CHAPTER - III

DEVELOPMENT OF THE RESEARCH INSTRUMENTS

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CHAPTER : III

DEVELOPMENT OF THE RESEARCH INSTRUMENTS

This chapter deals with the development of research instruments. Considering the nature of the investigation, the present investigator decided to develop his own research instruments to collect reliable and valid data. The whole chapter has been divided in two parts. Part-A of this chapter gives the procedure of developing decision-making participation instruments for studying existing and desired participation of the faculty. Decision-making areas have been identified with the help of : (1) Relevant publications; (2) Personal interactions with the experts. Try-out of the instrument has been conducted in one technological university. On the basis of try out, items have been finalized. Content validity has been considered for these instruments.

Part-B of this chapter deals with the development of organizational health questionnaire. Ten dimensions given by Mathew Miles have been accepted for organizational health. Important concept and definition of organizational health have been discussed in the Ist Chapter.

Items of the organizational health questionnaire (O.H.Q.) have been constructed with the help of experts and available instrument. The O.H.Q. has been finalized on the basis of: (1) Content Validity, (2) Inter-correlations among items;

(3) Correlation of each item with the total scores (all items); (4) Significance of difference between upper 27% and lower 27% for each item. For (2), (3), (4) try-out has been conducted in one technological university.

On the basis of try-out appropriate modifications have been done i.e. including response modes, removing unnecessary details of informations and reducing the items at optimum level as per reactions of the respondents. The research instruments thus developed are useful for the present research investigation.

(3A) DEVELOPMENT OF DECISION-MAKING PARTICIPATION INSTRUMENTS :

A decision is a deleberate act that generates commitment on the part of the decision maker towards an envisaged course of action of some specificity and is consistent with some at least of the elements : an action scheme; the components of which are classified under the headings of action; outcome and actional outcome relationship. Every day at all levels of education; decisions are made often in isolated and random fashion, which contribute to education continuing drift toward the future. In planning strategies of education systems; less important is attatched to the decision-making aspect. According to Gore (1977) decision-making is an important management function and it should be considered according to the social values and expanding base of members participation. Sharing in decision-making is participation in democratic management. Free flow of information and ideas accompanied by open and as far as possible oral channel of communication, allowing greater degrees

of freedom tend to make the organization more participative in nature (Tannenbaum and Schmidt, 1958). In participation there may be disagreement, discussion for a final course of action which may be compromise or actual opposition to the decision issues. Participation is a feeling of identification with and commitment to the institution and the academic life it offers, including its policies, programmes and activities (Rao. 1969). It is possible to create democratic settings by using participative decision-making strategy. As participation is a process of bringing a set of people in an organization in working relationship in democratic setting and this process is facilitated if there are, alongwith the availability of these processes, certain conditions and participatory machineries that make possible sharing of ideas by the members of the organization on equality basis (Woodburne, 1959). It means facilitating conditions for participation are required in any education system. Here managers and the members of the system can function as a group to solve the problem by the best available methods of group functioning. Srivastava (1980) considers participation as a process of bringing about democratic setting in an organization. It creates conditions for friendly unaffected social relations which are learnt to be the most indispensable condition for the activity to go on smoothly and efficiently in an organization for realizing the goals of the organization. So it is necessary to classify area of decision-making for participation purpose. Decision-making participation instrument will be useful to study the existing

and desired participation by the faculty members.

3A-1 AREAS OF DECISION-MAKING :

Different authors have analysed the areas of decision-making for management. Brief account of the same has been discussed here.

Ansoff (1968) has classified decisions into different levels: Operating, Administrative and Strategic. Operating decisions are those which are concerned with the efficient and effective use of resources within an organization. Administrative decisions are those concerned with setting up formal structures by which an organization functions. Strategic decisions are those concerned with the relationship of the organization and its likely future environment.

Dykes (1978) identified six major areas of education management viz. Academic Affairs, Personnel Matters, Financial Affairs, Capital Involvement, Student Affairs and Public and Alumini Affairs.

Academic Affairs : Degree requirements, Curricula, Student Admissions' requirement and Academic Standards.

Personnel Matters : Appointments, Reappointments, Promotions, Granting of tenure and dismissal.

Financial Affairs : Determination of financial priorities and allocation of budgetory resources.

Capital Involvement: Buildings, other physical facilities and grounds.

Student Affairs : Discipline, Student Government, Recreation and Related Matters.

Public and Alumini Affairs : Covering public and alumini aspects.

Carl, Theodre and Roger (1976) considered these categories:

(1) Academic programme review.

(2) Institutional goal setting.

(3) Faculty performance evaluation.

Goldman (1977) suggested areas for decision-making as : Policy Planning; Interfacing with the external environment; Accomodating Authority and power; Relating to human concern; Inventing the future.

Pareek and Rao (1977) gave following functions under decision-making :

(a) Planning : This includes -

- (i) Expansion and development.
- (ii) Manpower Planning.
- (iii) Planning of facilities.

(b) Policy formulation in relation to the following :

- (i) Departmental goals.
- (ii) Fund raising.
- (iii) Teaching load.
- (iv) Time-table.
- (v) Policies on outside work by the faculty.

(c) Administration including -

- (i) Recruitment.
- (ii) Promotion
- (iii) Leaves etc.
- (iv) Facilities for work and research.

(d) Teaching including activities like :

(i) Admissions.

(ii) Curricular building.

(iii) Instruction.

(iv) Evaluation.

(e) Research.

(f) Consulting and extension work for outside community.

Gore (1977) suggested areas of decision-making for academic institutions as :

(I) Professional Systems :

1. Instructional system.
2. Knowledge generation system.
3. Community services system.
4. Academic administration.

(II) Administrative Support System :

1. Secretarial system.
2. Budget and accounts.
3. Establishment and maintenance.
4. Executive system.

(III) Student Services System :

1. Recreational facilities.
2. Financial Aid.
3. Counselling.

(IV) Personnel Services System :

1. Recruitment.
2. Promotion.
3. Leave and other facilities.

(V) External Relations System :

1. Legitmisation and interpretation of institutional activities.
2. Resources mobilization.
3. Goal setting.

Srivastava (1978) considered four major areas of decision-making :

(I) Academic : Curricula, College schedule, Work-load of teachers, Library, Instruction and Evaluation, Student Admission and College Publication.

(II) Non-Academic : Personnel Matters. Financial Affairs and Capital Involvements.

(III) College-Faculty-Student Affairs : Purposes and objectives of the college, Planning and Development of the college, Faculty affairs such as Professional Growth, Residential Facilities, Recreation, and Student Affairs such as Discipline, Student Union, Hostel, Aid to students.

(IV) Extra-Curricular Activities : Sports, Games, Athletics, Cultural and Social Activities and Educational Tours and Trips.

3A-2 DEVELOPMENT OF THE Ist DRAFT OF DECISION-MAKING PARTICIPATION INSTRUMENT :

Decision-making areas alongwith different decision situations have been identified on the basis of experts opinions collected through personal interactions and review of literature. Following persons have been interviewed for this purpose :

(1) Prof. T.V. Rao, Indian Institute of Management, Ahmedabad.

(2) Prof. M.S. Sodha, Deputy Director, I.I.T., Delhi.

(3) Prof. Purnima Mathur, Head, Humanities and Social Sciences, I.I.T., Delhi.

(4) Prof. Subhash Chandra, Dean of Student Affairs, I.I.T., Delhi.

(5) Prof. S.K. Khanna, Dean of Planning and Finances, Roorkee University, Roorkee.

(6) Prof. G.M. Mandalia, Head, Architecture and Town Planning Department, Roorkee University, Roorkee.

(7) Prof. B.B. Garg, Part-time faculty member of Roorkee University, Roorkee and Assistant Director, C.B.R.I., Roorkee.

(8) Dr. Arun Mathur, Reader Roorkee University, Roorkee.

(9) Prof. P.K. Dongre, Head Educational Administration Department, M.S. University, M.S. University-Baroda.

(10) Dr. M.M. Shah, Reader, Faculty of Education and Psychology, M.S. University, Baroda.

(11) Dr. D.C. Joshi, Reader and Incharge of Higher Education Unit, Faculty of Education and Psychology, M.S.University, Baroda.

(12) Dr. Pramila Ben Dekhtawala, Lecturer, Department of Educational Administration, M.S. University, Baroda.

(13) Sr. O.D. Tripathi, Ex-teacher,Fellow of CASE.

(14) Dr. Soran Singh, Ex-teacher,Fellow of CASE.

(15) Dr. A. Satyawati, Ex-teacher, Fellow of CASE.

(16) Dr. Parveen Akhtar, Ex-teacher, Fellow of CASE.

(17) B. Bhaskar, Ex-teacher, Fellow of CASE.

(18) Dr. Adinarayana, Ex-teacher, Fellow of CASE.

(19) Sr. R.P. Jain, Ex-teacher, Fellow of CASE.

(20) Sri K. C. Bastia, Ex-teacher, Fellow of CASE.

(21) Sri V. Rangacharya, Ex-teacher, Fellow of CASE.

(22) Seth Digvijaya Singh, Ex-teacher, Fellow of CASE.

(23) Dr. R.C. Jain, retired Principal, J.V. Jain, College Saharanpur.

(24) Prof. B.R. Gupta, Ex-Head of Education Department, J.V. Jain College, Saharanpur.

(25) Prof. H. M. Mathur, Member of Management Committee, S.A.M. College, Saharanpur.

(26) Prof. N.R.S. Saxsena, Member of Managing Committee, S.D. Girls College, Saharanpur.

(27) Dr. R.N. Aggarwal, National Research Associate, Meerut University, Meerut.

(28) Dr. D.P. Singh, National Research Associate, Jamia Milia University, New Delhi.

(29) Dr. Indra Prakash, Lecturer, C.I.E., University of Delhi, Delhi.

(30) Sri S.K. Dutta, Lecturer, Faculty of Engineering and Technology, M.S. University, Baroda.

(31) Sri T.N.S. Bhatnagar, Lecturer, Teacher Education Department, N.C.E.R.T., New Delhi.

(32) Dr. S.P. Malik, Reader, N.C.E.R.T., New Delhi.

Following ten major areas of decision-making have been identified and selected for elaborating decision-making.

I) INSTITUTIONAL GOALS.

II) FINANCES.

III) PERSONNEL FUNCTIONS.

IV) COURSES AND INSTRUCTION.

V) DISCIPLINE.

VI) EXAMINATION AND EVALUATION.

VII) RESEARCH AND DEVELOPMENTS.

VIII) FACILITIES.

IX) COMMUNITY SERVICES.

X) PUBLICATIONS

Each decision-making area has been divided into various decision situations :

(I) INSTITUTIONAL GOALS :

1. Modifying and changing institutional goals.
2. Formulating rules and regulations of the system (institution) and sub-systems (college or department).
3. Setting calander of the institution.

(II) FINANCES :

1. Departmental budget.
2. Allocation of funds.
3. Controlling and checking on expenditures.

(III) PERSONNEL FUNCTIONS :

1. Selection and appointment of staff members.
2. Deciding promotions.
3. Service conditions of the Staff.
4. Deputational aspect of staff members.

(IV) COURSES AND INSTRUCTION :

1. Introducing new courses.
2. Allotment of courses.
3. Selecting and prescribing instructional materials.

4. Finalising the cources syllabi for the courses which are taught here.
5. Deciding instructional policies for the department.
6. Deciding work load of the staff members.
7. Considering scope of experimentation for classroom instruction.

(V) DISCIPLINE :

1. Establishing student disciplinary norms and procedures.
2. Setting up student disciplinary committee.
3. Setting up the code of conduct for staff members.
4. Deciding members of the inquiry commission or tribunal.

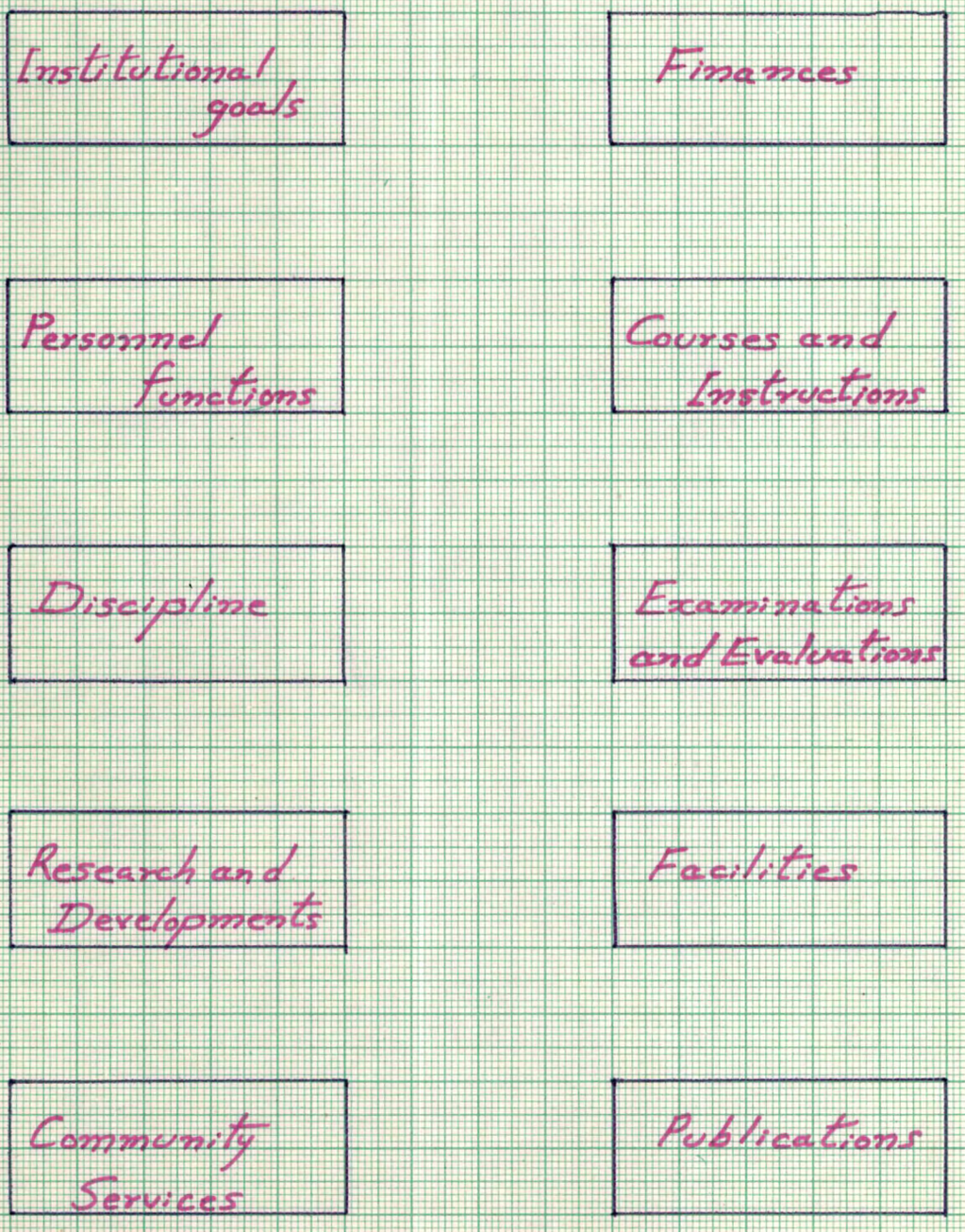
(VI) EXAMINATIONS AND EVALUATION :

1. Setting up student assessment procedures.
2. Preparing pannel of examiners.
3. Setting up the pattern of a question paper for the course.
4. Deciding the weightage to be assigned to the course.
5. Conduct of examination.
6. Tabulation and results.

(VII) RESEARCH AND DEVELOPMENTS :

1. Involvement in interpretation of research results and findings.
2. Involvement in the decision-making process for the selection of research projects.
3. Implementation of research projects.

SELECTED AREAS OF DECISION MAKING



4. Developmental Plans.

5. Allotment of supervisors and guides.

(IX) COMMUNITY SERVICES :

1. Conducting social services activities.

2. Provision of special facilities to the community.

3. Extension services programmes.

(X) PUBLICATIONS :

1. Publications of books/monographs/research resports.

2. Publication of Magazine/Journal/News letters/ Bulletin/Annual report.

These decision situations had been arranged serialwise in the Ist. draft of the instruments. Copy of the Ist. draft of decision-making participation instruments has been attached in the appendix portion which contains necessary directions, decision situations and response models.

3A-3 TRY-OUT OF THE INSTRUMENTS:

Try-out of the instruments has been done on a sample of seventy faculty members (30 Lecturers, 25 Readers and 15 Professors) of a Technological University, selected randomly. Responses have been classified in four categories:

(A) participating and wishing to participate;

(B) not participating and not interested to participate;

(C) not participating but wishing to participate;

(D) participating but not interested to participate.

Decision situations have been analyzed categorywise for Lecturers, Readers and Professors by calculating percentages as following fashion.

3.13

Table III-1 Showing Percentages of Respondents Against Each Decision-Making Situation and Categories of Participation (A, B, C, D).

Decisions	Lecturers N=30				Readers N=25				Professors N=15			
	A %	B %	C %	D %	A %	B %	C %	D %	A %	B %	C %	D %
1	13	17	70	0	16	28	56	0	53	13	34	0
2	30	27	43	0	48	20	32	0	73	7	13	7
3	3	43	54	0	20	40	40	0	13	40	47	0
4	20	27	53	0	24	20	52	4	47	33	20	0
5	27	20	53	0	28	16	56	0	53	20	27	0
6	23	30	47	0	32	24	36	8	27	40	33	0
7	3	33	64	0	12	20	68	0	33	20	40	7
8	10	27	63	0	12	16	68	4	20	20	53	7
9	13	17	70	0	16	12	72	0	33	40	37	0
10	7	20	73	0	8	20	68	4	20	33	40	7
11	47	10	43	0	92	0	8	0	93	0	7	0
12	70	13	17	00	80	4	12	4	100	0	0	0
13	63	13	24	0	80	4	12	4	80	7	13	0
14	80	3	13	4	92	0	4	4	100	0	0	0
15	40	20	37	3	68	8	20	4	87	0	13	0
16	23	23	54	0	72	12	16	0	73	7	20	0
17	40	20	37	3	68	8	24	0	80	13	7	0
18	20	37	43	0	28	32	40	0	33	40	27	0
19	13	37	50	0	24	52	24	0	13	67	20	0
20	3	43	54	0	8	48	44	0	53	13	34	0

Decisions	Lecturers N=30				Readers N=25				Professors N=15			
	A %	B %	C %	D %	A %	B %	C %	D %	A %	B %	C %	D %
21	3	67	30	0	8	60	28	4	7	79	7	7
22	50	10	40	0	80	8	12	0	47	20	33	0
23	43	17	40	0	64	20	24	0	79	7	7	7
24	37	23	40	0	64	28	8	0	60	20	13	7
25	73	10	17	0	88	8	4	0	86	7	7	0
26	80	3	17	0	92	8	0	0	93	7	0	0
27	64	23	13	0	72	12	12	4	87	13	0	0
28	37	40	20	3	60	16	16	8	40	40	7	13
29	53	10	33	4	76	4	20	0	87	0	13	0
30	23	13	64	0	64	8	28	0	73	0	27	0
31	37	17	43	3	68	12	20	0	60	0	40	0
32	30	23	44	3	36	20	44	0	80	0	20	0
33	27	33	40	0	64	8	20	0	86	7	7	0
34	7	53	40	0	20	52	28	0	20	60	20	0
35	13	54	30	3	32	48	12	8	13	80	7	0
36	43	17	33	7	60	16	20	4	53	40	7	0
37	10	40	50	0	8	52	36	4	27	53	20	0
38	3	64	33	0	4	76	20	0	7	66	27	0
39	0	77	20	3	12	56	28	4	7	73	20	0
40	0	43	57	0	52	0	48	0	20	53	27	0
41	10	47	50	3	12	48	40	0	20	53	27	0
42	17	23	57	3	44	24	28	4	86	7	7	0

Decisions	Lecturers N=30				Readers N=25				Professors N=15			
	A %	B %	C %	D %	A %	B %	C %	D %	A %	B %	C %	D %
43	10	37	53	0	28	24	40	8	40	13	40	7
44	13	50	33	4	32	24	36	8	33	40	20	7
45	0	70	30	0	0	80	16	4	13	60	27	0
46	0	37	63	0	0	52	44	4	33	40	27	0
47	17	40	43	0	40	36	24	0	20	53	27	0
48	13	27	60	0	28	24	48	0	20	40	33	7
49	7	40	50	3	20	28	52	0	27	53	20	0
50	57	7	33	3	80	0	20	0	73	7	20	0
51	33	17	47	3	52	8	40	0	53	20	20	7

A = Participating and wishing to participate.

B = Not participating and not interested to participate.

C = Not participating but wishing to participate.

D = Participating but not interested to participate.

1. Modifying and changing institutional goals : In this decision-making situation above fifty percent of the Professors are participating. Seventy percent of the Lecturers and fifty six percent of the Readers are not participating but they desired to participate.

2. Formulating rules and regulation of the system (institution) and sub-systems (college or department) : Here seventy three percent of the Professors, forty eight percent of the Readers and only thirty percent of the Lecturers are

participating and interested to participate, whereas forty three percent of the Lecturers and thirty two percent of the Readers are not participating but as a matter of fact they wanted to participate. So far as this situation is concerned, the Lecturers participation seems to be comparatively less.

3. Setting calender of the institution: In this aspect faculty participation is less. Forty seven percent of the Professors, forty percent of the Readers and fifty four percent of the Lecturers are not participating though they want to participate whereas forty three percent of the Lecturers, forty percent of Professors and Readers each are neither participating nor willing to participate.

4. Departmental budget: So far as this situation is concerned fifty three percent of the Lecturers and fifty two percent of the Readers are not participating inspite of their willingness to participate whereas forty seven percent of the Professors are participating and they want to participate also.

5. Allocation of funds: More or less the situation is similar to that of decision situation (4).

6. Controlling and checking on expenditures: Forty seven percent of the lecturers are not participating but they want to participate. Here the picture seems to be indistinct.

7. Selection and appointment of staff members: Most of the faculty members are kept away from the participation though they want to participate in this decision situation.

8. Deciding promotions: Most of the faculty members are interested to participate but they are not participating.

9. Service conditions of the Staff: Seventy percent of the Lecturers, seventy two percent of the Readers are not participating though they want to participate. Forty percent of the Professors neither participating nor willing to participate.

10. Deputational aspect of staff members : Considerable percentage of faculty members (Readers and Lecturers) are not participating though they want to participate. In this case the picture of the Professors' participation is not clear.

11. Introducing new courses : Most of the Readers and Professors are participating and they want to continue whereas only forty seven percent of the lecturers are participating, forty three percent want to participate but at present not participating.

12. Allotment of courses : Most of the faculty members are participating and they want to participate.

13. Selecting and prescribing instructional materials : Most of faculty members are satisfied with the participation.

14. Finalising the syllabi for the courses : Situation is similar to the decision situation no.13.

15. Deciding instructional polies for the department : Most of the Readers and Professors are participating and willing to participate whereas the picture of lecturers is not clear.

16. Deciding work-load of the staff members : Participation of Readers and Professors is quite satisfactory whereas the good percentage of Lecturers want to participate but they are not participating.

17. Considering scope of experimentation for classroom instruction : Most of the faculty members are satisfied with the participation.

18. Establishing student disciplinary norms and procedures : This decision situation is not very clear from participation point of view. More than thirty percent of the faculty members are not participating and not interested to participate.

19. Setting up student disciplinary committee : Most of the faculty members are not participating and not willing to do so. Of course, fifty percent of the lecturers showed their interest in the participation.

20. Setting up the code of conduct for staff members : Considerable percentage of faculty members are not participating but they want to participate.

21. Deciding members of the inquiry commission or tribunal : Most of the faculty members are not participating and they are not willing to do so.

22. Setting up student assessment procedures : A good percentage of faculty members are participating. Only thirty three percent of the Professors and forty percent of the Lecturers are not participating but they want to participate.

23. Preparing panel of examiners : Most of the Faculty members are satisfied with the participation aspect in this decision situation.

24. Finalising the panel of examiners : Most of the Readers and Professors are satisfied with the participation. The position of Lecturers is not very clear as forty percent of them

are not participating but willing to participate, thirty seven percent are satisfied with the participation and twenty three percent are not interested to participate.

25. Setting up the pattern of a question paper for the course: Most of the members are satisfied with the situation.

26. Deciding the weightage to the assigned to the question: Most of the faculty members are participating and they want to be there.

27. Conduct of examination : This decision situation is similar to the decision situation no.26 from participation point of view.

28. Tabulation and results : An average percentage of faculty members are participating and wishing to participate whereas forty percent of the Professors and Lecturers are not participating and also they are not interested to do so.

29. Involvement in interpretation of research results and findings : Most of the faculty members are satisfied with their participation.

30. Involvement in the decision-making process for the selection of research projects : Most of the Professors and Readers are satisfied with the participation while considerable number of Lecturers are not there but they want to be in the decision-making.

31. Implementation of research projects : Situation is similar to the decision situation no.30.

32. Developmental plans : Most of the Professors are satisfied with their participation. A good percentage of

Lecturers and Readers want to participate in this decision situation.

33. Allotment of supervisors or guides : Most of the Professors and Readers are participating whereas forty percent of the Lecturers are not participating but willing to participate.

34. Sanctioning loans/scholarships/freeships to the students: Most of the faculty members are not participating and also not willing to participate in this decision situation.

35. Management of hostel : Here the situation is similar to No.34.

36. Co-curricular activities : Most of the faculty members are satisfied with their participation.

37. Student guidance bureau : A good percentage of Readers and Professors are not participating and not willing to do so but fifty percentage of the Lecturers want to participate.

38. Student and staff dispensary : Majority of the staff members are not interested to participate in this decision situation.

39. Student book aid : Similar to 38.

40. Staff quarter allotment : A good percentage of faculty members (Lecturers and Readers) want to participate in this decision situation whereas fifty three percent of the Professors are neither participating nor they are interested to participate.

41. Allotment of accommodation to the staff members in the institution : A good percentage of Readers and Professors are neither participating nor interested to participate whereas fifty

percent of the Lecturers are not participating but they want to participate.

42. Deciding departmental requirements : Most of the Professors and forty three percent of Readers are satisfied with their participation but considerable percentage of the Lecturers are interested to participate.

43. Library organisation : Here the considerable percentage of faculty members are not participating but they are interested to participate.

44. Library supervision : The picture is not clear.

45. Sanctioning loans to the staff members : A great number of faculty members are neither participating nor willing to participate.

46. Sanctioning study leaves to the staff members : Majority of the Lecturers are interested in participation but many Readers and Professor are not participating and not interested to participate.

47. Conducting social service activities : Fifty three percent of the Professors manifest indifference to this decision situation. For Lecturers and Readers the position does not seem to be clear.

48. Provision of special facilities to the community: Sixty percent of the Lecturers and forty eight percent of the Readers are interested but they are not participating.

49. Extension service programmes : A good percentage of faculty members (Lecturers and Readers) are interested to participate but they are not participating while fifty three percent of the

Professors neither interested nor participating.

50. Publication of books/monographs/research reports : Most of the faculty members are satisfied with their participation.

51. Publication of magazine/journal/newsletters/bulletin/ annual report : Fifty two percent of the Readers and fifty three percent of the Professors are satisfied with their participation whereas forty seven percent of the Lecturers are not participating though they want to participate.

In most of the decision-making situations the Professors participation is quite satisfactory but in 3, 7, 8, 10, 31, 43 they want more participation. While participation of Readers is there in so many decision situations however they want more participation in decision situations no.1, 3, 4, 5, 7, 8, 9, 10, 20, 32, 41, 43, 46, 48, 49; Lecturers participation is satisfactory in decision-making situation no.11, 12, 13, 14, 25, 26, 27, 29, 50. In other decision situations they want more participation excluding 20, 21, 28, 34, 35, 38, 39, 44, 45.

In certain decision making situations most of the professors and readers are not interested in participation like 19, 21, 34, 35, 37, 38, 39, 45, . . . Most of the Lecturers are not interested to participate in 38, 39, 45.

3A-4 FINALIZING THE ITEMS FOR DECISION-MAKING PARTICIPATION INSTRUMENTS :

Following experts have been consulted for finalizing the items and checking the content validity.

(1) Prof. P.K. Dongre, Head, Educational Administration Department, M.S. University, Baroda.

(2) Prof. N.S. Pathak, Head, Psychology, Department, M. S. University, Baroda.

(3) Dr. M.M. Shah, Reader, Education Department, M.S. University, Baroda.

(4) Dr. D.C. Joshi, Reader and Incharge of Higher Education Cell, Faculty of Education and Psychology, M.S. University, Baroda.

(5) Dr. Pramila Ben, Dektavalla, Lecturer, Educational Administration Department, M.S. University, Baroda.

Following decision situations have been delimited as a great majority at the faculty members (Professors, Readers, Lecturers) are already there in the decision-making and they are equally interested to participate in future.

(1) Allotment of Courses (item no.12).

(2) Selecting and prescribing instructional materials (item no.13).

(3) Finalising the syllabi for the courses which are taught here (item no.14).

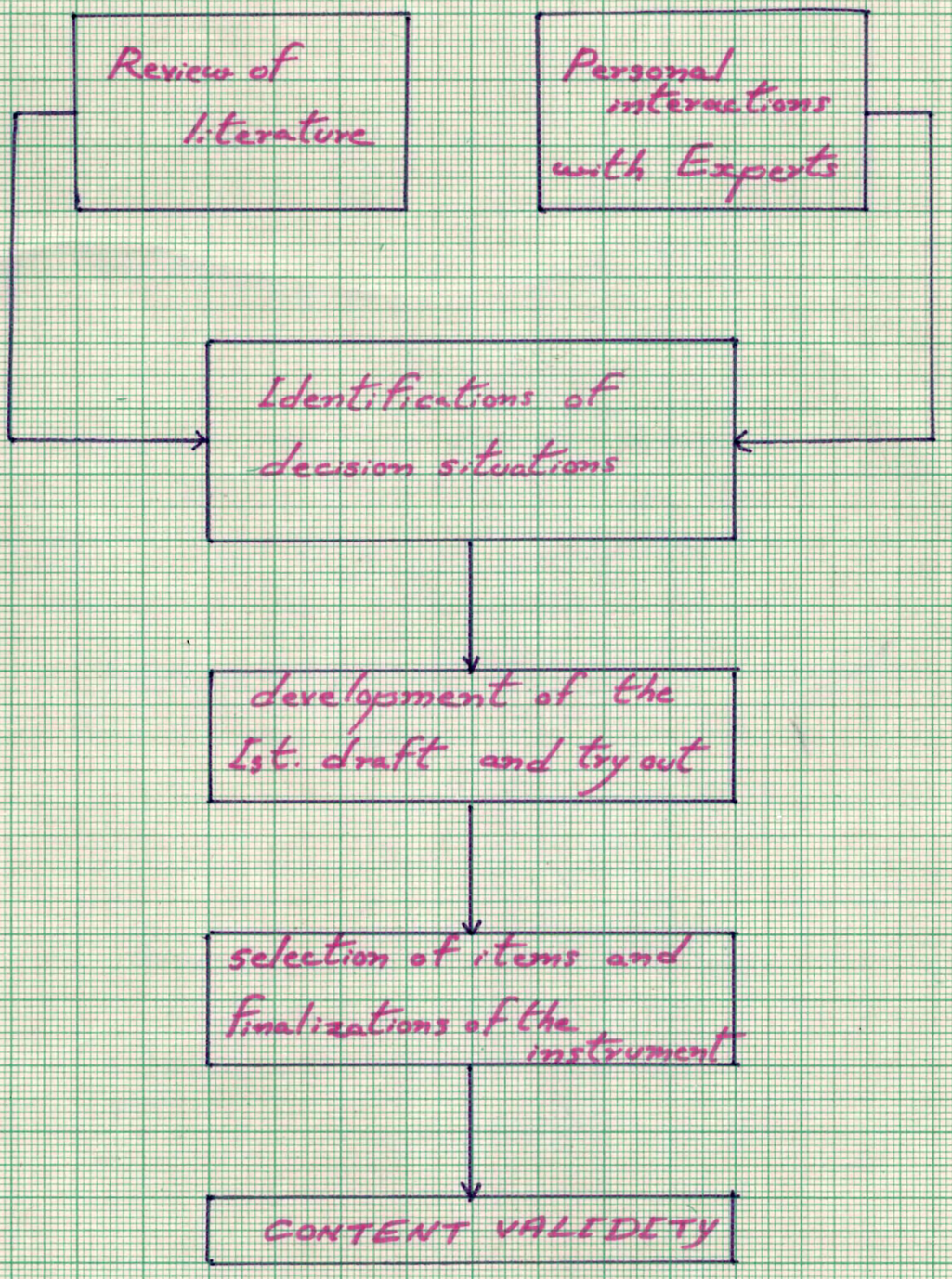
(4) Setting up the pattern of a question paper for the course (item no.25).

(5) Deciding the weightage to be assigned to the question. (item no.26).

(6) Conduct of examinations (item no.27).

(7) Publication of books/monographs/research reports. (item no.50).

DEVELOPMENT OF DECISION MAKING PARTICIPATION Instrument



On the basis of try out it has been pointed out that there are certain decision situations where most of the faculty members are not participating and also they would not like to participate. So those have been eliminated i.e.

1) Student and staff dispensary (item no.38).

2) Student book-aid (item no.39).

3) Sanctioning loans to the staff members (item no.45).

On the basis of reactions of faculty members taken for try-out, and consultations with the experts, response modes have been changed. Final draft of the decision-making participation instruments (one for real or existing participation and the other for the expected or desired or would be participation) have been attached in the appendices. The content validity of these instruments has been established by the experts. Each one contains forty decision situations to study the participation (real or existing, expected or desired or would be in future), for Technical Education Systems.

(B) DEVELOPMENT OF ORGANIZATIONAL HEALTH QUESTIONNAIRE :

Education systems come under social systems of many subsystems which are interrelated to each other. Education management is expected to operate effectively to achieve its goals and objectives. Organization has got its own personality which sometimes suffers from its health point of view. It is necessary to diagnose the illness of the organization to provide it with appropriate treatment so that it may recover its health.

Pareek and Rao (1978) expressed that organizational health of the education system through the perceptions of its members may likely to reflect the psychological orientations of the employees to organizational structure and decision-making strategies. For this investigation it has been decided to develop a organizational health questionnaire to study the organizational health of education systems based on the perceptions of members. As far as the knowledge of investigator based on the review of relevant literature, one instrument is available in this area developed by Indian Institute of Management, Ahmedabad. But this instrument had been developed for Agricultural Universities. Concept and definition of organizational health has been discussed in the first chapter. Here dimensions of organizational health are discussed with special reference of ten dimensions given by Mathew Miles.

3B-1 DIMENSIONS OF ORGANIZATIONAL HEALTH :

Sometime management considers some functional factors as index of organizational health. In the words of Argyris (1958) '....management may be in danger of mistaking such factors as low absenteeism, low turnover, low grievance rates, and high production for evidences of organizational health, which can be obtained by bureaucratic method also.' Chapple and Sayles (1961) extended this idea by suggesting morale as a measure of organizational health which can be defined for an organization as the obtaining of a state of equilibrium in relation of the constituent individuals. He further added two more concepts i.e. survival and growth. Maintaining the survival condition the organization step forwards for better

3.26

progress in the changing environment. By above discussion dimensions of organizational health are not very clear. Fordyce and Weyl (1971) discussed detailed characteristics of healthy and unhealthy organizations which included freedom of people to share difficulties, pragmatic problem solving, functional decision-making, responsibility, sharing, respect of judgement of people, tackling problems of personal needs and human relationships, collaboration, joint effort in crisis management, conflict management with openness, use of feedback, joint critquing, honest relationship voluntarism, flexible leadership, high degree of trust, acceptance of risk, learning from mistake, joint resolution of poor performance, functionalism of procedures, sense of order and high rate of innovation adaptability and joint management of frustrations.

Miles (1973) has given ten dimensions of organizational health. The first three dimensions are relatively "tasky", in that they deal with organizational goals, the transmission of messages, and the way in which decisions are made. These are goal focus, communication adequacy and optimal power equalization. Then there are three "task-centred" dimensions of organizational health - resource utilization, cohesiveness and morale. Here this group of dimensions deals with the internal state of the system and its inhabitants "maintenance" needs. Finally remaining four dimensions of organizational health which deal with growth and changefulness, are innovativeness, autonomy, adaptation and problem solving adequacy.

Dayal (1977) gave sign of ill organizational health as; widely existing habits of sharing responsibility, alternating between defiance and submissiveness to authority, delays in work, prevailing tensions at all levels of management, 'Gheraos' for trival issues, intense of unsuspected competition for positions, almost total lack of self-appraisal. How to maintain organizational health or to renew the educational organizations are one of the important issues of educational management research which could be done by incorporating the various factors to form solid constructs of organizational health. Pareek and Rao (1978) expressed that organizational health of any system depends upon several variables like the history of the organization, its formal structure, strategies used to achieve the objectives, philosophy, if any or lack of it, the people that occupy leadership roles, socio-psychological forces, people who join the system and interaction of all these. They gave dimensions of organizational health in terms of autonomy, collaboration and interdependence, creativity, productive behaviour, work motivation, functionality openness and centrality as important dimensions of organizational health.

3B-2 MILES'S DIMENSIONS OF ORGANIZATIONAL HEALTH :

(1) Goal focus. In a healthy organization, the goal (or more usually goals) of the system would be reasonably clear to the system members, and reasonably well accepted by them. This clarity and acceptance, however, should be seen as a necessary but insufficient condition for organization health. The goals must also be achievable with existing or available resources,

and be appropriate more or less congruent with the demands of the environment. The last feature may be most critical. Switiching back to the person level for a moment, consider the obsessive patient who sets the clear, accepted, achievable goal for himself of washing his hands 250 times a day. The question remains : is this an appropriate goal in light of what else there is to do in life?

(2) Communication adequacy. Since organizations are not simultaneous face-to-face systems like small groups, the movement of information within them becomes crucial. This dimension of organization health implies that there is relatively distortion-free communication "vertically", "horizontally", and across the boundary of the system to and from the surrounding environment. That is, information travel reasonably well - just as the healthy person "knows himself" with a minimum level of repression, distortion, etc. In the healthy organization, there is good and prompt sensing of internal strains; there are enough data about problems of the system to insure that a good diagnosis of system difficulties can be made. People have the information they need, and have gotten it without exerting undue efforts, such as those involved in moseying up to the superintendent's secretary, reading the local newspaper, or calling excessive numbers of special meetings.

(3) Optimal power equalization. In a healthy organization the distribution of influence is relatively equitable. Subordinates (if there is a formal authority chart) can influence upward, and even more important-as Likert has demonstrated - they perceive that their boss can do likewise with

his boss. In such an organization, inter-group struggles for power would not be bitter, though inter-group conflict, (as in every human system known to man) would undoubtedly be present. The basic stance of persons in such an organization, as they look up, sideways and down, is that of collaboration rather than explicit or implicit coercion. The units of the organization (persons in roles, work groups, etc.) would stand in an interdependent relationship to each other, with rather less emphasis on the ability of a 'master' part to control the entire operation. The exertion of influence in a healthy organization would presumably rest on the competence of the influence vis-a-vis the issue at hand, his stake in the outcome, and the amount of knowledge or data he has - rather than on his organizational position, personal charisma, or other factors with little direct relevance to the problem at hand.

These then are three "task-centered" dimensions of organization health. A second group of three dimensions deals essentially with the internal state of the system and its inhabitants' "maintenance" needs. These are resources utilization, cohesiveness, and morale.

(4) Resource utilization. We say of a healthy person, such as a second-grader, that he is "working up to his potential". To put this another way, the classroom system is evoking a contribution from him at an appropriate and goal-directed level of tension. At the organization level, "health" would imply that the system's inputs, particularly the personnel, are used effectively. The overall coordination

is such that people are neither overloaded nor idling. There is a minimal sense of strain, generally speaking (in the sense that trying to do something with a weak or inappropriate structure puts strain on that structure).

In the healthy organization, people may be working very hard indeed but they feel that they are not working against themselves, or against the organization. The fit between people's own dispositions and the role demands of the system is good. Beyond this, people feel reasonably 'self-actualized", they not only 'feel good' in their jobs, but they have a genuine sense of learning, growing, and developing as persons in the process of learning, growing, and developing as persons in the process of making their organizational contribution.

(5) Cohesiveness. We think of a healthy person as one who has a clear sense of identity; he knows who he is, underneath all the specific goals he sets for himself. Beyond this he likes himself, his stance toward life does not require self-derogation, even when there are aspects of his behaviour which are unlovely or ineffective. By analogy at the organization level, system health would imply that the organization knows "who it is". Its members feel attracted to membership in the organization. They want to stay with it, be influenced by it, and exert their own influence in the collaborative style suggested above.

(6) Morale. The history of this concept in the social-psychological literature is so appalling that Miles hesitated to introduce it at all. The implied notion is one of well-being or satisfaction. Satisfaction is not enough for health, of

course; a person may report feelings of well being and satisfaction in his life, while successfully denying deeplying hostilities, h [illegible], anxieties, and conflicts. Yet it still seems useful to evoke, at the organization level, the idea of morale; a summated set of individual sentiments, centering around feelings of well-being, satisfaction and pleasure, as opposed to feelings of discomfort, unwished for strain and dissatisfaction. In an unhealthy system, life might be perceived rosily as "good" or as unabashedly bad; in a healthy organization it is hard to entertain the idea that the dominant personal response of organization members would be anything else than one of well-being.

Finally, there are four more dimensions of organization health, which deal with growth and changefulness: the notions of innovativeness, autonomy, adaptation vis-a-vis the environment, and problem-solving adequacy.

(7) Innovativeness. A healthy system would tend to invent new procedures, move toward new goals, produce new kinds of products, diversify itself, and become more rather than less differentiated over time. In a sense, such a system could be said to grow, develop, and change rather than remaining routinized and standard. The analogue here is to the self-renewing properties of a Picasso; or to Schachtel's "activity" orientation (curious, exploring) as contrasted with "embeddedness" orientation (tension-reducing, protective) in persons.

(8) Autonomy. The healthy person acts "from his own center outward". Seen in a training or therapy group, for example, such a person appears nearly free of the need to submit dependently to authority figures, and from the need to rebel and destroy symbolic fathers of any kind. A healthy organization, similarly, would not respond passively to demands from the outside, feeling itself the tool of the environment, and it would not respond destructively or rebelliously to perceived demands either. It would tend to have a kind of independence from the environment, in the same sense that the healthy person, while he has transctions with others, does not treat their responses as determinative of his own behaviour.

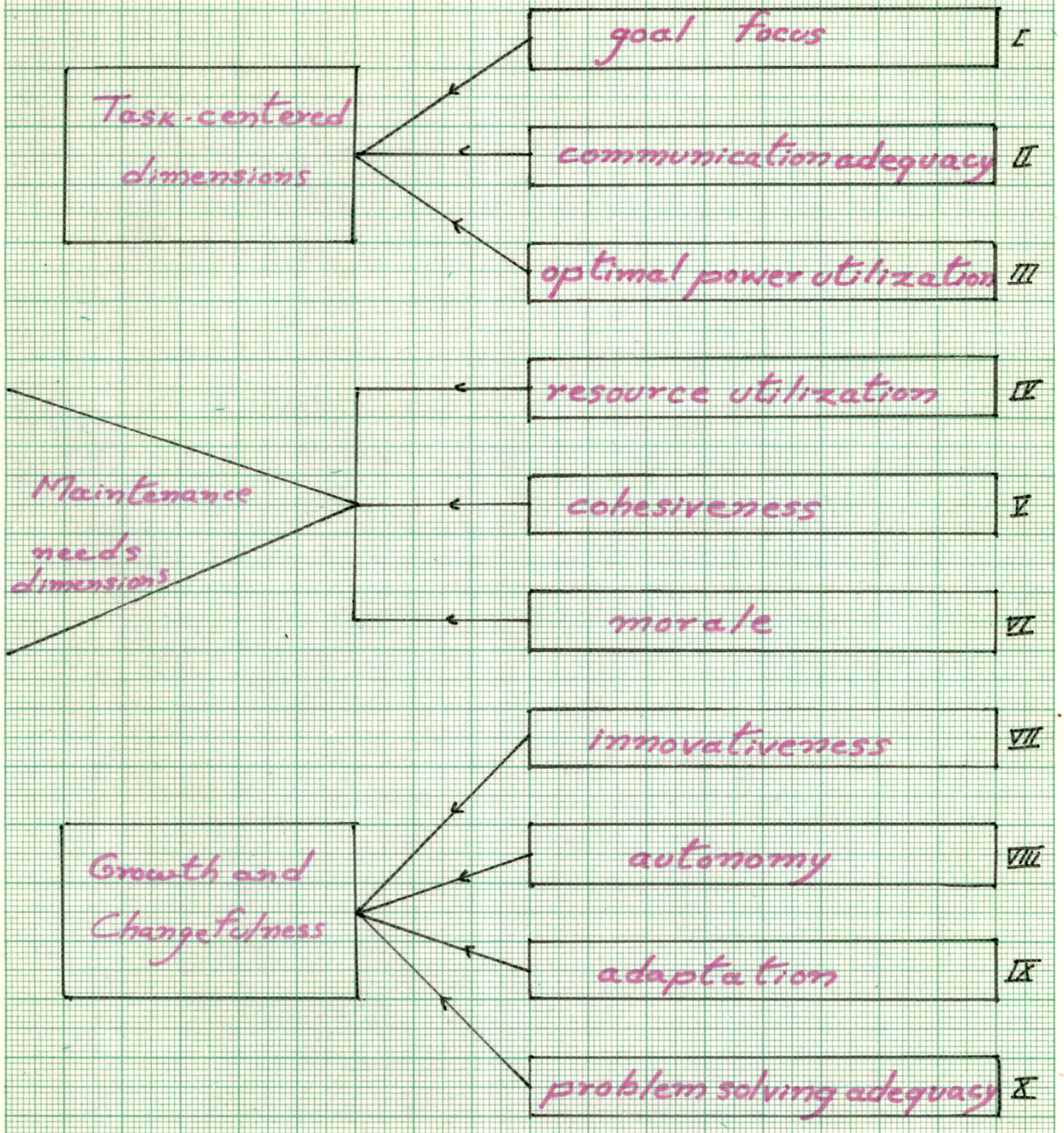
(9) Adaptation. The notions of autonomy and innovativeness are both connected with the idea that a healthy person group, or organization is in realistic, effective contact with the surroundings. When environmental demands and organization resources do not match, a problem-solving, re-structuring approach evolves in which both the environment and the organization become different in some respect. More adequate, continued coping of the organization, as a result of changes in the local system, the relevant portions of the environment, or more usually both, occurs. And such a system has sufficient stability and stress tolerance to manage the difficulties which occur during the adaptation process. Perhaps inherent in this notion is that the system's ability to bring about corrective

change in itself is faster than the change cycle in the surrounding environment. Explanations for the disappearance of dinosaurs vary, but it is quite clear that in some way this criterion was not met.

(10) Problem-solving adequacy. Finally, any healthy organisam - even one as theoretically impervious to fallibility and instances of ineffective coping. The issue is not the presence or absence of problems, therefore, but the manner in which the person, group, or organization copes with problems. Argyris has suggested that in an effective system, problems are solved with minimal energy; they stay solved; and the problem solving mechanisms used are not weakened, but maintained or strengthened. An adequate organization, then has well-developed structures and procedures for sensing the existence of problems, for inventing possible solutions, for deciding on the solutions, for implementing them, and for evaluating their effectiveness. Such an organization would conceive of its own operations (whether directed outward to goal achievement, inward to maintenance, or inward-outward to problems of adaptation) as being controllable. We would see active coping with problems, rather than passive withdrawing compulsive responses, scapegoating, or denial.

Here then are ten dimensions of a healthy organization stated abstractly, even vaguely in many instances. They must of course be operationalized into meaningful indicators of organization functioning.

DIMENSIONS OF ORGANIZATIONAL HEALTH



3B-3 DEVELOPING THE 1ST. DRAFT :

Ten dimensions of organizational health have been considered to develop organizational health questionnaire. Items have been developed with the help of : (1) Review of literature available on organizational health; (2) Organizational health instrument developed by Prof. Ravi J. Matthai, Prof. Udai Pareek and Prof. T.V. Rao for a study done on Agricultural Universities by Public Systems Group, Indian Institute of Management, Ahmedabad; (3) Interactions with the experts and appropriate personnels.

Following personnels have been consulted:

1) Prof. N.S. Pathak, Head, Psychology Department, M.S. University, Baroda.
2) Dr. Z.M. Quraishi, Lecturer, Psychology, Department, M.S. University, Baroda.
3) Dr. Galib Hussain, Psychology Department, Delhi College, University of Delhi.
4) Prof. M. S. Sodha, Deputy Director. I.I.T. Delhi.
5) Prof. Purnima Mathur, Head , Humanities and Social Sciences, I.I.T., Delhi.
6) Prof. Subbash Chandra, Dean of Student Affairs, I.I.T., Delhi.
7) Prof. S.K. Khanna, Dean of Planning and Finances, Roorkee University, Roorkee.
8) Prof. Visvamitter, Architecture and Town Planning, Roorkee University, Roorkee.

9) Dr. Arun Mathur, Reader, Roorkee University, Roorkee.

10) Prof. B.B. Garg, part time faculty member of Roorkee University and Assistant Director, C.B.R.I., Roorkee.

11) Dr. G.C., Pachouri, Lecturer, Faculty of Education, J.V. Jain College, Saharanpur.

12) Dr. P.K. Gupta, Mathematics Department, J.V. Jain College, Saharanpur.

13) Dr. P.K. Sharma, Geography Department, J.V. Jain College, Saharanpur.

14) R.G. Maheshvari, Geology Department, J.V.Jain College, Saharanpur.

15) Dr. Pramilaben Dektavalla, Lecturer, Educational Administration Department, M.S. University, Baroda.

16) Dr. Thomas Mathew, Project Associate, Centre of Advanced Study in Psychology, Bhubneshwar.

17) Dr. Seema Sahastrabudhe, ex-Senior Research Fellow, CASE, M. S. University, Baroda.

18) Dr. S.K. Dass Gupta, Head, Education Department, Meerut College, Meerut.

19) Sri I.R.S. Sindhu, Teacher Fellow, Meerut College, Meerut.

20) Prof. K.K. Bhalla, Meerut College, Meerut.

21) Dr. K.G. Sharma, Reader, Education Department, Meerut University, Meerut.

22) Dr. R.A. Sharma, Reader, Education Department, Meerut University, Meerut.

23) Dr. P.K. Srivastava, Head, Human Relations Division, ATIRA, Ahmedabad.

Format of the organizational questionnaire with directions and response mode has been given in the appendices. Totally there are sixty three items. Dimension wise distribution of the items are shown in the following table:

Table III-2 :

S.No.	Dimensions of organizational health	Item No.
1.	Goal Focus	1,2,3,4,5,6.
2.	Communication adequacy	7,8,9,10,11,12,13.
3.	Optimal power equalization	14,15,16,17,18,19,20,21.
4.	Resource utilization	22,23,24,25,26,27,28.
5.	Cohesiveness	29,30,31,32,33.
6.	Morale	34,35,36,37,38,39,40.
7.	Innovativeness	41,42,43,44,45,46.
8.	Autonomy	47,48,49,50,51,52,53.
9.	Adaptation	54,55,56,57.
10.	Problem solving adequacy	58,59,60,61,62,63.

The first draft of the organizational health questionnaire has been shown to following experts to check the content validity:

1) Prof. N.S. Pathak, Head, Psychology Department, M. S. University, Baroda.

2) Dr. M. M. Shah, Reader, Education Department, M.S. University, Baroda.

3) Dr. Z.M. Quraishi, Lecturer, Psychology Department, M. S. University, Baroda.

4) Dr. Pramilaben Dektavalla, Educational Administration, Department, M. S. University, Baroda.

5) Sri Rajiv Sharma, Scientist, Human Relations Division, ATIRA, Ahmedabad.

With the suggestions and minor modifications it was given for cyclostyling.

3B-4 TRY OUT OF THE QUESTIONNAIRE :

Though content validity of the O.H.Q. has been taken into consideration, still it required try out to select various items i.e. to follow item validation on the basis of internal consistency (interco-rrelations among items and co-rrelation between item and the total scores). Validity of the O.H.Q. can be calculated by the standard method used and suggested by Likert, which involves a sort of item analysis (Edward, 1969). Total scores for each subject on all the items obtained and they are arranged in terms of their magnitude i.e. from high to low. Two contrasting groups or criterion groups are formed by taking 27 percent of the subjects obtaining high scores and 27 per cent of the subjects obtaining low scores. Responses of these two groups on each statement are compared. More specifically by applying t-test. Critical ratio is found to examine the discriminative power of the statement. If the "t" is found to be significant it indicates that the statement is effective. With these purposes O.H.Q. thus developed has been given for try out to eighty

faculty members of a technological university selected randomly. The questionnaire have been supplied personally and collected with the reactions of the faculty members. Most of the faculty members suggested to decrease the number of items to avoid duplications and to make it feasible and useful from time point of view. On this basis it has been decided to give due considerations to various reactions of faculty members selected for the 1st try out.

3B-5 VALIDATION OF ITEMS :

Out of eighty O.H.Q. only seventy five of them were found. Useful for the analysis. Classifications and tabulations have been done for calculating statistical measures by giving ratings as follows:

A = Completely agreed - 5

B = Agreed to a great extent - 4

C = Agreed to some extent - 3

D = Agreed to a little extent - 2

E = Disagree - 1

It has been assumed that each category differed with its consecutive category by one. For item validation it was decided to use intercorrelations among the items and each item's correlation with the total. Intercorrelations are presented in following tables dimension wise:

Table III-3 :

I. Goal Focus						
Items	1	2	3	4	5	6
1	1	.68	.60	.62	.49	.42
2		1	.67	.57	.40	.49
3			1	.63	.42	.57
4				1	.72	.59
5					1	.52
6						1

Table III-4 :

II. Communication adequacy							
Items	7	8	9	10	11	12	13
7	1	.46	.56	.44	.51	.38	.59
8		1	.49	.40	.22	.23	.30
9			1	.57	.55	.39	.55
10				1	.75	.41	.55
11					1	.54	.65
12						1	.47
13							1

Table III-5 :

III Optimal power equalization								
Items	14	15	16	17	18	19	20	21
14	1	.42	.26	.46	.40	.40	.40	.32
15		1	.41	.34	.42	.56	.37	.30
16			1	.48	.27	.52	.33	.42
17				1	.47	.39	.49	.29
18					1	.45	.53	.40
19						1	.46	.52
20							1	.41
21								1

Table III-6 :

IV Resource Utilization							
Items	22	23	24	25	26	27	28
22	1	.46	.49	.29	.38	.39	.48
23		1	.57	.52	.34	.55	.43
24			1	.50	.32	.36	.39
25				1	.59	.59	.34
26					1	.61	.23
27						1	.39
28							1

3.41

Table III-7 :

	V Cohesiveness				
Items	29	30	31	32	33
29	1	.54	.44	.49	.44
30		1	.49	.39	.24
31			1	.48	.35
32				1	.24
33					1

Table III-8 :

	VI [illegible]						
Items	34	35	36	37	38	39	40
34	1	.44	.50	.44	.45	.50	.28
35		1	.43	.43	.50	.51	.43
36			1	.63	.31	.28	.59
37				1	.51	.36	.52
38					1	.58	.38
39						1	.32
40							1

Table III-9 :

	VII Innovativeness					
Items	41	42	43	44	45	46
41	1	.53	.36	.55	.24	.55
42		1	.19	.55	.29	.55
43			1	.32	.03	.28
44				1	.17	.46
45					1	.22
46						1

Table III-10 :

	VIII Autonomy						
Items	47	48	49	50	51	52	53
47	1	.63	.59	.31	.26	.49	.28
48		1	.71	.35	.36	.41	.12
49			1	.43	.38	.40	.26
50				1	.46	.28	.25
51					1	.25	.17
52						1	.46
53							1

Table III-11 :

	IX Adaptation			
Items	1	2	3	4
54	1	.45	.29	.38
55		1	.34	.28
56			1	.64
57				1

Table III-12 :

	X Problem Solving Adequacy					
Items	58	59	60	61	62	63
58	1	.55	.58	.58	.52	.55
59		1	.60	.46	.66	.59
60			1	.68	.71	.69
61				1	.63	.62
62					1	.70
63						1

Table III-13 : Correlation of individual item with the total

Item No.	Dimension	Correlation Coefficient
1	Goal Focus	.45
2		.49
3		.49
4		.60
5		.53
6		.51
7	Communi-cation adequacy	.63
8		.55
9		.60
10		.51
11		.54
12		.40
13		.51
14	Optimal power equalization	.47
15		.50
16		.57
17		.65
18		.60
19		.59
20		.54
21		.48
22	Resource Utilization	.55
23		.68
24		.51
25		.67
26		.55
27		.69
28		.56
29	Cohesiveness	.62
30		.49
31		.46
32		.52
33		.50
34	Morale	.49
35		.48
36		.64
37		.61
38		.66
39		.47
40		.54
41	Innovative-ness	.67
42		.68
43		.36
44		.58
45		.36
46		.44
47	Autonomy	.44
48		.51
49		.53
50		.43
51		.33
52		.57
53		.41
54	Adaptation	.49
55		.48
56		.40
57		.49
58	Problem Solving adequacy	.50
59		.51
60		.63
61		.54
62		.59
63		.64

On the basis of scores obtained total seventy five members of faculty were divided into two groups. Upper 27% and lower 27%. Upper 27% on the basis of total scores i.e. 20 faculty members have been classified according to scores obtained on each item and tabulated. Similarly lower 27% on the basis of total scores i.e. 20 faculty members have been classified according to scores obtained on each item and tabulated. For both the groups means and standard deviations have been calculated. Significance of difference for each item has been calculated by using t-test. Following tables shows means standard deviations and t-values item wise.

M_1 = Mean of the upper group

$S.D_1$ = Standard Deviation of the Upper group.

N_1 = Number of cases (Here $N_1 = 20$) in Upper group.

M_2 = Mean of the lower group

$S.D_2$ = Standard Deviation of the lower group

N_2 = Number of cases in lower group (Here $N_2 = 20$)

Lower Group : 27% of the faculty members getting highest scores.

Upper Group : 27% of the Faculty members getting lowest scores.

Table III-14 :

Dimension - Goal Focus						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-Value	Significance level
1	4.05	1.15	1.90	1.02	6.26	.01
2	3.65	1.42	1.60	.88	5.49	.01
3	3.65	1.27	1.65	.81	5.94	.01
4	3.90	1.16	1.75	.85	6.69	.01
5	4.05	1.10	2.30	1.26	4.68	.01
6	3.65	1.09	1.70	.73	2.10	.05

Table III-15 :

Dimension - Communication adequacy						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significant level
7	3.55	.89	1.75	.64	2.33	.05
8	4.50	.69	2.75	1.12	1.88	.10
9	3.45	.99	1.50	.95	2.02	.05
10	4.05	1.00	1.90	1.02	2.13	.05
11	3.85	1.09	2.05	.89	1.81	.10
12	3.80	1.24	2.40	.88	4.12	.01
13	3.45	1.10	1.70	.80	1.82	.10

Table III-16 :

Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
	Dimension : Opmtimal power equalization					
14	3.55	1.05	1.95	.83	1.70	.01
15	4.00	.86	2.60	.94	1.56	Less than Insig.10
16	3.40	1.14	1.70	.86	5.32	.01
17	3.45	1.05	1.75	.91	1.73	.10
18	4.05	.83	2.25	1.17	5.66	.01
19	3.90	.85	1.60	.82	2.75	.01
20	4.40	.60	2.20	1.01	2.65	.01
21	4.35	.80	2.75	1.07	1.70	.10

Table III-17 :

Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
	Dimension - Resource utilization					
22	4.45	.76	3.05	1.11	1.47	less than.10
23	3.80	1.06	1.85	.67	2.20	.05
24	3.85	1.09	2.05	1.00	1.72	.10
25	3.55	.76	1.40	.68	2.98	.01
26	4.15	.67	2.15	1.09	2.21	.05
27	3.60	.82	1.90	.72	1.56	less than.10
28	3.95	.69	2.95	.88	1.26	less than.10

Table III-18 :

Dimension - Cohesiveness						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
29	4.05	1.15	1.80	.83	7.08	.01
30	4.25	.85	2.70	.86	2.04	.05
31	4.05	.89	2.55	.89	1.69	.10
32	3.70	.98	2.00	.79	1.91	.10
33	3.85	.88	2.40	.99	1.55	Less than .10

Table III-19 :

Dimension - Morale						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
34	4.15	.81	2.75	1.16	1.40	less than .10
35	4.20	.83	2.45	.94	2.03	.05
36	4.15	.75	2.30	.80	2.26	.05
37	4.00	.92	2.10	.72	2.30	.05
38	3.75	1.02	2.25	.79	1.65	less than .10
39	3.35	1.18	1.90	.92	4.24	.01
40	4.40	.60	2.10	.85	3.13	.01

Table III-20 :

Dimension - Innovativeness						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
41	4.15	.81	1.75	.79	3.01	.01
42	3.85	.93	1.70	.80	2.48	.05
43	3.80	.77	3.10	.91	.83	less than .10
44	3.90	.85	2.05	.89	2.13	.05
45	2.95	1.10	2.25	1.25	.60	less than .10
46	3.90	.97	2.35	.93	1.15	less than .10

Table III-21 :

Dimension - Autonomy						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
47	3.85	.88	2.50	1.10	1.36	less than .10
48	4.10	.73	2.30	.66	2.61	.05
49	3.80	.83	2.30	.73	1.92	.10
50	3.85	.99	2.55	.76	1.47	less than .10
51	4.20	.83	3.20	1.11	1.02	less than .10
52	4.30	.57	2.50	.95	2.30	.05
53	3.90	1.07	3.10	.91	.81	less than.10

Table III-22 :

Dimension - Adaptation						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	significance level
54	3.90	1.07	2.55	1.05	1.27	less than .10
55	4.00	.73	2.45	.69	2.18	.05
56	4.00	.73	3.05	.76	1.05	less than .10
57	3.75	1.07	2.45	.76	1.40	less than .10

Table III-23 :

Dimension - Problem solving adequacy						
Item No.	M_1	$S.D._1$	M_2	$S.D._2$	't'-value	Significance level
58	3.60	.88	2.25	.79	1.61	less than .10
59	3.40	.94	2.20	.89	1.31	less than .10
60	3.25	1.02	1.50	.61	2.08	.05
61	3.55	1.00	1.90	1.85	1.95	.10
62	3.15	1.04	1.85	.67	1.49	less than .10
63	3.55	1.00	1.80	.83	1.90	.10

Inferences :

Table III-3 to table III-12 presents the inter-correlations of items dimensions wise. In each dimensions the co-efficient correlations among items have got significant values in most of the cases. Table III-13 gives correlation between each item and the total scores. All the values are significant .01 level. Table III-14 to III-23 presents significant of difference between upper group and lower group for each item. Most of the items achieve .05 and .01 level.

3B.6 FINALIZATION OF ITEMS :

On the basis of correlation of each item with the total score, intercorrelations among items (dimension wise) and significance of difference between upper group and lower group for each item, following items have been selected finally for the O.H.Q.

Table III-24 :

Dimensions	Items No. selected	S.No. alloted
Goal focus	2,3,4,5	1,2,3,4
Communication adequacy	7,9,10,12	5,6,7,8
Optimal power equalization	16,18,19,20	9,10,11,12
Resource Utilization	23,24,25,26	13,14,15,16
Cohesiveness	20,30,31,32	17,18,19,20
Morale	36,37,39,40	21,22,23,24
Innovativeness	41,42,44,46	25,26,27,28
Autonomy	48,49,50,52	29,30,31,32
Adaptation	54,55,56,57	33,34,35,36
Problem Solving adequacy	58,60,61,63	37,38,39,40

Again out of seventy five members, sixty faculty members have taken randomly and scores of forty items selected have been tabulated. With the help of computer intercorrelations among forty items have been found out. Table III-25 gives intercorrelations of forty items with each other. High majority of correlations co-efficients have got significant value (at .05 or .01 level of confidence). It can be said that the items of O.H.Q. thus selected may measure the health of the organization effectively. These forty items have been distributed randomly in the final draft of the O.H.Q. Following table III-26,27 gives the details:

Table III-25 on separate sheet

Table III-2627

S.No.	Dimension	Item of the Ist draft	Item of the final draft
1	Goal Foucus	2	1
2	" "	3	25
3	" "	4	7
4	" "	5	14
5	Communication adequacy	7	2
6	" "	9	20
7	" "	10	3
8	" "	12	11
9	Optimal power equalization	16	35
10	" " "	18	32
11	" " "	19	27
12	" " "	20	21
13	Resource Utilization	23	10
14	" "	24	38
15	" "	25	30
16	" "	26	12
17	Cohesiveness	29	24
18	"	30	28
19	"	31	19
20	"	32	17
21	Morale	36	34
22	"	37	22
23	"	39	29
24	"	40	9
25	Innovativeness	41	16
26	"	42	5
27	"	44	39
28	"	46	13
29	Autonomy	48	15
30	"	49	18
31	"	50	6
32	"	52	8
33	Adaptation	54	23
34	"	55	31
35	"	56	37
36	"	57	40
37	Problem Solving adequacy	58	4
38	" " "	60	36
39	" " "	61	33
40	" " "	63	26

Copies of the O.H.Q. 1st draft and O.H.Q. final one have been given in the appendices.

Following tables show the brief mention of the research instruments developed for this research investigation.

Table III-28 :

S.No.	Research Instrument	Purpose	Validity	
1	Decision-making participation instrument (Existing)	To study existing participation of faculty members	Content validity	Total No. of Items.40
2	Decision-making participation instrument (Expected)	To study desired participation of faculty members	Content validity	Total No. of Items.40
3	Organizational health questionnaire	To study the organizat-ional health of Education systems	1)Content validity 2)Item validity	Total No. of Items.40

Table III-29 : Research Instrument for decision-making participation (Existing).

S.No.	Type of responses	Way of responding	Scoring by ratings
1	Participating always-a	encircle 0 or tick ✓	4
2	Participating to a great extent - b.	"	3
3	Participating considerable - c	"	2
4	Participating to a less extend-d	"	1
5	Not participating-e	"	0

Table III-30 : Research Instrument for decision-making participation (Expected).

S.No.	Type of responses	Way of responding	Scoring by ratings
1	Participation always - a	encircle 0 or tick ✓	4
2	Participation to a great extent - b	"	3
3	Participation considerably. - c	"	2
4	Participation to a less extend - d	"	1
5	No participation - e	"	0

Table III-31 : Research Instrument for organizational health

S.No.	Type of responses	Way of responding	Scoring by ratings
1	a - completely agreed	encircle 0 or or tick ✓	4
2	b - Agreed to a great extent	"	3
3	c - Agreed to some extent	"	2
4	d - Agreed to little extent	"	1
5	e - Disagree	"	0