presage-process and process-product), each part had its own educational implications which are reported below:–
(1) Presage-process study:

The conclusions in this part of the study have their implications in the field of teacher education, recruitment of students in training colleges and classroom teaching.

It was found that younger group of teachers were more indirect in their behaviour as compared with older group of teachers. So the older group of teachers may be given continuous training to change their behaviour from direct to indirect. Moreover younger group of teachers may be preferred for teaching and older group of teachers may be given non-instructional work.

It was found further, that science teachers were more indirect in their behaviour than arts teachers. The curriculum in arts subjects should be so constructed that the teachers can provide more chances for student participation.

The findings of the present study have their implications related to the teachers who are already in service. It has been found that teachers with masters degree are less indirect in their behaviour as compared to teachers with bachelors degree. Inservice training for indirect behaviour may help them to have more insight into their own classroom behaviour and students behaviour. It may also help
them to cut down teacher talk and enhance pupil participation, thereby increasing the constructive integration and avoiding lecturing. Moreover, lectures on the teacher classroom behaviour may be arranged in the schools from time to time, so that the teachers may become conscious of their behaviour in their classes and try to change their behaviour towards indirectness. Training colleges should play an active role in this field, by organising seminars and workshops on human relations for in-service teachers which may work as an effective means of developing facilitative communication skills, which improve the interpersonal relations.

Further, this study has the findings that professional status of the teacher has nothing to do with teacher behaviour. Therefore, the distinction of high and low among teachers working at different levels of education may be discarded. Differentiation on the basis of high or low emoluments should also go, so that the teacher community may become united in its aim and mission of achieving the moral, physical and economic emancipation of teeming millions entrusted to them.

In the present study it has been found that teachers having positive attitudes are indirect in their classroom behaviour. So the teacher attitude scales may be used for admitting the pupil teacher in the training colleges. The study further reveals that adjustment is
related to indirect teacher behaviour. Though it is unknown, whether adjustment (home, health, social, emotional and occupational) causes indirect teacher behaviour or indirect teacher behaviour causes adjustment, yet the study has its implications that adjustment of the pupil teachers' should be taken into account before training and recruitment of teachers. Further it becomes the duty of society and the managing committees to provide the facilities to the teachers, so that they feel satisfied and adjusted.

(ii) Process-Product Study:

The conclusions in this part of the study have their implications in the field of classroom teaching, research in teaching and teacher behaviour.

The teacher is one of the most exposed persons, who is to deal with students, colleagues and administrators. He is the professional person, operating with professional skills and exercising professional judgement. Also he is the link between students and other personnels of the school. As the study reveals that teachers' indirect behaviour with students, receives higher ratings from colleagues, principals, and self, so he should allow greater participation of students, for being accepted by the colleagues and
principals. The sound relationship with these personnels of the school, may help in decreasing many of his problems which arise due to the social and organisational framework of the school. To make the teachers aware of this fact, inservice-courses and workshops may be arranged, so that the teachers may develop insight into their classroom behaviour. Further lectures and discussions in the field of teacher behaviour may be arranged for the teachers, which may tell them the importance of indirect classroom behaviour.

In the classroom the teacher holds a pivotal position, around which all the classroom activities are condensed. As Adval (1973) has remarked that no factor in teaching-learning process is more important than that of the teacher. The results indicate that behaviour of the teacher contributes to generate students liking or disliking towards the teacher. Liking towards a teacher means better classroom climate which may bring motivation and better teaching-learning situation. The teacher thus, can easily achieve the educational goals by adopting indirect behaviour towards the students. Further teacher's sympathetic and effectionate behaviour towards the pupils, will build an atmosphere in which youth feels that it can play an integral role.

The study supports that indirect teacher classroom behaviour results in the acceptance of the teacher by students,
peers, principal and even self. The major responsibility falls on the teacher training institutions, which should consider classroom behaviour as an important aspect of programme of teacher education. It will be no exaggeration, if it is suggested that the teacher classroom behaviour may be introduced as a one compulsory paper for the training of teachers.

A teacher of a free society has a tremendous load of responsibilities to attain the goals which are concerned with faith in democratic ways of life. At the higher secondary stage, where the students are at the transitional age (adolescents); there is a need to impart training to the students for developing healthy interpersonal relationships. In this field, the teachers are supposed to play a major role which can train the students from the very beginning for human relations, so that the coming younger generation generate democratic society.

6.4-0 SUGGESTIONS FOR FURTHER RESEARCH

The present study has explored the gap between presage-process and process-product studies by studying three groups of variables (presage, process and product) together. It is in accordance with 'A Model of Research on Teacher Effectiveness' developed by the Centre of Advanced Studies in Education (1975). Based upon the findings of this study some experimental and exploratory studies are suggested below:-
i) An experimental study of the effect of indirect-direct teacher behaviour upon students liking and their cognitive growth.

ii) An experimental study may be carried out to find the effect of indirect teacher behaviour upon the students liking, students adjustment and their mental hygiene.

iii) Effect of indirect teacher classroom behaviour upon teaching popularity amongst teaching community and parents is an important experimental study.

iv) Alongside the efforts at probing verbal interchange in the classroom, attention should also be paid to study the non-verbal occurrences as the process variable of classroom behaviour of the teacher, while keeping the presage and product variables same.

v) Presage variables like teacher personality and product variables like parents rating may also be studied.

vi) The study of students liking and rating by peers and principals, in reciprocal to teachers liking for students, peers and principals is another important field of study.

vii) Finally in India, the studies are not committed to Flanders tool only. Once it is felt that other costlier systems can be afforded or standard tools adapted to Indian conditions are developed, the trial can be made with them too, for different presage and product studies.