

CHAPTER II :

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2.4 THE RATIONALE

Higher education in India has witnessed unprecedented expansion during the post-Independence era. As against 21 universities at the end of the British rule, we have now over 120 universities, including deemed universities. In 1971-72 the number of colleges was 4500 (Approx.) as against 496 in 1946-47.

The number of students in higher education is now about 3.5 million and is rising at the rate of 13 per cent per year and it may cross 10 million mark before 1985. The number has increased by about 5 times in the twenty-six years after Independence.

Unfortunately the spate in quantity in higher education was not matched by improvement in quality. The mode of evaluation, the type of curriculum, and the pattern of instruction and all remained static without moving with the times. Nearly half of all the students who entered the universities, including the pre-university classes failed to complete their first degree course during the stipulated period. On the whole there was high rate of failure at all the public examinations. Thus there ensued colossal wastage

in higher education in terms of human resources, time, energy, and money, which India could ill-afford.

In order to remedy the situation the University Grants Commission (UGC) has from the fourth plan period onwards been supporting many programmes of qualitative improvement including innovative reforms in universities and colleges. In the course of the last three years or so if there was any programme which received greater attention and support from the U.G.C. leadership, it was the operative programme of examination reform. The U.G.C. termed it an "action programme" of examination reform. This programme is comprehensive and has almost become multidimensional. One of its most prominent dimensions is the introduction of SEMESTER SYSTEM in the institutions of higher learning in the country and to gear other programmes to it. The U.G.C. has selected twelve universities to try out this action programme, of which Madras University is one. Under the circumstances a research of this kind is expected to help in building up a coherent conceptual plan for the introduction of Semester System with clearer understanding of the positive sides as well as the problems likely to arise.

Second, the semester system has long been the pattern of curricular organization and evaluation in American Universities. A number of British Universities has also adopted some, if not all, of the features of the American Semester System. The Open University which represents one of Britain's most interesting innovation in higher education for many years, works on the credit accumulation system which is an inherent aspect of Semester System. Many emerging nations like Philippines are fast switching over to the Semester System of academic calendar. The popularity of Semester System elsewhere is no justification for implanting it in India without proper study. We may have to make changes in the American pattern of Semester System or rather mould our own system to suit our requirements, conditions, objectives and resources.

Third, the Semester System is visualized as ideally suited to bring about curricular as well as examination reform. But a change of calendar from its traditional yearly examination system to a biyearly examination system or Semester System involves a number of administrative, psychological, and socio-logical problems on the solution of which depends the success of the introduction of Semester System.

An important problem on the curricular side when a change over is made is the development of inter-disciplinary courses in order to provide for a wide range of choices which is a prerequisite for the adoption of Semester System. The ambitiously structured courses of the present system need to be split up into sharply focused smaller units of major and cognate courses. Moreover, the courses are to be organized in terms of credit hours depending upon the hours put in by students per week for study. This facilitates the covering of more courses in shorter period and also in the development of inter-disciplinary courses to cater to the varying needs and interest of the students. More and varied courses would mean more staff and classroom facilities, and the framing of a flexible time-table cutting across the boundaries of a number of courses in different disciplines.

On the examination side also, the gains of the adoption of the Semester System are remarkable but not free from their attendant problems. In the traditional system the student has to wait for one year before an examination is held and his scholastic achievement assessed. A single examination held at the end of the year for a few hours obviously would not give a true picture of the progress and

and development of the student for the whole year. Such a system also cast a heavy burden on the student's memory at the annual examination as students tend to accumulate their work till the last moment. The Semester System on the other hand, reduces the yearly quantitative and not qualitative load on the student who is evaluated internally on an year-round basis. In fact, Semester System and the system of internal assessment are concomitant factors. Internal assessment entails many problems relating to maintenance of objectivity, devising tools and techniques, maintenance of records, providing guidance and counselling etc. It is hoped that the present research would help to get a better perspective of these problems.

Finally, the decision regarding the introduction of Semester System evidently has come from the top echelon of universities and not from the teaching fraternity. Teachers and students constitute two vital components of university community without whose willing cooperation no reform is likely to succeed. Though Semester System is now being followed in about 20 universities in India in some form or other, no analytical study has so far been made to find what the student and teaching community feels about the introduc-

tion of Semester System. The present research constitutes, perhaps, the first attempt to study in depth what one segment of the University Community namely teachers think about the adoption of the Semester System on two important counts - its desirability and feasibility. A study of this kind is expected to throw light on some of the human and institutional factors that might affect the adoption or rejection of Semester System, for that matter any educational innovation.

2.2 THE PROBLEM AND ITS SCOPE

Statement of the Problem :

The problem of the present study is to examine critically the perceptions of the college teaching communities of Madras as to the desirability and feasibility of adopting Semester System in their colleges or Institutions of higher education in Madras. The study is, therefore, worded as -

"A CRITICAL STUDY OF THE PERCEPTIONS OF THE COLLEGE COMMUNITIES ABOUT THE DESIRABILITY AND FEASIBILITY OF INTRODUCING SEMESTER SYSTEM IN THEIR COLLEGES IN MADRAS."

Scope and Limitations :

The study reckons with the following limitations :

(1) The introduction of Semester System and the manner of its functioning in the colleges is influenced by the perceptions of the entire college communities which could be defined as comprising the top educational administrators in the Directorate of Collegiate education, the university and the colleges, and the teaching staff, the students, and the administrative staff. Though a comprehensive study of the perceptions of the entire gamut of the college communities would have been more profitable, owing to constraints on time and resources, the present investigation is limited to the study of the perceptions of the teaching communities only.

(2) A major component of the college teaching communities of Madras visualized in this study is the teachers of the affiliated colleges and the teaching departments of the University of Madras. It may be noted in this connection that the jurisdiction of the University extends over the territory of Tamil Nadu and the Union Territory of Pondicherry, excluding the area of the jurisdiction of Annamalai and Madurai Universities. It has under it 142 colleges and 17 institutions of Oriental Learning besides its teaching

departments numbering 30. (Commonwealth University yearbook 1975: pp.1527-1533). This study has limited itself to sampling teaching communities in the affiliated colleges and the Madras University teaching departments in the metropolis of Madras.

(3) The other components of the teaching communities of Madras considered in this research are the teachers of autonomous institutions such as Indian Institute of Technology, the Technical Teachers' Institute, and the Madras Veterinary College which is now affiliated to the Agricultural University of Tamilnadu. These institutions have been grouped together as autonomous institutions in this study in view of their being outside the control of the University of Madras and for having their own controlling authorities; otherwise they differ from each other in their size and complexity.

(4) As a full fledged academic calendar, the Semester System has many facets and dimensions connected with the educational, administrative, and social aspects of an educational institution. The present study, however, limits itself to the consideration of the perceptions of the college teaching communities about certain educational aspects namely (a) concept, (b) philosophy, (c) curriculum, (d) teaching,

(e) class strength, (f) evaluation, (g) learning, (h) organization, and (i) plant and equipment, and (j) some related problems.

(5) The correlational studies in this investigation is confined to the biographical factors, (a) age, (b) sex, (c) teaching experience, (d) academic qualification and (e) professional status, of the respondents, and to the institutional factors, (a) Institutional climate, (b) Leadership behaviour of the Principal, (c) Teacher morale, and (d) dogmatism of the teaching staff.

(6) In studying the perceptions of teachers faculty-wise, this investigation has limited itself to a few faculties broadly classified as (a) Arts (b) Science, (c) Education, (d) Medicine, (e) Engineering, (f) Technology, (g) Commerce, (h) Law, and (i) Veterinary.

(7) In a questionnaire research of this sort there is the possibility of the respondents being not frank and honest about their responses. The investigator had, however, tried his best to obviate this possibility by establishing sufficient rapport with the respondents and by taking a reasonably large sample for the study.

2.3. DEFINITION OF TERMS

It may be appropriate here to define certain terms used in the statement of the problem and its scope for purposes of clarity.

The term CRITICAL STUDY denotes a critical analysis and interpretation of the data collected in the study using modern statistical procedures keeping the objectives of the study in view.

The term PERCEPTIONS is used in its simple meaning namely visualization or ideas. It is envisaged to examine the teaching communities' perceptions about the desirability and feasibility of introducing Semester System by placing their responses on a continuum viz., "very much", "much", "some-what" and "not at all" on a four point scale.

The term COLLEGE COMMUNITIES here mean the respective Heads and teaching staff of the teaching departments, the constituent and affiliated colleges of the University of Madras and professional and technical institutions of higher education of all types. The term COLLEGE is used comprehensively to denote all institutions of higher education - university departments, colleges, and Technical Institutes.

The term SEMESTER SYSTEM denotes the type of academic calendar in which an academic year is divided into two or more divisions, each division being self-contained for its course content and examination. TRIMESTER and QUARTERMASTER are only variations of Semester System in which the academic year is divided respectively into three and four self-contained units. A semester is significant for its internal assessment, and credit hour-system of academic work and inter-disciplinary approach to curriculum.

The term INSTITUTIONAL CLIMATE is used here to signify the general tone of the college which, in fact, reflects the pattern of social interaction that takes place within the college community. In essence it could be defined as the resultant 'personality' of the colleges as it gets built up through the interaction of the teachers' behaviour, the leader's (principals') behaviour, and the administration. The connotation is the same as used by Halpin and Croft (1963). Halpin says, "personality is to an individual what organizational climate is to the organization".

LEADERSHIP BEHAVIOUR is a concept which call attention to a key concern of the college executive (Principal): the concern that he be perceived as instrumental in effecting

movement in his organization and thus demonstrate leadership in the initiation of a new structure or procedure for accomplishing an organization's goals and objectives or for changing an organization's goals and objectives.

TEACHER MORALE refers to the professional interest and enthusiasm that a person displays towards the achievement of individual and group goals in a given job situation. This definition recognizes the satisfaction of both individual and group needs and their effective harmonization as a basis for morale. The term implies that (a) morale is not a single global dimension but consists of a number of components (b) it is an individual attribute, although the institution does play a significant role therein (c) it is a function of the specific job situation and not a generalized trait in the individual, and (d) it can be interpreted in terms of human needs and the environmental sources of specification of these needs.

DOGMATISM refers to a closed way of thinking in a belief-disbelief system. It is an intolerance toward those with opposing beliefs and a sufferance of those with similar beliefs.

The belief system is conceived to represent all the

beliefs, sets, expectancies, or hypotheses, conscious and unconscious, that a person at a given time accepts as true of the world he lives in. The disbelief system is composed of the disbeliefs, sets, expectancies, conscious and unconscious, that to one degree or other, a person at a given time rejects as false.

DOGMATISM SCALE is a questionnaire designed to measure individual differences in the extent to which belief systems are open or closed (Rokeach, M., 1960).

2.4 OBJECTIVES OF THE STUDY

The overall purpose of the study is to examine critically the perceptions of the college teaching communities in Madras about the desirability and feasibility of introducing Semester System in their colleges and to ascertain whether or not their perceptions in this regard are influenced by their biographical and institutional background especially in regard to "Institutional Climate", Leadership Behaviour", "Teacher Morale" and "Dogmatism". With this broad perspective in view the following objectives have been set for the study.

Specific Objectives

- (1) To find out what facets of the different components

of the Semester System as visualized in the study are perceived by the college teachers in Madras as

- (a) desirable and feasible
- (b) desirable but not feasible
- and (c) neither desirable nor feasible.

(2) To determine the extent to which biographical variables such as (a) sex (b) age, (c) teaching experience and (d) academic qualification influence the teachers' perception about the desirability and feasibility of introducing Semester System.

(3) To ascertain differences, if any, in the perceptions of college teachers and college administrators about the desirability and feasibility of introducing Semester System.

(4) To ascertain differences, if any, in the perceptions of teachers in the University departments, autonomous institutions, and affiliated colleges in Madras as to the desirability, and feasibility of adopting Semester System.

(5) To find out differences, if any, in the perceptions of teachers about the desirability and feasibility of Semester System in the faculties of (a) Arts, (b) Science, (c) Commerce, (d) Medicine, (e) Education, (f) Engineering (g) Technology, (h) Veterinary, and (i) Law.

(6) To determine the extent to which the teachers in different types of institutions viz., University departments, affiliated colleges, and autonomous institutions differ in their perceptions about the desirability and feasibility of introducing Semester System.

(7) To find out the extent to which the teachers perceive the problems of introducing Semester System in comparison with their perceptions about the desirability and feasibility of the same.

(8) To determine the extent to which the following institutional factors and of their dimensions visualized in this study influence the perception of the teachers about the Semester System.

- (a) The Institutional Climate.
- (b) The Leadership Behaviour.
- (c) The Teacher Morale, and
- (d) The Dogmatism of teachers.

With these objectives in view the following hypotheses have been framed for the study.

2.5 THE HYPOTHESES

The following hypotheses have been formulated for the study :

1. The college teaching communities in Madras tend to perceive the adoption of Semester System in its components studied more desirable than feasible.
2. The college teachers are not likely to perceive the components of the Semester System visualised in the study as equally desirable and feasible.
3. The desirability and feasibility of the adoption of the Semester System in its various components would be perceived more favourably by the teachers of Autonomous Institution than the teachers of Madras University departments and the latter would perceive the Semester system more favourably than the teachers of Affiliated colleges.
4. The perceptions of the teaching communities of the Affiliated colleges, University Departments, and Autonomous Institutions about the desirability and feasibility of Semester System would show lack of agreement in most of its components.
5. The members of professional faculties would perceive the adoption of Semester System more favourably than

those of non-professional faculties.

6. The educational administrators of the University of Madras, the Directorate of Education and the Autonomous Institutions would perceive the adoption of Semester System more favourably than the Heads of colleges and of the Departments and the teaching staff.
7. The college teaching communities in Madras show no true and significant difference in their perception of the desirability and feasibility of the Semester System on the basis of ^{the}biographical factors, (a) age, (b) sex, (c) academic qualification and (d) teaching experience.
8. The perceptions of the college teaching communities about the various components of Semester System are interrelated within the respective dimensions 'desirable' and 'feasible'.
9. The perceptions of the college teaching communities about the adoption of Semester System would show positive correlation between identical components of the 'desirable' and 'feasible' dimensions of the same.
10. The perceptions of the college teaching communities about the desirability and feasibility of adopting Semester System would show inverse relationship with their perceptions of the problems of adopting semester System.

11. The type of institutional climate prevailing in colleges would have significant relationship to the way in which the respective teaching communities perceive the desirability and feasibility of adopting Semester System, and the problems associated with it.
12. There would be significant linear relationship between the dimensions of institutional climate and the various components of the Semester System as perceived by the teaching community.
13. The extent of teacher morale prevailing in colleges would be significantly related to the way in which the respective teaching communities perceive the desirability and feasibility of adopting Semester System, and the problems associated with it.
14. There would be significant linear relationship between the dimensions of Teacher Morale and the various components of the Semester System as perceived by the college teaching communities.

15. The pattern of leadership behaviour perceived by the teaching communities in their principals would have significant relationship to their perceptions of the desirability and feasibility of adopting Semester System, and the problems associated with it.
16. There would be significant linear relationship between the dimensions of leadership behaviour and the components of the Semester System as perceived by the college teaching communities.
17. The extent of dogmatism prevailing in a college teaching community would have significant relationship to its perceptions of the desirability and feasibility of adopting Semester System, and the problems associated with it.
18. There would be significant linear relationship between the dogmatism of a college teaching community and the components of the Semester System as perceived by the Community.

2.6 THE SAMPLE

The college teaching communities which formed the subjects of this investigation were broadly classified into three categories as follows :

- (1) Heads and teachers of the teaching departments of the University of Madras.
- (2) Heads and teachers of the affiliated colleges of the University of Madras, and
- (3) Heads and teachers of autonomous institutions which are technical institutions of higher learning (not under the governance of the University of Madras).

These categories formed the different strata from which samples were drawn at random taking care to provide representativeness and adequacy in sampling to the sub-groups of teaching communities taken up for study.

It could be seen from the Table 2.1, given on ^{the} next page, that questionnaires were distributed to 25 per cent of teachers of each of the said categories of institutions and there was on the whole 55 per cent of return of questionnaires and the overall sample size thus obtained for the study was 500 college teachers, which is 14 per cent of the teachers

Table 2.1 : An Overall break-up of the sample

Sl. Categories of No. Institutions	Teachers			
	Total Number	Number receiving question- naires	Number returning question- naires	Number sampled in %
1. Teaching departments of the Univ.of Madras	264	66 (25%)	45 (68%)	17
2. Affiliated college of the University of Madras	2970	743 (25%)	380 (51%)	13
3. Autonomous insti- tutions	398	100 (25%)	75 (75%)	19
Total	3632	909 (25%)	500 (55%)	14

of the different college teaching communities in Madras. A break-up of the figure category-wise would show that the sample consisted of 45 teachers from the university departments, 380 teachers from the affiliated colleges of the university and 75 teachers from the autonomous institutions, which is 17 per cent, 13 per cent, and 19 per cent of the respective categories of teachers. A list of the educational institutions which provided the sample for the study is given in Appendix 2.1 and the same according to the type of institution is given in the following table.

Table 2.2 : Types of institutions sampled.

Types of Institutions	Institutions		
	Total Number	Number sampled	Number sampled in %
1. Madras University teaching department*	1 (29)	1 (22)	100.00
2. Medical Colleges(Professional)	3	2	66.7
3. Engineering College (")	1	1	100.00
4. Veterinary College (")	1	1	100.00
5. Law College** (")	1	1	100.00
6. Teachers' college (")	7	7	100.00
7. Technical Institutes(")	4	3	75.00
8. Arts & Science Colleges (Academic)	22	12	65.50
Total	40	28	70.00

* All the teaching departments are taken as one unit. The figures within brackets are the number of departments

** The day college and the evening college are taken as one unit.

It may be seen that out of the 40 institutions of higher learning in Madras, 28 institutions (or 70 per cent of them) have been brought under the purview of the study and of these 15 are professional institutions or colleges and 12, Arts and Science colleges, and 1, university departments all taken together.

The distribution of the 500 teachers taken from the aforesaid 28 institutions under the various biographical variables envisaged in this study is given in Table 2.3.

Table 2.3 : The sample size under the biographical variables

Sl. No.	Variable	Teachers sampled	
		Number	Proportion in %
1.	<u>SEX</u>		
	Male	148	29.60
	Female	352	70.40
	Total	500	100.00
	<u>AGE</u>		
	21-30 years	110	22.00
	31-40 years	229	45.80
	41-50 years	133	26.60
	51-60 years	28	5.60
	Total	500	100.00
3.	<u>ACADEMIC QUALIFICATION</u>		
	Bachelor's Degree only (Academic)	nil	-
	Master's Degree only (Academic)	227	45.40
	Professional Degree (B.T., M.Ed., B.E., M.B.B.S. etc.)	215	43.00
	Ph.D. Degree	58	11.60
	Total	500	100.00

... cont...

Table 2.3 (contd.)

Sl. No.	Variable	Teachers Sampled	
		Number	Proportion in %
4.	<u>TEACHING EXPERIENCE</u>		
	Upto 5 years	94	18.80
	6 - 10 years	146	29.20
	11-15 years	116	23.20
	16-20 years	89	17.80
	20 years and above	55	11.00
	Total	500	100.00
5.	<u>PROFESSIONAL STATUS</u>		
	Educational Administrators*	10	24.96
	Principals	8	11.57
	Vice-Principals	12	2.35
	Heads of Departments	79	15.49
	Professors	65	12.75
	Lecturers	286	15.88
	Tutors/Demonstrators	50	9.80
	Total	510	99.80
	(*Not included under other variables)		
6.	<u>FACULTIES</u>		
	Arts	122	24.40
	Science	90	18.00
	Commerce	43	8.60
	Education	40	8.00
	Law	15	3.00
	Medicine	65	13.00
	Veterinary	30	6.00
	Engineering	30	6.00
	Technology	65	13.00
	Total	500	100.00

It is to be noted here that the Educational Administrators, 10 in all (taken from the University of Madras, Directorate of Collegiate Education, and autonomous institutions), included under the variable, 'Professional status', is special to this variable and not included under any other variable. Thus the biographical variables that are taken into account in this study are (1) sex, (2) Age, (3) Academic qualification, (4) Teaching experience, (5) Professional status and (6) Faculty membership.

In this investigation a sample size of 30 or more is taken as large (Henry E. Garrett, page 215) and anything less than 30, as small. The distribution of teachers under the different variables would show that the sample is large for all the variables except in the case of the variable 'Professional status' under which the size of the sample for Educational Administrators, Principals, and Vice-Principals is 10, 8, and 12 respectively. Appropriate statistical procedure would, however, be employed in the analysis of the data so that the differences in the sample size do not vitiate the conclusions drawn.

2.7 THE METHOD OF DATA ANALYSIS

The data collected in this investigation would be analysed with reference to the hypotheses formulated and listed earlier. Appropriate verification procedures would be followed to deduce conclusions out of them. The statistical processes employed in this regard are broadly stated here.

VII

1. Hypothesis Nos. I to V postulate possible deviations or no deviations as the case may be, among the college teaching communities grouped under the different variables, in respect of their perceptions of the Semester System. The verification procedure here involves using tests of significance between pairs of mean scores for which the t-test of difference between means would be used.
2. Hypothesis Nos. VIII, IX, X, XII, XIV, XVI and XVIII postulate possible interrelationship in terms of perception scores, first, within the components of the Semester System perception itself, and, second, between these components and the dimensions of the organizational climate, leadership behaviour of the principal, teacher morale and dogmatism as the case may be. For the verification of these hypotheses appropriate correlation matrices would be built computing Pearson Product moment coefficient of correlation.

3. Hypothesis Nos. XI, XIII, XV & XVII postulate possible relationship between the perceptions of the college teaching communities about the adoption of Semester System and the variables such as the organizational climate, leadership behaviour of the principal, teacher morale and dogmatism, all of them having been classified into categories as described in the following chapter. So, in verifying these hypotheses Chi-square test of independence in contingency tables would be used.
4. Factor analysis would be done with the different sets of variables of the study to examine any relations between them and to ascertain their factorial composition.

2.8 CONCLUSION

The preceding paragraphs give a brief description of the research design formulated for the study which has as its main objective a critical study of the perceptions of the college teaching communities in Madras about the desirability and feasibility of introducing Semester System in their colleges. A sample of 500 teachers drawn at random from the teaching communities of the university departments, affiliated colleges, and autonomous institutions would form

the subject of the study. Certain biographical variables like sex, age, academic qualification, teaching experience, and professional status, and certain institutional variables namely organizational climate, leadership behaviour of the principal, teacher morale and the dogmatism of the teaching staff would be studied in relation to the college teachers' perception of the Semester System. A series of 16 hypotheses formulated in this regard would form the basis of analysis and interpretation of data pertaining to the investigation. Finally a cluster and factor analysis of the variables would be done to ascertain their factorial composition.

The next chapter is devoted to a discussion of the research tools used in this investigation.