

## CHAPTER III

### PROBLEM, VARIABLES AND HYPOTHESES

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#### THE PROBLEM

The present study is designed to investigate into the factors which affect diffusion of innovations within the school system and thereby to develop a strategy for fruitful introduction of innovations in schools. The problem has been worded as under :

' THE FACTORS AFFECTING DIFFUSION OF INNOVATIONS  
IN SECONDARY SCHOOLS. '

Diffusion of an innovation is defined as the process by which an innovation spreads from one person or aggregate of persons to another person or a group in a social system over a period of time. It is a process in which the innovation is transferred from one source to the other within a system or between systems. The basis of diffusion process is inter-personal relations as a result of which interactions and interchanges take place leading to the dissemination and adoption or rejection of

of the innovation. Dissemination is one of the basic aspects of the diffusion. The person who first acts as a receiver and an adopting unit, becomes a source to a third person who is ignorant about the innovation and acts as the adopting unit and so on.

The diffusion process is thus closely interlinked with the adoption of an innovation in the sense that adoption is the ultimate goal of diffusion. Adopting unit's awareness and acceptance of the innovation tells us about the degree of diffusion of that innovation. The extent of diffusion gives an idea as to how many of the adopting units have become aware and accepted the innovation. The diffusion of an innovation, thus, is manifested in awareness and adoption of the innovation in a social system. Again, adoption of an innovation by the receiving unit is indicated by its degree of assimilation in the system which takes place when the adopting units have favourable attitude toward the innovation. While measuring the diffusion of an innovation we necessarily measure awareness, adoption and assimilation of an innovation i.e. attitudinal acceptance of the innovation.

The person who knows about the innovation communicates it to the other who does not know about it. This phenomenon cannot be called diffusion which leads only to the awareness.

It is just communication which is one of the elements of the diffusion process. The person who is told about the innovation does not act as a source for later units unless he adopts the innovation. After the communication the receiving unit passes through a mental process which is termed as innovation decision process or adoption process. He passes through certain distinct stages - awareness, interest, evaluation, trial finally leading to adoption or rejection. His final decision to continue use of the innovation has much to do with the diffusion of that innovation. Once it is rejected it blocks the possibility of further spread of that innovation because the unit which has rejected will never act as a source for later adopting units in positive direction. Thus the ultimate decision of the second unit to adopt innovation paves the path for its further spread i.e. diffusion. This diffusion or spread of innovations can be studied from two aspects viz. (i) the 'inter-institution' diffusion or diffusion 'between' two institutions and/or two types of institutions and (ii) the 'intra-institution' diffusion or diffusion 'within' one institution. Diffusion of innovations between institutions refers to their spread from their source (may be a central agency or any institution) to those institutions who do not know. It is the spread of innovations from institution to institution. Here the institution is considered as the adopting unit. Whereas the diffusion of

innovations 'within' the institution refers to the spread of innovations from one individual to the other of the same institution. As a result of diffusion between the institutions or systems, the innovation reaches a particular system or institution and gets diffused within it as a result of interaction between the members of the system. The basis of diffusion, however, everywhere, whether 'between' or 'within' remains the same. The only difference lies in how we view at and how broad a category we take for defining a social system, for example, all the secondary schools as agency of education belong to the same 'social institution' and can form one social system as they are different from other types of educational institutions for example, primary schools or colleges. At the same time each school differs from other schools as a 'social organization'. All the schools together can form one social system as they represent the same type of educational institutions. Again, these schools can be classified into separate social system because each one has its own characteristics and geographic locus. The spread of innovations 'between' schools and institutions thus takes a broader perspective and in such studies the school or the institution forming the social system are taken as a unit of analysis. On the other hand in studies of diffusion within a system each individual is regarded as an unit and the spread within the system is studied. As it has been mentioned earlier while studying the

diffusion process whether between or within the systems, awareness, acceptance and assimilation of the innovation are assessed and that is why the dependent variables of the present investigation are derived from the process of adoption as will be seen in this chapter.

#### SCOPE OF THE STUDY

What happens to an innovation when it floats from its source and reaches a school for which it is meant ? How it gets diffused 'within' the school system ? The present investigation deals with the diffusion of an innovation within the school system and not between or among the school systems. It differs from most other diffusion studies in the sense that it focuses upon the diffusion within an institution. The unit of analysis in this investigation is not the school but the individual teacher. It also differs from other diffusion studies as it emphasises upon the assimilation of an innovation within an institution because it is a question of assimilation when we talk about diffusion within the school. The study necessarily deals with awareness, adoption and assimilation of the innovation. An attempt has been made to locate the factors that are associated with the successful adoption and assimilation of an innovation 'within' a school system.

The principals and administrators, though in the key position, are not the ultimate users of the innovations. They

may try to implement innovations, using their power as heads of institutions, but it does not ensure the successful implementation of the innovation. Teachers are the users of the innovation and it is quite logical to assume that the institutionalization of an innovation will depend on the teacher's acceptance of the innovation. On the whole, the teacher's innovative character will certainly have influence on the success or failure of the innovation. This study is designed to find out the relationship between the characteristics of teachers and their adoption behaviour. For the successful adoption of an innovation, proper grooming of the teachers, 'the ultimate users of the innovation' is required. It is a common experience that all the innovations that principals and administrators select do not get spread 'within' the school evenly. All the teachers neither develop interest about the innovation nor do they adopt it at the same time. Their reactions to the innovations also differ. The eagerness, zeal and enthusiasm that they show towards change is not of the same degree. This study is planned to find out why teachers from the same school have different reactions to the same innovation. Hence an attempt has been made to study the characteristics that make them more inclined to adopt an innovation.

This study is designed on the basis of the studies conducted by Lin Nan et al. (1966) in Michigan entitled ' The Diffusion

of an Innovation in three Michigan High Schools', and Rogers, Joyce et al. (1966) study in Thailand 'Institution Building through Change'. Present study concentrates on finding out the characteristics of secondary school teachers that are related to the elements constituting the diffusion process within the school system.

#### MAJOR OBJECTIVES

The main objectives of the study are

1. to examine the factors which might be associated with the various degrees of innovation assimilation within the school system,
2. to find out what factors contribute to promoting adoption of innovations by teachers,
3. to identify the characteristics of teachers for predicting adoption of innovations by them within the school system,
4. to find out the extent to which organisational climate of the school influences adoption of innovations by teachers.

#### BASIC ASSUMPTIONS

There are certain basic assumptions that were kept in view while conducting this investigation. These assumptions are :

1. All teachers do not become aware of the innovation at the same time.
2. They do not adopt it at the same time.

3. Their awareness and adoption of the innovation is influenced by their perceptions of the principal and school environment.
4. Their attitude towards profession, their conservative or radical attitudes, their professional awareness, cosmopolite behaviour and their socio-economic status influence the adoption process.

#### LIMITATIONS OF THE STUDY

The present investigation deliberately concentrates on the study of the characteristics of the teachers in the process of innovation adoption and not a large number of other factors which influence the change process within the school system. The study further restricts itself to secondary schools only.

#### VARIABLES

As the study aims at exploring factors that influence the process of adoption by teachers within a school system, it is natural that a large number of variables which are suspected to influence teacher's adoption of innovations have to be selected. The relationship of these variables with selected criterion variables will have to be studied.

Dependent Variables : The process of adoption of innovations by teachers has the following dimensions :

- (i) Time of awareness
- (ii) Time of adoption
- (iii) Innovation Internalization
- (iv) Process of Self-perceived change orientation



Measures of all these four dimensions will form the dependent variables in the study. Each of these dependent variables requires some explanation.

Time of Awareness : The time of first hearing of the innovations is considered as the awareness time of the individual about that particular innovation.

Time of Adoption : According to Rogers (1962) adoption is a decision to continue full use of an innovation. This definition implies that the adopter is satisfied with the innovation. Here in this study time of adoption denotes the first use of the innovation by the teacher.

Here it is admittedly mentioned that both time of awareness and time of adoption, are likely to be affected by the ability of accurate recall of the exact date of awareness and adoption.

Innovation Internalization : The variable deals with the attitude towards a specific innovation after it is known or adopted. Innovation internalization is defined as the extent to which a teacher perceives the innovation as relevant and valuable to his role performance in the school. It is the degree of a teacher's attitudinal acceptance of a specific innovation and the usefulness of the innovation perceived by him. Unless and until the teacher perceives an innovation as

useful, the question of satisfaction and its adoption does not arise and that makes the way to include this variable as a dependent one.

Process of Self-Perceived Change Orientation : It is defined as the individual's degree of general predisposition towards change. This variable deals with the general attitude towards change. A teacher's attitude towards change in general reveals his innovativeness. On this rationale this variable is kept in the group of dependent variables in the present study. The characteristics of the teachers that make him more change oriented are sought to be studied through this.

Independent Variables : The thirty independent variables of the study are classified into six broad categories:

I. Demographical Variables : The variables included in this category are : (i) Age, (ii) Sex, (iii) Educational Qualifications, (iv) Recency of Training (Professional training of the teacher ), (v) Experience (as a teacher) (vi) Urban and rural background.

II. Institutional Category : The institutional category includes all such variables which originate as a result of interaction between the individual's personality or psychological make up and the institution. The category again is sub-divided into four sub-categories. They are : role perception, perception of the superior, perception of the

peer's and perception of the students.

(i) 'Role perception' includes -

- (a) role satisfaction, i.e. the extent to which the teacher is satisfied with his work and working environment,
- (b) feeling of security, i.e., the extent to which the respondent feels secure and safe as a teacher in the school.

(ii) 'Perception of one's superior' includes -

- (a) perceived psychological distance between self and principal, i.e., the teacher's perception of the degree of social distance between himself and the principal;
- (b) perceived psychological distance between other teachers and the principal, i.e., the teacher's perception of the degree of social distance between fellow teachers in the school and the principal;
- (c) perceived source credibility of the principal, i.e., the way the teacher perceives the principal as a source of information in terms of professional competence, dynamism, and safety;
- (d) perceived change orientation of the principal, i.e., the extent to which the teacher perceives his principal to be change oriented,
- (e) vertical communication, i.e., teacher's perception of how often he is able to communicate with the principal,
- (f) perceived principal's support of the innovation, i.e., the extent to which the teacher thinks his principal supports the innovation.

(iii) 'Perception of peers' includes -

- (a) self-designated opinion leadership, i.e., teacher's perception about how many times he is asked to give opinion on important matters in the school,
- (b) ascribed opinion leadership, i.e., the frequency of opinion given to other teachers as designated by teachers,
- (c) perceived cohesiveness of the school faculty, i.e., how the teacher perceives other teachers in the school get along as a group;
- (d) perceived frequency of general horizontal communication i.e., the teacher's perception of the frequency of talk with other teachers,
- (e) perceived frequency of horizontal communication about the innovation, i.e., the teacher's perception of the frequency of talk with other teachers about the innovation.

(iv) 'Perception of students' includes -

- (a) teacher's perception of students' benefit from the innovation,
- (b) teacher's perception of students' attitudes toward the innovation.

III. Communication Behaviour : Studies show that the communication behaviour of a person has much influence upon his change orientation and innovative outlook. Communication behaviour here is again sub-divided into two categories :

- (a) General mass media exposure : The exposure of the teacher to outer world through newspapers, magazines, radio etc.

- (b) Professional communication behaviour : This refers to the teachers' reading of professional journals, teachers' attending professional meetings and their frequency of listening to educational talks, etc.

IV. 'Psychological and Personality Variables': This category includes following five variables :

- (a) Cosmopolite orientation, i.e., the degree to which an individual's orientation is external to a particular social system. How much the individual is linked up with outside the social system.
- (b) Professional orientation, i.e., it refers to the extent to which the teacher has link with professional bodies within or outside the social system (Membership).
- (c) Attitude towards teaching profession - it is the teacher's degree of favourable or unfavourable disposition towards teaching profession.
- (d) Conservatism vs. radicalism - conservatism refers to the disposition to maintain existing institution or to preserve old customs and traditions. On the other hand radicalism goes towards the desire for reforms in the existing set up.
- (e) Need for autonomy - this variable refers to the extent to which the teacher is independent and autonomous in taking his own decisions i.e., self governing power.

V. 'Socio-Economic Status': In this category only one variable i.e., socio-economic status is included. The environment in which the person has lived for most of his

life and the social status that she enjoys might have some relationship with the adoption behaviour of the teacher and thus with the diffusion process within the institutions.

VI. 'Organisational Climate': The category includes all the six school climates that were identified by Halpin and Croft (1963). Halpin and Croft are of opinion that what 'Personality' is to the individual, 'Organizational climate' is to the organization. Thus the organizational climate may be defined as patterns of social interaction that characterize an organization. The main units of interaction in this concept of climates are individuals, the group as a group, and the leader. The environment that prevails in the organization is likely to influence the adoption of an innovation and its internalization by an individual and that is why it has been included in the present study as an independent variable.

#### HYPOTHESES

As the major aim of the study is to find out the variables that are related to teachers' adoption of innovations, it attempts to answer following questions :

- (i) Are the demographic variables of teachers related in any way to the 'time of awareness', 'time of adoption', 'internalization' of innovations, and 'process of self-perceived change orientation'?

- (ii) Do the institutional variables such as role perception of superiors, perception of peers and perception of students by the teachers have any relationship with the 'awareness', 'adoption', 'internalization' of innovations and 'process of self-perceived change orientation'?
- (iii) What part does the communication behaviour of the teacher play in determining the 'time of awareness', 'time of adoption', 'internalization' of an innovation and the 'process of self-perceived change orientation'?
- (iv) Do such factors as teachers' cosmopolite orientation, professional orientation, conservative and radical attitudes, attitude toward teaching profession and felt need for autonomy are related to the 'awareness', 'adoption' and 'internalization' of innovation and the 'process of self-perceived change orientation'?
- (v) Does the socio-economic status of the teacher influence his adoption behaviour?
- (vi) Does the organizational climate influence teachers' adoption behaviour? Which type of climate is more conducive for the diffusion of innovation within the school system?
- (vii) To what extent these variables predict adoption behaviour of teachers?

To answer all these questions a number of hypotheses were formulated with respect to each variable.

Variable 1 : Age of the teacher

Many studies have tried to find out the relationship between

the age of the individual and his adoption behaviour, but all of them have not come out with one generalisation. A number of studies have reported that younger the person more adoptive he is while another group of studies report positive relationship with increasing age and adoption behaviour. As there is no unanimous support for one finding a null hypothesis is formulated for the present study :

- ' The age of the teacher is not related to the 'time of awareness', the 'time of adoption', 'internalization' of an innovation and the 'process of self-perceived change orientation', the four dimensions selected for measuring the diffusion process within the school system.'

#### Variable 2 : Sex

There is dearth of research evidence to show that male or female members are likely to be early adopters of innovations. With regard to this variable a null hypothesis is formulated.

- ' Sex of the teacher is not related to any of the four dimensions constituting the diffusion process within the institution viz. the 'time of awareness', the 'time of adoption', 'internalization' of an innovation, and the 'process of self-perceived change orientation.'

#### Variable 3 : Educational qualifications

Education helps a person to develop understanding and depth in the field. More the person is academically qualified, more scientific will be his outlook. More qualified persons



will analyse the situation logically and react to it. Education makes the person more professional minded and increases professional competence. The hypothesis to be examined in the study is :

- ' Educational qualification of a teacher has significant positive relationship with the 'time of awareness' of an innovation, 'time of its adoption', its 'internalization' and the 'process of self-perceived change orientation'.'

Variable 4 : Recency of training ( Professional training of the teacher )

If a teacher has received his training recently it is possible that he knows more about innovations, new ideas and practices than a teacher who got training some years back. It is possible that a recently trained teacher may become aware of a new idea comparatively early and may adopt the same early. Experience, however, shows that freshly trained teachers are more keen to feel secure in the classroom setting and, therefore, they do not venture any experimentation. Under the circumstances a null hypothesis is formulated for this variable.

- ' Recency of training of the individual is not related significantly to any of the four dimensions selected to measure the diffusion process within the school system.'

Variable 5 : Experience ( as a teacher )

Experience brings the person in touch with academic problems and he develops confidence to deal with such problems in his profession. With experience the person also gets greater confidence in trying out innovations for creating better teaching learning situations. As the person is in touch with the field for long there is the possibility of his knowing the pros and cons of the problem. It is, however, to be noted that age and experience are positively correlated. More the age of a person, more will be his experience. The findings of age are contradictory and we are testing null hypothesis. On this ground a null hypothesis is formulated for this variable also.

- ' Teacher's experience in his profession has no relationship with any of the four dimensions selected in the present study to measure the diffusion process within the school system. '

Variable 6 : Urban and rural background

It is natural that a person staying in an urban area is exposed to much more wider environment than a person in a rural region. He comes in contact with all modern developments and is more prone to change. Hence the hypothesis that is formulated for examination is :

- ' Urban background of a teacher is positively related to all the four dimensions of the diffusion process within the school.'

Variable 7 : Role satisfaction

It is highly probable that more the individual is satisfied with his job higher is the accomplishment on the job. It is expected that if the accomplishment is high, there is motivation for the individual to try out new practices. The hypothesis being examined here is :

- ' Role satisfaction of the teacher has a significant positive relationship with all the four dimensions of the diffusion process that are selected in the present study.'

Variable 8 : Feeling of security

Feeling of security gives strength to the individual. The teacher who feels that his job is secure, will not hesitate to take risks of trying out new practices. The hypothesis to be tested is :

- ' Feeling of security is positively related to all the four dimensions of the diffusion process within the institution.'

Variable 9 : Perceived psychological distance between  
self and the principal

The teacher who perceives closer to the principal is more free with the principal and does not feel insecure to

start anything new. The thought of closeness and mutual understanding with the principal brings courage and confidence in the teacher to try out new practices; reverse will be the case where the teacher does not perceive closeness with the principal. Hence the hypothesis in the present study is :

' Perceived psychological distance between self and the principal is negatively related to all the four dimensions of the diffusion process within the school system. '

Variable 10 : Perceived psychological distance between other teachers and the principal

Less is the perceived psychological distance between the principal and other teachers, more the teacher thinks the principal to be a friendly person and naturally he feels free and confident in adopting new ideas for improvement of the school. The hypothesis formulated is :

' Perceived psychological distance between other teachers and the principal has a significant negative relationship with all the four dimensions of diffusion process, 'the time of awareness', 'the time of adoption', 'internalization' and the 'process of self-perceived change orientation'. '

Variable 11 : Perceived source credibility of the principal

The teachers who perceive their principal as an important source of information have more faith in what the principal says and does. They are likely to take advice from him and work for change readily. The hypothesis to be examined in the study is :

' Teacher's perceived source credibility of the principal is positively related to all the four dimensions of diffusion process selected in the present study. '

Variable 12 : Perceived change orientation of the principal

When the teacher feels that the principal is change oriented he is stimulated to work for change. The teacher gets the confidence that the principal will certainly encourage him for adopting new practices. The hypothesis formulated is :

' Teacher's perception of change orientation of the principal has a significant positive relationship with all the four dependent variables taken in the present investigation. '

Variable 13 : Perceived frequency of vertical communication

If the teacher perceives the principal as a friend and not as a superior with whom he can communicate frequently and

freely and both are bound together with a common goal of improving the school the teacher will work more intensely for change. The hypothesis is :

- ' Teacher's perceived frequency of vertical communication has significant positive relationship with all the four dimensions of the diffusion process included in the study.'

Variable 14 : Perceived principal's support of the innovation

The teacher is encouraged to adopt the innovation if he feels that the principal has a liking for the innovation. The teacher does not have any feeling of insecurity as the principal supports the innovation. The hypothesis for the study is :

- ' Perception of the principal's support for the innovation by the teacher is positively related to the four dimensions of the diffusion process within the school, viz. the 'time of awareness', the 'time of adoption', 'internalization' of an innovation and the 'process of self-perceived change orientation'.'

Variable 15 : Self-designated opinion leadership

When the teacher thinks himself to be the leader in the school it shows that he has great confidence in anything that he does. As he thinks himself to be the leader he must be quite ahead of what others think and do. There is every change that

he will try with new things. The hypothesis to be examined in the study is :

- ' Self-designated opinion leadership of the teachers has a significant positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' and the 'process of self-perceived change orientation.'

Variable 16 : Peer-ascribed opinion leadership

When the colleagues of a teacher perceive him as a leader he must be leading the school in all respects. The hypothesis formulated is :

- ' Peer-ascribed opinion leadership of teachers has significant positive relationship with all the four dimensions of the diffusion process within the school.'

Variable 17 : Perceived, cohesiveness of the school faculty

All the teachers will work together for the betterment of their school if there is more cohesiveness among the staff members. When the teacher perceives the cohesiveness among staff members he is sure that he will be supported for his work whenever there is need for it. With more cohesiveness among the staff there is more support for innovations. The hypothesis being examined in the study is :

- ' Perceived cohesiveness of the school faculty has a significant positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' and the 'process of self-perceived change orientation of the teachers.'

Variable 18 : Perceived frequency of general horizontal,  
Communication

It is quite natural that more the interaction between staff members more they will come to know about innovations and more the ability of exchange of ideas, more is the possibility of adoption of innovations. The hypothesis to be tested here is,

- ' Perceived frequency of general horizontal communication has a positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' and 'process of self-perceived change orientation of the teacher.'

Variable 19 : Horizontal Communication about the innovation

The interaction among staff members regarding the innovation will help the process of communication of the innovation amongst all teachers in the school. The hypothesis is,

- ' Horizontal communication about the innovation is positively related to the 'time of awareness', the 'time of adoption', 'internalization' and 'the process of change orientation.'

Variable 20 : The teacher's perception of students' benefit  
from the innovation

Students' learning is the main goal of the teacher and if the teacher achieves this goal he can be expected to be



satisfied in his profession. Therefore, if the teacher feels that 'students' will be benefitted from the innovation, he will be for adopting that innovation, and if the teacher perceives that the students will not be benefitted from innovation, he will resist change and will try to maintain the existing pattern. So the hypothesis is,

- ' Perception of the students' benefit from the innovation has a significant positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' and the 'process of self-perceived change orientation'.'

Variable 21 : Teacher's perception of student's attitude towards the innovation

Favourable or unfavourable attitude of students towards the innovation will undoubtedly influence its adoption by the teacher, and its internalization, but this variable will not have much relation with the 'time of awareness' and the 'process of self-perceived change orientation.' So the hypothesis in this study is,

- ' Teachers' perception of students' attitude towards the innovation will have a significant positive relationship with the 'time of adoption' and 'internalization' process, but will not have any relationship with the 'time of awareness' and the 'process of self-perceived change orientation'.'

Variable 22 : General mass-media exposure

Development of technology and its influence on human life cannot be denied. More the person is exposed to mass-media communication technology more he will be change oriented. On the other hand the individual who is not in contact with all the communication technology will like to stick to his old ideas and pattern. The more isolated people in terms of communicative exposure or contact with the outside world, the more resistant to change they are likely to be. Individual's attitude towards innovations is much influenced by the mass-media communication techniques. The person, who is exposed to newspapers, magazine, radio, gets knowledge about the changing world at large and becomes more flexible. He remains in contact with more information sources outside his own social system. Whatever the field may be when a person is in close contact with the discoveries of the researches that are going on, he gets enough material to think about and apply the same in his own field. The hypothesis is,

- ' Teacher's general mass-media exposure has a significant positive relationship with all the four dimensions of the diffusion process within the school system.'

Variable 23 : Professional communication behaviour

Professional communication behaviour i.e., reading books, magazines, news related to his own profession brings the persons in closer contact with development in his own field. His knowledge about his field remains recent, his depth and understanding in his field increases. It is likely that professional communication behaviour of a person will make him more innovative. The hypothesis to be examined in the study is,

- ' Professional communication behaviour has a significant positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' of an innovation by the individual and the 'process of self-perceived change orientation.' '

Variable 24 : Cosmopolitaness (Exposure to wider environment)

New ideas mostly come from outside in a social system. More the individual is oriented to the outer systems, more he will be in contact with new ideas and will be more innovative. Cosmopolitaness refers to the degree of individual's external orientation to a particular social system. Localities remain in the boundaries of their own social system, come to know about innovations late and hence mostly they are laggards. Cosmopolites on the other

hand are not confined to the boundaries of their own system. They like travelling, reading, meeting people of their own as well as upper cadre. They are more flexible in their values. Cosmopolites are likely to be innovators as the innovations usually emanates from sources external to the system. The hypothesis is,

- ' The cosmopolite nature of the individual is positively related to the individual's 'time of awareness', 'time of adoption', 'internalization' of the innovation and the 'self-perceived change orientation.' '

#### Variable 25 : Professional, orientation

The professional orientation of the person here refers to his membership in professional organizations. Membership in many professional organizations will bring the person in contact with people of different areas of interests and of different fields. The individual gets the opportunity to discuss different problems with different groups which may influence his innovative behaviour. The hypothesis examined in the study is :

- ' Professional orientation of the individual has a significant positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' of an innovation and the 'process of self-perceived change orientation. '

Variable 26 : Attitude towards teaching profession

Positive or a negative attitude of the person towards his profession is going to influence his innovative behaviour. The person having positive attitude towards his profession will try to find out new ways and means to make his job more effective for others and interesting for himself. If he is genuinely interested in his job, he cannot but take pain to bring about improvement and to make it more effective. Therefore, he will invite and try out new ideas and practices. The individual having a negative attitude towards his profession cannot be expected to give time and energy in trying out anything new. The hypothesis is,

- ' Positive attitude of a teacher towards his profession will have a significant positive bearing on the 'time of awareness', the 'time of adoption', 'internalization', and the 'process of self-perceived change orientation'.'

Variable 27 : Conservatism Vs. radicalism

It is quite natural that a person with a radical bent of mind will accept new ideas and practices more readily compared to one who is conservative. A conservative individual always resists any change in whatever field he may be. He likes to maintain old traditions and resists any deviation from it. The hypothesis to be examined is,

- ' Radical attitude of the teacher has<sup>a</sup> significant positive relationship with the 'time of awareness', the 'time of adoption', 'internalization' and the 'process of self-perceived change orientation. '

#### Variable 28 : Need for autonomy

Experimentation and adoption of new ideas require free independent decision. The teachers who feel that they have enough freedom in taking decisions as far as their school duties are concerned are likely to be more innovative. The hypothesis that is formulated is :

- ' The felt need for autonomy has a significant positive relationship with the 'time of awareness' of innovations, the 'time of adoption' of the innovation, 'internalization' of the innovation and the 'process of self-perceived change orientation. '

#### Variable 29 : Socio-economic status

As the teachers coming from upper classes are quite secure about their economic position and have wider contact, they will not mind taking risk in experimentation. At the same time it is also there that people from the upper class are satisfied with their conditions and may not take the trouble of initiating any new idea or practice. Those who are from middle stratum of the society are quite eager to raise their position and it is likely to make them more innovative. The hypothesis for the study that

is formulated is the null hypothesis,

' Socio-economic status of the teacher does not have any significant relationship with any of the four dimensions of the diffusion process that are included in the present study.'

Variable 30 : Organizational climate

Open climate schools are characterised by high esprit, thrust and consideration. They leave much scope for the teachers to be innovative. The teacher morale in such schools is high. The members of the institution are highly satisfied as far as the social needs are concerned. As the 'thrust' is high the leader does not impose himself on the teachers. The principal himself works hard and sets an example to the teachers. Schools of this type, are not marked by closed supervision of the teachers. 'Consideration' in such organisations is also high. The principal takes personal interest in the professional as well as personal problems and even he goes out of the way to help them. Naturally, in such schools teachers are motivated to work hard on their own and hence there is every possibility of their being more innovative

In the autonomous climate the leadership acts emerge primarily from the group. The leader does not enforce his control on the group members. The members derive both social

need satisfaction as well as satisfaction from task achievement. It is likely that the teachers of such organizations will be innovative.

Controlled climate is mainly characterised by highly task oriented behaviour but the social needs are neglected. Esprit is fairly high in such schools. The group behaviour is task oriented. The members might tryout and experiment with new ideas and practices.

In the familiar climate schools, just the opposite is the case. The members derive social need satisfaction in such institutions but little attention is given to the task accomplishment.

As we move towards paternal and closed climate organization the esprit and thrust decreases and aloofness and production emphasis increases. These types of schools are characterised by closed supervision. The principal is highly impersonal and abide by too much of rules and regulations. Teachers are only supposed to carry out the orders of the principals. In such institutions the teachers have little freedom and least encouragement to initiate any change in the school programme. The hypothesis for this variable is,

' Organisational climate of the school is significantly related <sup>all the</sup> to four dimensions of <sup>the</sup> diffusion process within the school system, viz., the 'time of awareness', 'the 'time of adoption', 'internalization' and the 'process of self-perceived change orientation.'



The following table gives the predicted direction of the relationship of all the independent variables with the four dimensions of the diffusion process within the school system.

Table 3.01. Categorization of variables and the predicted direction of relationship of all the independent variables with the four dependent variables.

Independent Variables	Predicted Direction of Correlation with Dependent Variables			
	Time of awareness	Time of adoption	Internalization	Process of self-perceived change orientation
1	2	3	4	5
<b>I. DEMOGRAPHIC</b>				
1. Age	0	0	0	0
2. Sex	0	0	0	0
3. Educational qualification	+	+	+	+
4. Recency of Training	0	0	0	0
5. Experience	0	0	0	0
6. Urban Background	+	+	+	+
<b>II. INSTITUTIONAL</b>				
<b>A. Role Perception</b>				
1. Role satisfaction	+	+	+	+
2. Feeling of security	+	+	+	+

(continued)

	1	2	3	4	5
<b>B. Perception of Superior</b>					
1. Perceived psychological distance between self and the principal	-	-	-	-	-
2. Perceived psychological distance between other teachers and the principal	-	-	-	-	-
3. Perceived source credibility of the principal	+	+	+	+	+
4. Perceived change orientation of the principal	+	+	+	+	+
5. Vertical communication	+	+	+	+	+
6. Perceived principal's support of the innovation	+	+	+	+	+
<b>C. Perception of Peers</b>					
1. Self-designated opinion leadership	+	+	+	+	+
2. Peer ascribed opinion leadership	+	+	+	+	+
3. Perceived cohesiveness of the school faculty	+	+	+	+	+
4. Perceived frequency of general horizontal communication	+	+	+	+	+
5. Perceived frequency of horizontal communication about the innovation	+	+	+	+	+
<b>D. Perception of students</b>					
1. The teacher's perception of students' benefit from the innovation	+	+	+	+	+

(continued)

1	2	3	4	5	5
2. The teachers' perception of students' attitude towards the innovation					
	0	+	+	0	
III. THE COMMUNICATION BEHAVIOUR					
A. General mass-media exposure such as newspaper, magazines, book reading, radio					
	+	+	+	+	
B. Professional communication behaviour					
	+	+	+	+	
IV. PSYCHOLOGICAL AND PERSONALITY VARIABLES					
1. Cosmopoliteness : Exposure to wider environment					
	+	+	+	+	
2. Professional orientation					
	+	+	+	+	
3. Attitude towards profession (favourable)					
	+	+	+	+	
4. Conservatism Vs radicalism (more radical)					
	+	+	+	+	
5. Need for autonomy					
	+	+	+	+	
V. SOCIO-ECONOMIC STATUS (Upper Strata)					
	0	0	0	0	
VI. ORGANIZATIONAL CLIMATE					