CHAPTER II

REVIEW OF STUDIES AND BACKGROUND OF PRESENT RESEARCH

The previous chapter was mainly concerned with providing a brief introduction to the problem of employee attitudes and to bring out various connotations and controversies connected with employees' morale, job satisfaction, and organizational structures. In the present chapter we propose to present some studies dealing with morale, job satisfaction and organizational structures. It may be emphasised here that in most of these studies the terms job satisfaction, morale, and attitudes have been used interchangeably. This trend, to some extent, persists even today. In most of the studies reviewed here, no attempt had been made to operationally define and study job satisfaction and morale as separate variables distinct from one another. But their place in the history of industrial psychology and the impact that they made on subsequent thought and research is too obvious. Studies dealing with organizational structures, on the other hand, are very few. It appears that this important area of investigation suffered from neglect. Some of the studies reviewed here are of recent origin and indicate a growing awareness of the importance of this factor. It may be pointed out that there are a few studies which have attempted to relate organizational structures with attitudes. But there is no study in the knowledge of
the present investigator which has attempted to determine
the influence of organizational structures on employees' 
morale and job satisfaction both.

Professor Elton Mayo's investigations at the
Hawthorne Works of the Western Electric Company are the
first important breakthrough in the field of attitude assess-
ment of workers. Mayo's investigations (Roethlisberger and
Dickson, 1939) comprised of a series of experimental investi-
gations, one leading to another, but all unplanned at the
initial stage and spread over a period of twelve years from
1927 to 1939. The importance of these studies lies in the
fact that they draw very little from the formal theoretical
systems of any of the social sciences and yet they can be
considered real contributions to the theory.

The Hawthorne studies, for the first time, experi-
mentally established that the relationship between the worker
and the supervisor "leads to a more potent influence on out-
put than any manipulation of environmental conditions and
that the informal associations of a group of men at work act
as a potent stabilizer on the level of production (the notion
of the informal group enforcing its notion of the "fair day's
work") were made the basis of a new frame of reference in
industry" (Herzberg, Mausner and Snyderman, 1959: pp. 8-9).

The studies which started as simple experiments to
determine the effect of varying intensities of illumination on productivity were yielding results which defied explanation in ordinary cause-effect terms. To understand the mysterious variables at work, Mayo planned one study after the other. Each study is essentially an outgrowth of the preceding one. Blum (1956: P. 23) divides the Hawthorne studies as follows:

1) Experiments on Illumination.
2) Relay Assembly Test Room:
   a) Second Relay Assembly Test Room.
   b) Mica Splitting Test Room.
3) Mass Interviewing Programme.
4) Bank Wiring Observation Room.
5) Personnel Counseling.

The Illumination Studies were initiated with a view to establishing the relationship between various intensities of illumination and productivity. Three departments were selected for these studies, they were engaged in inspection of small parts, assembly of relays, and coil winding. As a control, all the workers in these departments worked under existing lighting installations, to enable a record of their production. Under experimental situation they were exposed to different intensities of illumination and a record of their production was obtained. The results
proved inconclusive and the investigator failed to obtain any direct relationship between illumination intensities and productivity. A second experiment was conducted in which the design was modified. This time two groups of workers were selected from a single department. They were matched in terms of experience of employees, average production and number of employees. The control group operated under 'relatively constant illumination' whereas the experimental group worked under three different illumination intensities. To control the spirit of competition the two groups were assigned different work sites. Results showed an identical increase in production of both the groups. This necessitated further refinement in design.

A third experiment was planned in which all natural light was eliminated and the operations were carried out under artificial illumination. The control group worked under a constant illumination of 10 foot-candles. The test group started working under an illumination level of 10 foot-candles which was gradually decreased to 3 foot-candles at the rate of 1 foot-candle at a time. It was observed that the test group maintained the same level of production throughout. Under the fourth experimental setting two operators started working in a light-controlled room. The intensity of illumination was gradually reduced to moonlight level.
They reported having no eye strain and maintained their normal production rate. The fifth phase of illumination experiment dealt with only one group of operators. Here intensity of illumination was gradually increased and later bigger bulbs were placed with the level of illumination remaining constant. The operators expressed satisfaction with the real and the supposed increases in illumination. Real and supposed decreases in the level of illumination brought forth unpleasant reactions. Results indicated no appreciable change in production under any of these conditions.

As a sequel to the first set of studies, i.e., Illumination Studies, a second experiment was planned which came to be known as the Relay Assembly Test Room.

The Relay Assembly Test Room was planned as an improvement over the illumination experiments. As a measure of greater control, it was decided to experiment with a small group of workers who were to work in a separate room. Two friendly experienced operators were invited for this study, who, in turn, selected three other assemblers and a layout operator. They were engaged in assembly of small relays. An experienced observer who has worked during the illumination studies was put in the same room. During the course of
the experiment, a number of changes connected with work place, method of payment, rest pauses, number of working hours, length of work-week, and facilities for mid-morning lunch, were systematically introduced. Complete records of the goings-on were maintained. The surprising outcome was that every change accompanied some increase in production. The investigators were led to believe that there was no connection between the physical conditions of work and production.

To establish the relative influence of wage-incentives on production, two side studies were planned. These were known as (i) Second Relay Assembly Test Room, and (ii) Nice Splitting Test Room.

In the case of Second Relay Assembly Test Room experiment, some operators were put on a wage-incentive plan but their work environment remained unchanged. The production rate increased immediately by 12%. Then wage-incentive was withdrawn, production went down. This experiment, however, had to be abandoned in face of deteriorating morale in the department. In the Nice Splitting Test Room experiment, the impact of wage-incentives was studied under test room conditions. The results showed an average increase of 15% in the rate of production.
Results of the Illumination Studies and Relay Assembly Test Room experiments led Mayo and his associates to believe that they have failed to establish any relationship between physical conditions and productivity but have performed a sociological and psychological experiment. In their endeavour to control different variables, they have inadvertently introduced a new 'social situation'. This situation was characterised by changed attitudes and interpersonal relations. With these investigations, employee attitude studies come of age.

During the course of Relay Assembly Test Room studies it came to light that the operators were quite critical of their supervisors and modes of supervision whereas management has been all along thinking that this department had no supervision problems. This knowledge about criticism of supervisors and supervisory practices was accompanied by the realization that supervision is a vital potential factor in morale building. It became necessary to gain more knowledge about employees' attitudes. It led to planning of a third study which is known as the Mass Interviewing Programme.

The Mass Interviewing Programme was launched in the inspection branch with the help of three men and two
women supervisors to assess attitudes of about 1600 employees working in the branch. The programme was by and large well received by the work group. It led to important attitudinal changes in the persons interviewed.

An important finding of the study was that certain job factors, e.g., wages, hours of work, and physical conditions are not isolated factors, rather they are 'carriers of social values'. This realization made it necessary to assess the imperceptible but vital influence of social groups upon an individual's performance. The concept of informal personal leadership had not fully developed up to this stage. To determine if the informal organization has any influence on worker's behaviour and efficiency, a fourth study was planned known as the Bank Wiring Observation Room experiment. It was designed at determining the impact of informal organizations on worker's performance. The operators were assigned a separate room because it was well established by now that such a change has a salutary effect on productivity. The main purpose for which this study was initiated was neither to alter behaviour nor to increase productive efficiency but to observe exactly what went on. Two men were deputed to carry out the investigations: an observer and an interviewer. The observer was planted in the work room but was instructed to remain aloof and uninterrupting. The interviewer was to meet
the workers in another part of the factory and was to gather casual information from them about their families, social values etc. There was a great deal of apprehension about the presence of the investigators and it took three weeks to allay unnecessary fears.

Results of this study showed that this small group has spontaneously developed into a 'team with natural leaders'. The financial incentive extended by the company was met with cold indifference. The group was sticking to a steady production figure of 6000 units whereas it was easily capable of producing 7000 units. 6000 units was their 'fair day's work'. The group tended to restrict output in accordance with its definition of a fair day's work, nullifying the validity of the wage incentive plan. Values and customs of the group and interpersonal relations were more important than any cash benefit.

After a gap of about 4 years, the last of the studies was initiated known as the Personnel Counseling Programme. This programme had two objectives. Its first objective, as pointed out by Blum (1956) was "to have a non-authoritative and impartial agency interview employees to diagnose their problems and work with supervisors on their methods of supervision". Its second objective was to improve the method of communication between management and operators.
with a view to avoiding friction between the management organization and social organization. Supervisors benefited from this programme in that they could see their problems with 'less emotion and more understanding'. The programme led to a decisive improvement in (a) personal adjustment, (b) supervisor-employee relations and (c) employee-management relations.

The significance of the Hawthorne Studies lies not in their experimental designs or control of variables but in their sincere endeavour to understand employees and their problems. They experimentally established the impact of employee attitudes on productivity. These researches are considered 'revolutionary' and representative of the type of investigation that was not 'steered to predetermined conclusions'. New questions and new problems continued to crop up and new methods and designs were evolved to meet them. Many questions were raised during the course of these studies which would have never been raised otherwise.

Another significant study, though not as extensive as Mayo's, was conducted by Hoppock (1935) and reported in his monograph entitled 'Job Satisfaction'. A community-wide survey was conducted by Hoppock in New Hope. To assess job satisfaction, Hoppock developed a nine-item questionnaire. About 88% of the 351 employed adults filled out his
questionnaire. His findings revealed that about 16% of the sample had negative attitudes or job dissatisfaction.

Hoppock computed an index of satisfaction ranging from 100 to 700 (with six divisions). An index of 100 indicated extreme dissatisfaction, that of 700 extreme satisfaction and 400 indicated indifference. Results obtained by Hoppock for five occupational groups are given below:

<table>
<thead>
<tr>
<th>Occupational Classification</th>
<th>Number of Cases</th>
<th>Range of Indexes</th>
<th>Mean Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unskilled Manual</td>
<td>55</td>
<td>100-650</td>
<td>401</td>
</tr>
<tr>
<td>2. Skilled manual...</td>
<td>74</td>
<td>125-650</td>
<td>483</td>
</tr>
<tr>
<td>3. Skilled manual and white collar...</td>
<td>84</td>
<td>125-675</td>
<td>510</td>
</tr>
<tr>
<td>4. Sub-professional, business and minor supervisory...</td>
<td>32</td>
<td>250-700</td>
<td>548</td>
</tr>
<tr>
<td>5. Professional, managerial, and executive...</td>
<td>23</td>
<td>300-700</td>
<td>560</td>
</tr>
</tbody>
</table>

Hoppock also conducted a single-profession survey on 600 teachers. Teachers from 51 urban and rural communities were selected and their job satisfaction was estimated on four attitude scales. Scores on all the four scales were
combined to yield a single measure of job satisfaction. On the basis of scale scores, 100 most satisfied and 100 least satisfied teachers were chosen for intensive interviewing. Differences between the two groups are summarized by Blum (1966; p. 131), as follows:

1. The satisfied showed fewer indications of emotional maladjustment.
2. The satisfied were more religious.
3. The satisfied enjoyed better human relationships with superiors and associates.
4. The satisfied were teaching in cities of over 10,000 population.
5. The satisfied felt more successful.
6. Family influence and social status were more favourable among the satisfied.
7. The satisfied 'selected' their vocations.
8. Monotony and fatigue were reported more frequently by the dissatisfied.
9. The satisfied were (on average) 7.5 years older.

This survey did not find any statistically significant difference between the average salaries of the two categories. A revealing finding of the survey was that job satisfaction and vocational interest are not identical.
since, 84% of the dissatisfied teachers responded positively to the question: "Is your work interesting?".

In the epilogue to his study Hoppock proposes the following six major components of job satisfaction:

i) Individual's reactions to unpleasant situations.
ii) Facility of adjusting with other individuals.
iii) Standing in the socio-economic group with which one has identified.
iv) Relationship between the demands of the job and the worker's abilities, interests and training.
v) Security.
vi) Loyalty.

One of the very important researches on employee attitudes involving satisfaction - dissatisfaction was conducted at the General Motors Corporation of America. A new technique to assess employees' attitudes was evolved. A contest was planned in which the employees submitted letters on the subject of "My Job and Why I Like it". The length of material submitted ranged from one sentence to twenty type-written pages. About 60% of the 2,97,401 employees entered the contest. These entries provided an opportunity to analyze thematically the relatively unstructured reflections of employees. The study was later published in
monograph form under the title "My Job Contest" (Ivens and Lasch, 1960) popularly known as the MJC.

The MJC entries present a record of an individual's thoughts when his mind is at liberty to discuss subject matter of interest and importance to him. But thematic analysis of the entries represented a hurdle. Conferences were held with experts of many disciplines, such as, education, attitude and opinion research, social psychology, psychiatry, and political science. These pre-contest conferences could yield only certain generalized principles. Every 10th entry was taken out from the first 10,000 for purposes of analysis. This procedure had to be abandoned in face of very large number of entries. Photostat copies of the last 400 of the original 103 sample were made. About 150 prevailing themes or coding categories were evolved. These were further reduced to 76 on the basis of their frequency of recurrence in the sample.

The title of the letters laid a pre-condition upon the entrants to discuss only the positive factors about their jobs but lack or absence of mention of certain factors was also considered significant. The 26 themes found significant for the whole of MJC were regrouped into 18. These are reproduced below in order of frequency of mention.
<table>
<thead>
<tr>
<th>Regrouped Themes</th>
<th>% Mention</th>
<th>Regrouped Themes</th>
<th>% Mention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Income</td>
<td>52.2</td>
<td>10. Benefit plans</td>
<td>34.2</td>
</tr>
<tr>
<td>2. Interesting and Important job</td>
<td>50.8</td>
<td>11. Safety and Medical facilities</td>
<td>32.7</td>
</tr>
<tr>
<td>3. Pride in belonging to Company</td>
<td>49.4</td>
<td>12. Holidays and Vacations</td>
<td>16.6</td>
</tr>
<tr>
<td>4. Fellow Workers</td>
<td>48.9</td>
<td>13. Recreational facilities</td>
<td>15.9</td>
</tr>
<tr>
<td>5. Immediate boss</td>
<td>47.9</td>
<td>14. Personal achievement (sense of)</td>
<td>14.2</td>
</tr>
<tr>
<td>6. Treatment and policies of</td>
<td>47.5</td>
<td>15. Steady work</td>
<td>11.1</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Working Conditions</td>
<td>47.3</td>
<td>16. Suggestion Plan</td>
<td>10.1</td>
</tr>
<tr>
<td>8. Security</td>
<td>35.6</td>
<td>17. Free Enterprise</td>
<td>7.9</td>
</tr>
<tr>
<td>9. Chance to get ahead</td>
<td>35.2</td>
<td>18. Recognition of Seniority</td>
<td>2.4</td>
</tr>
</tbody>
</table>

An important study connected with workers' satisfaction was conducted by Herzberg, Mausner, and Snyderman in 1959. These investigators evolved their own design and procedure which were both novel and effective. Whereas the earlier investigators have studied attitudes either in isolation or in relation to productivity and morale, this study was aimed at studying job attitudes 'in toto'. For the first time the
Factors-attitudes-effects (F-A-E) complex was studied as a unit. A semi-structured interview was used for this purpose. Individuals were required to think of the times (i) when they felt most happy with their jobs (high), and (ii) when they felt most unhappy (low) about their jobs. These 'narrational data' were subjected to rigorous analysis for sifting the variables which are potential 'Satisfiers' and 'Dissatisfiers'.

Accountants and engineers from nine steel and engineering companies constituted the sample of this study, both belonging to the general category of 'middle management'. About 200 interviews were conducted. A five-fold analysis procedure was adopted. The factors studied were, "first, the description of the person speaking; second, an over-all description of the sequence of events; third, the description of the objective situation in the sequence of events (first-level factors); fourth, a description of the needs, motives, and perceptions of the person speaking (second-level factors); and fifth, a description of the behavioral and other effects of his attitudes". (Herzberg, et al, 1959; P. 40).

A first-level factor, according to the investigators, is 'an objective element of the situation in which the respondent finds a source for his good or bad feelings.
about the job. The second-level factors were an outcome of a critical self-examination which, in turn, was obtained or facilitated by enquiring, "What did these events (as suggested in first-level factors) mean to you?" Diverse first-level factors were found capable of arousing a given feeling or attitude (second-level factor). For example, a feeling of recognition could come from words of praise, from a promotion, or from a new job assignment and these three alternatives merely mean for the subject that his worth has been recognized. The following 14 first-level factors were found.

| i) Recognition                  | ix) Company policy and administration |
| ii) Achievement                | x) Working conditions                 |
| iii) Possibility of Growth     | xi) Work itself                       |
| iv) Advancement                | xii) Factors in personal life         |
| v) Salary                      |                                        |
| vi) Intercpersonal Relations:  | xiii) Status                           |
| with superior, subordinates, peers |                                         |
| vii) Supervision-technical     | xiv) Job Security                      |
| viii) Responsibility           |                                        |

The second-level factors were gathered from the self-examination of subjects. "In essence", write the investigators, "he (the respondent) was looking at himself, trying to figure out what in his own need and value systems led to his attitude towards his job at the time of the events"
being described" (p. 49). The entire list of second-level factors includes:

i) Feelings of recognition

ii) Feelings of achievement

iii) Feelings of possible growth, blocks to growth, first-level factors perceived as evidence of actual growth.

iv) Feelings of responsibility, lack of responsibility or diminished responsibility.

v) Group feelings; feelings of belonging or isolation, socio-technical or purely social.

vi) Feelings of interest or lack of interest in the performance of the job.

vii) Feelings of increased or decreased status.

viii) Feelings of increased or decreased security.

ix) Feelings of fairness or unfairness.

x) Feelings of pride or of inadequacy or guilt.

xi) Feelings about salary.

The last item of the F-x-E complex, namely, 'effects' were relatively easy to determine and study. Five distinct types of effects were found to have resulted from the various objective situations cited by respondents. The effects were:
1) **Performance Effects**:

   a) With no change for good or bad in performance (output).

   b) Change in rate of output—slowed down or speeded up— with no change in quality.

   c) Change in quality of work.

2) **Turnover**:

   quitting, not quitting at even a better offer, mentally prepared to quit, etc.

3) **Mental Health Effects**:

   Psychosomatic effects—smoking, drinking, tensions, ulcers, cardiac conditions, etc.

4) **Effects on Interpersonal Relationships**:

   Improvements or degeneration in interpersonal relationships as a result of 'tensions on the job' usually with wife, children and friends.

5) **Attitudinal Effects**:

   Feeling about the job leading to changed attitudes towards self, colleagues, profession and the company. Changes were in negative as well as positive direction.

Results of this investigation substantiated the hypothesis that there are different sets of motivators which act as 'satisfiers' and 'dissatisfiers'. Intensity or importance
of each variable was gauged in terms of frequency of its occurrence in the narrational data. Results on a total of 228 cases are reproduced below in tabular form.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total High</th>
<th>Total Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Achievement</td>
<td>41</td>
<td>7</td>
</tr>
<tr>
<td>2. Recognition</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>3. Work itself</td>
<td>26</td>
<td>14</td>
</tr>
<tr>
<td>4. Responsibility</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>5. Advancement</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>6. Salary</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>7. Possibility of growth</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>8. Interpersonal relations</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Subordinate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Status</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>10. Interpersonal relations</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>superior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Interpersonal relations</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Supervision - technical</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>13. Company policy and</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Working conditions</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>15. Personal life</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>16. Job security</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
An important finding of the study was that people in general do not allow the tensions of their job life to affect their family life. The investigators suggest that it is "likely that the degree to which a person lets his feelings about his job spill over into the conduct of his interpersonal relationships is more a function of his psychological dynamics as an individual than of anything else" (p. 83).

Studies reviewed above are those which are concerned with determining the factors constituting job satisfaction and morale (employee attitudes). These have been reported here either for their historical significance or for their refinement in research design and techniques, and because of the fact that they have taken cognizance of variables included in our investigation. In the following section we shall review studies which have influenced the design of the present investigation.

Background of present research:

In a series of investigations beginning in 1938, Lewin, Lippitt and White compared productivity and morale of children working under different 'social climates' or 'social atmospheres'. The first experiments were directed to determine the impact of democratic and autocratic social climates on productivity and morale (Lewin and Lippitt, 1938; Lippitt, 1939, 1940; Lewin, Lippitt and White, 1939). In the second experiment
Under the democratic 'climate' the leader made policies a matter of group decision and encouraged the club members to conduct discussions and to allocate the duties. The laissez-faire leaders were passive in social participation and left all decisions about procedure and activity to the group. They supplied help when asked, but refrained from making any evaluations.

It was found that about 60% of all behaviour of the authoritarian leaders comprised of giving orders, disrupting commands, and non-constructive (non-objective) criticism. Only 5% of democratic and laissez-faire leaders engaged in such activities. The democratic leaders made more suggestions and stimulated self-guidance compared to the autocratic and laissez-faire leaders. The laissez-faire leaders were more concerned with extending the knowledge of their group members. It was also found that the authoritarian leaders gave more social recognition through social approval; the democratic leader was more jovial, and laissez-faire leaders were more 'matter of fact'. Mäire (1962: p. 316) summarizing the results, observes:

"When the overall productivity ratings of the three types of groups were compared, the authoritarian groups were highest in quantity, while the democratic groups were judged to be better in quality".
Findings of these studies were contrary to the prevailing beliefs and practices. As Miller and Form (1964; pp. 687-688) observe: "Lewin pointed out the greater active participation and judgment exercised by the members of democratic groups. Traditionally work organizations had relied heavily on autocratic styles, and Lewin's work was a challenge".

Katz and his associates at the Survey Research Center of the University of Michigan, have attempted to determine the causes and conditions of worker productivity and morale through field studies, surveys and field experiments (Katz and Kahn, 1951a, 1951b; Katz and Kahn, 1952; Katz, Kahn, Jacobson, Morse, and Campbell, 1961; Katz, Maccoby, Gurin, and Floor, 1961; Katz, Maccoby, and Morse, 1961). These investigations were planned to deal directly with 'Social realities'. According to Kahn and Katz (1963; p. 61?) "the initial research was not planned around tight mathematical models of the hypothetico-deductive variety but was more empirically oriented, seeking to discover and explore those variables which assumed significant proportions in the industrial situations studied". All the investigations were conducted under the Human Relations Program. A variety of industrial situations were explored. These included the office of an insurance company, maintenance-of-way section gangs of railways, an electric utility, an automotive manufacturer, a tractor plant, an appliance manufacturer, and two U.S. (Federal) government agencies.
The Survey Research Center studies represent a pioneering effort to investigate into morale and productivity measures with a view to 'get at the functional relationships in an ongoing organization'.

Results of these studies indicate that there are four factors which are consistently related to morale and productivity of an organizational group. These are as follows:

1) The supervisor's ability to play a differentiated role.
2) The degree of delegation of authority or 'closeness' of supervision.
3) Employee-orientation or supportiveness.
4) Group cohesiveness.

It was found that supervisors of high-producing groups played a more differentiated role, that is, they did not perform the same functions as the rank and file worker. They had superior planning ability and spent a greater amount of time on 'planning the work and performing special skilled tasks'. Kahn and Katz (1963; Pp. 614-615) have observed that the supervisors of the low-producing sections 'were more likely to spend their time in tasks which the men themselves were performing, or in the paper-work aspects of their jobs'. In the low-producing groups there was a tendency for an
'informal leader' to arise. It appears that the informal organization of the low-production groups "compensated in some respects for the abdication or misdirected leadership of the foreman, but not without some losses in total effectiveness" (Kahn and Katz, 1953; P. 615).

Closeness of supervision was found to be directly related to morale and productivity. It was found that low-producing supervisors 'check' on their subordinates more frequently, they gave more detailed and more frequent work instructions. On the other hand, the high-producing supervisors gave their men greater freedom 'to do the work in their own way' and to 'set their own pace' on the job.

The high-producing groups also had supervisors who were 'employee-oriented' and who engaged themselves in broad 'supportive functions'. These supervisors, besides maintaining production, conducted such other functions as on-the-job training, recommending people for promotion and transfer, and communicating relevant information about the work and the company. Workers in high-producing groups more frequently characterized their supervisors as 'taking a personal interest in them and their off-the-job problems'. Kahn and Katz (1953; P. 622) summarizing the results of employee-orientation observe that those workers 'who felt that the foremen took the greatest interest in them also were getting the greatest psychological
return from their employment in terms of satisfaction with job, supervisor, and company."

Group relationships or cohesiveness were also found to be a major determinant of productivity. It was observed that workers in the high-producing groups 'tended to express a more favorable evaluation of their section (work group) and of their division'. They also felt that they were 'really a part of their group'. Group cohesiveness was also found to accompany high satisfaction with job and company.

In recent years an important investigation was conducted by Vroom and Mann (1960) to determine the impact of leader authoritarianism on employee attitudes. The study was carried out in a single plant of a large delivery company. The plant comprised of 28 geographically-separated operating stations, each employing about 50 persons. The men working there were (1) truck drivers and (2) positioners. The positioners' duty was to collect parcels from a conveyor belt and place it on an appropriate shelf for the trucks to carry them. Positioners worked in teams of 8-10 men. The teams started work around 11:30 P.M., and left around 5:30 A.M. There is good deal of interaction among positioners and between the night supervisor and the team.

Drivers reported on duty around 8:30 A.M., were briefed for the day and were out on work by 9:00 A.M. Each
driver reported to the station manager. The nature of the duty restricted interaction among drivers and between drivers and station managers to a few minutes at the beginning and end of their duties.

Supervisory authoritarianism was assessed by responses to 26 items from Form 40 and 45 of Adorno's F-Scale. Employee attitudes and perceptions were measured with the help of an attitude questionnaire, consisting of questions with fixed alternative answers. Items on 12 important areas were framed, namely, over-all work situation, supervisor, work group, pay, higher management, supervisor's participativeness, perception of tension with supervisor, perception of tension between supervisor and higher management, perception of pressure for high performance, perception of supervisor's influence, estimate of frequency of group meetings with supervisor and, estimate of frequency of individual contact with supervisor.

Results of this study indicate that employees in small work groups which were characterized by a great deal of interaction among workers and between workers and supervisors and by a high degree of interdependence had more positive attitudes towards equalitarian leaders. On the other hand, work groups where opportunities for interaction were few or none and where individual employees were highly independent had more positive attitudes towards authoritarian supervision.
Pearson's product-moment correlation was computed to determine the nature and extent of relationship between supervisor's attitude and employees' perception. Negative correlations were obtained between the F-Scale scores of night supervisors and attitudes of positioners toward their supervisor and over-all work situation. In other words, less authoritarian the supervisor more positive the attitudes of workers towards him and the over-all work situation. Findings for drivers were contrary to those for positioners. Positive correlations were obtained between station manager authoritarianism and drivers' attitudes. Drivers tended to prefer more authoritarian leaders while positioners tended to prefer equalitarians.

To establish behavioural differences between authoritarian and equalitarian leaders in the two operations, leader authoritarianism scores were correlated with measures of their subordinates' perceptions of leader behaviour. Significantly different relationships on four out of seven variables were found between drivers and positioners. The following table gives correlation figures for supervisor's authoritarianism and drivers' and positioners' perception of the supervisor's relations with others.
<table>
<thead>
<tr>
<th>Perceptions and estimates</th>
<th>Drivers (N = 26 Groups)</th>
<th>Positioners (N = 24 Groups)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Supervisor's Participativeness</td>
<td>.36*</td>
<td>-.58**</td>
</tr>
<tr>
<td>Perception of Pressure from Supervisor</td>
<td>-.38*</td>
<td>.40**</td>
</tr>
<tr>
<td>Perception of Tension with Supervisor</td>
<td>-.40**</td>
<td>.33</td>
</tr>
<tr>
<td>Perception of Tension between Supervisor and Higher Management</td>
<td>-.38*</td>
<td>.19</td>
</tr>
<tr>
<td>Perception of Supervisor's Influence</td>
<td>.23</td>
<td>.12</td>
</tr>
<tr>
<td>Estimate of Frequency of Group Meetings</td>
<td>-.14</td>
<td>-.03</td>
</tr>
<tr>
<td>Estimate of Frequency of Individual Contact</td>
<td>-.07</td>
<td>-.19</td>
</tr>
</tbody>
</table>

* = r < .05  
** = p < .10

Figures in the above table indicate that authoritarian station managers are perceived to be more participative, exerting less pressure on subordinates, and creating less tension both with their own supervisors and with their subordinates. On the other hand, authoritarian night supervisors are perceived to behave in an exactly opposite manner. They
are seen as less participative, exerting more pressure, and creating more tension both with supervisors and subordinates". (Vroom and Mann, 1960; p. 131).

In the foregoing section we reviewed some investigations which influenced the design and planning of the present investigation. Detailed outline of the design of the present investigation is, however, presented in the next chapter of the present work. The present investigation marks an improvement over earlier studies both in terms of its design and its coverage of variables.

In many of the previous investigations leadership practices have been taken as the independent variable, individual (or group) morale as the intervening variable and productivity as the dependent variable. As Miller and Form (1964; p. 689) propose, "The chain of causation would be drawn as follows:

Leadership Practices $\rightarrow$ Individual and Group Morale $\rightarrow$ Productivity of Employee Members

(Independent variable) $\rightarrow$ (Intervening variable) $\rightarrow$ (Dependent variable)."

In none of the earlier studies it was proposed to study job satisfaction and morale both, as either intervening or dependent variables. Investigators have used the terms interchangeably and nowhere attempted to discriminate between job satisfaction and morale. The present investigation is the
first study in which an attempt is made to study job satisfaction and morale. Both these factors are treated as dependent variables. Two separate operational definitions are proposed and the variables studied with the help of carefully prepared tools. The independent variable was also studied with the help of two tools, namely, an inventory and an interview schedule.

This study is of academic value, in that, it is the first empirical attempt in the direction of finding out if the amount of job satisfaction of a given group is necessarily the same as its morale and to what extent these two variables are influenced by organizational structures. Though the study was conducted on a limited sample yet its results can be of far reaching consequences. Results of the present survey can help in planning supervisory training programmes. They also indicate needs and wants of the Indian worker.

The aim of the present investigation, it may be mentioned in brief, was to determine the job satisfaction and morale of a select sample of Indian workers under two types of organizational structures. The term 'organizational structure' has been used here to denote 'supervisory practices'. Two groups of workers roughly equated on nature and type of work, length of service (experience), earnings etc., but working under different types of supervisors were studied for any possible difference in their job satisfactions and morales.