CHAPTER - III

PROFILE OF ORGANISATION

CONCEPTUAL FRAME WORK OF ABSENTEEISM

In order to facilitate the study on Employee absenteeism in a Government organization, the CPCL is selected and its profile is given below.

GENESIS

Oil refining industry in one of the leading industries in India and oil continue to play a significant role in meeting the energy requirements of our country. Ever-since the discovery of this black gold, there has been a consistent increase in its demand. At the time of independence in 1947, the refining industry was controlled by Multinational companies. To-day, a little over 58 years later, the industry is largely in the public domain with skills and technical know-how comparable to the highest international standards and the name of the company has been changed from 'Madras Refineries Limited' (MRL) to 'Chennai Petroleum Corporation Limited' (CPCL) with effect from 6-4-2000.

CPCL, Chennai widely known as Madras Refineries Limited (MRL) is one of the largest and most integrated refineries in South India producing fuel products, lubricants and additives.

CPCL was formed as a joint venture of the Government of India (GOI), Amoco India inc., USA and the National Iranian Oil Company (NIOC), Iran with equity contribution in the ratio of 74:13:13 on 30-12-1965 as a Public Limited Company.
At the time of formation in 1965, the MRL was originally designed for processing 2.5 Million Metric Tones (MMT) of crude oil per annum from Iran. Taking its activities beyond Manali, CPCL has commissioned Cauvery Basic Refinery at Panangudi with a capacity of .5MMT per annum. At present the total refining capacity of 9.5 Million Metric Tones (MMT) per annum and the other at Nagapattinam with a capacity of 1.0 MMT per annum.

It is noted here that CPCL has been making profits from the second year of its operation and it has been paying dividend continuously form the third year and during the year 2004-05, CPCL has announced a dividend of 120% to its investors. As on date, the total investment made in the Refinery processing project amounted to Rs.2, 360 crores.

PRODUCTS PROFILE

CPCL produces a number of petroleum and specialty products which are useful to the public in general and too many industries like transport, fertilizer, power, railways, petrochemicals etc. List of products manufactured by CPCL are

- Liquefied Petroleum Gas
- Motor spirit
- Aviation Turbine Fuel
- Methyl Ethyl Ketone Feedstock
- Propylene
- Paraffin wax
- Bitumen
- Naphtha
- Linear Alkyl Benzene
Polybutene Feedstock
High speed Diesel
Furnace oil
Lube oil base stock
Sofo Oil
Sulphur

PROCESSING MANAGEMENT

Presently, the CPCL has a total refining capacity 10.5 Million Metric Tones (MMT) per annum. The refining capacity at the Manali Complex is 9.5 Million Metric Tones (MMT) per annum and the capacity of the Cauvery Basin Refinery is 1.0 Million Metric Tones (MMT) per annum. In order to be globally competitive and to sustain growth and remain an economically viable word-class entity in the de-controlled era of the oil industry, CPCL has taken a number of pro-active measures to improve the operations of the refinery process and work practices. Progressive steps have been taken to bridge the potential gap identified in the various areas of refinery operations in association with the ‘Pace setter performance process of M/s. Solomon Associates Inc., USA and this improvement programme has rightly been called as Excellence in Competitive Performance Programme”. A new production planning system has also been generated with the help of the above American Company to focus the production planning process through regular monitoring of Gross Refinery Margin for maximization of the production performance of CPCL, Chennai.
SAFETY MANAGEMENT

CPCL has been carrying out its operations on par with the Indian and International standards. Foremost importance has been given for the safety of the workers while they are at work and the organization has been taking the following measures to improve the safety management system:

- Memorandum of Understanding (MOU) with Chennai Port Trust for establishing the Oil Spill Response facilities at Chennai Port.
- Pre-commissioning safety audits in the expansion project.
- Declaration of ‘No smoking Zone’ in the entire plant area.
- Prohibition on the use of cell phones inside the plant area.
- Provision of training facilities on safety aspects.
- Creation of safety awareness through screening of safety video films to visitors and contractors.

In appreciation of the adoption of a comprehensive quality environment, health and safety policy, CPCL has received the following awards:

- Safety Certificate and Safety Plaque from the British Safety Council, UK.
- Leadership and Excellence Award in HSE from the Confederation of Indian Industry (CII), Southern region.

ENVIRONMENTAL MANAGEMENT

CPCL has been implementing various environmental conservation measures to meet the environmental conservational norms and through effective monitoring and proper co-ordination, it has achieved substantial abatement of pollution form.
operations. A dedicated environment Department has been working sincerely in
CPCL and the Environmental management system covers the following:

➢ Use of cleaner technology in refinery process operations.
➢ Continuous operations of pollution control facilities.
➢ Creation of environmental awareness amongst all employees.

It has also implemented a new ‘Zero Discharge Project for treating the
effluents from Refinery III are a total cost of Rs.10 crores. In appreciation of CPCL’s
concern for environmental management. It has received various awards and
recognitions as show below:

➢ **Greentech Environment Excellence Award** for 2002-2003 from Greentech
  Foundation.

➢ **TERI Corporate Environment Award** from the Energy and Resources
  Institute.

➢ **Leadership and Excellence Award** for the year 2003 from the confederation
  of Indian industry, Southern Region.

**MARKETING PROFILE**

The oil products manufactured by the CPCL, Chennai are marketed through
Indian Oil Corporation Limited (IOCL), ITS Holding Company. However, CPCL has
been carrying its marketing operations for some of it’s products and feed stocks
directly and thereby supplies the following to various industries located in and around
and Manali refinery:
Naptha

Propylene

Polybutene feed stock

MEK feed stock

LAB feed stock

In addition to the marketing operations noted above, CPCL supplies the following products to retail consumers directly by adopting a single window concept:

Food Grande Hexane

Extracts- Heavy

Extracts-Light

Sofo Oil

Sulphur

Paraffin wax.

SOCIAL SERVICES MANAGEMENT

In order to uplift the quality of life in the society, CPCL has been contributing substantial amount to various welfare and community development programmes. Some of the contributions are

Organization of Eye camp for cataract identification at Tirumullaivoyal and Manali in association with Sri SankaraNetralaya, a renowned eye-care Institution.

Construction of new class rooms and compound wall at Government School, Vichur and provision of kitchen facilities for students hostel at Washermanpet situated in Manali area.
➢ Distribution of computers and printers to various schools and hostels in the around Chennai.

➢ Promotion of sports by conducting number of tournaments in all games.

➢ Contribution to Tamil Nadu Chief Minister’s Fund to the tune of Rupees one Crore for carrying out various relief operations.

CORPORATE GOVERNANCE

Corporate Governance has assumed great significance in this era of globalization. CPCL recognizes the importance of Corporate Governance and contribute to implement the best practices of Corporate Governance on order to create greater confidence in the minds of the investors.

Strong Corporate Governance is indispensable to resilient and vibrant capital markets and is an important instrument of investors’ protection. It is a system in which the directors are entrusted with responsibilities and duties in relation to the management of corporate affairs. It is concerned with the accountability of persons who are managing the company and concern for ethics and values. In this context, CPCL strongly believes that Corporate Governance is a must for its corporate affairs and for business excellence and it enhances the prestige of the organization among the shareholders.

CPCL’S philosophy on Corporate Governance hinges on total transparency, integrity and accountability of the management and is aimed at towards protecting and enhancing the trust of its stakeholders namely Shareholders, Creditors, Employees, Suppliers, Customers and Society.
CPCL has been short-listed as one of the top 25 companies adopting good Corporate Governance practices by the Institute of Company Secretaries of India it is to be noted that CPCL is one of the top 3 public Sector companies in our country.

ORGANISATION AND MANAGEMENT

Organisation structure: The management of CPCL is governed and led by the Board of Directors appointed by the President of India. The Managing Director is the Chief executive Officer if CPCL and is assisted by the following three Full-time Directors:

1. Director (operations)
2. Director (Technical)
3. Director (Finance)

Working Divisions: There are four divisions in CPCL to control its affairs and management and these divisions have to report their operations to the office of the Managing Director besides his Executive Assistant, the vigilance, the secretarial and legal wing the Public relations Department at its Corporate Office, Chennai. Following are the Divisions:

1. Refinery Division
2. Project and Development Division
3. Finance Division
4. Human Resources Division

Refinery Division: This division is headed by the Director (Operations) and it consists of an Executive director (Operations) and a General Manager (Cauvery basin refinery) at its apex to supervise the activities at Manali and Nagapattinam
respectively. The activities of this division are focused towards continuous operations of Refinery I Refinery II at Manali and another Refinery at Nagapattinam for achieving the targeted levels of production.

**Project and Development Division:** This division is headed by Director (Technical) and it consists of Project and Development department and Corporate Planning department with officials in the rank of Executive Director /General Managers directly reporting to the Director (Technical).

**Finance Divisions:** This division is under the control of the Director (Finance) and the Finance Director is assisted by the General Manager (Finance). The activities of this division are listed below:

- Corporate finance
- Internal audit
- Project finance
- Refinery finance

**Human resources Division:** Director (operations) additionally heads the Human Resources Division with another official in the rank of General Manager at its apex level responsible for the following activities:

**Human resource Services**

- Industrial Relations
- Administration Services
- Organizational development
- Occupational Health Services
Liaison with the various departments and agencies of Central and State Government.

It is noted that in CPCL, Director (operational) is the Principal advisor to the Managing Director and the Board on all matters relating to human resource policies, procedures and practices. Any introduction and review of human resource polices will be submitted only by the Director (operations) to Board of Directors for its approval.

**HRD PRACTICES FOLLOWED IN CPCL**

The HRD practices followed in CPCL are presented in the following manner:

**Organization Development**

Organization Development is an effort planned, organization-wide, and managed from the top, to increase organization effectiveness and health through planned interventions in the organization's 'processes,' using behavioral-science knowledge.

Organization Development is an attempt to influence the members of an organization to expand their candidness with each other about their views of the organisation and their experience in it and to take greater responsibility for their own actions as organization members. Recently in CPCL Enterprise Resource Planning System (ERP) has been introduced. This ERP system enables the management to coordinate the efforts of the employees achieve better productivity and implementing various appropriate plans to utilize the resource in an effective manner.

**Employee Development**
Employee development is a joint, on-going effort on the part of an employee and the organization for which he or she works to upgrade the employee's knowledge, skills, and abilities. Successful employee development requires a balance between an individual's career needs and goals and the organization's need to get work done.

Employee development programs make positive contributions to organizational performance. A more highly-skilled workforce can accomplish more and a supervisor's group can accomplish more as employees gain in experience and knowledge.

For this CPCL provides facilities for conducting workshops, counseling etc. Programmes such as, personality Development programme, yoga and meditation are conducted for its employees. Experts form different walks of life are being outsourced by the CPCL management to conduct above mentioned programmes. In order to develop new and specialized skill, technical consultants from all over the world are being invited for the organization. Employees are given opportunities to participate in the Seminars, conferences, symposiums etc at the cost of the company.

Grievance Redressal

In any organization employee grievance redressal is considered as an indispensable one. In CPCL the employees could air their grievances through their trade unions. The CPCL Officers Association, CPCL Employees Union and CPCL SC/ST Employees Union are functioning to place their grievances to the management. In addition to protect the rights of women employees there is a separate organization called (WIPS) is functioning. The WIPS will handle women employees grievances and other related issues. Depending upon the nature of grievances, the CPCL
management gives opportunities to selected and approved trade union leaders to participate in redressing the grievances.

Training and Development

**CPCL Training and Career Planning:** The CPCL has a very good Training department and it has been concentrating more on the conduct of training programmes for the benefit of the newly recruited employees and the existing workers on the roll. The training needs of the supervisory and non-supervisory personnel are assessed on the basis of their qualifications, work experience and performance appraisal. Various training programmes namely induction training and training on first-aid, occupational health hazards and fire and safety have been provided on a continuous basis to its employees.

CPCL has two training centers namely Human Resources Development (HRD) Centre and Refinery Engineering School of Training (RESOT) and intensive training programmes have been conducted for the benefit of its employees.

**Refinery Engineering School of Training (RESOT):** It was established in 1984 and it has been imparting training programme to Engineering professionals of Petroleum and petro-chemical industries on corporate planning, materials management, power and utility and total productive maintenance.

**Human Resources Development Centre:** It provides various training programmes for supervisory and non-supervisory employees of CPCL on strategic management, management development, personality development, information technology, orientation training, job training, apprentice training, in-plant training and project training.
HRD Practices in CPCL: CPCL is one of the largest and most integrated oil refining Public Sector Industries in India and it has been implementing HRD policies as per the instructions and guidelines issued by the Central and State Governments and the efforts of CPCL in this direction results in the following welfare measures:

- Organisation of various training and development activities through the Refinery Engineering School of Training (RESORT).

- Providing opportunities for exposure to new technological and for sharpening the professional skills through in-company training.

- Organization of training programmes for the new employees.

- Sponsoring employees for External training programmes and seminars.

- Conduct of an off-campus Bachelor of Science (BS) Degree Programme in Process engineering in collaboration with the Birla Institute of technology and Science (BITS) for the benefit of the employees.

- Organisation of separate training programmes for woman employees.

- Running of Industrial Training Institute (ITI) and Polytechnic College for the benefit of wards of the employees.

- Organization of sports activities and tournaments for the employees.

- Maintenance cordial industrial relations with the trade Unions and Association of employees.

- Proper maintenance of Occupational Health Services (OHS) Centre which ensures excellent health of the employees.
➢ Conduct of Personality Development programmes for the benefit of both supervisory employees.

➢ Publication of Periodic Newsletter for the employees.

Thus Employees of CPCL have different demographic factors with varied experience and exposure.

CONCEPTUAL FRAME WORK OF ABSENTEEISM

Meaning of Absenteeism:

Employee’s presence at work place during the scheduled time is highly essential for the smooth running of the production process in particular and the organization in general. Despite the significance of their presence, employees sometimes fail to report at the work place during the scheduled time, which is known as ‘absenteeism’. Labour Bureau, Simla, defined the term ‘absenteeism’ as “the failure of a worker to report for work when he is scheduled to work.” Labour Bureau also states that “absenteeism the total man shifts lost because of absence as a percentage of the total number of man shifts scheduled to work.” According to Webster’s Dictionary, “absenteeism is the practice or habit of being an ‘absence’ and absentee is one who habitually stays away”.

Types of Absenteeism:

Absenteeism is of four types viz.: (i) Authorized absenteeism, (ii) Unauthorized absenteeism, (iii) Willful absenteeism, and (iv) Absenteeism caused by Circumstances beyond one’s control.
(i) Authorised absenteeism:

If an employee absents himself from work by taking permission from his superior and applying for leave, such absenteeism is called authorized absenteeism.

(ii) Unauthorised Absenteeism:

If an employee absents himself from work without informing or taking permission and without applying for leave, such absenteeism is called unauthorized absenteeism.

(iii) Willful Absenteeism:

If an employee absents himself from duty willfully, such absenteeism is called willful absenteeism.

(iv) Absenteeism Caused by Circumstances beyond One’s Control:

If an employee absents himself from duty owing to the circumstances beyond his control like involvement in accidents or sudden sickness, such absenteeism is called absenteeism caused by circumstances beyond one’s control.

Causes of Absenteeism

Research studies undertaken by different authors reveal the following features of absenteeism:

(i) The rate of absenteeism is the lowest on pay day, it increases considerably on the days following the payment of wages and bonus.
(ii) Absenteeism is generally high among the workers below 25 years of age and those above 40 years of age.

(iii) The rate of absenteeism varies from department to department within an organization generally, it is high in the production department.

(iv) Absenteeism in traditional industrial is seasonal in character.

Calculation of Absenteeism Rate can be calculated with the help of the following formula:

\[
\text{Absenteeism} = \frac{\text{Number of Mandays lost}}{\text{Number of Manday scheduled to work}} \times 100
\]

Absenteeism rate can be calculated for different employees and for different time periods like month and year.

The frequency rate reflects the incidence of absence and is usually expressed as the number of separate absence in a given period, irrespective of length of absences. The frequency rate represents the average number of absences per worker in a given period.

\[
\text{Frequency} = \frac{\text{Total number of times in which the leave was availed}}{\text{Total number of Mandays scheduled to work}} \times 100
\]

Severity Rate: Severity rate is the average length of time lost per absence and is calculated by using the following formula:
Total number of days absent during a period

Severity Rate = \[ \frac{\text{Total number of times absent during the period}}{\text{Total number of times absent during the period}} \times 100 \]

A high severity rate indicates that the employee is absent for longer duration each time high frequency and severity rates indicate that the employee is absent more frequently and for a longer durations each time resulting in high absenteeism even in absolute terms.

The following are the general reasons for absenteeism among Indian work force:

(i) **Maladjustment with the working Conditions**: If the working conditions of the company are poor, the workers cannot adjust themselves with the company’s working conditions. They prefer to stay away from the company.

(ii) **Social and Religious Ceremonies**: Social and religious functions divert the workers attention from the work.

(iii) **Unsatisfactory Housing conditions at the work place**.

(iv) **Industrial Fatigue**: The industrial fatigue compels workers to remain outside their work place.

(v) **Unhealthy Working conditions**: The Poor and intolerable working conditions in the factories irritate the workers. Excess heat, noise, either too much or too low lighting, poor ventilations dust, smoke etc. cause poor health to the workers. These factors cause the workers to be absent.

(vi) **Poor Welfare Facilities**: Though a number of legislations concerning welfare facilities Financial position of the companies or due to the exploitative attitude
of the employer. The poor welfare facilities, include poor sanitation, washing, bathing, first-aids appliances ambulance, rest rooms, drinking water, canteen, shelter, crèches etc. the dissatisfied workers with these facilities prefer to be away form the work place.

(vii) **Alcoholism:** Workers mostly prefer to spend money on the consumption of liquor and enjoyment after getting the wages. Therefore, the rate of absenteeism is more during the first week of every month.

(viii) **Indebtness:** The low level wages and unplanned expenditure of the workers make them borrow heavily. The research studies indicate that workers borrow more than 10 times of their net pay. Consequently, workers fail to repay the money. Then they try to escape from the place in order to avoid the moneylenders. This leads to absenteeism.

(ix) **Maladjustment with the Job Demands:** The fast changing technology demands higher level skills from the workers. Some workers fail to meet these demands due to their lower level education and/or absence of training.

(x) **Unsound personnel Policies:** The improper and unrealistic personnel policies result in employee's dissatisfaction. The dissatisfied employee in turn prefers to be away from the work.

(xi) **Inadequate Leave Facilities:** The inadequate leave facilities provided by the employer helps him to depend on E.S.I. leave which allows the workers to be away from the work for 56 days a year on half pay.

(xii) **Low Level Wages:** Wages in some organisations are very poor and they are quite adequate to meet the basic needs of the employees. Therefore,
employees go for other employment during their busy seasons and earn more money. Further, some employees take up part-time jobs. Thus, employees resort to moonlighting and absent themselves from work.

(xiii) Categories of Absenteeism K.N. Vaid classifies chronic absentees into five categories viz...

(i) Entrepreneurs: This class of absentees considers that their jobs are very small for their total interest and personal goals. They engage themselves in other social and economic activities to fulfill them.

(ii) The Status Seekers: This type of absentees enjoys or perceives a higher ascribed social status and is keen on maintaining it.

(iii) The Epicureans: This class of absentees do not like up the jobs which demand action, responsibility, discipline and discomfort. They wish to have money, power status but are willing to work for their achievement.

(iv) Family-oriented: This type of absentees are often identified with the family activities.

(v) The Sick and Old: This category of absentees is mostly unhealthy, with a weak constitution Old people.

Pleasure to Minimise Absenteeism

Absenteeism affects the organization from multiple angles. It severely affects the production access and the business process. The unauthorized absenteeism is more compared to other types of absenteeism. However, it would be difficult to completely avoid absenteeism. The management can minimize absenteeism. The following measures are useful in controlling or minimizing absenteeism.
(i) Selecting the employees by testing them thoroughly regarding their aspirations, valve systems, responsibility and sensitiveness.

(ii) Adopting a humanistic approach in dealing with the personal problems of employees.

(iii) Following a proactive approach in identifying and redressing employee grievances.

(iv) Providing hygienic working conditions.

(v) Providing welfare measures and fringe benefits, balancing the need for the employees and the ability of the organization.

(vi) Providing high wages and allowances based on the organizational financial position.

(vii) Improving the communication network, particularly the upward communication.

(viii) Providing leave facility based on the needs of the employees and organizational required.

(ix) Providing safely and health measures.

(x) Providing cordial human relations and industrial relations.

(xi) Education the workers.

(xii) Counseling the workers about their career, income and expenditure, habits and culture.
(xiii) Free-flow of information, exchanging of ideas, problems etc. between subordinate and superior.

(xiv) Granting leave and financial assistance liberally in case of sickness of employee and his for members.

(xv) Offering attendance bonus and inducements.

(xvi) Providing extensive training, encouragement, special allowances in cash for technological advancements.

ATTENDANCE AND PUNCTUALITY:

Punctuality in attendance is the very basis of a well – organized, stabilized and enlightened society and it forms the backbone of industrial management also. No institution, howsoever progressive, can work effectively if its employees / workers are not punctual and regular in attendance. It is also the very essence of the contract of employment that the employee must perform his job diligently and carefully and must not absent himself from work place without sufficient cause. Halsbury observes a servant is under an obligation not to absent himself from the work without good cause during the time at which he is required to be at work by the terms of his contract of service. If he absents himself without good cause his master is entitled to take appropriate disciplinary action against him for breach of contract and in case the absence of the servant amounts to misconduct inconsistent with the due and faithful discharge by the servant of his duties, it will constitute good cause for his dismissal. One of the most serious problems with which our industries are confronted today is that of absenteeism. Absenteeism erodes the very potentiality, credibility and productivity of any company or organization. This is no need to overemphasize the
fact that the punctuality of employees is the bedrock of the industrial climate and
development. The spirit of the punctuality has to be inculcated among the workers
and for this purpose even the harshest measures of discipline could be adopted as and
when it is required. It has been seen particularly in our country that if an employee
has become permanent, he can take the liberty of coming late to the office but this
should be nipped in the bud before it could take the shape of the cancer.

It is important to understand that there is no commonly accepted definition of
the term “absenteeism.” Instead, there are at least three major definitions for this
term. The first definitions include all absences – authorized as well as unauthorized.
Strictly speaking authorized absences are those about which the employer has
advanced knowledge and can therefore plan his production during the absence of the
worker. Unauthorized absences are those about which the employer has no advanced
knowledge and therefore cannot plan his production during the period of unauthorized
absence. The second includes only authorized absences, and the third includes only
unauthorized absences. Lack of commonly accepted definition obviously complicate
the comparison of absence rates between companies and presents an inaccurate
picture of the extent of absenteeism in the country. It results in one company having a
very high rate of absences regardless of notice and a second company having an
unusually low rate of absenteeism because it counts only those absentees of which
management had no advance notice. This problem is further complicated by lack of
unanimity on the definition of the terms ‘authorized’ and unauthorized absence.
Authorized absences generally include permitted vacations, sickness, accident
privilege and casual leave. Ex post facto regularized overstays and other absence
condoned by the management prior to or after the occurrence are also regarded as
authorized absence. Unauthorized absences include all those cases where work is available, the worker knows about it, he fails to report himself for duty and the employer has no prior information of the worker’s failure. Uncondensed absences and overstay and unauthorized absences preceding discharge are also included in the category.

1. Definition and Measurement

The Bureau of Labour Statistics (BLS) defines absenteeism as follow:

Absenteeism is the failure of workers to appear on the job when they are scheduled to work. It is a broad term which is applied to time lost because sickness or accident prevents a worker from being on the job, as well as unauthorized time away from the job for other reasons. Workers who quit without notice are also counted as absentees until they are officially removed from the payroll.

In an economic analysis of work attendance, the relevant decision variables for both workers and employers must be identified and discussed in the context of maximizing behavior. Such an analysis will not be applicable to those absences unaffected by changes in those decision variables. Some absences must be viewed analytically as random events, such as those resulting from death in the immediate family, accidents in the home, or severe and unavoidable illness. Even in these cases, it is hard to rule out of economic forces. How does one define “immediate family”? Should one include uncles, second cousins? Did an accident result from inferior product design? How can an employer know for sure that the absent worker is incapacitated because of the flu? If he is really ill, could this have been prevented by expenditures on personal or public health? Did another worker who was just as ill
report? It is difficult to distinguish between absences resulting from random forces and those connected to individual choice parameters in both theory and practice.

Cases which on the surface could be attributed to a random walk of viruses may analytically depend on the firm’s or the worker’s decision to allocate some scarce resource. In establishment providing no medical benefits, workers may not invest sufficiently in their own personal health and thus miss work frequently. In plants where such benefits are plentiful, workers may find it optimal to miss some work in order to take full advantage of them.

Economic analysis should be even more useful in the discussing of absences resulting from factors other than illness. Absences caused by accidents on the job are part of the opportunity cost of maintaining an unsafe workplace. The employee who misses work because he “doesn’t feel like working” might reconsider if the wage or dismissal probability were high.

In abstract terms absenteeism will be viewed in this discussion as a labour supply or work effort adjustment mechanism. The work attendance decision is made by an individual seeking the optimal combination of labour income and leisure. Absenteeism results because some worker prefers more free time and less income that their job provides. The worker’s decision is constrained by the firm’s personnel and compensation practices. Since chronic absenteeism is a just cause for dismissal external labour market conditions will also be taken into account in the work attendance decision. In turn the firm will set compensation levels and select supervisory techniques which will produce the optimal absence level for its workforce.
Defining absenteeism in an economic context does not facilitate selection of an appropriate measure. Many firms do not keep any attendance records. In a 1971 feasibility study of 500 firms in four areas, the BLs found that fewer than two-fifths of the employees worked in such firms.

A wide variety of absence definitions and measures is found among firms keeping records. In fact the failure of personnel managers to accept a standard definition of absenteeism make interestablishment comparisons meaningless in many instances. In some establishments when a worker is out because of illness or injury, he is considered absent until he returns. In other, only the first few days of absence are included. A similar measurement problem arises when a worker quits without notice. A worker who gives notice in advance that he will miss work for a certain period will be considered absent in some plants. Sometimes those who take work early are counted among the absent; those not reporting on time may also be included. In the latter case it becomes difficult to differentiate between lateness and absenteeism.

The definition of an absence as the failure of a worker to report as scheduled is not clear-cut because there is no universal agreement on the meaning of “as scheduled.” On the one hand, if a worker misses two weeks, by the second or third day of his absence he should be effectively replaced. On the other, since it is likely that the substitute will not perform as well, productivity is lower than it would be if he had reported. In an establishment where training is specific to individual positions, the productivity loss for the tenth day of a given spell of absence could be greater than the loss for the first day a worker is absent in another plant where all jobs require the same skills. Thus some firms may include long-term absences in computing their daily absence rate because that definition provides managers with the most useful
information. It would be foolish to claim there is a single superior definition of absences for all firms. It would be equally presumptuous to claim that some definitions necessarily are more reflective of absences resulting from voluntary choice. The worker who has been out nine days may find it advantageous to miss are more for a number of reasons (e.g., the tenth day is a Friday, he becomes eligible for disability payments after missing ten days, his best friend at work leaves for vacation tomorrow, etc.).

Even if there was universal agreement regarding the definition of absences, companies are still likely to disagree about which measure is superior. Probably the most widely used statistic is the inactivity rate, the number of hours (or days) lost to absences during a given period divided by the number of work hour (or days) scheduled.

Some useful information is not revealed in this statistic. In particular a high inactivity rate can result from a few workers being absent for long spells or from many employees missing work for only a day or two. Two measure permit identification of these separate dimensions of absenteeism; the incidence rate and the severity rate. The incidence rate equals the number of employees who were absent at least once over a given interval. The severity rate is defined as the ratio of the average number of hours (or days) lost by absent worker over average hour usually worked by those absent. It measures the average time lost per absent worker.

Some researchers argue that absences attributable to illness should be subtracted from all other absences. The remainder divided by scheduled hours (or days) of work over the given period is called the “other reasons absence rate.” This
adjustment is meant to eliminate absences of an involuntary nature from the measure. As discussed above, such a distinction is easier to make in theory than in practice.

Behrend (1959) has noted that absences in many British establishments tend to be higher on Mondays. If illness, accidents and death in the family are randomly distributed throughout the week, the pattern of absences can be used as a measure of what is termed "voluntary absenteeism". The blue Monday Index equals the difference between the average rates for Monday and Friday, the days with the highest and lowest average absence rate respectively. One difficulty with this index is that it discards any useful information provided by absence rate for other days. Two firms could have different midweek absence rate, but identical blue Monday Indices. The general approach can be useful for answering some questions (e.g., what is the lowest absence rate a given plant can aim to achieve?)

Some research into the degree of correlation among all these measures has been done. Behrend (1959) found no correspondence between the inactivity rate and either the Blue Monday Index or the other reasons absence rate. The blue Monday Index was associated with the incidence rate and the other reasons absence rate. This supports the hypothesis that long-term absences generally result from random causes and can be safely ignored when analyzing absenteeism. Chadwick – Jones et al. finds a high correlation between the inactivity rates. They conclude nonetheless. "As a general indicator of voluntary absence levels the FI (incidence rate) appears on this evidence to have most to recommend it." (Clearly from other standpoints, one may not find this indicator very useful. The productivity loss to a firm from any absence should be correlated with its duration, for instance.)
The most reasonable conclusion to make about defining and measuring absenteeism is that there is no single best way of going about it. Each of the measures discussed above contains some useful information. To get a well-rounded picture, data on the incidence, severity and inactivity rates, as well as the distribution of absences by days of the week are needed.

2. Survey of Past Research.

a. Theory

Most models of work attendance have originated from the field of organizational behavior. Absenteeism is generally viewed, along with labor turnover, as a signal of job satisfaction in these models. Psychological theories of motivation are used to analyze the work attendance decision. For instance in the expectancy model, "a person's motivation to perform in a particular way will be influenced by his expectancies about trying to perform in that way, his expectancies about the outcomes associated with performing at the level (P \to 0), and the attractiveness of the outcomes involved." Since past work experience influences these expectancies, "people who are dissatisfied tend to feel that going to work is not likely to provide the outcomes they value; hence, they are less likely to go."

The economics literature on both the sources of absenteeism and its effects on productivity, employment, and income is sparse. Ehrenberg was the first to examine how two decision variables—employment and overtime—are adjusted when there is a change in attendance probability. The absence rate itself is exogenously determined in his model. The firm chooses the combination of employment (M) and hours per person (H) which minimize costs for a given level of output. On any given day a M
workers are expected to report, where $a$ is the fraction of workers in attendance. Since the firm must still bear the cost of training absent workers, as well as paying such fixed labor costs as retirement and medical benefits, the marginal cost of labor purchased through increasing $M$ rises relative to the marginal cost of labor purchased through increasing $H$ when $a$ is less than one. Thus when the absence rate increases, the firm substitutes additional hours per person for workers in attendance. The net effect working in the opposite direction—more workers must be hired to attain a given level of workers in attendance on any given day.

Reza's input demand model differs form Ehrenberg's in two respects: (1) capital services ($K$) are treated endogenously, and (2) the firm maximizes profits rather than minimizing costs at a given output level. Using a Cobb-Douglas production function,

$$\Omega = (aM)^{\gamma_1} H^{\gamma_2} K^{\gamma_3},$$

Reza shows that an increase in the absence rate will lead the firm to raise $H$ and decrease both $M$ and $K$. He then considers the effects of a change in wages. Hours of work scheduled by the firm ($H^*$) depend on the nominal wage while the supply of hours ($ds$) varies with the real wage. Starting at the case where $H_s = H^*$, a fall in the real wage leads to absenteeism.

When the absence rate increases, those in attendance will be required to work longer hours. This leads to a vicious circle of increasing rates and hours scheduled and decreasing employment. Only by acting collectively can workers reduce the absence rate and $H^*$. In the case where the real wage increases, once again holding $H^*$ constant, each worker attends too frequently. The cost of hours relative to the cost
of hiring falls leading to a decrease in \( H^* \), an increase in \( M \), and a vicious circle working in the opposite direction. Collective action by workers is now necessary to raise the absence rate, closing the gap between \( H^* \) and \( H_s \). Finally Reza considers whether employers can adjust wages so as to change the absence rate. He shows this occurs only when the wage elasticity of demand for hours exceeds the wage elasticity of desired supply of hours.

These two papers illustrate that analysis of absenteeism is not a straightforward exercise. Each model emphasizes the firm's demand for inputs rather than the worker's time allocation decision. Rigidities involved in the determination of hours worked per person are taken as given. These latter two aspects will be explored in the theoretical model presented in the following chapter.

b. Empirical work:

With the exception of a pair of articles discussed below, studies of absenteeism have been confined to a small number of establishments, frequently just one. Since much of this work involves the testing of hypotheses related to motivation and job satisfaction, relatively few of the findings provide useful background for the present effort.

Behrend's (1959) survey of the literature discusses the links between absenteeism and level of employment, wages, sex and family responsibilities, age, length of service, occupation, conditions of work, size of industrial unit, incidence of payday, external factors, and psychological factors. Some of the case-study evidence presented is conflicting or inconclusive. Among her findings are the following:
1. Absenteeism is liable to occur after a break, after payday and on half days.

2. It is likely to be influenced by type of work; occupation with certain characteristics, for instance mass production characteristics seem prone to it; more varied work and higher status jobs are often free from it.

3. Women are more liable to irregular attendance than men.

4. Single men are more likely to stay away without excuse than married men, especially married men with several children.

5. Newcomers are more liable to absenteeism than seasoned workers.

6. Unskilled workers are more likely to stay away without excuse than skilled workers.

7. Casual unexplained absences are not confined to habitual absentees.

In a later study within a single establishment, Behrend (1974) found that absence rates decreased with age, normal hours of work, overtime hours, and gross weekly earning. Chi-square for all of these cross tabulations was significant.

The Organizational behavior literature exploring the link between absence rates and firm size should be mentioned. In ten of the 12 studies surveyed by Porter and Lawler, a positive linear relationship between absence rates and organizational subunit size was found. Ingram obtained correlation coefficients between the logarithm of firm size and absence rates of .86 for skilled workers and .94 for semi-skilled workers.
Two dimensions of work schedules have been examined in relation to absence rates: shift work and flexi time. Maurice’s survey of four case studies of absence rates of day and night workers points out conflicting evidence. Two studies found that absence rates were about the same on all shifts; one found higher absences among day workers; one, among night workers. Studies by Poor and the BLS find reduced absence rates among establishments adopting flextime and four-day weeks.

Two econometric studies of absence rates across industries have been published. Koshal and Koshal examined 1964 data for 17 manufacturing industries in India. They regressed industry absence rates (A) on average monthly earnings (Y), percent female (W), percent union members (U), the ratio of fringe benefits to total labor costs (B), percent single (S), percent family workers (F, employees related to entrepreneur) and number of workers (N). The results, with t-values beneath the coefficients, are:

\[
\log A = 10.9857 - 0.2365 \log Y - 0.0473 \log W - 0.0759 \log U
\]

\[
+ 0.1449 \log B - 0.0895 \log S + 0.1085 \log F + 0.0573 \log N
\]

\[
(1.59) \quad (1.90) \quad (3.02)
\]

\[
+ (1.70) \quad (2.11) \quad (1.88) \quad (1.67)
\]

\[
R^2 = .768 \quad F = 4.26
\]

The most significant variable in the equation is unionization. The authors feel unions develop fellowship among workers, thus lowering absence rates. Single workers and women are absent less frequently; family workers (who tend to be
underage), are absent more frequently. Absence rates are lower in industries with small plants, high wages and low fringe benefits in India.

Flanagan, Strauss, and Ulman examined 1972 full week absences (A) among two digit (SIC) manufacturing industries in their effort to find evidence of increasing worker discontent over no pecuniary rewards. Two variables representing the latter are included in the model. The first (H) is average weekly hours in the industry divided by the average for manufacturing. The authors argue that since long work hours should be less desirable, the coefficient of this variable should be positive. The second variable is the compensating wage differential (dw), defined here as the residual from a regression of average industry wage on education, experience, percent government workers, percent female, and percent nonwhite. The authors claim that "if the wage differential just offsets the perceived disadvantages of the job in each industry, there should be no relationship between absence rates and relative wage rates." As the variable is a residual from another equation, its coefficient will be biased towards zero. So even if no relationship is found (which is the case here), the author’s hypothesis cannot be accepted.

Flanagan, Strauss, and Ulman also include percent 14 to 24 years old (Y), percent female (F) and percent non-white (N) in their equation. They find the following (t-values in parentheses):

\[ A = -10.18 + .71dw + 12.23H - .061Y + .035F + .066N \]  \[ R^2 .65 \]

(2.08)  (.17)  (2.79)  (1.12)  (3.49)  (2.08)

Full week absence rates are higher in industries where hours are long and relatively many of the workers are women or nonwhites. Of course many, if not most,
absences last only one or two days. One is likely to obtain very different results with a more broadly defined dependent variable.

In summary the past case study evidence shows that absence rates (a) follow the trend of the aggregate economy, (b) are higher among women and inexperienced workers, and (c) increase with establishment size. All of these findings are the product of simple correlation analysis. No efforts have been made to control for differences in such variables as the wage rate. As for the two cases where regression analysis was employed, the results can only be considered suggestive, given the nature of the available data.

**Effect of Festivals:**

A major local festival 'Holiday falls in March but the total absenteeism is below average during this month in both the collieries. The effect of 'Holi' might be nullified by high production activity during this last month of production for achieving targets. The effect of Divali is indicated by above average figures and local crests in the graphs of both collieries in the month of November. During the period many workers go to their native village. 'within-a-month' variation of absenteeism in the month of March, showed a high absenteeism for 2/3, days immediately after 'Holi' (about 4% above average).

**Marriage Season**

The marriage season falls in the 2nd quarter. During this quarter absenteeism is highest. This is also the period of hot summer when the working conditions deteriorate due to extreme heat in this part of Bihar. In some parts of Bihar April-May is also the harvesting season. During this period the children get their school
vacation. The workers, therefore, prefer to take annual leave during May and go to native villages and as we find, most of the people either overstay their leave or get authorized leave without pay over and above, the privilege leave due to them. Total absenteeism thus reaches a peak for mass-scale leave taken during May. The true absenteeism also reaches a peak due to overstaying of leave.

**Harvesting season:**

The main harvesting season, besides the one discussed earlier is November – December in many parts of country. The absenteeism is found to be above average during these months.

**Bonus Payment**

Bonus is paid quarterly on 25\textsuperscript{th} February, 25\textsuperscript{th} May, 25\textsuperscript{th} August and 25\textsuperscript{th} November. On checking we find that these days do not show any significant effect on absenteeism, we thus conclude that bonus payment has no significant effect on absenteeism. Other studies have shown that yearly payment of bonus has an effect on absenteeism and as such in many cases, quarterly payment has been suggested.

**Fluctuation within the month:**

For the purpose of this study the workers were divided into surface and underground workers in Bansdeopur and Piece-rated and time-rated workers in Pootkee Colliery. The fluctuation for the surface workers and time-rated workers did not show any particular trend. But the graphs for piece rated and underground workers take similar shapes indicating less absenteeism during the first half of the
month and more absenteeism in the second half. The moving averages line indicates a little increasing trend from the beginning to the end of the month.

The pattern of absenteeism within the month here is not consistent with empirical findings of other studies in which absenteeism was found to be high in the beginning of the (after pay day) month and at the end of the month (before pay day). One reason for this is that in our data the majority of workers are piece-rated and receive salary/wages weekly. So the impact of pay-day is not tangible.

**Variation within the week:**

This analysis was done for piece rated workers in both the collieries because this category of workers is paid weekly. The analysis was also made for time-rated workers in Pootkee. The data and graph clearly reveals the impact of weekly pay day on absenteeism. Absenteeism is highest on Mondays and decreases to a minimum on Thursday/Friday. On Saturday absenteeism increases again to average value because many of the 2nd and 3rd shift workers tend to absent from work after pay day also contributes to high absenteeism on Monday. The fluctuation of absenteeism within the week for time-rated workers is not very significant.

**Break-up of leave and absences:**

The total absence over two years when broken up into three categories in both the collieries and averaged out shows that major portion of the absence is due to leave without pay. In most cases this is unauthorized leave. There is also a substantial portion of the total leave taken as sick leave.

**Absenteeism Forecast:**
For the purpose of manpower planning, it is important to forecast the total absenteeism over the planning period. As an illustration we have taken up Pootkee Colliery and forecasted the absenteeism for the year 1976. One important limitation that need to be remembered while carrying out similar exercise is that, a short-term forecast, may over next 2 to 3 years, will be fairly accurate if we are able to proceed with last 10 years data or so. But it may not be practical to have a long term forecast, (Refer Appendix II, Table 5, 6 and 7). The variation might be too high for any practical use for long term forecasts. (say beyond 5 years).

Length of service and absenteeism:

Previous employment has not been taken into account. It might thus be misleading to directly correlate age with length of service. In the early years of service absenteeism is low due to learning taking place on the job. The interest and curiosity causes regular presence on the job. Men with medium experience absent most from work. Similarly, absenteeism among workers with very long experience is high.

Alcoholism and Absenteeism:

In our sample survey we identified groups of high and low absentees and recorded drinking behaviour of this group. Drinking was found to be significantly correlated with high absentees.

Chronic Absentees:

A sample of chronic absentees were informally interviewed and subjective reason for their behaviour was extracted by searching questions. First, in many cases
health was found to be significantly different from regular workers. Health was one of the causes of deviant behaviour.

The chronic absentee was lacking motivation for work. Their opinion was that the work is dull and monotonous. The job had value to them only for the accuracy attached to it.

Some of them had other interests such as business, social or political activities. The job was of secondary importance to them. Some were found to over identify themselves with their families. They devoted too much time to small family problems.

Welfare Activities & Absenteeism:

It is drinking to measure the effect of welfare activities on absenteeism. However, correlations between different welfare activities & absenteeism can be arrived at subjectively. Some raises morale of the workers, thus reducing absenteeism. But activities like festival advance etc, are often found to enhance it. Though pootkee colliery had better welfare activities and production facilities, the absenteeism was higher than that of bansdeopur. Paradoxically, it has been found that the absenteeism had been rising through out the world over years even though working condition has improved much and so also the welfare facilities.

Working condition:

The working condition in most of the industries have improved over years. But, the absenteeism has always been on the increase or at best constant. Thus it is difficult to conclude that better working condition will definitely lead to a reduction in absenteeism. Nevertheless need for good working conditions cannot be ignored.
Since, there is a high probability of absenteeism going up with deteriorating working conditions.

**Indebtedness:**

The effect of indebtedness on absenteeism is a controversial issue. Most of the Indian workers are caught in the vicious circle of indebtedness. So many researches found that they had indebted workers in both regular as well as high absentee groups. There has not been any significant difference in their distribution. But it has been observed that the indebted workers in the high absentee group are much more deeply indebted than the workers of the regular group.

**Conclusion:**

The Chapter brings out company profile and various aspects relating to causes and effects of absenteeism among Indian organizations.
REFERENCES


