<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:1</td>
<td>INTRODUCTION</td>
<td>55</td>
</tr>
<tr>
<td>2:2</td>
<td>REVIEW OF LITERATURE</td>
<td>55</td>
</tr>
<tr>
<td>2:3</td>
<td>STUDIES ON WORKERS' ATTITUDES AND PRODUCTIVITY</td>
<td>71</td>
</tr>
<tr>
<td>2:4</td>
<td>STUDIES ON ABSENTEEISM</td>
<td>82</td>
</tr>
<tr>
<td>2:5</td>
<td>STUDIES ON ATTITUDES AND ABSENTEEISM</td>
<td>94</td>
</tr>
<tr>
<td>2:6</td>
<td>THE CASE FOR THE PRESENT STUDY</td>
<td>103</td>
</tr>
</tbody>
</table>
2.1 INTRODUCTION

An effort is being mobilised in this chapter, to present a synoptic review of research literature reflecting the impact of social security and labour welfare measures on production, productivity, absenteeism and attitudes of the workers. The discussion has come to a close after presenting the case for the present study.

In reviewing the literature, it becomes quite evident that different scholars have used the terms 'social security', 'labour welfare measures', 'attitudes' and 'impact' differently. In lieu of 'social security and labour welfare measures', the term 'fringe benefits' has been used interchangeably in most of the studies. In attitudinal studies the term 'attitude' has been used interchangeably as 'orientation', 'perceptions', 'morale' and 'inclination'. Similarly, the term 'impact' has been used interchangeably as 'effect', 'influence'. It is, therefore, in the present study all these terms have been used in their wider connotations and interchangeably.

2.2 REVIEW OF LITERATURE

Passenger Road Transport plays a pivotal role in the economic development of a nation. Recognising its need, necessity, significance and importance as a fundamental service sector, the Government of
India, immediately after seeking political Independence, passed a legislation for the formation of State Road Transport Corporation in all States. Presently there are 69 such State Road Transport Undertakings (STUs) functioning in all States and the Union Territories. The planned investment in the realm of transportation accounts for over 11 per cent but still not many studies have been conducted on productivity analysis. To quote Sudarsanam, P. (1993), from his World Conference address on transportation,

“Academic interest in transportation is of a fairly recent origin in India. Although Government studies have taken place from time to time as exercises for policy formulation, academicians and academic institutions in developing countries even today do not find transportation as a major areas of research.”

The review of literature on STUs reveals that some systematic research studies have been conducted but the scholars have concentrated on the operational side of the road transportation. The areas such as the profitability of STUs, road safety, traffic management, etc., have attracted the attention of these scholars. The Regional Workshops which constitute an integral part of these concerns have escaped their attention. Needless to say, the profitability of STUs depends not merely on how effectively a bus vehicle is utilised on the
road but also on how best a vehicle is being maintained, reconditioned and overhauled by the Workshops.

Having picked up some measures from the basket of fringe benefits, such as production, bonus, incentives, etc., scholars have directed their efforts to project the impact of such measures on aspects such as production, absenteeism, etc. However, no study has come to the limelight covering over-all Social Security and Labour Welfare Measures and their impact on different parameters.

A study organised by Rajesham, A. (1989), in the Andhra Pradesh State Road Transport Corporation, Central Workshops, Hyderabad, has displayed certain impressive findings. The salient features of the study are as under.

SALIENT FEATURES

1. Pursuing the objective of stimulating the labour productivity of the Workshops, the Management had introduced Production Incentive Bonus Scheme.

2. All Shops/Sections of the Workshops were covered under the purview of the scheme except the Body Shop.
3. The period under observation was one year from September, 1982 to August, 1983.

4. The Management laid emphasis on consistency in production performance level.

5. The incentive scheme thus introduced was based on twelve months' moving average production performance level in order to discourage the employees to give fluctuating performance level from month to month.

CONCLUSIONS

The study came out with following findings.

1. ENGINE SHOP

Before the introduction of Production Incentive Bonus Scheme, the production of engines was placed at 16 and the performance level was 73 per cent with a manpower of 12 skilled and 12 unskilled workers. After the introduction of the Scheme, 'ceteris paribus' the reconditioning performance scaled 28 engines, raising the performance level to 127 per cent.
2. **UNITS SECTION**

The Units Section carried out the reconditioning activity of rear axles, front axles, steering box, pump set, p.p.shafts, etc. The study brought to the forefront that the performance level of this Section scaled 91 per cent before the introduction of Scheme. After its introduction, the performance level was of the order of 126 per cent.

3. **SPRING SECTION**

The production of spring assemblies during August 1982 was 97 i.e., 55 per cent performance level. After the introduction of Incentive Scheme, the production shot up to 109 spring assemblies, i.e., 61 per cent.

4. **RADIATORS**

The reconditioning of radiators during August, 1982, stood at 47 per cent. After the introduction of the Scheme, the performance level rose to 58 per cent.
5. ELECTRICAL SECTION

This particular section conducted activities such as reconditioning of dynamos, alternators, self starters, armature wiring, S.R. wiring, regulators, etc. The performance level stood at 84 per cent before August, 1982. It rose to 126 per cent during the period under observation.

6. FUEL INJECTION PUMP SECTION

The study revealed that the performance level, prior to the introduction of the Scheme, stood at 103 per cent. During the period under observation, the performance level scaled to the tune of 127 per cent.

Over-all performance of the Central Workshops stood at 83 per cent. With the introduction of Incentive Scheme, the performance level had leaped to 122 per cent. Thus the study concluded that the Production Incentive Bonus Scheme was the profused motivator for flashing superlative performance in the Central Workshops, Hyderabad.

However, a close examination of the study reveals that it has kept the New Bus Body Building Section outside the purview of the Scheme which seems to provide adequate scope for the investigator to
measure productivity comprehensively and precisely. Further, the period taken under consideration is very brief.

Murlidharan (1994) in his research study has concluded that increased efficiency in bus utilization leads to a corresponding increase in operating profit provided, the vehicle is being maintained, reconditioned and overhauled efficiently by the Workshops. The study subscribed to the following methodology.

1. The profitability data of fifteen selected STUs including K.S.R.T.C., for seven years from 1984-85 to 1991-1992 were collected.

2. The parameters chosen for the study comprised of capital, labour and materials.

3. Spearman's rank correlation was worked out to explore whether any empirical relation existed between profitability of STUs and the factor(s) productivity.

4. The student 't' test was being carried out to find out the statistical significance of correlation exercise.
Having developed the study in the framework of above methodology, the scholar concluded that there existed a high positive correlation between capital productivity and operating profitability. The 'r' value was of the order of 0.67. Beyond doubt, the study is more systematic in its approach, but it concentrates on the operational aspect of STU.

Suryanarayan, C. and Kondayya Rao (1982) conducted yet another study on the floor of Andhra Pradesh State Road Transport Corporation. Their study sheds focus on the nature and extent of fringe benefits provided to the staff of the Corporation. It was based on the time series analysis covering a long period of thirteen years from 1965-66 to 1978-79.

The study has drawn the conclusion that the fringe benefits stimulate labour productivity. Following the definition of I.L.O. regarding fringe benefits, the scholars have taken note of several social security and labour welfare measures such as Provident Fund, Gratuity, Medical Services. Facilities provided to the dependants of the employees for seeking education, Housing, Staff Benefits Fund, Canteen facility, etc.

FINDINGS

The main findings of the study include:
1. The A.P.S.R.T.C., has provided to its employees a variety of fringe benefits falling under the ambit of both statutory and non-statutory provisions.

2. The statutory benefits such as Provident Fund, Gratuity and Medical Aid constitute the major benefits (60 per cent to 76 percent)

3. The subsidy provided for running the canteens is to the tune of 1.23 per cent.

CONCLUSIONS

The study has drawn following conclusions:

1. The fringe benefits are the potential motivators stimulating the workers performance.

2. Provision of non-statutory measures such as the Staff Benefits Fund, the housing co-operatives, the facilities for the dependants of the employees for seeking education, etc., boost up the morale of the workers. They are useful in keeping good organisational health.
Patankar, P.G. (1982), viewed incentive schemes as the best stimulant motivating the workers to better their performance and minimise the cost. In his view, the most useful tools stimulating the workers for better performance are:

1. the introduction of incentives by results, permitting equitable share of the benefits of higher productivity; and

2. the schemes for workers' participation in management.

These are a few glimpses of the research studies organised on the floor of the Regional Workshops.

The review of research studies organised in industrial ventures other than transport sector unfolds the fact that the scholars of the eminence of Herzberg, Varoom, Bhatia, Bhasin, Somani, Gillerman, Katz, Davis Keith and others have made systematic efforts in projecting the impact of fringe benefits, morale and attitudes on productivity aspect of labour.

Manik Kher (1984) writes:

"Several studies in India and abroad have shown that monetary payment is not the only motivating factor for workers. The non-
monetary incentives play a decisive role in work motivation and thereby labour productivity. However, isolating the effect of these two is nearly impossible."

Bhasin, Y.P. (1961), projecting the impact of incentives on labour productivity has brought to the limelight that the labour productivity had shot up from 40 per cent prior to July, 1959 to over 70 per cent by December, 1969. Similarly, in his case study in Cotton Textile Industry, Somani, G.D. (1961), has explored that the introduction of wage incentive schemes had resulted into a better use of labour and improvement in labour productivity materially.

There is yet another study which has emerged with similar conclusion. It is an evaluatory work conducted by Satyanarayan, J. (1969), on the floor of Heavy Electricals Ltd. The study subscribed to the objective of evaluating the impact of incentive schemes on production aspect. The study reported a perceptible increase in production in all sectors and in some sectors, the increase was indeed appreciable.
The studies conducted by -

1. Suri, Hundal, Gupta and Ganguli in Indian Pistons, Enfield India Ltd.,
2. the case study of Uttar Pradesh Sugar Mills by Khan Afzal,

have reflected that the wage and non-wage incentives had favourable impact on labour performance. The introduction of these incentives had resulted into increased production and enhanced productivity.

A survey conducted by the National Productivity Council in India pointed out that about 70 per cent of the reporting industries and companies had wage incentive plans. These schemes have resulted into increased output. It ranged between 30 per cent and 50 per cent and the increases in earnings were between 25 per cent and 45 per cent.

According to the Government of India, Ministry of Labour and Employment, in National Coal Development Corporation, the group productivity index increased from 30 per cent to 50 per cent in the pre-
incentive period to 60 per cent to 75 per cent in the post-incentive period.

According to the National Commission on Labour, productivity has been progressively increasing and costs falling in the Chittaranjan Locomotive Works, where incentive schemes have been in operation since 1954.

The studies conducted by the Jamanalal Bajaj Institute of Management Studies, University of Bombay (1985-86) concluded that the adoption of incentive schemes is not free from risk and uncertainties. A poorly administered, inappropriate incentive scheme can result in increased costs, restriction in output and outburst of hostilities and grievances. In view of these problems, the investigators suggested for taking utmost care while drafting and implementing the incentive schemes.

In his empirical study Shankaraiah (1994) has examined the effectiveness of incentive schemes launched in Singareni Collaries Co. Ltd., Andhra Pradesh (S.C.C.L.). The study has come out with exciting findings.

According to the scholar, the S.C.C.L. Management had launched the incentive schemes, keeping in view the objectives like:
1. effecting enhancement in the labour productivity;
2. reduction in material cost;
3. reduction in miscellaneous costs;
4. reduction in the rate of absenteeism; and
5. improvement in the quality of work.

DEFINITION

The incentive scheme was defined by the investigator as a purposive inducement for obtaining higher contribution by the employees.

METHODOLOGY

The study subscribed to following methodology.

1. Collection of data both from primary and secondary sources.

2. Primary data were collected from 160 workers, 48 executives and 20 union leaders.

3. The secondary data were collected from the S.C.C.L. office for a period of ten years from 1979-80 to 1988-89.
4. The statistical tools used included the co-efficient of correlation, 't' test and paired comparison method.

FINDINGS

The main findings of the study are as under:

1. The S.C.C.L. authorities have extended a volley of measures such as Quarterly Bonus, Ex-gratia/Bonus, Provident Fund, Group Insurance, Gratuity, Workmen's Compensation and other welfare measures.

2. The expenditure on all these items accounted for more than 50 per cent of the total expenditure.

3. The split of data revealed that the growth in productivity was not commensurate with the growth in expenditure on benefits.

4. However, a common phenomenon of growth is found in both benefits and productivity and 'r' value indicated (+ 0.803) a positive relationship.

5. The 't' value (3.808) confirmed its significance at 5 per cent and 1 per cent level.
6. The relationship was significant and positive in long-term changes as 'Rt' value was + 0.935. The calculated 't' value for Co-efficient of Correlation in time series was 6.457.

7. The relationship was insignificantly negative in case of short-term changes as 'Rt' value was - 0.26.

8. There was considerable increase in the total expenditure on social overheads such as expenditure on township, medical, cultural clubs, sports, games, super-bazars, grain depot, schools, colleges, free supply of coal, etc.

9. In spite of such an increase in expenditure, the compound growth rate of productivity was not commensurate with the total expenditure growth. However, the 'r' value (+ 0.831) indicated the positive relationship between the expenditure on social overheads and productivity, its significance was proved by 't' value (4.227) at 5 per cent and 1 per cent levels.

10. The same positive relationship was also indicated by the 'Rt' value (+ 0.956) of long-term changes but Co-efficient of Correlation (rt = - 0.08) of short-term changes showed the negative insignificant relationship.
11. The responses of the sample respondents revealed that the grievances such as undue time lag between production and payment of incentives, absence of compensation for the additional efforts by the workers, non-availability of tools, suspicious quality of materials, improper supply of materials are responsible for the slow and tardy growth in productivity.

Indeed it is a systematic and methodical study concentrating on the impact of incentives on labour productivity. The study has reported tardy growth in productivity due to poor administration of incentive scheme. The findings of the study have reaffirmed the conclusion drawn by the investigators of J.B. Institute of Management Studies, University of Bombay (1985-86) that a poorly administered incentive scheme might lead to restriction in output and outburst of grievances.

2.3 STUDIES ON WORKERS' ATTITUDES AND PRODUCTIVITY

History stands as a testimony to this fact that the psychologists cultivated their interest in industrial problems since First World War. The need and necessity of enhancing industrial productivity in the arms and amunition manufacturing industry necessitated the psychologists to investigate the factors that obstruct the workers in achieving maximum efficiency. The introduction of factory system in England invited their
attention to peep into the problems such as labour absenteeism, working hours, lighting, rest pauses, etc. The incredible role played by the psychologists in Great Britain, under the auspices of Health (then Fatigue) Research Board, in stimulating labour productivity, brought to the forefront, their significance in industrial premises. Since then industries have continued to consult psychologists for problems such as human work, work environment, workers' attitudes and motivational factors.

Psychologists have been mobilising efforts in measuring workers' attitudes and trying to correlate these with productivity. The results are conflicting. In some studies, high-producing workers were found to be more satisfied with their job. In some other studies, no such relation was seen.

In empirical studies, it is difficult to ascertain cause and effect relation between attitudes and efficiency. However, it may be shown that both these parameters vary in the same way. The causal relationship cannot be established because it is not easy to prelude the possibility that the factors that are affecting workers attitudes may also be affecting his productivity independently.
It is to the credit of Elton Mayo (1945) and his research colleagues Warner, Pennock, Putnam, Wright and Dickson to have brought to the limelight the importance of workers' attitudes and motivation towards their productivity. This team of researchers conducted an experiment in Western Electric Company at Hawthorne. The experiment is suitably titled as Relay Assembly Test Room Experiment.

The purpose of the study was to determine more accurately the effect of physical environmental factors on productivity, particularly the effects of fatigue, rest pauses, shorter working days, workers attitudes towards work and the company and changes in working equipment.

A team of six girls was chosen for the purpose of study. They were engaged in the task assembling parts and fastening them to a job by means of four machine screws into a telephone relay.

The study was divided into fourteen periods which lasted from 1927 to 1932. The changes effected included the rest pauses, time for snacks, reduction in hours of work. These girls were informed about the changes. Proper records for their behaviour, conversation, health and social habits were maintained.
FINDINGS

The investigators could find that the workers morale was quite high. Their behaviour was normal. An atmosphere of friendliness prevailed through the period of experiment amongst workers as also between workers and supervisors, workers and their bosses.

Staurt Chase (1951) has given an interesting account of the implication of this experiment. To quote him:

"According to all rules of common sense and factory management, suppression should crush the girls' spirit and reduce their output. Instead it jumped to an all time high of 3,000 relays per girl per week - (during XII and XIII period). Their whole attitude changed from that of separate cogs in the machines to that of congenial group trying to help the company solve the problems. They worked faster and better than ever had in their lives."

Blum (1968) makes following observations regarding Hawthorne experiment:

"Probably the most significant results of these studies are, the fact that workers are affected by factors outside the job to an even greater extent"
than by those on the job itself, and that they organise into informal social groups. These organisations take precedence over management-employee organisations and determine production to as great an extent as do changes in job-environment nature. The disregard of 'outside the job' factors and employee self-grouping has led many studies conducted by management to erroneous conclusions."

Beyond doubt the experiment has made significant contribution to the understanding of work motivation, yet it seems to suffer from certain drawbacks. One such weakness was pointed out by Gorges Friedmann (1958). In his view the Hawthorne enquiry considered the factory as a closed social structure.

There is yet another experiment conducted by Rice, A K. (1950) of the Taristock Institute of Human Relations in London. It was conducted in the joint collaboration of their Directors, Management and their personnel of the Ahmedabad Manufacturing and Chemical Printing Company, Ltd. It is famously known as the Ahmedabad Experiments. The experiment continued from March, 1953 to April, 1966.

The company was encountering the problem of poor productivity in spite of having introduced the Japanese type automatic
looms. The productivity was poor both quantitatively and qualitatively compared to the old looms. There were 29 workers operating on 224 automatic looms.

Having explored the causes, the researcher formed small internally-structured groups. He introduced changes such as fixation of higher wages, enhancement in bonus payment on group basis and establishment of standards of inspection. The experiment was divided into nine phases from January 15th to November 13th, 1954.

CONCLUSIONS

The experiment yielded following results:

1. The quantity of damaged cloth went down.
2. Considerable savings were made in material and labour costs.
3. The workers earnings went up by 55 per cent compared with their equivalent grades in other loom sheds.

These changes were undoubtedly due to a profused change in the attitudes of the workers. To quote the author Rice:

"with the organisation of task groups on traditional community and joint family patterns, the workers in the experimental shed intuitively
felt that something vital had returned to their soul. The new group structured was satisfied better such universally felt needs as security needs and protection needs than previous organisational structure.”

Mill and Rice (1967) maintain:

“Experiments in Indian textile industry have shown that such forms of work organisation can be discovered which provide a better match between task and human needs and correspondingly picture significant improvement in both human satisfaction and productivity.”

Whether this is universally possible or not is a disputed question but it was found possible in AHMEDABAD EXPERIMENTS.

Ganguly’s (1954) ACTION RESEARCH PROGRAMME presents yet another interesting study reflecting re-orientation of workers’ attitudes. He conducted an action research programme in an engineering industry of Calcutta. The objective of the study was to determine the usefulness of attempts to re-orient the attitudes of workers through lectures, discussions, etc.
SALIENT FEATURES

1. The investigator had picked up 138 workers from foundry shops and 49 workers from machine shops.

2. The sample respondents were of similar age, education, income.

3. The foundry workers constituted the experimental group and machine shop workers, the control group.

4. The experimental study was divided into following stages:

   STAGE FIRST - it involved taking measures of attitudes and recording production figures of both the groups.

   STAGE SECOND - the programme of re-orientation of attitudes was launched by six supervisors and twenty-one selected workers of experimental group. The content of the programme constituted formal and informal group discussions, screening of film shows, theoretical classes, etc. They were informed about the social security and labour welfare programmes launched by the Government. After
the completion of the course, they were sent back to their respective groups.

STAGE THIRD - after the lapse of four months, attitude survey of both the groups was conducted. There was comparison of productivity records.

FINDINGS

The findings of the Action Research Experiment are as follows

1. There was a significant improvement in the attitudes towards supervisors, national Government, Management as also the work of the foundry workers than before.

2. There was no such improvement in the attitudes of the machine shop workers.

3. The production performance of the experimental group workers had increased by 28.8 per cent during the post-orientation period.

4. In respect of control group (Machine Shops), the production remained almost same as before.
CONCLUSION

The author concluded that group participation is instrumental in effecting changes in attitudes. It is an effective technique to reduce industrial tension and improve workers' productivity and morale.

However, it is criticised that the study has over-emphasised the problem of communication.

Several research studies were conducted to investigate the relationship between workers' morale and productivity. Since morale is an attitude of mind, and esprit de corps, a state of well-being and an emotional force, it affects output, the quality of product, cost of production, etc. McLarney William, J. (1964) rightly states that if workers' attitudes and perceptions lead to a state of high morale, they grow more loyal towards management and handle the equipments, tools and machinery carefully. High morale tends to reduce absenteeism, tardiness and employee turnover.

Gillerman (1963) states that poor morale results into strikes, feather-bedding, malingering and allied reactions which lower labour productivity. Further, lower morale leads to high rates of turnover, absenteeism and accidents.
On the basis of several research studies, Miller and Form (1964) have given four combinations of productivity and morale.

1. High productivity - high morale:
   It is a situation likely to appear when employees needs, desires such as high wage rates, intrinsic job interest, etc, are satisfied. These satisfied needs motivate the workers to accomplish high standards of performance. Higher productivity leading to high morale which in turn reinforce high productivity.

2. Low productivity - high morale:
   There is shrinkage in output due to lack of skills though there is high morale.

3. High productivity - low morale:
   The checks and pressures from supervisory staff leading to high productivity. However, workers morale is low.

4. Low productivity - low morale:
   Such a situation crops up when factors obtaining in combination of high productivity and high morale are lacking.
These studies, thus, have established complexity of relationship between morale and productivity.

Herzberg (1965) found that in 54 per cent of the studies, high morale was related to high productivity, while in 35 per cent, morale and productivity did not reveal any relationship. In 11 per cent of studies, high morale was associated with low productivity. Evidences support that there is direct relativity between employees' satisfaction and performance on the job.

Davis Keith (1975) finds some positive relationship between morale and productivity but it is not absolute relationship. An increase in morale may either cause an increase or decrease in productivity. A high morale reflects a predisposition to be more effective if attempts are made to provide effective leadership and co-ordinate various technical production factors.

2.4 STUDIES ON ABSENTEEISM

The modern industrial society is seriously caught up in the cobweb of the problem of absenteeism. It has become universal problem. The State Transport Undertakings are not an exception to it. The passenger road transport is primarily a labour intensive industry. High percentage of absenteeism not merely impairs production and
productivity but also upsets the calculations of management. The management in STUs are very much keen on tackling this chronic problem. They have been organising departmental committees from time to time. However, these informations are restricted to the portals of the enterprise.

The problem of absenteeism in STUs perhaps, has not attracted the attention of researchers except a few. A synoptic review of their works is detailed as under.

Jakati (1975) has made a systematic attempt in projecting the problem of absenteeism in the Karnataka State Road Transport Corporation’s Regional Workshops, Hubli. The salient features of the study are as under.

**SALIENT FEATURES**

1. It is basically a case study which was conducted during 1972 to 1974.

2. The investigator has picked up 25 chronic absenteees from the official records for a period of two years.
3. The primary data were collected from the respondents through personal interviews.

4. The term 'chronic absentee' is defined as a worker who absented himself for thirty days or more in a year over and above the privilege, casual and sick leave enjoyed by him.

FINDINGS

The main findings of the study are as under.

1. Majority of the respondents had remained absent between 31 and 90 days and a few of them between 91 and 150 days.

2. The Management was quite sympathetic in its dealings and treatment.

3. All the respondents except one were found job-conscious.

4. Half of the respondents were seriously caught up with the problem of indebtedness.

5. Ill-health of the respondents, their family members, indulgence in alcoholism and gambling were other important causes for their absenteeism.
6. Nearly 80 per cent of the absenteeism was due to sickness.

7. During the month of March, April, May and December, the rate of absenteeism in the Workshops was on the ascending trend and remained almost constant in September and October. During the month of January and February, it was on descending trend.

8. Absenteeism rate was more during day shift and less during the night shift. While during the month of November, the rate of absenteeism in both the shifts remained around 23 per cent.

9. The rate of absenteeism was more on Mondays and less on Fridays and Saturdays.

10. After 5th of every month (i.e., after payments day) up to 20th, the rate of absenteeism recorded was very high. From 21st of every month till pay-days, the absenteeism rate used to be low.

11. The average percentage of absenteeism varied between 20 per cent and 25 per cent.
SUGGESTIONS

The investigator suggested for periodic medical check-up, introduction of attendance/regularity linked incentives, labour-participation in Management as the steps to check the problem of absenteeism.

Beyond doubt the study has been quite analytical in exploring the causes for absenteeism but it has not forwarded the concrete suggestions to remedy the problem of chronic absentees.

There is yet another study conducted in the Calcutta Road Transport Corporation. It is associated with the name of Bose Jagat (1991). The study has focused on the problem of an unauthorised absence amongst the workers of the Depot Workshops and the operational staff.

FINDINGS

The main findings of the study are as under.

1. The rate of absenteeism in Depot Workshops was oscillating between 8 per cent and 10 per cent.
2. The split of data pertaining to absenteeism amongst Motor Transport workers was as under:

3. Absenteeism rate was very high amongst workers falling in the age group of 21 years to 30 years.
   
a. Conductors - 28 per cent per day
b. Drivers - 26 per cent per day

4. It was very low amongst the workers coming under the age group of 31 years to 45 years. The percentage of absenteeism was low because these workers were found to be more work-conscious, responsible and active.

5. Absenteeism percentage was slightly more in respect of workers falling in the age group of 46 years to 58 years. The reason attributed for their absence was ill-health.

6. The problem of absenteeism had greatly impaired the productive activities particularly the construction of new bus bodies and reconditioning of vehicles.

7. It had also caused unexpected delays in outsheding of buses on the road.
CAUSES

The investigator has come out with following causes responsible for high rate of absenteeism in the Calcutta Road Transport Corporation.

1. Sickness and in some cases plea of sickness.
2. Inadequate leave facility.
3. Inadequate social security and labour welfare measures.
4. Bad service conditions.
5. Low rate of payment of incentives.
7. Inadequate promotion facilities.

REMEDIAL MEASURES

The investigator has suggested following remedial measures for combating the problem of absenteeism.

1. Setting up of Joint Management Councils.
2. Improved service conditions.
3. Provision of medical and leave facilities.
5. Scope for promotion on the basis of seniority-cum-merit.

Beyond doubt the study has been quite analytical in presenting the absenteeism rate on the basis of the age of the employees but it seems that these facts have not been supplemented with the statistical evidences.

Conclusively, these are some of the studies conducted in the STUs. There is a wealth of information on absenteeism hidden in the published and unpublished research works. These studies were conducted in ventures other than the passenger road transport undertakings.

The scholars of the eminence of Jackson (1944), Noland (1945), Behrend (1948), Chakrapani (1965), Boagrt and Dass (1975), Indana and Khisty (1974), Bhatia and Valecha (1977), including certain national-statured research institutes, have fathomed that there is close relativity between personal factors and absenteeism. Some micro level empirical studies in India have pointed out that the personal factors exert profused influence over the problem of absenteeism.

Sherlekar (1982) enumerates that 10 per cent to 20 per cent of the total number of employees are absence-prone. Unhealthy and unhygienic habits of the employees constitute yet another personal
factor. Bhutani (1977) in his studies on absenteeism has brought to the forefront that 15 per cent to 20 per cent absenteeism is on account of drunkenness. Sherlekar (1982) stated that 22 days per year absenteeism is attributed to alcoholism.

Bhatia and Valecha (1977) in their empirical study on absenteeism reveal that the chronic absentees are entangled with the problem of indebtedness. Indana and Khisty (1974) reported that absentees are more among low income group. The extent of indebtedness is high amongst absentee-workers. High incidence of indebtedness has caused them to remain away from the work.

Ill-health of the workers is yet another personal factor impeding them to be regular. Jucius Michael (1971) reported that sickness or feigning sickness account for most absenteeism. Sickness is often valid but the chronic absentee is more likely to use it as a pretext because he knows that it will not generally produce any repercussions. Sickness or feigned sickness may run as high as 50 per cent of the absentee rate. According to Indana and Khisty (1974), ill-health of the workers or their family members is found to be a strong reason for their absence.

Noland (1945) explored inverse relationship between the level of education and absenteeism. An educated worker grows more responsible and work-conscious. Consequently he remains less absent.
Similar findings were reported by Bhatia and Valecha (1977). But Indana and Khisty’s (1974) study drew altogether a different conclusion. The study was conducted in a textile mill in Vidarbha region. The universe of investigation constituted 100 sample respondents chosen randomly. 50 workers each were selected from the groups of chronic absentees and the regular workers. The study revealed that the formal schooling does not influence the regularity of a worker. On the other, workers with moderate schooling background and/or more middle-schoolers were found among the absentee group as compared to that of regulars.

Black James (1970) reported that the distance to work spot is a factor in absenteeism. When the worker is housed at a farther distance from the work spot, there is every likelihood of his remaining absent quite often. Bhatia and Valecha (1977) reported that the mode of transport used in reaching the work place is yet another factor influencing the problem of absenteeism. The employee using independent mode of transport and conveyance such as bicycles, scooters were found to be less absent than those dependent on public transport. It is, therefore, the management must create housing facility in the neighbourhood of the work spot. Strange enough, the study of Bogaert and Dass (1975) and Bhatia and Valecha (1977) reported a different conclusion. Their studies have revealed that absenteeism is
independent of the provision of quarters in the neighbourhood of the organisation.

Most of the research studies have pointed out that the age of the employee has some bearing on the problem of absenteeism. Chakrapani (1965) from his study of textile mill, concluded that employees with longer service seemed to remain absent for a longer duration. This absence is with permission. On the contrary, the employees with shorter service remain absent more frequently. This absence is without permission. The studies conducted by Bhatia and Valecha (1977) and Noland (1945) have drawn similar conclusions. Bhatia and Valecha (1977) found more chronics in the higher age bracket. Noland (1945) reported that absence rates increase as people grow older while frequency rates decline. Gerstenfeld and Black (1969) and Indana and Khisty (1974) explored that the workers with shorter length of service are more inclined towards absenteeism while Pigors and Myers (1969) have disagreed with this view.

Scholars such as Steinmetz, Schoderdeck and others have focused on inplant factors causing absenteeism. Steinmetz and Schoderdeck (1967) contended that absentee rates vary with the quality of working conditions. As working conditions improve, the absentee level goes down. Similar opinion was expressed by Indana and Khisty
(1974). Black James (1970) has drawn an interesting conclusion that the assembly or plant workers are absent more than the office personnel.

In his explorative study on the problem of absenteeism in USA firms, Reid (1963) reported, “absenteeism is industry’s high priced headache.” The average cost of absenteeism ranged from $100 to $300 per employee per year. With a view to realising the planned targets of production, some firms were maintaining work force 14 per cent above the basic force needed. Black James (1970) reported that absenteeism is the highest on Mondays and Fridays and, before and after a holiday. Thus the week starts and ends without a total work force creating the problem for production.

The scholars such as Behrend, Revans and other have endeavoured in projecting a comparative picture of the rate of absenteeism amongst male and female workers. The studies have revealed that the women employees have higher rates of absence both in frequency and duration as compared to men. Behrend (1948) in her study has revealed that overall absence rates for men and women were 3.9 per cent and 6.5 per cent respectively. The British Institute of Management in 1956 found that overall absence rate for women was 6.5 per cent while that of men was 4.1 per cent. Revans (1964) found that the student-nurses who left the hospital had higher absence rates than those nurses who stayed. Bruke and Wilcox reported that the telepohone
operators who left the company had high absenteeism than those who remained in the company.

There are a few research studies which come out with certain remedial measures to tackle the problem of absenteeism. The Business Management (1965) in its survey report stated that 80 per cent of 190 companies surveyed in USA used some form of discipline in their attempt to controlling absenteeism. Gammell (1973) suggested that discipline should be progressive such as verbal reprimand, warning slip, temporary lay-offs and dismissals.

Citing his personal experience in the task of improving productivity by tackling absenteeism in three large engineering industries in Madhya Pradesh and Tamil Nadu. Bhatia (1986) reported that absenteeism is necessarily a managerial problem. He strongly advocated for management's participation in tackling the problem. He asserted that management can tackle the problem with determination and commitment.

2:5 STUDIES ON ATTITUDES AND ABSENTEEISM

The social scientists have explored a volley of factors exerting influence on labour absenteeism. One amongst such factors is the attitudinal factor. An attempt is made to present a synoptic review of
research studies dealing with the psychological aspect of the problem of labour absenteeism, hereunder.

Vaid (1970) conducted an attitudinal study on absenteeism in the textile mills owned by a joint stock company. The basic objective of the study was to explore the orientation or attitude of the workers towards work, organization, supervisors and the fellow-workers. Having evolved 43 attitudinal questions, he picked up 75 chronic absentees and 75 most regular workers as his sample respondents.

FINDINGS

The findings of the study are quite interesting and impressive which have been detailed below.

1. The work behaviour of the worker is related to their attitudes towards work. However, employees' work behaviour is conditioned by their attitudes towards those aspects of work which they perceive to be exclusively within management's control.

2. Chronic absentees valued their jobs as much as the regular workers did. They found their job interesting, appropriate and was approved by their families and friends.
3. The chronic absentees' perceptions of job security, cleanliness of work place, machine maintenance and work-loads were not materially different from those of regular workers.

4. Chronic absenteeism was inversely related to the extent of workers' integration with the organization they worked for.

5. The absentees showed as much or as little commitment to the company as the regular workers.

6. Both the groups agreed that their company was better than other companies and yet both the groups stated that they would leave the company if a similar job could be found elsewhere.

7. Chronic absentees believed that the company was neither interested in their opinion nor cared to give them justice and fair play.

8. The absentees perceived supervisors as highly production-centred. They thought that the supervisors neither appreciated good performance nor helped subordinates in improving skills. They did help in work-related difficulties but seldom encouraged the operatives to bring up their personal problems.
9. The regular workers too did not perceive supervisors as employee-centred but they did not think of them as merely production-agents.

10. Majority of the respondents in both the groups held that their fellow-workers were quite friendly to them.

11. Majority of the workers in both the groups were prepared to recommend the company to their friends.

Indeed it is a systematic and analytical study on the attitudinal perceptions of textile workers. The coverage of the sample respondents too has been fairly reasonable. In spite of this the study seems to suffer from certain drawbacks. The study has been developed on the plank of qualitative data. The respondents were given with limited options (Yes/No and in some cases ‘Not known’) to give their responses.

The experts in the realm of Human Engineering maintain that the workers pour their heart and soul into the work and subsequently maintain better attendance records when they appreciate their work values, develop necessary skill, understand work content and cultivate positive outlook towards their work. Once they feel themselves in disharmony with their work, absenteeism creeps in. Ruchti (1967) reported that the employees who have a strong sense of participation and
are aware of the relationship of their job to the overall production, have better than average attendance records.

Examining the aspect of job content, Kilbridge (1961) reported that absenteeism was positively correlated with the degree of task repetitiveness in a person's job. Lawler and Hall (1970), Patchen (1970) and Rabinwitz (1971) have concluded their studies with the finding that employees attendance is better in those jobs that offer variety, autonomy and responsibility.

There is a close liaison between the skill of a worker and his attendance. Chakrapani (1965), Vaid (1967) and Bhatia and Valecha (1977) have drawn the conclusion that the skill level is lower among high absentee groups.

Behavioural scientists state that job satisfaction exerts profused influence over an employee's behaviour. In their view, the overall job satisfaction is negatively related to absenteeism. Sinha and Singh (1961) studied the relationship between job satisfaction and attendance. The study was conducted in the Works Department of the Tata Iron and Steel Ltd., at Jamshedpur.

Having picked up 50 high absentees and 50 low absentees as their sample respondents, the analysis was made with regard to four
component areas of job satisfaction namely, the nature of work, wages and security, supervisors and supervision and company's overall personnel policy.

FINDINGS

The main findings of the study are as under.

1. The low absentee group had significantly higher job satisfaction. Their satisfaction score is higher in all four areas.

2. The workers with high incidence of absence tended to be less satisfied than regular workers with regard to nature of work, supervision, personnel policy and wages and security.

In yet another study conducted by Sinha and Nair (1961) in a light engineering plant in South India, a close association was revealed between the index of job satisfaction and absenteeism.

Srivastava (1984) has found job satisfaction rests on human needs satisfaction. There is high and positive relationship between the two. Ruchti and Vroom (1964) have drawn the conclusion that the level of job satisfaction has an inverse relationship with absentee level.
In some cases, workers use absenteeism as an expression of vindictiveness. While analysing the problem of attendance, Jucius (1971) reported that around 10 per cent to 20 per cent of the workers were found responsible for 70 per cent to 80 per cent of absenteeism. Such workers, he felt, might use susceptibility to illness, lack of sense of responsibility or they might be using absenteeism as a tool to express their resentment.

The scholars such as Ingham, Hewitt and Parfit have examined the relationship between organization size, leadership, and absenteeism. Ingham (1970) in her study has found that there is a close relationship between the size of the organization and employee absenteeism. Explaining the reasons for her finding, the author stated that there is a greater degree of impersonality in larger organizations. The responsibility would reduce the employee's identification with the organization which would in turn result in increased absenteeism. Hewitt and Parfit in their study of British Textile Plant stated, "one would expect the risk of coming into contact with poor morale, like the risk of infection, to be greater in the large workshop."

Having employed the methodology of examining work groups of various sizes within an organization and then relating differences in work
group size to individual employee absenteeism, Revans (1958) reported that as the size of the work group increased, so did employee absenteeism.

Steinmetz and Schoderdeck (1967) reported that poor leadership, loose planning and organization of work affect absenteeism levels. As the incidence of poor leadership increases, so does the absentee rate. Exploring the impact of supervisory staff on employee absenteeism, Indana and Khisty (1974) reported that 22 per cent of the absence group responded that they were unhappy with their supervisors as compared to 4 per cent of the regulars. Gerstenfield and Black James (1969) concluded that there is inverse relationship between employees' attitudes towards supervisors and absentee rate.

Some scholars have suggested certain remedial measures to curb the problem of absenteeism. Noland (1945) suggested that the foreman was instrumental in reducing absenteeism by exercising fair treatment with the employees. Alexandar (1969) suggested that discipline is instrumental in reducing absenteeism. The code of discipline should be administered by immediate supervisors and they should be directly responsible for reducing/controlling absenteeism.

Morgan and Hermann (1976) proposed an organisationally-mediated absenteeism policy. The policy should cover in its lap both
rewards for good attendance and punishment for absence. A study conducted by Pedalino and Gamboa (1974) described a behaviour-modification programme to check the problem of absenteeism. They concluded that both behaviour-modification techniques and employee-participation process held the promise for reducing absenteeism. Vaid (1974) stated that employees should be kept informed about their absence records.

Having screened a series of research articles on containing absenteeism in USA industries, Johnson and Peterson (1975) suggested that it is a Positive Reinforcement System (PRS) which deserves a fair trial in arresting the problem of absenteeism. It is a system of introducing incentives both monetary and non-monetary, for effecting a desirable change in employee attitudes and behaviour and thereby improving employees attendance.

Incentives and rewards as a means of controlling absenteeism were criticised by many thinkers on the ground that the employees are already paid for being at work; there is no reason to pay them again; while Nord (1970), Indana and Khisty (1974) advocated for such incentives. Indana and Khisty (1974) viewed that for any working group there is an unwritten “norm” of absence. If one hopes to influence the group to lower their “norm”, one method is to provide an incentive. In their view, dietary supplements, provision of better canteen and
improvements in working conditions are the methods to control absenteeism.

2.6 THE CASE FOR THE PRESENT STUDY

The review of literature on STUs reveals that there are not many studies conducted on the floor of Regional Workshops. Most of the studies were conducted departmentally for drafting suitable policies and programmes. Further, none of the studies could concentrate on the attitudinal aspect of the workers.

In respect of other studies, it seems that the investigators have picked up certain specific variables from the basket of fringe benefits such as productivity incentives, bonus, etc., and have directed their efforts to investigate the impact either on production, productivity, absenteeism or attitudes of the workers. Hence, these studies seem to be partial in their approach and lack holistic approach. Further, some of the attitudinal studies seem to have been developed on the plank of qualitative data.

In view of these facts, the need was felt to develop a study concentrating on all the measures from the precinct of fringe benefits and examining their effects on different parameters.
The salient features of the present study may be enumerated as follows.

1. In its broad lap, the comparative study has covered all measures from the realm of fringe benefits to examine their impact on production, productivity, absenteeism and attitudes of the workers.

2. The impact of expenditures on social security and labour welfare measures (independent variables) on production and absenteeism, (dependent variable) has been examined under the framework of statistical tools and techniques such as Coefficient of Correlation Multiple Regression, etc.

3. The impact of independent variables on the dependent one has been examined taking both aggregate expenditures as also the component-wise expenditures.

4. In its final analysis, the study has concentrated on the aspect of measuring the attitudes of the workers. The focal point of the study has been to investigate the perception of the workers towards the living facilities extended in the realm of social security and labour welfare measures and thereby examine their
orientation towards organization, work, management, supervisors and the fellow-workers.

5. Based on Likert's model, a five point scale has been developed to measure the attitudinal perceptions of the workers towards the living facilities created in the precinct of fringe benefits.

6. The orientation of the workers towards organization (Organisational Identification) and work (Work Identification) has been examined under the framework of four point scale developed by Srivastava, et. al., (1978).

7. With a view to measuring the attitudes of the workers towards management (Management Identification), supervisors (Supervisors Identification) and the fellow-workers (Fellow-workers Identification) five point scales have been developed.

8. The primary data thus collected were computed under the framework of Chi-square ($\chi^2$) to find out the results.