There is a definite need to improve the quality of work life in any organisation. Only by humanising the work place improvement of the quality of human relation in industry can be made. Unless this happens there is little hope of reducing social tensions and conflicts - which are not at all desirable. Existing theory and research on organisational behaviour suggest the need for innovative action in the following areas: (a) job design and (b) man-management systems.

Sheth (1977) agrees that there is nothing wrong in developing (1) plans for change in work technology to provide for greater humanisation of work environment and satisfaction of workers, (2) institutional arrangement and programme towards greater participation of workers in management. In fact, in accordance with his consideration such changes are inevitable and even necessary from the point of view of organisational effectiveness in a democratic society. But he maintains that at present we do not know enough about motivational and attitudinal dimensions of the social life of Indian industrial worker. The recommended organisational changes, according to Sheth, are based more on assumptions and theoretical models developed in other countries than on
sound empirical evidence from Indian context.

Finding the available literature as inadequate to draw useful conclusions, Sheth (1977) has emphasised the need for a few grassroot studies of the background and motivation of Indian industrial workers. As he seems to have serious doubts about the relevance of the "imported" concepts and tools, he recommends that the choice of concepts and methodology should be oriented to the accomplishment of the suggested task. It is believed by research workers in this area that psychological and social phenomena are governed by universal laws which can be discovered by the use of scientific methods. Culture might, in some situations, act as a moderator in the universal cause and effect relationships in the sphere of human behaviour. Like other fields of scientific endeavour, therefore, social scientists too must be prepared to borrow and share concepts, tools and techniques for the growth of their science.

PERCEIVED CHARACTERISTICS OF CLIMATE

In order to undertake the grassroot study as recommended by Sheth it is necessary to identify the characteristics which are concerned with the true nature of the climate of the organisation. It is also necessary to identify the dimensions and determinants of the climate of the organisation
under study. Since dimensions are the main components to constitute the climate of an organisation an approach to study the climate of an organisation through the study of the dimensions will be very much effective. In fact, different organisational scientists proposed to perceive the climate of an organisation from different points of view and consequently have tried to establish different definitions of organisational climate. However for the purpose of our study an effort will be made to establish a working definition on the basis of the above observations as well as the common perceived characteristics of climate of the organisation under study.

On analysis it is seen that abstract concept of culture and operational concept of climate basically refer to the perceived personality of an organisation in very much the same sense as individuals have personality. Just as an individual possesses a personality - a set of relatively stable traits - so does an organisation. Just as any culture has some do's and don't's which dictate how each member should behave with a fellow member or an outsider, similarly each organisation has a culture that influences the behaviour of its employees towards clients, competitors, colleagues, supervisors, subordinates and strangers. In this study we shall be concerned with this relatively stable perceived
internal environment of an organisation, called organisational climate (OC).

It should be noted that organisational climate (OC) is the perceived aspect of an organisation's internal environment but within the same organisation there may be different organisational climates. This is so because people with different lengths of experience or at different levels of organisation's hierarchy, may perceive the internal environment of an organisation differently. Personal characteristics such as values, needs, attitudes and expectations determine the manner in which an individual is likely to perceive the various aspects of the internal working environment of the organisation.

VARIOUS DEFINITIONS OF OC

Different research workers on organisational climate have tried to establish different definitions of OC based upon their approach towards the study of OC. Here an effort will be made to establish a working definition of OC on the basis of these definitions.

1. Forehand and Gilmer (1964) define OC as a set of characteristics that (a) describe the organisation and distinguish it from other organisations, (b) are
relatively enduring over time and (c) influence the behaviour of people in the organisation.

2. Georgopoulos (1965) defines OC as a normative structure of attitudes and behavioural standards which provide a basis for interpreting the situations and act as a source of pressure for directing activities.

3. Litwin and Stringer (1968) define OC as a set of measurable properties of the work environment perceived directly or indirectly by the people who live and work in that environment influencing their motivation and behaviour.

4. Tagiuri and Litwin (1968) define OC as a relatively enduring quality of the internal environment experienced by its members, influencing their behaviour, and which can be described in terms of the values of a particular set of characteristics of the organisation.

5. Taylor and Bowers (1970) define OC as the perceived traits of organisational stimuli which become a group property through interpersonal interactions and which modify behaviour of people within the organisation.

6. Friedlander and Margulies (1969) define OC as a relatively stable or ongoing property of the organisatio...
which may release, channel, facilitate or constrain an organisation's technical as well as human resources.

7. Campbell\(^8\) (1970) defines OC as a set of attributes specific to a particular organisation that may include the way the organisation deals with its members and its environment. For the individual member within the organisation, OC takes the form of a set of attributes and expectations which describe the organisation in terms of both static characteristics (such as degree of autonomy) and dynamic characteristics (such as behaviour outcomes).

8. Payne\(^9\) (1971) defines OC as a moral concept, reflecting the content and strength of the prevalent values, norms, attitudes, behaviours and feelings of the members of a social system which can be operationally measured through the perception of members of the system or observational and other objective means.

9. Pritchard and Karasick\(^10\) (1973) define OC as a relatively enduring quality of an organisation's internal environment distinguishing it from other organisations, which (a) results from the behaviour and policies of the members of the organisation, specially in top management, (b) is perceived by members of the organisation, (c) serves as a basis for interpreting the
situation and (d) acts as a source of pressure for directing activity.

10. Hellriegel and Slocum{11} (1974) define OC as a set of attributes which can be perceived about a particular organisation and/or its subsystems and which may be induced from the way the organisation deals with its members. Several themes are implicit in this definition of OC:

(a) Perceptual responses sought are primarily descriptive rather than evaluative.

(b) The level of inclusiveness of the items, scales and constructs are macro rather than micro.

(c) The unit of analysis tends to be attributes of the organisation rather than the individual.

(d) The perception of OC have potential behavioural consequences.

However, here the unit of analysis tends to be attributes of organisation not individuals and perceptual responses necessitated are primarily descriptive rather than evaluative.

Though in different definitions stated above efforts
have been made to define OC differently, they have some common elements referring to some definite particular characteristics linked with organisation and its members and these characteristics may be regarded as the basic characteristics of OC.

However, from the study of above definitions of organisational climate a working definition of organisational climate may be given as follows: The Organisational Climate is a set of characteristics consisting of some common elements: (a) OC is a molar concept; (b) though subject to change OC is relatively enduring over time; (c) inspite of differences in individual perceptions, there can be broad overall agreement in describing OC; (d) OC turns to be a characteristic of an organisation instead of any particular individual but summed or averaged perception of all individuals; (e) the behaviour of the members of the organisation is influenced by OC. The term OC, as used in the present study, has all these five sets of qualities and meanings.

THEORETICAL IMPLICATIONS

Schneider (1975) is of the view that the concept of OC rests on certain assumptions. These assumptions may be listed as follows: (a) People attempt to apprehend order in their environment and to create order through thoughts,
(b) People apprehend and/or attempt to create order in the environment so that they can effectively adapt their behaviour to the work environment. The climate perceptions, accordingly, represent meaningful apprehension of "order" in the perceiver's world based on direct stimulus to perception as well as inferences regarding the presence of psychologically equivalent characteristics. The apprehensions of order has direct implications for behaviour. As suggested by Heider\textsuperscript{13} (1958), people do have theories about the world is ordered and they use these theories as a framework for their behaviour. Hence we may conclude that people (a) apprehend order in their world of work based on perceived and inferred characteristics and (b) behave in ways that fit the order they apprehend (Schneider\textsuperscript{14} (1972))

Gestalt psychologists hypothesised that people apprehend and create order because they have no choice. Functionalists proposed that order is apprehended and created so that people can function adaptively in their world. According to Schneider\textsuperscript{15} (1975) evidence from many studies conclude that in general people adapt to or try to achieve some kind of balance with their psychological environment. The desire on the part of individuals to adapt to their environment tends to depress display of individual differences unless their climate supports or otherwise provides for the display
of such differences. Hence, the functionalist view implies that situational characteristics rather than individual attributes are the main determinants of behaviour in organisations.

Litwin and Stringer15 (1968), through their experimental studies found that a given leadership style produced a characteristic climate. This indicates that climate can be created or altered in a group and consequently climate can arouse a motive appropriate for the demands of the group. Changing the overall climate of an organisation is the primary objective of many programmes of organisational change. In general, efforts for such change are provided by those who call themselves Organisation Development (OD) specialists or consultants. Main features of organisation development can be subsumed by the following two general approaches, both of which attempt to realise direct change in the climate and interpersonal style which characterise the organisation:

(a) Helping organisations build more effective teams of organisation members, with special attention to issues of participation and leadership within teams.

(b) Helping organisations find new and better means of managing interpersonal and intergroup conflict with special attention to creating a climate of collaboration throughout the organisation.
Though organisation climate is never static, there is need to introduce planned changes in them from time to time so as to enhance their effectiveness and well being of those who work in them. Such planned change in organisational climate calls for extensive use of behavioural science knowledge and techniques. Planned changes or OD intervention can take one or more of the following forms: (1) changing the individuals who work in the organisation, (2) changing specific structures or systems of the organisation and (3) changing the overall climate of the organisation. Effective programmes of organisational change normally involve the simultaneous use of more than one of these approaches.

Since OD efforts are directed at organisational climate or style of management at the organisation-wide level, the objective here is to create a system-wide climate which is characterised by high interpersonal trust and openness and reduction of dysfunctional consequences of excessive social conflict and competitiveness. This approach to change is based on the assumption that behaviour in organisations is influenced by the emotional and social processes which characterise the relations among members of the organisation.

In an article on strategic planning for organisation climate modification, Ginsberg¹⁶ (1978) has outlined how changes in climate can be planned in a systematic fashion.
The approach is based on an objective method for assessing and evaluating performance in the area of human resource management. The strategy consists of clearly defined objectives, identification of programmes to meet those and specification plans for various steps, costs, impact and control of these programmes. The climate should then be surveyed on a regular basis in order to monitor progress against the plan and to assess the effectiveness of the chosen alternative. As suggested by Becker (1975), climate surveys are required due to the need for a systematic method of collecting information on human motivation as this is essential for effective management. Sources in particular facets of the survey can be used in formulating a strategy for improving OC.

PARALLEL CONCEPTS

The term OC is relatively new. But the phenomenon covered by this term has been the subject of study by many writers and organisational research workers since long. The scientific management approach to work motivation introduced by Taylor (1911) may be taken as an example. According to this approach, organisation members can be motivated to peak performance through material rewards and economic incentives. Taylor applied this philosophy to the world of work by
advocating piece rate system of payment wherein rewards are closely linked with output to ensure maximum output from employees. This classical motivation theory of Taylor was supplemented by Adam Smith's classical organisation theory, which emphasised the division of a particular job into simple units or operations.

Mayo\(^{19}\) (1933) advocated the impact of "informal" groups on organisational objectives. According to him, instead of ignoring the natural instinct of people for forming groups, management should encourage it. He suggested that management should develop such informal groups by showing an active, first-hand interest in each individual member and by giving the group a reasonable share of control over its own work. The importance of the group is also indicated in the more recent studies by the staff of the Tavistock Institute in United Kingdom. The studies by Trist\(^{20}\) (1963) at British collieries revealed that extreme division of labour, accompanied by a central coordinating authority, was not the most efficient form of organisation. The experiment by Rice\(^{21}\) (1958) in one of the large textile mills in Ahmedabad also supported the findings of the Tavistock studies as well as those of Mayo.

Maslow\(^{22}\) (1943) developed a theory of motivation based on five sets of human needs arranged in a particular order
from the lower to the higher needs. He worked out a scale of human motivation based on the premise that next higher order need appears as soon as the lower order need is satisfied. According to Maslow, each need is created to the state of satisfaction or dissatisfaction of other needs.

Herzberg\(^2\) (1959) have proposed the two factor theory of work motivation. In this theory, features of the organisational environment have been divided into two broad groups. In one group called "motivators" are factors relating to intrinsic aspects of the job. These include achievement, recognition, responsibility, advancement etc. In the other group called "hygiene" are factors that are external to the job. These include supervision, company policy, working conditions, interpersonal relations, salary, status, job security etc. According to this theory, the "hygiene" factors, when improved, yield no improvement in motivation but merely serve to prevent losses of morale or efficiency. If neglected, the "hygiene" factors would cause motivation to deteriorate very rapidly. On the other hand, the "motivators" have an uplifting effect on job satisfaction often resulting in an increase in output.

McGregor\(^4\) (1960) divided managers into two broad groups based on their style of leadership which, in turn, resulted from the assumptions they made about human nature and
motivation. He called one group as Theory X leaders who are of the opinion that human beings are inherently lazy and dislike their work; hence they must be coerced, controlled and directed to work. Theory Y leaders, on the other hand, believe that most people aspire for independent responsibility and are capable of self-direction and self-control. McGregor argues that a participative and supportive approach as referred in Theory Y style of leadership is likely to produce better results.

Argyris (1964) was of the opinion that the restrictions imposed on individuals by organisations for the sake of order and efficiency seem to create resistance which eventually harms the organisation. He observes three main mechanisms through which the organisation spoils the mature employee and encourages the immature to follow that way. These are: (1) the formal organisation structure in which the power is typically concentrated in the hands of a few at the top, (2) directive leadership in which the superior makes all decisions and subordinates carry them out and (3) managerial controls on local initiative.

Likert (1967) has recommended four different systems of management that are found in various organisations. In the first system, the management has got no confidence and trust upon subordinates and consequently subordinates do not get
involved in any decision making. In the second system, the management has got some confidence and trust upon subordinates, but still most of the decisions are taken at the top and only a few are taken by the subordinates. In the third system, the management has got substantial but not total confidence and trust upon the subordinates, the broad and general decisions are made at the top and other day-to-day decisions are taken at the bottom level. In the fourth system, the management has got complete confidence and trust upon subordinates and accordingly decision making is widely left upon the subordinates. The subordinate group members are encouraged to participate in the decision making process encouraging the system of participative management. In accordance with this observation of Likert if the management of an organisation approaches the fourth system as above it can expect high productivity whereas closer to the first system there is more likelihood of a sustained record of low productivity.

**DIMENSIONS OF OC**

It is seen that OC refers to a set of some commonly experienced stable characteristics of an organisation which constitute the uniqueness of that organisation and differentiates it from others. One occasionally faces some difficulty in identifying this set of characteristics unless one
knows the various dimensions or factors of OC in which one should look for these characteristics. In the last two decades, extensive studies have been conducted and these have helped us to identify some key factors of OC. Some of these common dimensions, as mentioned earlier, are: (1) Scope for Advancement. (2) Grievance Handling. (3) Monetary Benefit. (4) Participative Management. (5) Objectivity and Rationality. (6) Recognition and Appreciation. (7) Safety and Security. (8) Training and Education. (9) Welfare Facilities.

Once an overall consideration of the recommendations done by different research workers is noted the justification of selection of above nine dimensions becomes clear. The selected dimensions have been used as tools in the present study of organisation climate.

DETERMINANTS OF OC

In the process of study of organisation climate it is useful to distinguish between determinants and dimensions of OC. Determinants are actually the causes and the dimensions are the components of OC. In fact the determinants are those which are influenced.

Although OC refers to the internal environment of an organisation, the nature of OC is determined by a variety of
internal and external factors. One of the basic premises of organisational behaviour is the outside environmental forces which influence events within organisation.

In the organisation members encounter thousands of events, practices and procedures and they perceive these events in related sets. As viewed by Schneider and Reichers\(^\text{27}\) (1983), work settings have numerous climates and these climates individually are something specific. A work setting may be a climate for safety, a climate for service or a climate for achievement. A climate without being attached with a referrent does not bear any meaning. Climate is a multidimensional construct, the OC has got to be judged not as a single entity but as a set of entities, each of which is to be with respect to a particular referrent. These entities are the determinants of "OC".

Though there appears to have a common approach over the definition of the concept of OC, there is yet no agreement about a common set of determinants of OC. However different research scientists have put their efforts to specify the above sets of entities on different considerations.

1. Forehand and Gilmer\(^\text{28}\) (1964)
   a) Structure, b) Size, c) Complexity, d) Leadership style, e) Goal direction.
2. Newton Margulis$^{29}$ (1965)
   A. Group characteristics
      a) Disengagement, b) Hindrances, c) Spirit, d) Intimacy
   B. Leadership characteristics
      a) Aloofness, b) Production Emphasis, c) Thrust, (d) Consideration.

3. Litwin and Stringer$^{30}$ (1968)
   a) Structure, b) Responsibility, c) Reward, d) Risk
      e) Warmth, f) Support, g) Standards, h) Conflict,
      i) Identity.

4. Schneider and Bartlett$^{31}$ (1968)
   A. Marginal Factors
      a) Management Support, b) Management Structure, c) Employee Concern.
   B. Agent Factors
      a) Inter Agency Conflict, b) Agent Interdependence, c) General Satisfaction.

5. James Taylor and Bowers$^{32}$ (1970)

6. House and Rizzo$^{33}$ (1972)
   a) Timely Decision Making, b) Upward Information Requirement, c) Top Management Receptiveness, d) Formalisation,
e) Selection Criteria Based on Ability, f) Job Pressure, g) Subordinate Development, h) Team Work, i) Inter Group Cooperation, j) Chain of Common, k) Information Distortion, l) General Communication, m) Definition of Work.

7. Campbell, Dunnette, Lawler and Weick \(^{34}\) (1970)
   a) Structure, b) Consideration/Warmth/Support, c) Autonomy, d) Reward.

8. John Newman \(^{35}\) (1977)

The diversity among these approaches is so great that it is impossible to consider any one of the above approaches as typical. Hence the above approaches have been categorised into three broad groups as follows:

A. **LEADERSHIP FUNCTION**

The executives of a company are responsible for motivation of employees, including formal system of reward and punishment, different types of employee benefit programme, incentive schemes, communication system, the quality of
leadership offered by top management and consequently the supervision being done by middle and lower level of managerial hierarchy.

B. STRUCTURAL PROPERTIES

The structure of the organisation or its subunits, span of management, reporting relationship, delegation of authority and area of command, number of levels in the organisation hierarchy etc.

C. EMPLOYEE SATISFACTION

This leads to identification of employees feelings and attitudes towards their fellow workers and the organisation.

The above categorisation is exhaustive, very few research workers have used all these categories.

As discussed above the determinants influence the OC and the dimensions of OC are consequently influenced. Our study of OC as proposed is to utilise the cause and component characteristics of determinants and dimensions.

HYPOTHESIS OF THE STUDY

The present day situation in industrial organisation is very complex in nature. The total system in general is
dependent upon some variables. The variables individually possess different trends depending upon different internal and external characteristics of the organisation or firms under consideration.

For an engineering firm, these different variables can be summed up to be Finance, Market, Technology and Organisational Climate existing in the particular firm under study.

To have healthy operation an engineering firm needs suitable capital investment to meet its different capital requirements like - fixed assets, working capital etc. Once this investment is steady, allocation of fund on different heads becomes suitable for the operation of the firm.

Technology significantly contributes upon the viability of an engineering firm. Technology on the global scene is always advancing in a steady rate. If the technology is obsolete the feasibility of the organisation falls back and even the existence of the firm becomes in stake. However in the engineering firms around Calcutta the availability of technology whether indigenous or imported has never been a problem because of rich technical heritage in the Calcutta based industrial complex.

Market is always a critical factor for the healthy operation of an engineering firm. If there is a steady market
for the product or services of the firm its viability never becomes subject to be questioned. This is one of the reasons that engineering firms occasionally go for diversification of their products - this diversification is generally in accordance with market demand for product or with an eye to create a new market in a new or existing locality with old or new product as the situation requires. Hence it is observed that market is not a constraint in general.

The Organisation Climate (OC) as has been discussed so far is an important variable of the organisational system. An extensive study over OC is on progress over the impact of OC upon the organisational health.

Since the period of late sixties it was observed that industries, specially engineering units located in the industrial area of Calcutta and its surrounding had been undergoing through a deteriorating stage. The bright industrial scenario of earlier days had been passing through a dark phase.

Also along with this dismal picture of the engineering firms in and around Calcutta, there seems to be a turmoil in sociological condition of Calcutta and its suburbs. This disturbing sociological scene also puts an adverse effect on the OC of organisations.
Let us assume,
y to be existing position of firms under study measured suitably
\( x_1 \) to be financial variable
\( x_2 \) to be technological variable
\( x_3 \) to be market variable
\( x_4 \) to be OC variable
Hence \( y = f(x_1, \ x_2, \ x_3, \ x_4) \)

In accordance with observation as made above it is noted that there is no change in the rate of change of trend of variables \( x_1, \ x_2 \) and \( x_3 \). Accordingly herewith it is hypothesised that by controlling or organising the trend of change of \( OC \) in the favourable direction, the engineering firms under study may be prevented from the decay as being experienced.

The climate of an organisation, when measured through perceptions of its members, is considered by some as an attribute of the individual and not that of the organisation. Moreover, if such data are analysed using individual as the unit of analysis, it is better to call it a study of psychological climate. On the other hand, if there is adequate inter-rater agreement in perception of climate, scores of individuals from the same organisation can be summed up and averaged. When such aggregated data are analysed using
organisation as the unit of analysis, it can be called a study of organisation climate (OC). In the latter case, we are justified in considering OC a property of the organisation. As an attribute of the organisation, mean climate scores enable us to assess the status of various systems and procedures followed by an organisation. Such assessment is a must if an organisation desires to improve its climate and effectiveness.

OC is a multi-faceted phenomenon. While everyone seems to accept this fact, there is, as yet, no consensus over a set of dimensions that can be considered the common denominator in studies of OC. Subsumed under the head OC are various practices, procedures and leadership styles followed by an organisation in dealing with its members. These practices and styles have attracted attention of research workers of organisational behaviour. Some of them have used the term OC in studying these variables, while others have preferred the more specific terms such as - "participative leadership", "safety", "welfare" and so on.

Here an attempt may be made to explain briefly as to how OC is conceived and measured for the purpose of the study in hand. Here the approach has been made to study OC with the help of a specially designed questionnaire. The questionnaire seeks to measure nine dimensions of OC, each
with the help of three statements. The 27 statements are so worded as to describe the various characteristics of an organisation. The answers to questionnaires were collected from members of organisation - i) consisted of first-line supervisors who are sandwiched between management and the workmen and, therefore called men-in-the-middle and also from ii) workmen.

Analysis of data on OC revealed that there was adequate inter-rater agreement justifying aggregation of scores of individuals to arrive at mean scores for each organisation. In this study, the term OC is used only when organisation (instead of individual) is the unit of analysis and organisational mean scores (instead of individual raw scores) constitute data on climate.
FOOT NOTES


5. Tagiuri, R. & Litwin, G.H. (1968), *Organisational Climate; Explorations of a Concept*, Boston University Press.


