

Chapter III

METHODOLOGICAL ISSUES

The third chapter is devoted to presentation of the precise statement of main issues involved in the study of organisational climate, explanation of the means and methods used to operationalise the concept of organisational climate, statement of the problem of the study, hypothesis, discussion of the rationale for selection of tests and their description, formulation of tables for data presentation and the scheme of analysing them.

It may be stated that this chapter constitutes the heart of the study for the reason that, like in most of the psychological studies, the success of the study lies in how well the abstract issue is conceptualised and operationalised to lead to its authentic use at the interpretative stages of the work. This chapter becomes all the more important in point of the fact that the application of the concept of organisational climate to industrial organisation is of very recent origin and theorists are at the exploratory stage to evolve a suitable approach and scheme to study organisational climate in industrial organisation as a special case. Choice of methodology turned out to be the most crucial step on which the outcome seemed to be verily hinging.

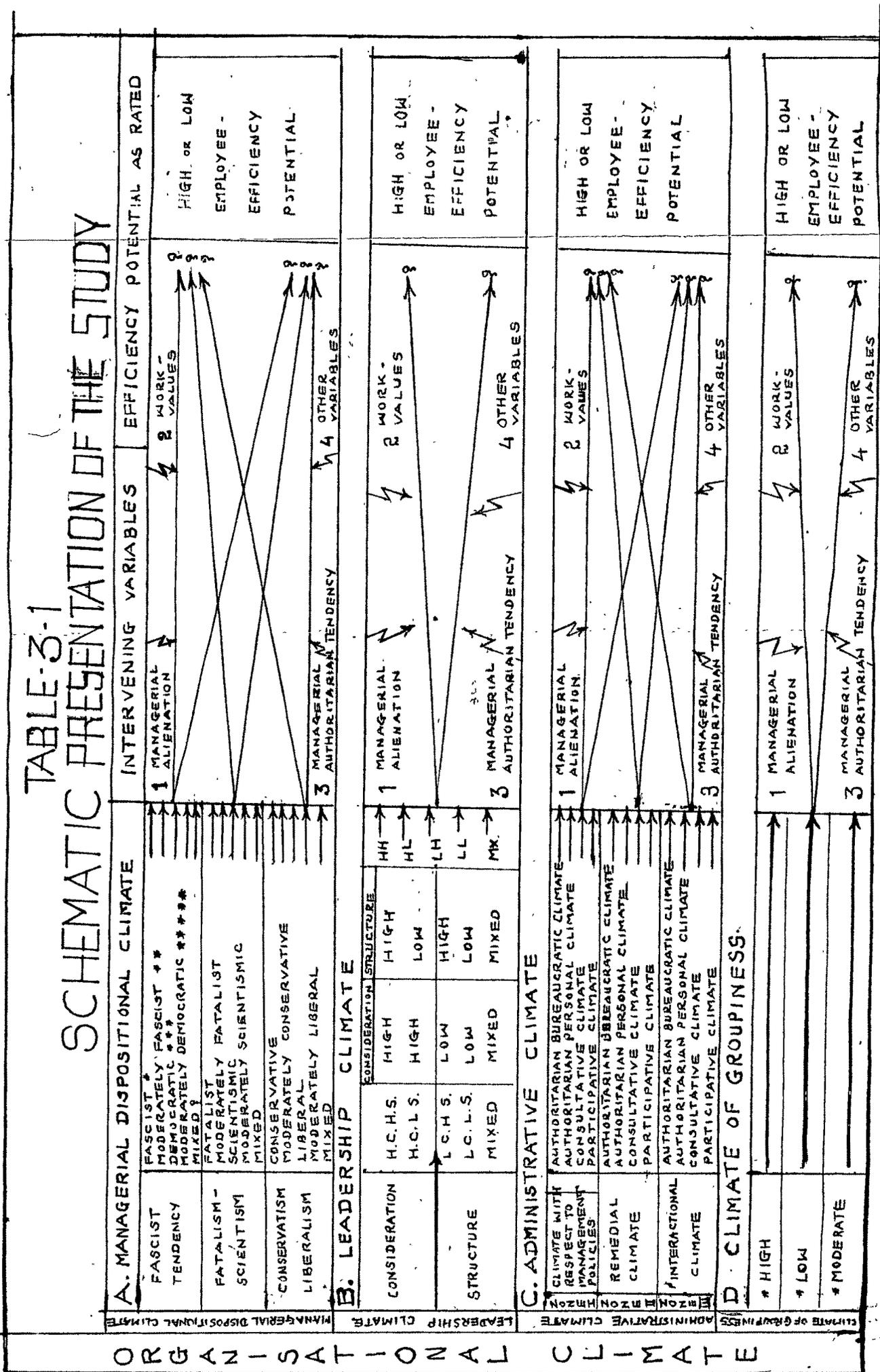
Outline of the Scheme of the Study

It is clear from the title of the study that it seeks to examine the relationships between Organisational Climate (OC) and Efficiency Potential of Employees (EEP) both measured in some definite ways. Of course, it has already been accepted that the relationship between these two could be better understood with the help of other related variables whose intervening influence cannot be kept at bay in the real situation. In view of the multi-dimensionality of the concept of organisational climate, it was imperative to choose the senses in which it could be usefully taken in the case of work organisation and limit the purpose and thrust of the study to guard against possible diversions and diffusions, both conceptual and procedural, offered by the inherent variety of the theme.

Taking into account the special character of Work Organisation as an organisation, it was decided to take OC in the following senses. OC in each of the selected senses has been conceptualised, specified and operationalised to make it amenable to the subsequent exercise of relating it with EEP.

OC has been taken in four different and mutually exclusive senses. The idea behind doing so was to accommodate the major dimensions of theory of organisational behaviour, namely the psychological, the social and the

TABLE 3-1
SCHEMATIC PRESENTATION OF THE STUDY



formal for grasping the reality of OC and seek to corroborate the relationship of OC and efficiency potential of employees, OC being taken in multiple senses. This exercise, it is believed, will help us to obtain a comment on the prevalent theoretical beliefs and direction in which organisational behaviour is moving.

The scheme of the study consists of the presentation of OC in four senses, namely (a) Managerial Dispositional Climate, (b) Leadership Climate, (c) Administrative Climate, and (d) the Climate of Groupiness in their finer gradations and their relationship with EEP ratings reported by each department of the organisation under study.

It may be noted that EEP has been rendered measurable by the formulation of a validated rating format which offers the opportunity of rating EEP on 20-item placed on a 5-point scale (Please refer Appendix 3.1).

The following Table 3.1 containing a schematic presentation offers a quick and comprehensive view of the scheme of study.

Explanatory note on the Schematic Chart:

The chart (Table 3.1) seeks to present the four major climates with their gradations, the intervening variables and the EEP. The arrows in the chart show two possibilities of relationship of each gradation of climate with EEP.

As shown, each grade of climate in each major climate can be related with High or Low EEP. The study seeks to ascertain which climate gradation relates with High or Low EEP and explain the relationship.

The chart pointedly brings out that the relationship between the climate and EEP is not direct but is being vitally influenced by the impact of variables which have been depicted in the middle portion of the chart between the climate and EEP in the form of zig zag arrows.

The four major climate measures are:-

- (A) Managerial Dispositional Climate
- (B) Leadership Climate
- (C) Administrative Climate
- (D) Climate of Groupiness.

The four intervening variables are:

- (1) Alienation tendency of Managers
- (2) Work values
- (3) Authoritarian tendency of Managers
- (4) Other variables such as achievement orientation, morale of the supervisory respondents.

What follows now is the discussion of the rationale and significance of each major climate, grades of major climate and explanation of the nature of intervening variables and their formulations.

(A) Managerial Dispositional Climate (MDC): Its Rationale

The top portion of the chart depicts the MDC, a climate of psychological condition created by managers. Managerial Dispositional Climate derives from the typical attitudes, orientations and tendencies of the managers and provides a subtle and contextual psychological environment within which the organisational actors namely the managers and supervisors function. Managerial dispositional climate taps the potential sources of psychological and cultural impacts of the managerial authority structure on the lower echelons in the organisation commencing from the supervisory level, downwards.

Managerial predilections, given the authority and other influence instruments, available to the managers in work organisation can in the long run exert driving or restraining influence on EEP.

Generally speaking managers in work organisation could create positive or negative conditions, depending upon what they themselves are internally in point of three basic attitudes viz., (a) predominance of liberalism or conservatism, (b) tendency to fatalism or scientism, and (c) authoritarianism.

Using suitable tests (discussed in the latter part of the study) an attempt is made to develop the measure of MDC which informs as to the kind of climate a manager

is himself equipped to create, given favourable conditions.

The essence of MDC is that it provides for the larger contextual psychological world, enveloping the lower layers of the organisation and an idea about the direction in which managers, especially in India, push their power.

Gradations of MDC:

Five gradations of the climate of MDC with reference to each of the major contributing tendencies have been provided, two of the gradations are on the positive side, two on negative side and the fifth one represents a condition of mixed tendency. Of the two gradations in the positive or negative side, the first one represents the clear tendency, the second one represents the tendency in a moderate form.

Illustration: With respect to Fascist tendency, first climate gradation is Fascist, indicated by one star (*). It is the clear negative tendency followed by moderately fascist which is a moderate tendency indicated by two stars (**).

On the positive side, clear gradation democratic has been indicated by three stars (***) whereas moderate gradation i.e. moderately democratic has been indicated by five stars (*****).

The mixed climate gradation with reference to the tendency of Fascism has been indicated ? (Q-mark).

Each climate gradation is developed through the process of analysing and interpreting the ratings of the managers of a department on a highly standardised Fascist tendency scale. This is being discussed in the latter part of the chapter.

Each gradation of climate could go into High or Low EEP which twin possibilities are shown by arrows in the chart.

The influence of the intervening variable on the relationship between the climate gradations in MDC or EEP has been examined by juxtaposing between the two scores the intervening variable scores and seeing if they explain the deflected relationships.

This scheme has been consistently followed in each of the tendencies, climate gradation and the other major climate's gradations.

Besides the MDC, there exists three other very important types of organisational climate namely (a) the leadership climate (b) the administrative climate, and (c) climate of groupiness.

(B) The Leadership Climate:

The leadership climate provides for the social conditions created by the interactions between the managers and their subordinates at the work place. It is termed social for the reason that it develops through the interactions that managers by their selected style of leading their subordinates initiate and sustain over a period. Managers have the freedom, within the broad framework of organisational constraints, to select the degree and style of leadership that they want to build into their formal roles and create an interpersonal basis of effective dealings with their subordinates. Thus, managers tend to create a relational world which is termed the leadership climate.

The second rectangle of the chart, shows leadership climate, deriving from the leadership style based into two important behavioural patterns, namely, the consideration and the structure. Managers could select any combinations from the four possible variations of the style namely high structure, high consideration, low structure and low consideration. The resultant styles are shown in the chart by abbreviations HH, HL, LH, LL and the last one M_x indicating a mixed style.

The gradations of leadership climate are related with high or low EEP, again taking into account the impact of intervening variables. The precise technique of measurement

of structure or consideration behaviour and characterisation of the climate of a given department are discussed later on in this chapter.

(C) Administrative Organisational Climate (AOC):

The administrative organisational climate derives from the manner in which the manager administers his department. It is more of a matter of style of doing the formal work, within the framework of work routines. The administrative organisational climate is more structured, formal and regimented and calls for a more incisive practice of a style to create an image. In administrative OC the manager's style of doing the work is observed. How he performs his duties is crucial to administrative OC perception. Thus leadership climate derives from the behavioural style of the managers and the administrative OC derives from the performance style of the managers.

Administrative organisational climate is job issues based and is very much significant to the subordinates whose focus in the long run is "interests arising from job related matters."

The major climate of administrative OC has been divided into three zones, each zone taking care of a distinct area of management-employee relationship based into job or job related matters. In the chart, these zones are mentioned at the second place in the box

as (i) climate with reference to management policies (ii) the remedial climate and (iii) the interactional climate. A brief statement of the rationale for each zone now follows.

(i) Management policies on important matters (which are high stake matters) such as promotion, transfer, leave, work-load distribution, it is hypothesised, create a general climate of an administrative type. They indicate the crux of relationship between the employees and the management in that it conveys to the employees the esteem in which they are held by the management.

(ii) The Remedial Climate zone covers areas of critical actions and interactions between the managers and their subordinates in which the management tries to correct or punish or set right the employees on their expected path. The matters covered, illustratively are correction of Mistakes, Disciplinary Action, Insubordination etc.

(iii) The third zone in AOC is interactional zone which takes care of the interactions between the managers and their subordinates. This zone of administrative organisational climate indicates the degree of cooperativeness that is built in the relationship.

Each zone of climate has four climate gradations namely (a) the authoritarian bureaucratic climate, (b) the

authoritarian personal climate (c) the consultative climate, and (d) participative climate.

- (a) The authoritarian bureaucratic climate derives from the tendency of the managers to have recourse to formal policies, authority, procedures and rules as a routine and go "by the rules".
- (b) The authoritarian personal climate derives from the tendency of the managers to develop personal power or use it in their administrative work.
- (c) The consultative climate derives from tendency of the managers to seek to consult their subordinates in administrative matters.
- (d) The participative climate derives from tendency of the managers to offer participation to their subordinates.

Thus, in each zone, these four climate gradations are related with EEP in the context of other intervening variables according to a scheme discussed later on.

(D) Climate of Groupiness:

The climate of groupiness depicted in the bottom of the chart derives from the extent to which subordinate respondents feel attracted towards the group not merely in the form of opinion which are intellectual and ideal but in fact as a matter of their experience. It may be

noted that this climate measure is based on the concept of group dynamics and plays the role of tapping the actual feeling of groupiness among members. It is believed that the social forces ultimately contribute to the feeling of groupiness among members and a composite picture in this connection provides a group-dynamics based climate measure. Using suitable tests, scores for the groups have been obtained which clearly discriminate between the groups.

Three climate gradations High, Low or Moderate have been developed and related with EEP, with the usual consideration of the intervening variables.

This climate measure is not central to the study but is used to corroborate the results of the other climate measures.

A brief explanation for the inclusion of the intervening variables will highlight their significance in the study.

Work Values are included in the study of organisational behaviour issues as a special factor which bring in the loading of socio-cultural forces operating in an environment.

Alienation is regarded now almost as important as Managerial Motivation and theorists have started regarding it as an important independent factor rather than the inverse or obverse of Motivation. Moreover alienation

tendency is so much ingrained that its inclusion, it was thought, could explain efficiency potential realisation, more appropriately in the scheme of the study.

Managerial authoritarianism measured specially could hold a clue to many problems of organisational climate or EEP since it is the mainspring on which all interdependent relationships hinge and all conditions could be ultimately traced to.

The study, in fine, seeks to study the interrelationships between OC and EEP in the selected industrial organisation, using the scheme of climate measures and EEP rating, and accommodate the inclusion and intervention of other relevant variables that could explain the apparently distorted but inherently meaningful relation between OC and EEP. In the process, it was also possible to know about the importance of the state of intervening variables in the general study of organisational behaviour.

Hypotheses Studied:

The central concern of the study is to ascertain what OC in general could be associated with high or low EEP (as rated) of the supervisory respondents at whose level organisational climate becomes operationally significant for the Organisation. Each hypothesis is rooted into the prevalent theoretical belief in the area of under study.

Initially, broad hypotheses are stated which have been specified for each issue studied in terms of the specifics of the area of study. In the scheme of presentation of the hypothesis, firstly, the specific issue studied is mentioned followed by the specific hypothesis set thereonto.

As mentioned, five broad hypotheses studied are as follows:-

- I. OC - EEP relationships is not specific to a particular measure of climate but a general one and therefore each climate measure could be related with EEP.
- II. All climate measures have in-built dichotomies, one end representing OC conditions which could be termed as positive and the other end as negative.
- III. Positive climate conditions based on Theory "y" conceptualisation tend to promote EEP more than negative climate conditions based on Theory "x" conceptualisation restrain EEP.
- IV. The climate - EEP relationship is not direct but is expected to be mediated by certain specific variables.
- V. In a work organisation, Administrative Organisational Climate, deriving from work-based and stake-based interactions, could be hypothesised to occupy central position in the totality of the scheme of climate measures and its contribution to the total climate generation could be maximum.

The above-mentioned broad hypotheses were used as guidelines for the formulation of the specific hypothesis

for each climate measure and other variables.

(a) Managerial Dispositional climate and EEP

Issues studied: Relevant managerial tendencies measured on Conservatism-Liberalism, Fatalism-Scientism and Fascism-Democratism continua could differentially relate with EEP.

The Hypothesis: Managerial Dispositional climate of a positive character has a positive relationship with EEP and negative managerial dispositional climate has a negative relationship with EEP.

(b) Climate of Groupiness and EEP

Issue studied: There is a definite relationship between extent of groupiness and EEP.

The Hypothesis: EEP varies directly as groupiness.

(c) Leadership Climate and EEP

Issue studied: Various combinations of leadership style measured along consideration and structure dimensions could be differentially related with EEP.

The Hypothesis: EEP has a positive relationship with both consideration and structure or EEP varies as consideration and structure behaviours of managers as perceived by their subordinates.

(d) Administrative Organisational Climate and EEP

Issue studied: Different types of Administrative Organisational Climate have different components of authoritarianism and could relate with different levels of EEP.

The Hypothesis: EEP varies as an inverse function of the authoritarian component of the OC.

(e) Organisational climate and EEP

Issue studied: Organisational climates are composed of different components such as the authoritarian, bureaucratic, consultative and participative.

The Hypothesis: While the presence of consultative participative components in OC could be expected to indicate conditions conducive to EEP what exact combinations of climate conditions could associate with good EEP distribution has to be empirically ascertained.

(f) Work Value Preference Agreement and EEP

Issue studied: Supervisors' and subordinates' agreement on specific work values could have a specific relationship with EEP depending upon their extents.

The Hypothesis: High agreement on preference for work values could be expected to associate with higher rating on EEP and vice-versa.

(g) Authoritarian and Alienation Tendencies of Managers and EEP of Subordinates.

Issue studied: The tendencies of authoritarianism and alienation among managers could have a certain influence on the motivation of subordinates.

The Hypothesis: Higher the degree of authoritarian and alienation tendencies, among the managers, lower would be efficiency potential (as rated) of their subordinates.

It may be noted an attempt is made to test the prevalent theoretical beliefs in the matter of each issue through the spirit of an independent inquiry, empirical in nature.

All throughout, an implicit attempt is made to test Theory 'x' and Theory 'y' foundations in a general way.

Methodological Issues Involved in the
Measurement of OC in Industrial Unit:

In a general way, the study posed the problem of measuring something that is considered to be existing at the cognitive and affective levels of awareness and as such necessitated the search for appropriate tools with the help of which OC could be gauged with a fair degree of accuracy.

The basic issue, thus, was to develop and/or ascertain the measures of OC that will help in differentiating one set of OC conditions from another one and characterise these sets of OC conditions to contradistinguish them inter se and inter alia. The second important decision was to choose the method of ascertaining the OC from the three wellknown methods described below.

Method . I

It is possible to ascertain the OC by examining the objective properties of organisations easily and readily obtainable from such records as the statement of the

company's policies and objectives, Office Memoes, inter departmental communication, important documents and letters, address of the chairman and important documents released by the company for its different publics, the documents pertaining to the conduct of meetings and a score of other evidences. This method of objective references is very credible and useful. But it takes into account the projected climate and not the actual resultant one which is more relevant to individuals who work within it. The real climate for individuals results from how the objective references are perceived by the participants in their day-to-day experience. This method therefore was ignored in the light of this argument.

Method II

It is possible to ascertain the OC through the observations of outsiders. But such observations, however objective, prove to be casual and transient because outsiders cannot be expected to observe continuously and in detail. Only the actual participants can be expected to do so.

Method III

The method of ascertaining OC based on participants' perceptions of organisational properties was found to be more useful and relevant. The causal variables like structure, objectives, supervisory practices interact

with personalities to generate perception and it is only through perception that relationship between the causal and end variables is rendered meaningful.

The third method was found to be more useful, for the reason that real understanding of the OC can be achieved only if one goes to roots of perception at which OC issues forth and shapes out.

One major issue that needs clarification at the stage is that, while it would be tempting to study OC of the whole organisation in a comparative manner, the variety of the factor and forces and their specificity in each industrial organisation makes it very difficult to render any two organisations comparable. Instead, taking the larger system of the entity of a given organisation as a parameter, it is possible to study the OC as between or among its constituent units, assuming that changes in OC between or among them could not be due to the totally different worlds of reality but the human processes taking place, therein.

Managerial Dispositional Climate

Explication of the Concept of Managerial Dispositional Climate and its Rationale:

As mentioned earlier, in the scheme of conceptualisation of OC, it was thought necessary to ascertain the climate that managers are capable of creating through their basic attitudes, orientations and work-values which go a long way in the creation of a contextual world in which they and their subordinates interact daily. This is termed as Managerial Dispositional Climate (referred hereinafter by the abbreviation MDC) since it exists as a cognitive possibility emanating from the perceptions of the subordinates of managers in the routine of their interactions. MDC is what the managers are capable of creating in terms of their inner mental make-up and becomes a perceived reality inasmuch as it enters the cognitive world of the perceivers. The extent to which MDC would materialise depends upon a number of factors and forces such as the authority of managers, their discretionary powers, their tendency towards autonomy the inner sanctions and a desire to imprint their decisions with their individuality. Managers can create a situation which may have a positive or negative value (if not impact) to their subordinates. This is certainly not to say that managerial stances have a direct effect on the efficiency

of their subordinates.

The highlight point to note is that managers tend to create a referential and contextual set of conditions which have a bearing on the quality of efforts that subordinates tend to put in. Generally speaking managers in work organisations could create positive or negative conditions depending upon what they themselves are internally in point of their basic attitudes. It stands to commonsense to state that positive managers tend to create positive conditions whereas negative managers tend to create negative conditions though they may not be always successful.

In order to ascertain whether given managers are of positive or negative character, it was found imperative to obtain answers to the following basic questions.

(a) Is the manager receptive of other's ideas and suggestions or is he stuck up in his own rigid beliefs? The answer to this question would tell us whether the given manager is liberal or conservative.

(b) Is a manager having a scientific outlook or is he a fatalist believing in the efficacy of non-scientific and non-logical forces? The answer to this question would determine whether a manager is convinced about the efficacy of techniques and technology he uses. In other words, whether he is scientifically oriented or fatalistically oriented.

(c) Is the manager sufficiently permissive or participative to encourage subordinates to open out and try or is he so much authoritarian that he would enforce his views, ways and methods upon subordinates? The answer to this question would throw a light on the extent of authoritarianism in him.

Keeping in view these three basic tendencies that determine the efficacy of a manager who acts through others three kinds of suitable tests were selected, the detailed description of which would follow soon.

The answers to above three basic questions, it was believed, would inform whether a manager is positively or negatively oriented and the kind of organisational climate he is equipped to create. MDC, thus, issuing forth from the specific mental make up of managers, would shape out in the perceptions of their subordinates not as clearly as a managerial style or approach which becomes overt in the long run but as something covert (implicit) to be assumed as the managers psychology. MDC is thus more subtle and implicit than other types of climates. The manager's psychology or state of mind is a source of influence to subordinates except that the manner of influence is too intricate and subtle to be depicted and described. It is quite common to hear people talk about Boss's line of thinking and adore or criticise it as a matter of facility or obstacle.

Test Description:

Two tests were selected to measure MDC: (A) F-scale by Prayag Mehta* which measures authoritarian tendency and (B) Ansari's** Value-orientation Scale which contains items for measurement of tendencies to conservatism-liberalism, Fatalism-scientism. It also contains items for measurement of authoritarianism - non-authoritarianism as well as hereditarianism V/s Environmentalism but they were ignored as they were not relevant for the kinds of tendencies sought to be measured for the study.

Prayag Mehta's F-Scale:

The F-scale of Prayag Mehta is an adopted and abridged version of original tool developed by Adorno. It consists of 29 items, first 19 measuring Fascist tendencies and the rest measuring alienation. The test has been adopted to suit the Indian conditions and is cast in terms of generality. The test items seek to tap the opinions and beliefs to respondents on seemingly general but intrinsically very crucial issues that reflect upon the basic character of a person. In fact, items are so construed that if a respondent genuinely responds, he will certainly reveal his belief and orientation systems. For

*Please refer Appendix 3.2

**Please refer Appendix 3.3.

example, Item No. 1 seeks to measure the Fascist tendency, seeking a response to the statement. "To whatever extent, science may progress, certain things can never be understood by the human brain." The person who agrees to this item displays a positive Fascist tendency whereas one who disagrees, a negative Fascist tendency, with reference to one of the nine behavioural manifestations developed by Adorno et al¹ (viz., superstition and stereotyping).

Item No. 13 "Western dress might look nice but I do not like my family members to wear it.", seeks to judge whether the respondent is committed to conventionalism a middle class value.

Item No. 9 "Businessmen are more important than poets and writers for the society" seeks to judge how the respondent fares on the tendency - Anti-intracception.

Items No 20 through 29 seek to judge how much alienation respondents experience through items which are used to judge how people feel helpless in different matters, believe all the while that actions do not lead to any results.

Scoring on F-scale:

For each of the 29 items, a response-set comprising of five categories of response was provided against

¹Fillmore H. Sanford and E. John Capaldi., "Research in Developmental Personality and Social Psychology", Prentice-Hall of India Private Ltd., New Delhi, 1967, Chapter II, pp.44-46.

each item for the respondent to tick upon. The following categories constituted the response set.

Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree.

The middle category is assigned '0' point value, since it is a neutral position. Strongly Agree and Agree categories are assigned +2 and +1 points respectively whereas Disagree and Strongly Disagree categories are assigned -1 and -2 points respectively. Thus, the maximum possible score for fascist portion of F-scale (1-19 items) could be +38 or -38. The actual scores of the respondents would fall between +38 or -38 and for Alienation portion (20-29 items) +20 to -20 points. The final score could be thus +58 or -58. After plus or minus scores were checked out, the final scores were rendered into T-scores, taking standard deviation at 10 or mean at 50 to facilitate the setting up of the cut-off therein and comparison thereof.

Ansari's Value-orientation Scale:

For Ansari's Value-orientation Scale from which items for two value orientations - conservatism-liberalism and fatalism-scientism were used, the response set of six categories — Fully Agree, Mostly Agree, Just Agree, Just Disagree, Mostly Disagree and Fully Disagree — were provided. Fully Agree category was assigned 6, Mostly

Agree 4, Just Disagree 3, Mostly Disagree 2 and Fully Disagree 1 point. Some items were intentionally reverse-scored to avoid patterned and mechanical responses.

The Test of Ansari entitled 'Value Orientation Scale' was found to be useful in obtaining answers to the three basic issues referred on pp 74-75 which were found to hold clue to the manager's work philosophy.

Rationale for the selection of the Test: Executive's value orientations and tendencies can penetrate the value components of their decisions and contribute significantly to the creation of typical socio-psychological conditions in their departments. It was decided to select a test which could rate the executives on value-orientations that influence their own work and incidentally the working of their subordinates. Ansari's Test, offering measurement of tendencies of Conservatism-Liberalism, Fatalism-Scientism and Authoritarian-Non-authoritarian was found to be meeting the requirements of the study. It was especially selected because its items are subtle and sufficiently general to motivate respondents to respond freely. Moreover, the variables that it seeks to measure have a direct bearing on the crux of managerial work-place philosophy.

Test Description: The test consists of 48-items, several of which ~~borrowed from~~ the item-pool of Dr. Uday Pareek and Chattopadhyay.

Test Scoring: Its items are to be scored on a 6 point summated ratings. The response set contained six responses each carrying a numerical value as shown below:

Fully Agree	Mostly Agree	Just Agree	Just Disagree	Mostly Disagree	Fully Disagree
6	5	4	3	2	1

Items pertaining to only Conservatism-Liberalism, (1-19), Fatalism-Scientism (20-29) and items (9 in all) measuring authoritarianism tendency were used as independent items to be referred at the right place hereafter. The maximum score in regard to the tendency of Conservatism-Liberalism was 90, the minimum 19. Likewise the maximum possible score in regard to the tendency of Fatalism-Scientism was 72, the minimum 12.

Some items were reverse scored.

Reliability and Validity of the Test as reported.

Reliability: Split-half reliability for the four value dimensions obtained between .72 to .82.

Validity: Items were selected on the basis of 11 judges ratings. Group validity was also established.

Procedure for Categorisation of Managers into High and Low Scores and Preparation of the Table for Characterisation of the OC in the Departments Concerned:

After calculating the scores of managers on Conservative-Liberal, Fatalist-Scientism and Fascist Tendencies, they were arranged in an ascending order for each tendency using the median value as a cut-off point in this arrangement, each respondent has been categorised as High or Low scorer for each tendency. Managers who scored higher than the median score were assigned the code H and those who scored less than the median value were assigned the code L to symbolically represent their position in each tendency. Symbol L in each of the three tendencies indicated tendency to Liberalism, Scientism and lower Fascism respectively, whereas symbol H indicated a tendency to Conservatism, Fatalism and Fascism in each of the above referred tendency respectively.

Few managers scored exactly the median score. They were equally distributed between H and L categories.

Preparation of the Table:

A table depicting the categorisations of all the managers for each of the three tendencies was constructed to obtain an overall view of the distribution of managers on H-L categorisation, departmentwise.

Table 3.2: Specimen of the Table depicting the
Categorisations of Managers into High or Low
Scorers in each of the three Tendencies in
ONE department.

Code No. of Supervisor	Categorisa- tion in Conservative Liberal Tendency	Categorisa- tion in Fatalist- Scientific tendency	Categorisa- tion in Fascist tendency
1	H	H	H
2	L	L	L
3	H	H	H
4	L	H	H
5	H	H	H
6	H	L	H
7	L	L	L
8	H	H	H

H - means High scorer i.e. above median value among all the managers constituting the sample of the study.

L - means low scorer i.e. below median value among all the managers constituting the sample of the study.

Description of the Table:

Managers were shown in the first column by their code numbers. The second, third and fourth columns displayed the scores of managers in Conservative-Liberal, Fatalist-Scientific or Fascist-tendencies, represented in H and L categorisations respectively. The managers of each

department studied were placed in a sequence to facilitate eventual characterisation of the same in climate terms. The table 3.2 thus made for the transfer, conversion and display of total data on MDC on a Master Sheet, and facilitated the preparation of the next table, offering the number of managers who were High scorers or Low scorers in each tendency.

Table 3.3: Specimen of the Table Displaying the Total number of managers earning H or L Categorisation in THREE Departments, expressed in H_xL_y form.

Code of the Department	H_xL_y Presentation of Managers in Conservative Liberal tendency	H_xL_y Presentation of Managers in Fatalist-Scientific tendency	H_xL_y Presentation of Managers in Fascist tendency
A	H_5L_3	H_5L_3	H_6L_2
B	H_4L_2	H_5L_1	H_4L_2
C	H_2L_3	H_3L_2	H_3L_2

The departmental score in the Table 3.3, it may be noted, is presented in the form of H_xL_y format. In H_xL_y format, subscript x indicated the number of managers scoring H categorisation and y indicated the number of managers scoring L categorisation.

Criteria for Climate-Assignment in MDC:

The Principle followed: The basic issue was to formulate the criteria for climate assignment. This involved a decision regarding what difference between H_x and L_y would qualify for what type of climate-assignment in MDC. The principle followed in this regard was that if the difference between H_x and L_y were double or more than double, then only a clear climate could be assigned in the case on the strength of the argument that double or more than double the number of persons holding certain tendencies and orientations would certainly have a predominant influence in a given set-up.

The Procedure: In the format $H_x L_y$, the values of x and y could be determinate for a given set-up. Given the maximum number of managers and the minimum number of managers, it was possible to construct a reference table that could depict all the possible H_x and L_y combinations. For example if maximum number of managers were 10 and 11, the first reference table indicating possible combinations of H_x, L_y would be as follows:

When N=10

$H_{10}L_0$

H_9L_1

H_8L_2

When N=11

$H_{11}L_0$

$H_{10}L_1$

H_9L_2

<u>When N=10</u>	<u>When N=11</u>
H_7L_3	H_8L_3
H_6L_4	H_7L_4
H_5L_5	H_6L_5
H_4L_6	H_5L_6
H_3L_7	H_4L_7
H_2L_8	H_3L_8
H_1L_9	H_2L_9
H_0L_{10}	H_1L_{10}
	H_0L_{11}

It may be observed that the total number of combinations would be $\underline{n + 1}$.

But from $n+1$ combinations, the main combinations, depicting the possible differences between H_x and L_y would be half or almost half since half the combinations are the opposites. Thus if a criterion could be evolved to take a decision of H_9L_2 , automatically the criterion could be applied for H_2L_9 combination also.

The number of main combinations would be $\frac{n}{2} + 1$, if n is even and $\frac{n+1}{2}$ if n is odd.

In the table, when n is 10, main combinations would be $\frac{10}{2} + 1 = 6$ and when n is 11, it would be $\frac{11+1}{2} = 6$.

From amongst 11 combinations, in case of $n=10$ the main combinations to be picked for deciding upon would be as follows:

Main combinations:	$H_{10}L_0$	H_0L_{10}
	H_9L_1	H_1L_9
	H_8L_2	H_2L_8
	H_7L_3	H_3L_7
	H_6L_4	H_4L_6
	H_5L_5	

Thus, a reference table of the main combinations to be used for any set-up could be created with any value of n , viz., number of respondents.

The Criteria:

As it is clear, the crux of the issue is to decide the basis of climate-assignment in MDC taking into account the differences between H_x and L_y . The following criteria were evolved and used for the purpose.

- (a) If the difference between H_x and L_y were double or more than double, then a clear climate of the greater score is assigned.
- (b) If the score of one of them was higher but less than double, then the climate of the higher score with a qualifying phrase 'moderate' was assigned to it.

- (c) If the scores of H_x and L_y were equal, then the climate assigned is 'mixed'.

Illustrations:

In H_5L_3 , the climate-assigned would be 'H moderate'. In H_6L_3 , the climate assigned would be H. In H_4L_4 , the climate assigned would be mixed. In H_5L_7 , the climate assigned would be 'L moderate'.

A table displaying climate characterisations in MDC from the five types of MDC climate was formulated. The specimen of the said table is as follows:

Table 3.4: A Table Displaying Climate Characterisation in MDC from the five types of MDC Climate.

Code of the Department	Climate Characterisation
A	H_M
B	L_M
C	H
D	Mix
E	L_M

But Table 3.4 being symbolic, it was observed, could be cumbersome for interpretation and use at latter stages of the study. For the sake of simplicity and directness of reference, the Table 3.4 was finally transformed into the language of the five types

of MDC. The specimen of the table is as follows:

Table 3.5: A Specimen of the Reference Table Depicting all Possible Combinations of MDC in Language, Indicating the Final Climate Characterisations for Interpretation in Each of the THREE tendencies.

Coded Characteri- sation	Tendency decoded in Language		
	Conservatism- Liberalism	Fatalism- Scientism	Fascist
H	Conservative	Fatalist	Fascist
H _M	Conservative moderate	Moderate fatalist	Moderately fascist
L	Liberal	Scientismic	Democratic
L _M	Moderately liberal	Moderately scientific	Moderately democratic
M _X	Mixed conservative and liberal	Mixed fatalist and scientific	Mixed fascist and democratic

A Test to Establish the Independence of Each
of the Three Tendency Measures in Measuring MDC:

It was decided to calculate inter correlations among the scores of Managers in conservative-Liberalism Fatalist-Scientisms and Fascist-Democratic tendencies and check whether these tests contribute independently to MDC creation. The co-efficient of correlations are reported.

	66			
	Conservatism- Liberalism	Fatalism- Scientificism	Fascist Democratic	
Conservatism- Liberalism		.31	.48	n=30
Fatalism- Scientificism	.31		.54	
Fascist Democratic	.48	.54		

It may be observed that all inter correlations are moderate and thus we may state that the three components of MDC are moderately correlated. The combinations of these would constitute High, Low and Moderate MDC. All the correlations being positive and moderate, justify the use of three measures of MDC, each measure having specific contribution and others also contributing to MDC as well.

Employee Efficiency Potential (EEP)

As the title of the study indicates, relationship between OC and EEP constitutes its core. Since the idea of EEP is not conventionally used and defined, an attempt is made to explicit it for the study.

Efficiency potential means the totality of capacities with which an individual is equipped with reference to a given task and which he can actualise if suitable conditions

obtain. It is widely known that, performance of an employee, beyond a certain level, is not responsive to merely formal instructions but rather to psychological forces operating upon him. There is always a gap between what an individual does and what he is capable of doing. The actual performance of an individual could be enhanced by operating on the factors and forces to which he responds beyond his average performance and the gap between the two could be narrowed. William James² of Harvard University estimated that employees could retain their job by working at a mere 20-30 per cent of their potential. His research led him to believe that if the same employees were properly motivated, they would work at 80-90 per cent of their capabilities. EEP, thus, does not refer to the efficiency that an individual achieves in a given set of conditions but to the fullest possible extent an individual, by virtue of his unique combination of abilities and qualities is capable of. EEP looks like being indeterminable but could be rendered determinate by means of certain indirect tests and a systematic assessment of it by experienced persons on specific items, scaled to values.

Moreover, practically EEP is not something of the type of a natural endowment but a matter of evolution of an individual's capabilities through work and work experience. An individual's EEP thus is not a static quality wanting to

²Quoted by Arun Monappa and Mirza Saiyadain, "Personnel Management", Tata McGraw Hill Publishing Company, p.138.

be unfolded but a dynamic entity, developing and growing as an individual advances in life, interpreting his experiences, sharpening his skills, changing his attitudes and functionalising his personality for goal achievement in the given conditions of working life. Over a period, EEP itself may change upto a certain stage in working life, through the processes of adaptation and adjustment. Operationally, EEP could be gauged at a given point of time, indirectly by running a number of tests for knowing how well he is internally tuned to, and equipped for, realistically responding to the stimuli and cues that obtain in his work environment.

Operationalising the Concept of EEP

Procedure for the Preparation of the Tool of EEP:

Initially a tentative list of EEP items was made through the scrutiny of selected Performance Appraisal forms of progressive concerns and a discussion with four known executives. These items were discussed with a number of executives to ascertain whether they could be useful in measuring the EEP. As a result, a few items were deleted. An idea as to what attributes contributed to EEP emerged. A general consensus emerged that EEP did not merely depend upon his technical competence but also upon certain tendencies, qualities and attitudes

that he possessed or developed. Another important matter that was brought in the discussion was whether EEP could vary. Most of the executives opined that it could, depending upon conditions and circumstances.* A special questionnaire was, later on prepared and submitted to ascertain the opinion of sixteen experts who were selected from different industries from Baroda. They were mostly executives with more than ten years of experience and full departments under their control.

The items of measurement were displayed on right hand side and their opinion regarding whether or not it can measure efficiency potential was first sought. If they answered in the affirmative, they were asked to opine, if a given item measured the efficiency potential to a great extent, or to some extent.

Only two items did not receive favourable rating. They were therefore eliminated. At the end, we were left with 20 items on which we could reliably ascertain the efficiency potential of the prospective respondents. Since the items referred to EEP and not actual efficiency of the respondents, it was decided to meet each rating manager and discuss with him the items to obviate any misunderstanding or misinterpretation. Item No. 3 provoked maximum discussion and had to be explained at length for a clearer grasp of the intended meaning.

*Please refer to Appendix 3.4 for the Format of the questionnaire.

While selecting EEP items for the EEP format, a logical exercise to ascertain whether different EEP ratings could go with different climate types and categories was gone through.

It may be noted that EEP items could be broadly classified into four dimensions namely (a) Ability items, (b) Tendency items, (c) Knowledge items, (d) Quality items. A scrutiny of the format will reveal that an attempt was made to identify traits, tendencies, qualities and behaviours of an ideal employee whose own efficiency, contribution to his Boss's work and departmental work, active co-operation with colleagues etc. were highest possible. Such an employee would optimally be active, motivated, professional, co-operative, strongly identified with the organisation work and having a positive outlook. The profile of an opposite type was also visualised to fix low potential employee. In the light of the motivational theories and basic management tenets, an attempt was made to imagine how a given ability or a tendency or a knowledge (job-related) or a quality could go with different Managerial Dispositional categories, Administrative Organisational Climate categories, Leadership Climate categories and the Climate Levels of Groupiness.

For example getting along with colleagues (Item No.6 of the EEP format) which is a human relations ability could

find high expression in liberal, scientific and non-authoritarian climate (MDC), the participative and consultative categories of administrative organisational climate, the climate of high consideration in the leadership climate and a high level of groupiness, whereas in the opposite type of climate in the above climate types, namely, conservative, fatalistic and authoritarian in MDC, authoritarian bureaucratic and authoritarian personal in administrative organisational climate type, the high structure in the leadership climate and the low level of groupiness. The point that is sought to be emphasised is that before the items for the EEP format were finally selected, a theoretical visualisation of their possible association with different types of climates was attempted to establish the face validity of the tool. Special dichotomies were established such as High and Low for abilities and tendencies, More or Less for knowledge and Strong and Weak for qualities to visualise differential responses to items and their possible association with climate categories in all the climate types.

Description of EEP Format:

As mentioned earlier, a 20-item format was prepared to measure the efficiency potential of supervisors on a five-point scale. The EEP format included items on 11 Abilities, 5 Tendencies, 3 Knowledge and 1 Quality. The items were

framed in such a manner as to enable the respondent to choose a strength of response from possible varying strengths provided in the response-set for each item. The items themselves were such as would make for different responses on different items. Items were mutually exclusive and sufficiently provided for a range of responses.

The Raters and the Ratees: The raters were managers to whom the ratees reported and under whose direct supervision and control the ratees worked. The ratees were supervisors who worked under the managers. Care was taken to see that ratees had worked for a sufficient length of period and that the pairs of raters and ratees had a history of relationship.

Scoring: Managers were expected to opine by way of a tick on the response-set adjacent to the item. The range of response-set was from remarkable to poor, through a midpoint average performance indication. The EEP format did not mention any weightage to be given to categories.

It was decided to use a five-point scale, with categories arranged in a descending order with highest score of 5 being assigned to remarkable, 4 to Above Average, 3 to Average, 2 to Below Average and 1 to Poor. The maximum score possible was 100, minimum 20.

It would have been possible to keep only three categories of response viz., Above Average, Average and Below Average but it was decided to obtain the ratings on a finer scale. That it was thought, would make their responses more discerning. It was clear at the time of constructing the scale that a person who would be rated Average on majority of the items would score near 60 per cent. Moreover, rating on potential could always be on the higher side. But the division of High-Low scorers was to be made with reference to their own mean scores and as such the tendency of lower lenient marking was duly taken care of.

Reliability of the EEP Format:

The EEP format items were developed through discussions with fifteen executives with more than ten years of experience and coming from different industries like engineering, chemicals, pharmaceuticals etc. After prolonged discussions with selected executives, some of the initially proposed items which did not find favour with minimum 90 per cent and more executives were rejected. Moreover each executive was made aware of the fact that efficiency potential items and not actual efficiency items were developed. The items that emerged through the process of discussion and critical evaluation were construed to reflect the contents of the efficiency potential as

conceptualized by the body of experts. After the format was prepared, it was again submitted to some of them for their final approval and comments. Since the format of efficiency potential was new, a comparison of items with other existing tools was out of the question.

The managers who were supposed to rate the supervisors on the EEP format were also explained in person the difference between the efficiency potential and the actual efficiency. Regarding test reliability of the tool, it may be noted that the ratings of 20 supervisors by their managers were obtained again with a time-lapse of about a month and a comparison of the total scores with the previous ones showed a variation of 5 per cent only.

Procedure for distribution of High and Low

Scorers on EEP:

After totalling up the scores on the EEP formats, they were distributed between the categories of High and Low, using an adjusted mean, based on the actual scores of the respondents in each department.

The Adjusted Mean: As already explained, the rating on EEP always tended to be on the higher side. Moreover, the lowest EEP rating itself was around or above 50 per cent. It could always be so because the EEP ratings of the individuals (who are in service), have to be upward 50 per cent, in fact far higher than it. If EEP as a rule

is higher than actual efficiency rating which is normally 50 to 60 per cent in majority of the cases, then EEP's base rating would start at higher figure. Thus, there arose a problem of selecting a method which would take care of situations in which few abnormal ratings would not distort the distribution of High-Low scores. Simple mean was not useful for the purpose of distributing the scores, since one or two extreme scores were invariably found in each department. The following procedure was followed to obtain a realistic distribution of scores.

First, each distribution was scrutinised to find out if there were any extreme ratings.

If an extreme rating was found, the next lowest or highest rating was selected.

The difference between the highest (so selected) and the lowest (so selected) was obtained and halved. The halved figure was added to the lowest score. Thus if the extreme rating was 30, the next higher was 53 or the highest was 83.

$$\begin{aligned}
 \text{Adjusted Mean} &= \frac{\text{Highest Scores}-\text{Lowest Score}}{2} + \text{Lowest Score} \\
 &= \frac{83 - 53}{2} + 53 \\
 &= 15 + 53 \\
 &= 68
 \end{aligned}$$

Score 68 was taken as the cut-off. Such a procedure of finding the adjusted mean helped in obtaining a realistic distribution of H-L scores, taking note of the tendency of high rating on efficiency potential format.

Rationale for Treating each Department wfor
H-L Distribution of Scores:

Though the items on which respondents were to be rated were acceptable to all the departments, different departments gave different weightage to different items and a low scorer of one department could not be equated with low scorer of another department. Factor sets for EEP in each department tended to be department-specific and even the manner of rating on EEP differed significantly from department to department. For example, one departmental head definitely accepted that there were high scorers on EEP in that department but then their scoring pattern on the whole was to score on the lower side compared to other departments. They also did not believe that their subordinates were in any way lower than subordinates in other departments but they preferred to rate tightly. Elsewhere in another department the managers tended to be rather liberal in rating. If one were to go by an absolute universal mean for the class of respondents namely the supervisors, the latter department would seem to be scoring high and the lower scorer of this department would

be higher than the higher scorer of the previous department. Thus to tackle the disparity in scores arising from tendencies among managers in given departments, distribution of supervisors as low or high scorers was done on the basis of the actual scores obtained by the respondents of a particular department. This procedure fulfilled the objective of distributing high and low scorers department-wise. It may specially be noted that the purpose of the study was not to distribute EEP scorers with any absolute measure, developed for the whole organisation. What was desired was to distribute H-L scorers assuming the scoring pattern.

Administrative Organisational Climate

Concept of Administrative Organisational Climate:

Employees in complex work organisations, it is needless to emphasise, function through and with the machinery of administrative processes. In fact, their understanding of the relationship of the formal entity of the Organisation, crystallised through their experiences, therein, would go a long way in determining their extent of involvement in it. Employees understand the organisation through their experience of and participation in a number of administrative actions. At any level in the organisation employees' sensing of the nature of administration would constitute

their perceptions of Administrative Organisational Climate (AOC) in which they work. Daily routine administration ultimately creates his perception of AOC since the administrative machinery manifests itself through the actions of his immediate bosses. The employees are inclined to equate their administrative experience at their level with their total organisational experience.

Operationalisation of the Concept of AOC

Types of Climates in AOC, their Rationale:

Employees tend to perceive the administrative work climate on the basis of their understanding of how work is taken from them in general but more importantly how their compliance to administrative decisions is sought to be procured in matters that affect a behavioural modification such as Discipline or Training or change in conditions of their work like under Promotion or Transfer.

Thus, four roles that subordinate, may perceive their superiors can play, were used as a basis of each kind of climate category within the broad measure of AOC. Four climate categories based on four types of roles that could be perceived as shown below were identified and used.

(A) If subordinates feel that the superior goes by rules and regulations and uses the authority incumbent in his position in all important matters, then the climate likely

to be perceived is termed as Authoritarian Bureaucratic Climate (ABC). Managers who have a bureaucratic managerial philosophy and act accordingly induce the perception of ABC. The role of the superior is Bureaucratic.

(B) If subordinates feel that the superior uses his position to create personal power and influence over their subordinates, then the climate likely to be perceived is termed as Authoritarian Personal Climate (APC). The basis of influence in this sense of climate is personal power as different from the positional authority as in (A). The role of the superior is that of an Authority-figure.

(C) If subordinates feel that the superior simply acts out the role of a pater or an elder and offers consultation to seek compliance through emotional influence, the climate likely to be perceived is termed as Consultative Climate (CC). The basis of influence in this climate is emotional or the role of the superior is paternal.

(D) If subordinates feel that the superior is not so keen to use the formal authority of the organisation vested in his position either for organisation's good or personal aggrandisement but rather for creating opportunities of genuine participation through open and frank discussions and the technique of compliance is conviction, or consent then the climate likely to be perceived is termed as Participative Climate (PC). The role of the superior is

democratic. It may be noted that these four styles are similar to four basic systems of management developed and used by Rensis Likert in his researches, duly described in "The Human Organisation, its Management and Value" published by McGraw-Hill Book Company in 1967.

In fine, the four subclimates in the AOC and the subordinates' perception of their superior's role on which they are based are as follows:

<u>Supervisor's Role Perceived by Sub-ordinate/s</u>	<u>Sub-climate in AOC</u>
Bureaucratic	- Authoritarian Bureaucratic Climate (ABC)
Personality Force	- Authoritarian Personal Climate (APC)
Paternal	- Consultative Climate (CC)
Democratic	- Participative Climate (PC)

Place of AOC in the Scheme of Study:

Of all the experiences of an employee in a work organisation, the experience of the manner in which he is dealt with in specific job matters of high-stake is the most direct, pervading and penetrating one and as such constitutes the central plank of his relationship with the organisation. OC in the senses of leadership climate and the psychological climate though important as climate measures are secondary in nature since they are based into

the manner of interactions and the conditions of interactions respectively unlike the AOC which is based right into the content of the work and the direct stake of the employees in the work. AOC derives from the main theme of the relationship between the employee and the organisation viz. the mutual self interest. Conceptually and practically, AOC constitutes the core climate around which other types of OC develop.

The measure of climate based on the actual work experience was found to be missing during the survey of literature on the theme of OC. In fact, the application of OC to schools, churches and other service organisations was known but its application in manufacturing organisation is a matter of recent origin. An attempt to develop a climate measure tapping the actual administrative experience of employees in critical job matters (as against routine) was found in order.

A suitable tool has therefore been forged. In fact, the relationship of AOC to EEP is taken as the central theme of the study.

Climate Zones, their Rationale in AOC:

Three sets of items for the format of AOC were selected. Items on management policies and practices covering such important matters as transfers, promotions, leaves etc. which are high-stake items were selected to constitute

Zone I of the AOC. All these items, it may be noted, are items of vital concern for the employees. The manner in which management policies and practices are implemented would reveal to the employees what the organisation means to him and vice versa. Whatever the policies and practices with regard to such matters as promotion and transfers, the manner in which the employees feel they are dealt with would throw inputs into their permanent memory of what the organisation is like. The history of decisions and actions taken by management for a given set of employees for these items would tend to create a stable inner perceptual reference. It is this perception of the OC through administrative experiences that is characterised as Zone I of AOC.

Zone II in AOC:

The second zone of AOC is based into the administrative experiences of the employees in regard to matters in which they are sought to be remedied or counselled for their deviant performance or behaviour. It is a matter of common experience that one's version of the psychological conditions in which one has to work derives from one's experiences of high-ego involvement. In the administrative context, such experiences arise from the manner in which employees feel that their behaviour in matter of late coming, insubordination, improvement of performance,

and post-strike events is sought to be administratively influenced or corrected. It may be noted that the items for Zone II of AOC pertain to matters which potentially provide for high ego-involvement and consequent affective experience.

Zone III in AOC:

Working in complex work organisations implies regular work-based and general interactions with superiors. The pattern of interactions which evolves over a period between given set of subordinates and superiors would reveal the value that the organisation sets on them, the interest it makes in them and the nature of roles it visualises for them in the conduct of day-to-day affairs. Zone III of AOC consists of items which are general in nature but which, nevertheless, constitute the daily fare of experience that lays an imprint upon his mind as to 'human relations climate' of his department. The perceptions of the employees in these three zones of administrative experiences build up additively and cumulatively his repertoire of impressions of the formal conditions in which he works.

The Tool, its Introduction:

The tool* was prepared specially because the available tools were developed to study organisations other than

*Please refer to Appendix 3.5 for the specimen of the tool of AOC.

industrial organisations and using them would have meant missing out relevant and typical areas of the climate of the industrial organisation. That is why work-related issues in which employees get psychologically invested during their work-place life were selected. It also ensured that the climate perception of the respondents would be reality-oriented and not imaginary. The concept of AOC was operationalised through the development of a special tool that sought to tap the administrative experience of the respondents in different job matters and job related matters of high stake to them. Such matters were listed in consultation with experts. List of 22 matters that have gone in the test items, zonewise is given on page . —

The Format of the Tool:

The special tool developed for tapping the data on AOC provided for the climate perception responses in three distinct zones of AOC, each zone containing a cluster of items that would logically go together and cover a distinct area of organisation-employee interactions.

Four basic managerial styles of dealing with the employee in each matter were identified, each style by a statement. Thus, in all, there were four statements on each of the 22 matters and the respondent was asked to select a statement in each of the 22 areas that exactly or

nearly expressed the manner in which he felt he was dealt with by the administration. Each type of 'dealing' selected went into a final climate perception by the respondent (Please refer to Appendix 3.5 for the format of the questionnaire).

Tool Description:

Twenty-two critical areas of supervisor-management interactions were identified, each area containing four mutually exclusive alternatives, representing each one of the four types of climates in AOC. Each area actually represented a typical situation that would normally arise/obtain in any large work organisation. The respondent selected in each area the alternative which nearly indicated the course of action that his superior or management had or would (in his opinion) prefer in the situation described. Care was taken to see that major areas of employee-management interactions were covered and that every typical situation in each area contained clear possibilities of different alternative courses of action representing distinctly four climate descriptions.

Tool Items:

As mentioned earlier, three zones of AOC were identified. Zone I contained items on managerial policies and practices

on following matters:

1. Transfers, when resisted.
2. Leave, when difficult to grant, straightaway.
3. Promotion.
4. Voluntary welfare facilities.
5. Welfare administration.
6. Centralisation.
7. Work load distribution.
8. Improvement.

Zone II contained matters of remedial actions taken by the management to correct or improve deviant employees.

Matters covered in Zone II.

1. Post-strike dealings.
2. Insubordination
3. Late coming
4. Correction of mistakes in work
5. Absenteeism
6. Grievance settlement.

Zone III contained items on eight general matters of interactions.

1. Informality among colleagues, management's views thereof as perceived by the employees.
2. Superior - subordinate relationship.
3. General attitude to management.

4. Informal training given by superiors
5. Co-ordination efforts
6. Decision-making
7. Supervisory style
8. Supervisor's confidence in management.

An illustration of the format of the items in each of the three zones on selected matters.

Zone I - Leave when difficult to grant straightaway - Items

a) Management expects the employees to observe the rules while applying for leave. It does not overlook even small lapse in this regard (Authoritarian Bureaucratic Climate)*

b) One has to convince the boss personally that one really need proceed on leave even though one is entitled to it. People get or do not get leave at the personal conviction of boss (Authoritarian Personal Climate).

c) Many a time employees are persuaded to adjust their leave period in view of organisational interest as understood by the boss (Consultative climate).

*Climate mentioned in the bracket were not mentioned in the tool. They are mentioned here to illustrate the point.

d) Before, finally refusing leave to an employee, the management tries out if his colleagues could help it out by some special arrangement (Participative climate).

Zone II - Insubordination - Items:

a) If an employee is found not obeying his superior/s or not behaving himself, the superior immediately hands over a Memo to him (Authoritarian Beaucratic climate).

b) Improper behaviour of an employee is dealt with by an officer by sheer force of his personality. Mostly, he sets the defaulter right without any reference to superiors for their help (Authoritarian Personal climate).

c) Superiors dealing with subordinates who indulge in unacceptable behaviour receive an affectionate rebuke rather than a Memo, to begin with (Consultative climate).

d) Managers pay special attention to insubordination. They do not try to get over it by a mere decision but go deep into it to encourage the employee to understand how his cooperation is useful to himself and the organisation as well (Participative climate).

Zone III - Superior Subordinate Relationship - Items

a) Our superiors do not mix with us just only to maintain their image and authority (Authoritative Beaucratic Climate).

b) How much power does our manager create out of his authority! It is much more than his official authority. We feel it in all his dealings with us (Authoritarian Personal Climate).

c) Our Boss does not order us about. He interacts more like an elder to get things done (Consultative Climate).

d) We think our managers are more like leaders. They invariably consider our view point while getting things done (Participative Climate).

Tool Administration:

The respondents (viz. supervisors) were requested to tick their indication in a highly structured questionnaire on AOC. The idea behind not interviewing them was to stay away from influencing their choices through discussion. The Survey undertaken by Shri P.L. Teredesai,³ Lecturer in

³(i) During 1978, Mr. Teredesai submitted a dissertation on "A study of organisational climate in a private sector enterprise", as a part fulfillment of the requirement for P.G. Diploma in Industrial Relations and Personnel Management conducted by the M.S. University of Baroda.

(ii) For the same examination, Mr. S.V. Sapre, Labour Officer, State Transport, Baroda, submitted dissertation on "A study of Organisational Climate in a Public Sector Enterprise".

(iii) A paper on "A Study of Organisational Climate in Private and Public Sector Enterprises" based on the data collected in (i) and (ii) above, was presented by him at the 72nd Session of Indian Science Congress at Lucknow.

(iv) The above researches were carried out on the basis of the Administrative Organisational Climate tool developed by Mr. I.P. Vyas, Reader in Commerce, M.S. University of Baroda.

Industrial Organisation, M.S. University of Baroda, provided the opportunity to test the sensibility of the tool. It was observed in this survey that the respondents tended to shift their choices as a result of discussions. During the discussion, the respondent tried to guess the desirable answer rather than seek clarifications.

The questionnaire was handed over to the respondent for a serious consideration, not so much time-bound but matter-bound. This was done to preclude any interactions among them while responding. Each respondent was individually approached and requested to tender back the questionnaire duly filled in a day or two. The maximum time permitted was a week. Invariably while collecting back, the questionnaire was scrutinised to ascertain if all the items were responded and whether the respondent needed any clarification on the items. Respondents were free to send their questionnaires back through the personnel department also.

Test Scoring:

No points were mentioned on the tool itself but it was decided to assign "1" to Authoritarian Bureaucratic climate, '2' to Authoritarian Personal climate, '3' to Consultative climate and '4' to Participative climate. These numbers were just nominal and symbolic and had no numerical significance. They could as well have been A, B, C and D.

The respondent was asked to represent his choice by a tick (✓) in each of the 22 areas. The maximum possible score could have been 22 ticks for the same climate. There was no question of the minimum climate score except that it could have been zero for any of the climates.

Reliability of the Tool:

The test was administered to a group of 16 supervisors coming from different industries other than the one in which the study was to be conducted. It was decided to follow the Test-Retest Method to ascertain the degree of reliability of the tool.

The test was thus administered to the same group after a lapse of 15 days. Enough care was taken to see that the respondents did not answer from memory. They were not told, any time in advance, that they were going to take the test again. They were also assured that the two-test answers were to be kept extremely confidential. After the two sets were received from 16 respondents, a 4x4 matrix representing four climates horizontally and vertically was prepared. The climates were designated in Table 3.6.

Table 3.6: Matrix used to score same or dissimilar Climate Perceptions at two administrations.

	Authorita- rian Bureau- cratic Climate	Authorita- rian Personal Climate	Consulta- tive Climate	Partici- pative Climate
Authoritarian Bureaucratic Climate	AA	BA	CA	DA
Authoritarian Personal Climate	AB	BB	CB	DB
Consultative Climate	AC	BC	CC	DC
Participative Climate	AD	BD	CD	DD

The matrix thus contained 16 cells, representing all possible choices of climate at two administrations. Later on, the actual perceptions of climates in each area for all the respondents was tabulated, putting the choice at the first administration and the second in appropriate cells. From this matrix (duly filled in), it was possible to find out how many respondents selected the same climate as also any other combinations.

Later on, it was decided to convert the 4x4 matrix into 2 x 2 matrix taking first two climates namely AB and AC falling in one category as CC and PC in another

one. These larger cells represented climate perceptions that could be termed similar but not the same. Just as AA, BB, AB, BA, CC, CB, DC, DD gave similar climate perceptions, CA, CB, DA, DB, AC, AD, BC, BD gave dissimilar climate perception. For each climate area a matrix of 4 cells was formed.

The reason for converting original 16 cell into 4 cell matrix was to ascertain whether climate perceptions even if they varied at second administrative fell nearer the original perception or far wide. The 4-cell matrix was amenable to the application of YULE'S Test of Association.

Methods Used for Ascertaining the Degree of Association Between Two the Results obtained at the First and Second Administration:

Method No. I

It may be recalled that the number of cases of respondents who reported the same or similar AOC were recorded in 4 + 4 matrix. YULE's method of ascertaining the degree of association between perception of 'similar' climate at the two administrations was used to ascertain reliability of the tool.

The 2 + 2 matrix provided data diagonally as to how many respondents from the test group chose similar climate at two administrations or how many chose dissimilar climate

(diagonally, from left bottom to right, righthand cell).

The rationale of the YULE'S⁴ test is to treat two attributes as independent and then work out the degree of association between the two, using the following formula:

$$\text{Quotient of Association} = \frac{(AB) (\alpha \beta) - (AB) (\alpha \bar{\beta})}{(AB) (\alpha \beta) + (AB) (\alpha \bar{\beta})}$$

We treated climate perceptions at two administrations as independent attributes for the reason that the second administration took place after a reasonable lapse of time almost making it impossible for the respondents to respond from memory. There were two other reasons why the respondents could not respond from memory. Firstly while they were taking the test first time, they were not told that they would be taking the test again. Secondly, the test items were too many to permit memorisation.

Method No. II

The second method was to work out the distribution of cases reporting consistent and divergent climate perceptions at two administrations.

⁴Gupta, S.P., "Statistical Methods", Sultan Chand and Sons, 1983, Chapter 12, pp.E. 12:10.

Table 3.7: Table Showing Percentage Distribution of 'same' and 'similar' climates at two administrations of the Administrative Climate Tool and the degree of Association between the Two by the Application of YULE's Test.

Name of the Climate	% of respondents offering consistent perceptions	Degree of association between two climates at two administrations by YULE's method
1. Transfer	75.0	.82
2. Leave	75.0	.79
3. Post experience	68.0	.61
4. Insubordination	62.5	.45
5. Informality	87.5	.90
6. Late-coming	68.5	.64
7. Promotion	50.0	.24
8. Superior subordinate relationship	87.5	.90
9. Voluntary welfare facilities	87.5	.97
10. Welfare administration	86.25	.90
11. Mistakes in work	68.7	.63
12. General attitude to management	62.5	.66
13. Centralisation	75.0	.79
14. Superior subordinate interactions	87.5	.87
15. Staying away from work	75.0	.85
16. Informal training by supervisors	75.0	.79
17. Work-load distribution	87.5	.96
18. Improvements	75.0	.82
19. Grievance settlement	81.25	.44
20. Coordination	75.0	.80
21. Decision-making	87.5	.90
22. Supervisory style	68.0	.71

From the Table 3.7, observing column 'two' displaying the percentage of respondents who reported similar climate perception, it appears that the degree of similarity of climate perceptions between two administrations is quite high in 19 areas, in two cases it is moderate and in only one case it is rather low (.25). On the whole, YULE'S test also affirmed (it is apparent from the high degree of association reported in the table for a large majority of areas) previous contention that respondents did not go amiss in perceiving the broad categories of climate conditions in all the areas of the tool and there was a low phenomenon of respondents choosing opposite climates in areas of climate. There was thus, a high degree of consistency between the perception of the respondents in all the areas of climate and the tool's (or test's) reliability was found to be quite safe.

Procedure for preparation of a Master Table from the primary data contained in questionnaires returned.

After receiving the questionnaires from the supervisory respondents a Master Sheet was prepared in which items of Administrative Climate Zones I, II and III were mentioned by their members in a row and respondents from each department were separately mentioned by their code numbers in columns. The Master Sheet so prepared facilitated insertion of the climate scores for all the departments

Table 3.8: A Specimen of a Departmental Master-sheet Presenting Climate Perceptions Scores in Three Distinct Climate Zones in the Administrative Organisation Climate. 120

Code No.of Supervisory Respondents	Climate Items - Zone I							
	Transfer	Leave	Promo- tions	Non- Statu- tory Welfare	Welfare Adminis- tration	Centralli- sation	Work-load distrib- ution	Improve- ment
	1	2	7	9	10	13	17	18
1	3	3	3	4	3	1	3	1
2	1	3	4	1	1	1	1	3
3	4	2	3	4	4	4	4	4
4	1	3	4	2	1	2	2	3
6	1	3	1	4	4	1	1	1
10	1	3	2	1	1	1	3	3
11	1	4	3	4	4	4	3	4
12	1	3	2	2	4	4	3	1
13	2	3	3	3	1	1	3	2
14	1	4	1	1	2	4	4	3
15	1	4	4	1	4	4	4	3
17	1	1	3	1	2	3	1	2
18	4	4	4	4	4	1	4	4
19	1	3	4	1	3	4	1	3
20	4	4	2	4	4	4	3	4
21	2	2	2	1	3	4	1	3
22	2	4	4	3	1	1	3	3
24	4	3	2	1	4	3	1	1
26	1	4	1	4	4	4	4	1
27	1	3	2	1	1	1	1	4
28	4	4	3	4	4	4	3	4
29	1	1	1	4	1	1	4	1
30	1	1	2	1	1	1	1	1
31	1	3	2	4	1	1	3	1
34	4	4	4	4	4	4	4	4
35	3	3	4	4	4	4	4	4
37	4	2	4	4	1	3	1	1
36	1	2	1	1	1	4	4	4
33	1	4	1	1	3	3	2	3
39	1	2	1	1	1	2	1	3

contd.....

Table 3.8 (contd.)

Code No. of Supervisory Respondents	Climate Items - Zone II					
	Post-strike experiment	Insubordination	Late-Coming	Mistakes in work	Staying a way from work-place	Grievance settlement
	3	4	6	11	15 *	19
1	4	3	4	4	3	1
2	4	4	3	4	3	4
3	4	4	4	4	4	4
4	4	3	3	4	4	2
6	4	4	2	4	3	4
10	2	4	3	1	1	3
11	1	4	3	3	4	4
12	4	3	2	4	4	1
13	2	2	4	3	3	3
14	1	1	5	3	3	4
15	4	4	4	4	4	1
17	3	2	4	3	1	3
18	4	4	4	4	4	4
19	4	4	4	4	3	2
20	4	4	3	4	4	1
21	4	4	11	3	3	3
22	4	3	4	3	4	3
24	4	4	1	3	3	3
26	4	4	1	1	3	3
27	4	4	3	3	4	1
28	4	4	1	4	4	4
29	1	4	1	4	3	4
30	4	2	1	1	3	2
31	1	4	4	4	3	4
34	3	4	1	4	4	4
35	4	4	4	3	4	4
37	1	1	3	4	4	4
38	1	4	1	4	2	2
33	4	3	4	3	3	3
39	4	3	3	2	4	4

contd

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Table 3.8 (contd.)

Code No. of Supervisory Respondents	Climate Items - Zone III							
	Informality	Superior Subordinate Relationships	General attitude to Management	Supervisor's confidence in Subordinates	Informal Training	Co-ordination	Decision-making	Supervisory style
	5	8	12	14	16	20	21	22
1	4	3	4	4	3	3	3	4
2	2	3	2	3	4		4	4
3	3	4	4	4	4	3	3	3
4	4	2	2	4	1	4	2	4
6	4	4	4	3	4	1	3	1
10	1	4	4	4	1	4	1	1
11	3	4	4	3	3	4	4	4
12	3	3	4	3	4	1	3	4
13	3	3	2	3	4	4	3	4
14	1	1	1	3	3	4	1	3
15	3	3	1	4	4	1	3	4
17	1	3	3	2	3	1	1	1
18	3	4	4	4	4	3	4	4
19	4	4	4	4	4	3	1	1
20	1	4	4	3	4	4	4	4
21	3	3	4	3	4	4	3	3
22	2	3	3	3	4	4	1	4
24	3	1	3	4	3	3	1	4
26	2	3	4	3	4	3	3	1
27	4	1	3	3	4	4	3	4
28	4	3	3	3	4	3	3	4
29	3	1	1	4	4	2	3	4
30	2	1	1	1	2	4	1	2
31	3	4	1	4	4	2	3	4
34	4	4	4	3	4	4	3	4
35	3	4	4	3	4	4	3	4
37	1	4	3	3	4	4	3	1
36	4	1	1	4	4	1	1	4
33	3	1	2	2	3	4	3	3
39	3	1	2	1	1	4	1	1

The climate scores merely contained numbers 1, 2, 3, 4 since the respondents were asked to mention their perceptions of a climate in an area by a tick only. It was decided to assign a number of each type of climate for the entire measure for the whole population of supervisory respondents. It was predecided to assign No. 1 to Authoritarian Bureaucratic climate, No. 2 to Authoritarian personal climate, No.3 to Consultative Climate and No. 4 to Participative climate to facilitate presentation of all the perceptions of the supervisors in all the 22 areas in a coded manner in the master sheet. Once ticked responses of supervisors were rendered on to the master sheet, it became easily possible to read off now many times a climate perception occurred in a given area taking all the supervisors in a department.

Preparation of Composite Tables of Climate

Perceptions Zonewise, Climatewise and Departmentwise:

It may be recalled that the master sheet presented the climate perceptions of all the supervisory respondents zonewise, climatewise and departmentwise. From the master sheet, composite tables depicting the number of respondents perceiving each of the four climates in each of the 22 areas of AOC were formed. The specimen of the Table 3.9 prepared, for a department, in let us say, zone I, is presented to illustrate the format and use of the table.

Table 3.9: Table Depicting Break-up of Climate Perception Frequencies of the Respondents of Department A in each item of Administrative Climate as also in Three Climate Zones.

Climate	Climate Zone I (Man, Policies and Practices)										Climate Zone II (Remedial actions)					Climate Zone III (Interactions)					Total Σ					
	Climate items										Climate items					Climate items										
	1	2	7	9	10	13	17	18	Total	z	3	4	6	11	15	19	Total	y	5	8		12	14	16	20	21
AB	18	3	4	13	12	11	10	10	81	6	1	9	3	2	5	26	5	8	6	2	3	5	9	7	45	
AP	3	5	11	2	2	2	2	2	29	3	3	2	1	1	4	14	4	1	4	2	1	2	1	1	16	
c	2	12	7	2	4	4	9	10	50	2	7	8	10	13	8	48	13	10	7	15	6	8	16	4	79	
p	7	10	8	12	13	9	9	8	80	19	19	11	16	14	13	92	8	11	13	11	20	15	4	18	100	

Table 3.9 clearly indicates how many respondents of a department selected a climate in each item in a zone and also the total number of times each climate is selected from the total number of possible perception in each zone of climate. Possible number of climate perceptions in each is arrived at by multiplying the number of respondents by the number of the items in a climate zone. For example in Table 3.9, since the number of respondents is 30 and the number of items is 8, the total number of climate perception is 240. If all the respondents had perceived only one climate (let us say AB for example) in each of the 8 items of the zone I, then the total climate perception score could have been 240. This could have been the case for any climate category as an extreme case. The column of total indicates how many times a climate is perceived from amongst the total perceptions possible. In Table 3.9, climate AB has been perceiving 81 items, AP 29 times, CC 50 times and PC 80 times in zone I. Such a table for each department was prepared for each of the three climate zones.

Table 3.10: Specimen of the Table Showing Climate Perception Rendered into Percentages from Table 3.9, Columns, x,y,z.

Climate	Zone I	Zone II	Zone III
AB	26.04	22.22	23.95
AP	19.79	9.72	9.73
c	29.16	30.56	26.04
p	25.01	37.50	46.64

The numerical data of climate perception of Table II was later on converted into percentages to render them comparable. Moreover, the criteria developed for climate assignment were framed in terms of percentile weightage of climate perceptions. A climate perception in order to go in for a specific climate assignment had to have a certain specified minimum percentile weightage. Different percentile weightages were fixed for assigning different climate or climate combinations. The Table 3.10 is self-illustrative.

Specific Criteria Used for Climate Assignment

The following specific criteria were evolved for climate assignment.

Criterion I: A climate score* of 30 per cent or above was taken as significant enough to be taken as a base for climate assignment. It was assigned as the climate of the department. Naturally any score, highest among the four climate score and above 30 per cent was taken as indicative of that climate.

Criterion II: A climate score next to the highest but above 30 per cent was taken as a basis of treating it as a supportive climate mentioned with a cypher. To illustrate, AB - P indicates AB as the predominant climate and P as the supportive climate. A supportive climate is considered to be a component of the total climate of that unit.

Criterion III: A climate score next to the highest (which must be above 30 per cent) but below 30 per cent is taken as a basis for treating that climate as an 'element' of the total climate and is mentioned in an adjunctory bracket. In symbolic expression AB (p), p is the element of the climate. The climate is authoritarian bureaucratic with an element of participative trace in it.

Criterion IV: Cases in which the frequencies were more or less scattered, with no climate significantly (that is to say even 5%) more than other climates were taken as cases of diffused climate.

*A climate score means the percentage of the climate perception claimed by a climate from among the total climate perception in a zone of climate. For further discussion please refer to pp. 123, 124, 125.

Criterion V: In case, the climate score of the climate next to the highest, came just below 30 per cent (by 1 or 2%), that climate was mentioned as supportive climate provided the difference between the supportive climate frequency and the higher of the remaining was more than 5 per cent. But a climate score in order to be treated as an element must be above 20 per cent.

Applying the specific criteria developed for climate assignment to Table 3.10 data, actual climates were assigned to each department in each zone. The final climate is specified as distinctly one or a combination of two climates from among four basic climate categories namely Authoritarian Bureaucratic (AB) climate, Authoritarian Personal (AP) climate, Consultative Climate (CC) and Participative Climate (PC).

It may be noted that in the discussion of the criteria for climate assignment, it is already explained how a climate qualifies to be taken as distinctly predominant, as a component as well as the element.

Three illustrative cases are presented below to offer the format of Table 3.11 and the manner in which final climate assignment is expressed.

Table 3.11: Table Showing the Assignment of Final Climate in AOC Category by Way of Illustration.

Department	Climate Zone I	Climate Zone II	Climate Zone III
A	AB-P	P-G	P-G
E	AB -G	G	G (AB)
C	Diffused..	P-G	P-G

Climate AB-P in Zone I for department is a case of climate combination with AB as the predominant climate and P as supportive one.

Climate C in climate zone III for department E is a case of a clear climate assignment.

Climate C(AB) in zone III for department E is a case of a climate with an element viz., climate C having an element of AB about it. Climate diffused in zone I for Department C is a case of a diffused climate meaning thereby that scores are more or less equally scattered.

The final table of climate assignment is used as an authoritative version of climate perception by the supervisory respondents in the broad category of AOC to be related to EEP other climate scores and tendency scores.

Work-Values, Their Role in the Relationship
Between Organisational Climate and EEP

Introductory:

Values are those ultimate criteria by which individuals justify their actions, involvement and positions, not in terms of immediacy and adequacy of benefits but deeper satisfaction that results from adherence to them. Values provide the final and the fundamental cause of action and are deeply ingrained in human personality. They are those lasting criteria by which an individual in the finer sense, lives and acts.

The general values that individuals hold have a pervasive and penetrating influence upon the specific functional roles that they play as members of different organisations. Working life, being a very special and specific area of an individual's life, it is interesting to know whether individual develops a specific set of values for world of work-life or simply seeks realisation of the same general values through his life at the work place. Interesting though this issue is, the investigator has taken a position that individuals have certain work values which may or may not derive from general values, and has set aside the debate of the source of work values. A spate of literature on values at work place points up the fact that work-values have been regarded as a useful

variable is organisational behaviour. Setting aside the controversy whether work-values are mere specifications of general values or new set of values independently held, one may hypothesize that the inclusion of work values as a variable could bring better or newer insights into the interrelationships between various known and partially known variables in organisational behaviour.

Identification of Work-values for this Study:

Initially, a long check list of work-values was prepared to be used as a basis for discussion with select executives. After discussion with them the hard-core of the check-list was retained, containing nine work-values. The set of work-values evolved represents the consensus among executives not only about their being very much important but also relevant to the performance of employees at their work place. There could be a score of work-values which might be remotely connected with work performance.

The following work-values were finally identified as crucial to the performance of individuals at the work place.

- I - PRESTIGE
- II - FINANCIAL REWARDS
- III - FREEDOM
- IV - SOCIAL HAPPINESS
- V - VARIETY/GROWTH
- VI - SECURITY
- VII - WAY OF LIFE
- VIII - INSTITUTIONALISM
- IX - CREATIVITY

This list of the work-values incidentally is supported by the landmark study of personal values by George England⁵ of 1972 American Managers. England differentiated between operating values and intended values. The operating values enlisted below were found to be "having the greatest influence on the managers actions." England makes an interesting remark to highlight the impact of personal values of managers. Says he,

"..... The personal value systems of individual managers influence the organisation in both indirect and direct manner at the same time that personal values are influenced by organisational life."

The personal values (operative) derived by England duly ranked are as follows:-

Achievement* -/	R Influence
Success*	✓ Prestige -/
Creativity* -/	Autonomy -/
✓ Job satisfaction* -/	Dignity
Individuality -/	✓ Security -/
✓ Money -/	Power
	Leisure

*Operating values of high importance
 -/ Values common to this list and the one prepared for the study.

⁵England, George W., "Personal Value Systems of American Managers", Academy of Management Journal, March 1967, pp.67-68.

It may be observed that of the nine values used in the study, eight values appear in the personal values (operative) of managers derived by England in his classic research on Managerial values.

Place of Work-Values in the Scheme of Study:

Work-values enlisted have been classified into two types, namely:

- (a) Intrinsic work-values which one sought per se in the very performance of the job, and
- (b) Extrinsic work-values which one seeks to pursue focussing on the end results, using the performance as a means to this end. These end results are extraneous to the job activity itself but yet are sought in the world of work by employees for satisfying their other needs at the work place. Work itself could be instrumental in fulfilling some needs and seeking some values there. Logically, intrinsic work-values could be related with job contents whereas extrinsic work-values could be related with job context factors of Herzberg's wellknown theory of motivation.

It will be interesting to test empirically what work-values go with what type of climate in all the senses of climate perceptions and whether work-values intervene as an explanatory factor for understanding OC-EEP relationship.

Work-Value Inventory:*

It was assumed that employees sought all the work-values in smaller or greater measure. Again it was also assumed that employees sought only positive values and not negative ones, though negative statements have been used to tap work-values that are positive.

It was decided to ascertain (a) preference rating of work-values, and (b) the agreement between the preference set of work-values held by the supervisory and the management groups in each department.

Test Description:

For each work-value nine statements different in phrasing but tapping the specific work-values were prepared. In all there were thus 72 statements constructed to tap nine work-values.

Each work-value was pitted against the rest of the work-values using the statements from the Inventory of 72 statements. There were thus 36 pairs of statements representing the scheme of comparing each value with the rest of the values.

The respondents were confronted with the forced choice arrangement in which they had to tick one value of

*Please refer to Appendix 3.6 for the format of the work-value Inventory.

It was possible using the matrix to record the preferences indicated by the respondents. To illustrate if value 1 was preferred to value 4 in the paired statements then that preference was indicated by a $\text{---}/$ in the column Wv_1 at the 4th square (Please refer the Table 3.12 - $\text{---}/$ encircled 1). But if value 4 were selected in the same illustration the $\text{---}/$ would have occurred in the column Wv_4 in the 1st square (Please refer the $\text{---}/$ in the Table 3.12 encircled 2). Thus the preferences indicated were transferred on to the matrix and counting the ticks column-wise the preference score for each work-value was obtained for each respondent.

The 'F' Matrix

The frequency of matrix depicts the frequencies corresponding to the number of times that each stimulus or statement is judged more favourable than other statement in the pair. On this matrix, value categories have been represented on both rows as well as columns, to find out the total number of respondents who favoured and did not favour the statements of each pair. The diagonal entries involving comparison of each statement with itself are assumed to be $N/2$.

The 'P' Matrix

This matrix is prepared by dividing each cell entry of 'F' matrix by N i.e. total number of respondents. The

cell entries in this table give the proportion of times that the column stimulus is judged more favourable than the row stimulus. Cell entries in this having value more than .50 are given + sign and less than .50 are giving - sign and .50 is considered as zero.

The 'Z' Matrix

The P matrix was converted into Z matrix which is the matrix of standard normal deviates corresponding to proportions given in 'P' matrix. All the diagonal cell entries in this matrix have zero value as they are equal to .50.

Obtaining the Scale Values:

After finding out the 'Z' values for each cell entry of 'P' matrix, the entries in each column of 'Z' matrix were summed up. To work out the scale values for each column the sum of each column was divided by total number of values. This gave the mean of each column. These values are shown in Mean Rows at the bottom of Z matrix for each category supervisory. To make scale-value position a constant to deviation was added. A convenient constant to add is the absolute scale value or the stimuli with the largest negative deviation. This made the scale value for this stimulus zero and all of the others positive in sign.

Finally, values were ranked from highest to lowest according to their scale values.

Thus rank of preference of work-values of each department was obtained. It was possible to ascertain which value obtained which rank. The final table constructed indicated the preferred scale of work-values departmentwise.

Procedure for Obtaining the Preference
of Intrinsic and Extrinsic Values:

Out of nine values one value was ignored namely value No. 7. Four values such as prestige, Financial rewards, freedom, and security were identified as extrinsic and the rest were identified as intrinsic. Sixteen pairs of sentences which contained the pitting of extrinsic values with the intrinsic values were selected to obtain the scores of preference of intrinsic work-values over extrinsic work-values and vice-versa. It may be noted that the 20 pairs of statement contained the pitting of external values with external values as well as internal values with internal values. They were ignored for this reason only. Naturally the scores of the 16 pairs, were used to arrive at preference scores of extrinsic values over intrinsic values and vice-versa. A departmentwise table was constructed to facilitate inter-departmental preferences of extrinsic and intrinsic values.

Procedure for obtaining Rank order Correlations
between the Supervisory and the Management Group
for the Work-values Preferred by them:

For each department the total preference scores shown by different respondents in the department were totalled up. Thus, 9 total scores representing the summated preference of the respondents of the department for all the 9 values were obtained. Similarly total scores of the preferences for the values of the managers of the department concerned were also obtained. Ranks were assigned to both the sets of total scores using the below mentioned formula, the correlation which is in the form of agreement between groups was computed.

$$r_{\text{rank}} = 1 - \frac{6 \sum D^2}{n(n^2 - 1)}$$

The rank order correlation between two sets of scores was obtained to be used later on in interpreting climate and EEP results. This correlation indicated in general the degree of agreement or otherwise in the matter of priority in which the work-values were held by the two groups.

Reliability Testing:

Since the work-value inventory was a special tool prepared for gauging the work-value preferences of respondents, it was necessary to test its reliability before its

use. Sixteen respondents described earlier were asked to check their preferences. After a lapse of 15 days they were again asked to do the exercise on another sheet. Firstly the ticks at the first administration were transferred on the matrix. Thereafter the ticks at the second administration were also transferred on to the same sheet. Simple co-efficient of correlation between the two sets of preference scores for each value was calculated. The Table 3.13 gives coefficients of correlation.

3.13
Table 3.13: Co-efficient of Correlations Indicating Test Reliability for Each work Value by Test Retest Method.

Co-eff. of correlation	Work Value	
1. 0.329	IX	
2. 0.59	III	
3. 0.32	VI	
4. 0.41	IV	Retest reliability for each value, $n = 16$
5. 0.74	II	
6. 0.77	I	
7. 0.33	V	
8. 0.30	VII	
9. 0.25	VIII	

It could be observed from the table that all correlations are positive.

The tool was being tested out in two pilot surveys conducted by (1) Shri B.S. Patel,⁶ Reader in Commerce, M.S. University of Baroda, (2) Mr. Suryakant Patel⁷ Engineer, Gujarat Communication and Electronics Ltd., Baroda, and the results obtained by both the investigators indicated that the tool was sufficiently sensitive to tap the differences in value orientations among respondents in a category as well as categories of respondents, and that the results could be meaningfully interpreted. Thus the tool was found to be reliable in its use.

Climate of Groupiness

Concept of Groupiness:

Groupiness is a feeling of being one with the group, resulting from one's experiences in a group. The feeling of groupiness results from the processes occurring at two levels (a) the cognitive and (b) the affective. Cognitively an individual's predisposition to trust others in important matters, reflected in his firm beliefs and opinions determines his potential for interpersonal trust. People are differently oriented to trust others as a result of their total life experience crystalised into ideological

⁶Patel, B.S., "Value Orientations of Clerks in an University", A dissertation submitted to the M.S. University of Baroda for the award of Post-graduate Diploma in Personnel Management and Industrial Relations, APRIL 1978.

⁷Patel, Suryakant, "A Study of Value Orientation of Degree and Diploma" A dissertation submitted to Rajendra Prasad Institute of Communication and Management (Bhavan's) Baroda, for the award of Post-graduate Diploma in Business Management, April 1980.

beliefs and opinions about when and how much to trust others and when and how much not to trust others. This orientation of interpersonal trust gets deeply ingrained into an individual's psyche and operates as an interpretative mechanism in the matter of his grouplife experience. The second level at which the group experiences are felt is the affective level. An individual's actual experience of his group life ultimately results into his feeling as to the extent to which he identifies with the group. An individual's actual grouplife provides him with an experiential base for the strength of the feeling of identification with the group.

Thus, the ^aidentional equipment reflected in the firm opinions and beliefs with which an individual enters an organisation (or may even develop being there) and the actual experiential affect interacting together in a complex manner result in the genuine feeling on the part of an individual as to where exactly does he stand, in the matter, intellectually and emotionally.

Groupiness, it may be stated, is not merely what an individual believes about trusting others and what he thinks or feels about his integration into his group but (with the subtle combination of the tendencies giving rise) to a degree of attractiveness that an individual feels for his group. Groupiness measures the strength of attractive-

ness for a given group. One can know how much groupy an individual is at a given time, by knowing his beliefs and opinions in general which indicate his ideological orientation in the matter and the lessons he has actually learnt living in a group. Groupiness thus has two dimensions (a) the ideological and (b) the experiential.

So far as the ideological dimension was concerned it was necessary to select a test that would offer information on how an individual is oriented to others in the matter of trust. The Interpersonal Trust Scale developed by K.J. Christopher of S.E.T.T. Institute, Hyderabad, was found to be useful in measuring the ideological orientation.

The test is all the more useful because it was developed to test the employees of Industrial Organisation and it is couched in simple language. The choices that it offers are clearcut and its items are phrased in distinctly affirmative or negative terms, leaving no scope for doubt. The second test entitled, Group Cohesiveness Index developed by Seashore was found to be useful in measuring the groupiness along the experiential dimension.

✓ Interpersonal Trust Scale of
K.J. Christopher*

Test Description:

The test is designed to measure interpersonal trust orientation of employees working in Industrial Organisation.

*Please refer to Appendix 3.7 for the Test format.

There are 25 items in all. The test is couched ⁱⁿ categorical style, making it possible for the respondent to precisely express himself on various belief and opinion items. The respondent was expected to say whether the given statement was true or false.

Test Format:

The Test (scale) consists of three questions.

Question one has six structured responses, each given a predetermined numerical, from 0 to 5.

Question two has also six structured responses, each given predetermined numerical, from 0 to 5.

Question three has three sub-questions given a predetermined numerical score from 0 to 3.

The maximum possible score was 19 and the minimum zero.

Scoring: Correct score whether true or false carried one point and incorrect score carried zero. The highest possible score was 25 and the lowest zero.

Test Reliability: Christopher had ascertained by the Rational Equivalent Method. Its validity index for each item was also calculated for the test.

Reliability of the Test as Ascertained
for this Study:

Using the test, re-test method the reliability of the test was computed by the coefficient of correlation. It was positive and .51.

Seashore's Group Cohesiveness Index:*

Variable Measure: The test seeks to measure group cohesiveness in terms of attraction to the group or resistance to leaving it.

Test Description: The test consists of three questions, first two of each can be answered on 5 degree response set while the three items of the third question can be answered on 4 degree response set.

Test Reliability: Inter-correlations among mean scale values for the groups on scale confirmed the Index of cohesiveness ranging from .15 to .17.

Test Validity: The variance found between groups on this scale was significant beyond the .001 level.

The index was specially constructed for Industrial Organisations. It can be used for almost any situation where index of group cohesiveness is required.

*Please refer to Appendix 3.8 for the Test format.

Reasons for combining IPT and
Group Cohesiveness Scores:

It has already been explained on pp. 142, 143 that it was decided to obtain data on how employees thought about interpersonal trust as well as felt about it as a result of their concrete group experience. The expectation plus experience could, it was thought, produce valid information about how authentically they could feel groupy. A simple exercise to correlate both the scores gave a green signal for both the scores were found to be significantly correlated. To be exact, the coefficient of correlation between the two independent scores was +.62.

Its Place in the Scheme of Study:

Employees having different levels of groupiness through their interactions at the work place create a set of conditions (essentially social in nature and contents) that determines the quality and level of possible co-operation, at the work place. A group low on groupiness will not only be illset to perform some group-work demanding more than average group effort but also make it difficult for the constituent members to operate effectively, inter se inter alia. These conditions of readiness for group-effort result from the feeling of ~~group~~ ^{group} ~~effort~~ of members and if the group is a constantly interacting one in fairly stable frame of work-routines then, a certain constancy develops

about them which may be construed to be taken as a climate of groupiness for the group. It was decided to attempt to measure the groupiness of employees with suitable instruments and develop a climate measure that would tap the most important sociological phenomenon at work place. This measure seeks to develop the climate on the dimension of group dynamics taking relevant aspects thereof in understanding the climate of groupiness. Other aspects can also be utilized to develop other climate measures in other senses. This measure does not claim to use group dynamics exhaustively but only selectively.

Taking a cue from the Hawthorne studies, it was found useful to try to relate the climate of groupiness with EEP Average and other climate as well as tendency scores. It was hoped that the use of this measure would inform whether and/or to what extent sociological forces influence the effectiveness of organisational functioning.

Procedure for Obtaining High or
Low Scorer's Distribution

Rationale for the Cut-off Used:

A score above 70 per cent is treated as high for the reason that modern work organisations necessitate employees to work in highly complex interdependencies operating at a fairly high level of mutual trust and co-operation never known before in the history of mankind. In fact mutual

trust and cooperation of a high order is implicit to the functioning of an organisation at a normal level for that is the only way in which they can reap the fullest advantages of specialisation. The greater the division of function, the higher is the need for integrative co-operation in the functioning of the sub-parts. Modern civilisation has become so much organised and organisation-dependent, that individuals in order to offer average performance engage in highly co-operative effort, compared to their previous counterparts. The need for co-operativeness or mutual trust seems to be increasing in direct proportion to the increase in complexity of organisation-design and its functioning and the minimum co-operativeness level seems to be increasing far beyond the 50 per cent level. Fifty per cent co-operativeness or mutual trust may be symptomatic of malfunctioning. The normal distinction point of excellence in human performance namely 60 per cent is losing its distinctiveness in excellence and is gravitating to the level of normality of expected performance. In point of these trends, it was thought necessary to set the cut off point for obtaining High or Low scores in groupiness at 70 per cent of the score.

The combined total scores of IPT scale and group cohesiveness being $(25+19) = 44$, 70.0 per cent of it worked out to be 30.8 per cent i.e. 31. Those respondents who

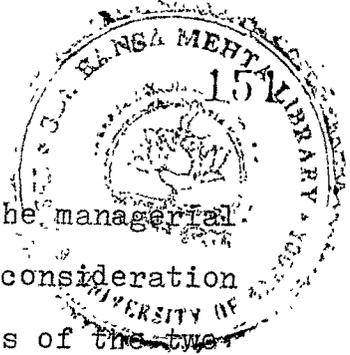
scored less than 31 were treated as low scorers and those who scored more than 31.0 per cent were treated as high scorers. Those who scored exactly were equally distributed between High and Low scorers as far as it was possible.

Concept of Leadership Climate

Managers as leaders by patterning their day-to-day interactions with their subordinates, can create an organisational climate based on their own style and the subsequent perception of the same by subordinates. What managers desire to project about themselves through their style is not necessarily what they are perceived as by their subordinates due to a number of situational and personality variables intervening in the process of interactions. Though managers are in a better position to set the tone and texture of their relationships with subordinates, in the ultimate analysis what subordinates believe them to be like is more crucial to the efficacy of their interactions than what managers want them to believe them to be like. Managers through their leadership style and acts create a socio-psychological environment which has the potential of helping subordinates unfold their unutilised reserves inasmuch as there is a compatibility between expectations of subordinates and superiors, inter alia. Two differently-oriented managers can create

different motivational climates within the same department if they operate with a time lag or in similar departments. Kurt Lewin's researches, Likert's researches and Chris Argyris's experiments amply bear out the point that realisation of productivity of subordinates crucially depends upon the managerial styles.⁸

⁸ Advocates of participative management (Argyris 1964; Likert 1961; McGregor 1960; Walton 1972) have stressed the fact that job involvement results from an organisation (and job) environment designed to promote ego and growth need (Alderfer 1972; Maslow 1954) satisfaction. Likert (1961), for instance, suggested that involvement in one's job results from a supportive psychological climate in an organisation that provides a sense of human dignity or satisfies the need for self-esteem. Following the humanistic tradition, both Argyris (1964) and McGregor (1960) explicitly advocated growth theories of human personality and motivation. Both of them suggested that work alienation is the inevitable result of organisational constraints that frustrate natural tendencies of individuals to grow through the satisfaction of intrinsic needs. According to McGregor (1960), the major organisational constraint responsible for employee alienation stems from managerial assumptions about human nature. If the management assumes that people have an inherent dislike for work, avoid responsibility and seek money and security with as little effort as they can, it creates conditions within the organisation to alienate employees. McGregor refers to these assumptions as Theory x. But instead of Theory x, the management can work under a different set of assumptions called Theory y which assumes that people like to work and want more responsibility, autonomy, and self-control on the job. Management under Theory y assumptions can create organisational conditions, such as participative management, that will reduce alienation or will increase worker involvement. Work alienation according to Argyris (1964), is caused by the properties of formal organisation, such as work specialisation, strict chain of command, or span of control. When the individual growth process is retarded by the properties of the formal organisation, the worker may become either psychologically ill or alienated from work.



It was decided to tap the perceptions of the managerial styles on the two wellknown basic dimensions of consideration of structure and to obtain High-Low combinations of the two sets of perceptions. Each combination will offer a distinct set of expectancy conditions that would serve as a basis of working relationship between the subordinates and the managers. It will tell us as to what type of socio-psychological conditions obtain in a given sub-unit, sufficiently different from those obtaining under a different combination of the same.

Its Place in the Scheme of Study:

The climate in the leadership sense was developed to test out the current belief about the relationship between Managerial style and Employee Motivation. In the usual sense, leadership is viewed^{as} a characteristic act or a series of acts. In this study, it is assumed that a distinct type of leadership style followed consistently over a period tends to create a stable and durable set of socio-psychological conditions at the work place which could be meaningfully related with other important variables, especially the end variables. Organisational Climate in the leadership sense occupies an important place since in it culminate the conscious and sub-conscious interplay of the psychological forces at the work-place. Leadership being the sine qua non of any collaborative

effort, an organisational climate measure based in it will naturally occupy an important position in a study of OC in any unit.

The reasons for studying OC at the supervisory level have been already given on pp.20,21,22 of Chapter I. To recapitulate the main ones, OC at the supervisory level becomes relevant for the reasons that (a) all managerial decisions are translatable into actions at and through this level; (b) there is a scope for maximum and intense interactions at this level among the majority of employees with supervisors; and (c) the final impact of all that managers hold good, valid, necessary and significant is felt maximum at this level. All the OCs existing at higher level ultimately becomes impactful at this level from the point of view of the achievement of organisational goals.

The Tool*

Rationale for selecting Supervisory

Behaviour Description Scale:

One of the conventional ways of gauging the socio-psychological conditions obtaining in a given unit is to know the manner in which the superior takes work from his subordinates since the leadership style sets the quality

*Please refer to Appendix 3.9 for Test format.

of interactions among the group members. But the study however concentrated on not what superiors thought about their style or tried to project out but how their leadership acts were perceived by their subordinates. This test, being cast in terms of subordinates' perception, is immensely useful in ascertaining climate in the sense of leader-follower interactional setting.

Variable Measured:

Perceptions of subordinates of the leadership behaviour demonstrated by their immediate superior. Factor analysis revealed that "initiating structure" and "consideration" items are the most significant factors in distinguishing leadership performance. "Initiating structure" reflects the extent to which the superior facilitates group interaction toward goal attainment. "Consideration" reflects the extent to which the supervisor is considerate of the feelings of those under him. All questions are worded in terms of "What does your own supervisor actually do?"

Test Description:

This is a 48-item questionnaire divided into two independent areas of leadership called "Initiating structure" and "Consideration". The first area includes 20-items and the second is made up of 28-items. The items

were presented with a five-point continuum response set that had scoring weightage from 1 to 5. The response-set contains responses categories as Always, Often, Occasionally, Selection, Never. The highest possible score was 140 and the lowest 28 in consideration set and '120' and '20' in Initiating structure.

Test Administration:

The test was administered to the supervisory population that constituted the sample for the study to ascertain their perception of the leadership style of their managers in respect of two wellknown dimensions of structure and consideration. The strategy adopted for the application of test was to obtain the relative weightage that the respondents gave to both these perceived dimensions of leadership and not to ascertain their exclusive or predominant choice of any one of the styles. Accordingly the respondents were given both the sets for their meticulous expression of their opinions on different aspects of his leadership behaviour. Thus respondents' scores on both the dimensions (structure and consideration) had to be analytically categorized to provide for the major combinations of the same. Five different categories of structure-consideration combinations, such as, high structure-high consideration, high structure-low consideration, low structure-high consideration, low

structure-low consideration, and mixed climate with respect to both the dimensions were obtained as leadership climates. It may be noted that a definite procedure was followed for treating climate with respect to consideration and structure for a given group of respondents. The respondents expressed their opinions by ticking at a point of their choice in the response set. All the ticks were given numerical weightage and thus by a simple process of addition of score of each item, the total scores for structure and consideration were obtained. The respondents were requested to tick on all the items taking about 10-15 minutes, all by himself, without engaging in discussion with anyone.

Reliability:

Test-retest reliability coefficients based on numerous samples range from .46 to .87.

Utility:

The questionnaire may be administered in a 10-15 minute period. When used in group applications, it is very efficient. By using this questionnaire in conjunction with the Leader Behaviour Description, it is possible to get a view of how a supervisor thinks he should lead and compare this with with an assessment by his subordinates of his actual leadership performance.

Research Applications:

The best summary of research is found in the monograph cited in the aforementioned. Other references may be found in the publications cited under the leadership opinion questionnaire. Most of the research has been done by E.A. Fleishman in the plants of the International Harvester company.

Procedure for Obtaining High-Low Scores:

Taking each department as a unit of observation, the maximum score and the minimum score obtained by the group of respondents falling in department were taken out. Since no respondents would score less than a certain minimum, it was decided to use the adjusted mean and not the plain one. The difference between the highest and lowest was calculated. It was halved and added to the minimum.

Thus,

X - Highest score

Y - Lowest score

$$\text{Low scores score} = X + \frac{X-Y}{2}$$

$$\text{High scorer score} = Y - \frac{X-Y}{2}$$

The idea behind using this procedure was to find High and Low scores in the context of a given department. Departments varied quite in the matter of pattern of High and Low scoring. The investigator was not interested in finding

out the rating of each department on the absolute scores but rather in relative weightage being given in a group of respondents in a department to consideration and structure. Therefore lower score in a particular department of a respondent was to be taken as lower in the context of that department and was not to be compared with lower score of the other department. The basic strategy was to tap the perceptions of the given department in regard to consideration and structure and obtain the climate deriving from the same. Each department had to have accordingly a climate on both the dimensions as was the basic premise.

Procedure for obtaining the Categories Based
on different Combination of Structure and
Consideration Scores:

Against each respondent's code his categorisation H or L in each of the two sets was placed. Thus, respondents had any one of the following categorisation.

HH, LL, HL, or LH, HM, LM or MM (M indicating mixed).

These symbolic presentation was made for each department. Table 3.13 is the specimen of the table discussed above.

Table 3.14: Specimen of Table Depicting Categorisation of Respondents into H or L in Consideration and Structure.

Supervisory Code No.	Consideration	Structure
1	H	H
2	H	H
3	L	H
4	H	H
5	H	H
6	H	H
7	H	L
8	L	L
9	L	L
10	H	H
11	H	H
12	L	L
13	L	H

From Table 3.14 it was possible to calculate how many respondents in the matter of Consideration and Structure scored H or L. When H scores were found to be more in the department was characterised as H in regard to consideration or structure as the case was. If majority of the respondents scored L, the department was characterised as L in regard to that dimension. Different departments earned different combination of HL or HM or MM.

These categorisations were later related to different variables like EEP, other climate scores and alienation scores.