SUMMARY

The most critical problem in the Indian industries, for the present and possibly for future also, is how to manage the human resources in an optimal manner along with other resources such as raw material, machine and money which are of scarce nature. In other words, the problem is: how to use the manpower to convert the potential efficiency into actual efficiency without doing any extra expenditure. The present study is designed to examine the existing level of effectiveness and efficiency in Indian industries and thus to suggest measures to improve the situation.

The effectiveness and efficiency are two different but related concepts. The concept of effectiveness holds an important position in the efficiency attainment. Review of the literature concerning the managerial effectiveness and efficiency reveals that these concepts have not been studied collectively but in isolation, individually and separately. It has also been revealed by the review that all human aspects have not been taken into consideration while conducting the research. The present study, on the other hand, makes an attempt to consider all human aspects in an integrated manner. The study is exploratory and descriptive in nature in the sense that
it attempts to make detailed analysis of effectiveness and efficiency in four textile units (two from public sector and two from private sector) which are located in Bhiwani (Haryana), Delhi and Saharanpur (Uttar Pradesh). The specific issues which have been investigated in this study are: 1) The overall quantitative relationship between the effectiveness and efficiency, 2) The association of effectiveness variables separately with efficiency, 3) Comparison of effectiveness and efficiency in public and private sector, 4) Unitwise comparison of effectiveness and efficiency within sector and 5) Assessment of effects of individual factors on effectiveness.

Our study is comprised of a sample of 384 employees which were segmented into three classes as: 1) Managers (24), 2) Assistant managers (120) and 3) Workers (240). The sample was taken keeping in view the representation of the universe and all the departments in a unit were given equal representation. In order to collect information following five questionnaires were administered: 1) Questionnaire of Personal information, 2) Assumptions about people at work (i.e. Theory X and Y assumptions), 3) Managerial skill (self assessed), 4) Organisational climate (existing and ideal) and 5) Job satisfaction.
These questionnaires covered almost all types of questions pertaining human behaviour directly or indirectly. Each questionnaire begins with an appeal to the respondent to extend his free and frank reply regarding the questions mentioned in the questionnaire. Personal information questionnaire was filled by all 384 respondents irrespective of their designation. Two questionnaires, (2nd and 3rd), were administered on managers only. Assistant managers were required to fill up all questionnaires while questionnaires of organisational climate and job satisfaction were relevant for workers only. Except personal information questionnaire, in all other four questionnaires, the scoring system was adopted. In job satisfaction questionnaire, higher scoring represents lower job satisfaction and vice versa. All the data of the study was collected through personal contact method. Prior permission of data collection was sought from the concerned authorities of the units under study. It took almost four months to collect information from all the four units. The collected data was classified, coded, tabulated, analysed and interpreted. The results have been obtained on the basis of some simple to complex statistical tools like percentages, averages, multiple correlation and regression, chi-square, and analysis of
variance (ANOVA). The confidence level of probability to accept the significance of results was at least .05.

The significant results and conclusions drawn from the study are adduced as under:

1) At an aggregative level, our results revealed that effectiveness variables were responsible for variance in the efficiency by 9% collectively. Assumptions about people at work and job satisfaction variables were found more efficiency elevators (i.e. 4.4% and .33% respectively). However, self assessed managerial skill was found to be negatively correlated with efficiency (i.e. -.124 %). Organisational climate both existing and D-score added the efficiency to the extent of .11% and .02% respectively. Results further showed that 50.902 % efficiency was due to unaccounted variables which has been indicated by K in the equation of multiple regression.

2) The superiors of sub-ordinates were found to have greater faith in Y-theory of management (\( \bar{X} = 1.222 \)), i.e. they were human-oriented (H.O.). A greater homogeniety was observed in this regard. In case of managerial skill (self assessed), it was revealed that all managers and assistant managers overrated their skills as mean was 41.389 against the total of 50 score. Its confidence interval (-.471 to .223) further gives
evidence of their biased self assessment. Organisational climate had an average of 47.044 with the maximum possible score 70. It showed positive correlation with efficiency. The values of confidence interval (.086 to .306) sufficiently indicates that the relationship between existing organisational climate perceptions with efficiency need not always be positive. The mean score ($X = 19.15$) of discrepancy between ideal and existing perceptions of organisational climate also indicated that less the discrepancy higher the efficiency. The mean score and standard deviation of job satisfaction were 31.58 and 8.97 respectively, which show greater heterogeneity among respondents. It was established that job satisfaction would always contribute to efficiency because its confidence interval was from .143 to .487 which is quite stable and consistent.

3) It was revealed that managers and assistant managers of both the sectors (public as well as private) were believing in human relations approach (i.e. in Y-assumptions). Managers scored better in comparison to assistant managers (i.e. $X = 1.307$ Vs. 1.175). On an average, private sector managerial personnel were having greater belief in human relations approach than public sector personnel (i.e. $X = 1.306$ Vs. 1.088). But, statistically, it was non significant. Managerial skill
did not differ significantly sectorwise and hierarchically. However, the difference was having an edge slightly in favour of managers ($X = 41.79$ Vs. $41.11$). Managerial personnel in public sector were found less skilled than the private sector ($X = 41.14$ Vs. $41.31$). Managers of public sector ($X = 40.33$) and assistant managers of private sector ($X = 41.52$) appraised themselves better than managers of private sector ($X = 40.74$) and assistant managers of public sector ($X = 40.25$). But the net result was non significant sectorwise, hierarchically and unitwise which is contrary to the general belief and expectations.

4) In case of organisational climate (existing) it differed significantly sectorwise with $F = 95.05$, at $p < .01$. The perceptions of existing organisational climate were better among public sector employees ($X = 50.62$) in comparison to private sector ($X = 47.47$). Unitwise source of variation was found non significant. Unit to unit variation was greater in public sector units ($X = 48.46$ Vs. $52.79$) whereas the differences were less in private sector units ($X = 44.30$ Vs. $42.63$).

Regarding discrepancy score of organisational climate it was held that sector variation affected the same significantly with $F = 28.67$, $1/356$ and $p < .01$. Private sector employees were having more discrepancy
than public sector employees ($\bar{x} = 17.77$).
Unit source didn't find significant F-values. It was also revealed that public sector practices were more nearer to the ideal perceptions of its employees.

5) Job satisfaction was found significant variable in case of sector (i.e. public and private). The private sector employees were less satisfied than public sector employees ($\bar{x} = 33.82$ vs. $29.33$). It is because higher the score the greater is the job dissatisfaction. Surprisingly, there was non significant difference between units of both the sectors.

6) The efficiency analysis and results divulge that private sector was more efficient ($\bar{x} = 74.08$) than public sector ($\bar{x} = 60.17$). Unitwise difference was non significant. In case of departments (6 departments in each unit) it was obtained that efficiency ratio differ significantly. Folding department was found to be the most efficient department ($\bar{x} = 78.25\%$) whereas the weaving department was the least efficient ($\bar{x} = 58\%$).

7) The analysis of personal factors of managers revealed that age has no effect on the effectiveness variables and efficiency. It was found that managers in textile units were highly experienced. Most of the managers have achieved the present position by working in various lower positions earlier. The
experience among managers was significant source for Y-X assumptions and managerial skill. Education, the next personal factor, was highly heterogenous among managers which did not affect the managerial skill and efficiency significantly. Managerial skill and efficiency ratio were less for those having technical education than those of formal educated managers. Contrary to it, technically educated managers strongly believed in human oriented approach ($t=2.145$ at 22 df). Salary factor couldn't categorise the managers, hence systematic analysis was not possible. By and large, individual factors did not prove to be potential source of variance for effectiveness variables as far as managers are concerned.

8) In case of assistant managers, the results showed curvilinear relationship between age and job satisfaction. It was noticed that job satisfaction was decreasing at the level of middle age ($\bar{X} = 32.15$) and again increasing at mature age level ($\bar{X} = 24.33$). The relationship between age groups and three effectiveness variables (viz. assumptions about people at work, managerial skill and organisational climate) was insignificant.
As far as experience was concerned, it was revealed that 70 assistant managers were in the same position from the time of their appointment whereas 42 have come through promotions. The assumption about people at work, managerial skill and organisational climate did not differ significantly for varying experience. Their job satisfaction was significantly affected by variations in total experience. The mean indicated that job satisfaction increased with the increase in experience. High experienced assistant managers were more satisfied ($\bar{X} = 22.87$) in comparison to low experienced with mean $31.94$ of job satisfaction.

The assumption about people at work ($Y/X$ ratio) in respect of assistant managers was found to be affected significantly by their educational background. Nominally educated and professionally trained assistant managers were more $X$-oriented ($\bar{X} = 1.26$ and 1.20 respectively) than non professional degreeholders ($\bar{X} = 1.08$). Self assessed managerial skill and organisational climate were not significantly affected by education. Contrary to these, job satisfaction was significantly affected by education with $P = 4.083$ beyond .01 level of probability. Professionally trained and nominally educated assistant managers ($\bar{X} = 28.028$ and 26.91) were more satisfied with their jobs than non
professional degreeholders.

11) The level of salary of assistant managers was found significantly related with job satisfaction. Other variables were insignificantly affected by salary level. As one would expect, those who were drawing more salary highly satisfied than those drawing low salary.

12) Our study gives the significant relationship between education and experience. Non-professional degree holders were found in high experienced group, but more frequencies were of professional degree holders in low experienced group. This caused to the fact that about 25 years back formal degree was the mere qualification for assistant managers but since late 70's professionally trained have been joining the textile industry.

13) The analysis of personal factors of workers revealed some important results. The age factor and organisational climate (existing) were not significantly associated. However, Organisational climate of ideal conditions was found significantly affected by age factor. The ideals of mature workers ($\bar{X} = 67.47$) were higher in comparison to young and middle age group workers ($\bar{X} = 66.18$ and 65.76 respectively). Job satisfaction was appeared to be highly influenced by age as mature workers more satisfied ($\bar{X} = 29.94$) than younger and middle age workers ($\bar{X} = 33.60$ and 33.24 respectively).
14) Experience of workers played no significant role in organisational climate as well as job satisfaction. High experienced group of workers showed a little more job satisfaction ($\bar{X} = 30$) than low and middle experienced groups ($\bar{X} = 33.51$ and $32.78$ respectively).

SUGGESTIONS:

1) It was clearly demonstrated by our study that human factor was responsible for $9\%$ efficiency and it could be enhanced to that extent. This, in itself, is a major finding which could be achieved by the management without involving any extra and burdensome expenditure. A more molar model of efficiency (additive or multiplicative) of human and materialistic factors may be suggested for further research. However, only empirical studies will reveal whether these two sets of predictors behave with additive or multiplicative model.

2) The managers and assistant managers with varied efficiency indices should be compared for their score on $Y/X$ scale and managerial skill so that the effectiveness oriented leadership style can be identified on the basis of these indices. These indices will serve as criteria for the selection of effectiveness oriented (EO) managers and assistant managers.
3) In order to assess the managerial skill, it was felt that self assessment could not be considered valid index of managerial skill. Therefore, a continuous feedback appraisal from superiors and subordinates of their managers should be given so that the managers can develop realistic self appraisal.

4) Attitudes change programmes regarding the ideals of organisational climate among employees should be designed. It will help them to lower their ideals which are impracticable and unrealistic. It will result in lesser discrepancy between ideals and existing conditions thereby increasing their job satisfaction, managerial effectiveness and the efficiency of production.

5) Technical education and modern management programmes should be organised by the industry from time to time to develop more human oriented outlook among the managerial staff.

6) Job satisfaction has been found very stable predictor of efficiency. Therefore, a close and continuous monitoring of the job satisfaction levels should be made by managements. Efforts should be made to increase it through various measures of human as well as other physical factors.