CHAPTER VI

SUMMARY AND CONCLUSION

Independent India has witnessed a rapid shift in all directions. Its educational system has also been one of the areas of rapid change. Both qualitative and quantitative development in this field have called for new programmes and techniques to be implemented. This has stimulated thinking among educators and encouraged research in the field of innovations and change. The first national seminar organised by National Council of Educational Research and Training in 1967 on innovations and change gave some directions in which enquiries could be conducted. As a result three studies which give us insight into the factors promoting and resisting change in the Indian schools have been completed. These investigations have thrown light on the characteristics of the innovative schools as well as the Principals. The present enquiry is an attempt to identify factors which are related to the diffusion process within the school system.

It focuses mainly on the characteristics of teachers that are associated with the 'time of awareness' of an innovation, the 'time of adoption', 'internalization' of the innovation and the 'process of self-perceived change orientation' - the four dimensions which have been considered in this study to measure the process of diffusion within a school system.

The four components of the diffusion process within the school system, viz. the 'time of awareness' of an innovation, the 'time of adoption' of the innovation, its 'internalization' and the 'process of self-perceived change orientation' of the teacher, form four dependent variables of the present study. Influence of thirty variables on these four dimensions of the diffusion process within the school has been studied. The independent variables of the enquiry have been selected from demographic and psychological areas of secondary school teachers. In addition, the organizational climate of schools has also been included in the study.

The main tool which was used for data collection, is a quasi scale which measures most of the dependent and independent variables included in the study. The tool is based on the diffusion studies conducted by E.M.Rogers and others in schools of Michigan and Thailand in 1966.

Other tools which are used in the study are :

1. a modified version of Organizational Climate Description Questionnaire (OCDQ) developed by Halpin and Croft (1963),
2. an attitude scale to measure teachers' attitude towards teaching profession constructed by Mrs.Y.F.Patel (1959),
3. a conservatism vs radicalism scale developed by Dr.M.N. Palsane, and
4. the socio-economic status scale developed by B. Kuppuswamy (1962).

The sample of the study consists of 442 teachers from fifty five schools of South Gujarat. Being a correlational study, product moment 'r's were calculated for testing the hypotheses. The relationship between dependent and independent variables was studied by using the product moment 'r'. Multiple correlation and regression analysis techniques were used to find out predictors of the diffusion process.

The major findings of the study are :

1. Correlates and predictors of the 'Time of Awareness':

The correlational analysis reveals that eleven variables are significantly related to the 'time of awareness' at .01 level. These variables are 'age', 'vertical communication', 'self-designated opinion leadership', 'perceived frequency of general horizontal communication', 'perceived frequency of horizontal communication about the

innovation','teachers' perception of students' attitude towards the innovation', 'general mass-media exposure', 'professional communication behaviour', 'exposure to wider environment','professional orientation', and 'socio-economic status'. Only two variables, viz. 'experience', and 'ascribed opinion leadership' are having significant relationship with this criterion variable at .05 level.

However, all the variables which are having significant relationship with the 'time of awareness' of an innovation do not come out as the best predictors of this variable. Of the thirteen variables which are significantly related with the 'time of awareness' only seven come out as best predictors of this variable. There are two more variables which do not have significant relationship, with this dependent variable as far as 'r' values are concerned, but they significantly contribute to its prediction. Thus nine variables, viz. 'self-designated opinion leadership','exposure to wider environment', 'general mass-media exposure', 'age', 'socio-economic status', 'teacher's perception of students' attitude towards the innovation', 'perceived principal's support of the innovation',' perceived frequency of horizontal communication about the innovation' and 'perceived change orientation of the Principal,' contribute significantly to the prediction of the 'time of awareness' at .05 level of confidence. These

variables together yield anR of .3753 which explain the variance in the 'time of awareness' only to the tune of 14.09%.

Further explorations into these factors predicting awareness is required. Based on these findings, it is suggested that opportunities for exposure to wider environments such as attending conferences, meeting people outside the social system, travelling and opportunities for interaction between teachers and principals should be created. Mass-media channels in education should be strengthened. Administrators should realize their important role of acceptance of change in general and support each innovation in particular.

2. Correlates and predictors of the 'Time of Adoption':

Six variables are found to be significantly related to the 'time of adoption' at .01 level. They are 'self-designated opinion leadership','ascribed - opinion leadership', 'perceived frequency of horizontal communication about the innovation', 'professional communication behaviour', 'exposure to wider environment' and 'professional orientation'. Six variables, which are related to the criterion variable at .05 level are 'age', 'experience', 'perceived frequency of general horizontal communication', 'teachers' perception of students' attitude towards the innovation', 'general mass-media exposure' and 'socio-economic status'.

Out of these twelve variables which give significant 'r' with the 'time of adoption' only six variables are important predictors of this criterion variable. There are five more variables which though do not have significant relationship with the criterion variable, but contribute significantly to the prediction of the 'time of adoption'. When the interaction effect of the variables is partialled out eleven variables, viz. 'perceived frequency of horizontal communication about the innovation', 'professional communication behaviour', 'ascribed opinion leadership', 'feeling of security', 'exposure to wider environment', 'sex', 'age', 'vertical communication', 'self-designated opinion leadership', 'urban and rural background' and 'attitude towards teaching profession' are found to be the best predictors of the 'time of adoption'. These variables together predict the variance in the 'time of adoption', to the extent of 11.65% ($R = .3413$).

3. Correlates and predictors of 'Internalization' of the innovation:

Eleven variables show significant relationship with 'internalization' of an innovation at .01 level and six variables at .05 level of confidence. They are 'role satisfaction', 'feeling of security', 'perceived change orientation of the principal', 'vertical communication', 'perceived principal's

support of the innovation', 'ascribed opinion leadership', 'perceived cohesiveness of the school faculty', 'teachers' perception of students' benefit from the innovation', 'teachers' perception of students' attitude towards the innovation, 'exposure to wider environment', 'professional orientation', and 'experience', 'perceived psychological distance between self and the principal', 'perceived psychological distance between other teachers and the principal', 'self-designated opinion leadership', 'perceived frequency of horizontal communication about the innovation', and 'socio-economic status' respectively.

Product moment correlation matrix (Appendix VII) shows that a large number of variables are significantly related to the 'internalization' process of the innovation but only seven variables viz. 'teachers' perception of students' benefit from the innovation', 'perceived change orientation of the principal', 'ascribed-opinion leadership', 'perceived cohesiveness of the school faculty', organizational climate', 'role satisfaction' and 'need for autonomy' together yield an R of .5964 accounting for 35.57% of the variance in the criterion variable.

In order to increase the acceptance of innovations by the teachers friendly atmosphere in the school should be

created. Acceptance of change by the principal should be demonstrated. In order to accelerate internalization process teachers should be given autonomy in decision making.

4. Correlates and predictors of the 'Process of Self-Perceived Change Orientation':

Twelve variables are having significant relationship with this component at .01 level whereas four variables show significant relationship at .05 level of confidence. The variables having significant relationship at .01 level with this dependent variable are 'role satisfaction','feeling of security', 'perceived psychological distance between other teachers and the principal','perceived change orientation of the principal','perceived principals' support of the innovation','self-designated opinion leadership','ascribed-opinion leadership','perceived cohesiveness of the school faculty', teachers' perception of students' benefit from the innovation','teachers' perception of students' attitude towards the innovation','exposure to wider environment' and 'socio-economic status'. The variables which are significantly related to it at .05 level are 'experience', 'perceived psychological distance between self and the principal', 'perceived frequency of horizontal communication about the innovation' and 'attitude towards teaching profession'. 'Educational qualifications of the teacher is the only variable which is having significant

but negative relationship with this variable at .05 level.

However, six variables, viz. 'perceived change orientation of the principal', 'teachers' perception of the students' benefit from the innovation', 'socio-economic status', 'perceived principals' support of the innovation' 'perceived source credibility of the principal,' and 'perceived psychological distance between other teachers and the principal' are found to be significant predictors of the 'process of self-perceived change orientation' at .05 level of confidence yielding an R of .5017 and explaining 25.17% of the variance in this criterion variable.

5. Predictors of the Diffusion Process within the School system:

Eight predictors of the total score of all the four criterion variables, viz. the 'time of awareness', the 'time of adoption', 'internalization' and the 'Process of Self-perceived change orientation', selected to measure the process of diffusion within a school system are 'Perceived change orientation of the principal', ' teachers' perception of students' benefit from the innovation', 'ascribed-opinion leadership', 'exposure to wider environment', 'socio-economic status', 'teacher's perception of students' attitude towards the innovation', 'experience' and 'general mass-media exposure'.

Together they yield anR of .5655 and explain 31.98% of variance in the diffusion process within the school system.

For a rapid diffusion of innovations within a school system opportunities for the teachers should be created to expose the students to the innovations and seeing their benefits. Encouragement for trying out new ideas should be given by the administrators. Principals need to be aware of their role as a source of information for teachers. To accelerate the diffusion process within a system exposure to mass - media channels and wider social environment is of utmost importance.

Six variables of the thirty independent variables selected in the present study, do not contribute significantly to predict the variance in any of the dimensions of the diffusion process. These variables are - 'educational qualifications', 'recency of training', 'perceived psychological distance between self and the principal', 'perceived frequency of general horizontal communication', 'professional orientation' and 'conservatism vs radicalism'. These variables do not come out as an significant predictor of any of the components of the diffusion process within the school system.

Needed Research in the field of the Diffusion Process within the School System

The four components which contribute to the diffusion

process within the school has not been fully explained by the independent variables which are selected in the present investigation. The highest R that these variables yield for the process of diffusion within the school does not exceed, .59 and only 35% of variance is explained by all the variables taken together. Further researches are required to identify other variables which will explain the remaining amount of variance. It will be worthwhile to find out the characteristics of both principals and teachers together as it is related to the innovativeness of the school system. Future studies should consider the institutional variables along with socio-psychological factors. Moreover, at present there is need to consider the ultimate aim of introducing change and the factors that might be influencing it in the long run. Thus consequence variables and not only the immediate impact of innovations should be studied to find out how far the innovations introduced are useful and what factors affect them.
