Managerial effectiveness has become the key for the success of most of the organizations today. In this study managerial effectiveness has been studied with respect to the managerial style adopted by the manager and his performance at work place. The role played by motives, integrative complexity and organizational climate in determining managerial effectiveness has also been studied.

Managerial effectiveness or efficient managerial performance can be gauged by studying the extent to which the manager indulges both in contextual and task performance. Task performance consists of job specific behaviors including core job responsibilities for which the primary antecedents are ability and experience. Contextual performance consists of non-job-specific behaviors such as co-operating with the colleagues and showing dedication, for which, the primary antecedents are volition and personality (Borman and Motowidlo, 1993). To avoid self – rating bias the managers were rated by their superiors on task performance and by their peers on contextual performance.

The managerial style adopted by the manager contributes to his effectiveness in a major way. Hersey and Blanchard (1969) gave four types of leadership styles – telling, selling, participating and delegating. All these styles vary on the task - relationship dimensions i.e. how much a manager is concerned about getting the work done vis a vis developing a friendly atmosphere at the work place. Here the leadership style adaptability was also studied. This was to see whether an effective manager sticks to one particular style or is flexible enough to change his style as per the situation.
The role of integrative complexity in managerial effectiveness has been relatively unexplored. Integrative complexity is a cognitive psychological construct, which has been extensively used in research on individual differences in styles of thinking. Operationally, cognitive complexity comprises of two dimensions of cognitive styles – evaluative differentiation and conceptual integration. Evaluative differentiation is the capacity and willingness to grasp different perspectives and it also includes the perception of different dimensions within a stimulus domain and to taking different perspectives when considering the domain. Conceptual integration is the capacity and willingness to link different viewpoints and to develop conceptual connections among differentiated dimensions or perspectives. It enables a person to understand why different individuals interpret the same event in different ways and to appreciate interactive patterns of causation. So one can assume that integrative complexity leads to a better managerial performance and because of cognitive flexibility a complex manager may be adopting a wider range of managerial styles.

In an organizational set up, the motives of managers are of immense importance, as predictors of their performance and the managerial style adopted by them. The most significant motives for work settings as identified by Atkinson (1958) are – need for power, need for achievement and need for affiliation. McAdams (1980) decided that a whole new approach was needed to measure the positive aspects of the affiliation motive. He employed more positive arousal conditions to derive a fantasy measure of this positive aspect which he termed as need for intimacy. The intimacy scoring system focuses more on the quality of relationship rather than on the active striving to attain them. Also intimacy motive correlates 0.32 with affiliation motive scores (Mc Adams and Powers, 1981) and appears to predict indexes of relationship quality in a better way (Mc Adams, 1981). Thus, it was hypothesized that intimacy motive will be a better predictor of managerial performance than affiliation motive, so in this study the relation of intimacy motive with managerial performance was studied.
The organizational climate variables become causative or moderator factors for attitudinal and performance variables. Organizational climate perceptions are viewed as a critical determinant of individual behaviour in organizations, mediating the relationship between objective characteristics of the work environment and individual employee responses. Keeping these dimensions in mind it was decided to study managerial performance and managerial styles in relation to integrative complexity, motives and organizational climate.

Need of the Present Study:

The need of the present study is highlighted by the fact that the role of integrative complexity in managerial effectiveness has been relatively unexplored. There is lack of knowledge as how it contributes to contextual and task performance and further how it affects the adoption of various managerial styles.

How integrative complexity interacts with motives to lead to different managerial styles and different components of job performance will also be revealed. How organizational climate interacts with motives to lead to different managerial styles and different components of job performance will also be revealed. Thus this study will help to understand managerial effectiveness in a better way.

Aims and Objectives:

1. To study the relationship between integrative complexity and different components of managerial performance.

2. To study whether integrative complexity leads to adoption of a wider range of managerial styles.

3. To study how motives affect managerial performance and the adoption of different managerial styles.
4. To study how perception of organizational climate affects managerial performance and the adoption of different managerial styles.

5. To study the moderating effect of organizational climate on the relationship of motives with managerial performance and managerial styles adopted by the managers.

6. To study the moderating effect of integrative complexity on the relationship of motives with managerial performance and managerial style adopted by the managers.

7. To study the relationship between motives and integrative complexity.

8. To study which managerial styles lead to contextual and task performance respectively.

Hypothesis

On the basis of review of literature the following hypothesis have been framed:

1. In managers, integrative complexity is positively related with their
   a. task performance (self rated) (Streufert, Streufert and Denson, 1985);
   b. task performance (superior rated) (Streufert, Streufert and Denson, 1985).

2. In managers, integrative complexity is positively related with their
   a. contextual performance (self rated) (Tetlock, Peterson and Berry, 1993);
   b. contextual performance (peer rated) (Tetlock, Peterson and Berry, 1993).

3. In managers Integrative complexity is positively related with their leadership style adaptability (Tetlock, Peterson and Berry, 1993).
4. Achievement motive is positively related with a manager’s
   a. task performance (self rated) (McClelland, et al., 1953; Atkinson, 1958; McClelland, 1961 and Atkinson and Feather, 1966);

5. Intimacy motive is positively related with a manager’s
   a. Contextual performance (self rated) (Mc Adams, 1980)
   b. Contextual performance (peer rated) (Mc Adams, 1980)

Participants

The study was conducted on 222 middle level managers from the following 3 companies:

- Goetze India Ltd., Bahadurgarh
- Escorts Mahle Ltd., Bahadurgarh
- Hindustan Machine Tools Ltd., Pinjore

All the participants were male between the age groups of 30 to 50. All of them had technical qualifications i.e. all of them had a minimum of bachelors’ degree in engineering and were working in similar departments like tool room, machine building etc. All the subjects had put in a minimum of 5 years in their respective organizations. Out of these 108 subjects were from Goetze India ltd and Escorts Mahle ltd (Private companies) and 114 subjects were from HMT (public sector company).
Description of the Tests:

The following tests were used in the study

- To study managerial styles, the **Leadership Effectiveness and Adaptability Description scale (Lead – Self)** which was developed by Hersey and Blanchard (1983) was used.

- The **Job Performance Scale** used in the present study was developed by Motowidlo and Van Scotter (1994). The original instrument has 24 items, 12 for measuring task performance and 12 for measuring contextual performance.

- Integrative complexity and motives were studied by the semi-projective **Picture Story Exercise (PSE)** a form of TAT (Murray, 1938).

- Organizational Climate was studied by **Motivational Analysis of Organizations – Climate (MAO-C)** developed by Udai Pareek (1989).

Administration of the tests

1. Because of the sensitivity of the TAT to situational factors, the story measure should come first or near the beginning of the data collection session i.e. it should not be preceded by other tests and questionnaires.

2. After the administration of the PSE, the subjects were administered the rest of the questionnaires pertaining to organizational climate, managerial performance and managerial style along with proper instructions.

3. The participants were assured that their responses would be kept strictly confidential and used only for research purposes.
4. It was taken care to maintain control over the qualifications, age/experience of the subjects. The data was collected from 3 industries from 222 middle level managers with technical qualifications, over a period of 1 year.

Scoring of the tests:

Scoring of the questionnaires was done in accordance with the set of instructions available along with the tests. For scoring of the picture story exercise, the scoring was learnt from the practice material given in the handbook on motivation and personality by Smith. In this book, the coding manuals are also given for all motives and integrative complexity. The coding manuals were read thoroughly, and then practice materials were scored several times till the required level of agreement was reached.

Statistical Analysis:

The data collected was subjected to the following statistical procedures:

1) The responses obtained on job performance scale were subjected to factor analysis.

2) The Cronbach’s alphas were calculated for the measures of task performance and contextual performance.

3) Item total correlations were calculated for the scales measuring task performance and contextual performance.

4) T ratios were calculated to observe the significance of differences between the means of scores obtained by the public and the private sector managers.

5) The means, standard deviations, skewness, kurtosis and correlation coefficients were calculated for all variables.
6) Factor analysis was also done for the scores obtained on all the variables of the two groups of private sector and public sector. Coefficients of congruence were also calculated to see the degree of similarity between the two sets of factors.

7) Moderated regression analysis was done with integrative complexity and organizational climate as the moderating variables, motives as predictors and managerial styles and managerial performance as predicted variables. Graphs were plotted to observe these interaction effects.

Results

The distributions on hope of power scores, fear of power scores, achievement motive scores, intimacy motive scores and integrative complexity scores show a markedly positively skewed distribution. Skewness value more than twice its standard error is taken as departure from symmetry.

This means that the distribution shows an asymmetric tail extending towards more positive values or that the scores are piled up at the low end. This may be because the motives and integrative complexity have been measured using a semi projective technique. Also the scores on telling and selling leadership styles have a markedly positively skewed distribution, which means that generally the scores on these two leadership styles also are piled at the lower end only. But the scores on leadership style adaptability show a markedly negatively skewed distribution which means that the scores on style adaptability are generally piled up at the higher end.
On calculation of t ratios there emerged significant differences among managers of private company and managers of a PSU on:

- Achievement motive (t = 3.96, p< .01)
- Integrative complexity (t = 2.28, p< .05)
- Perception of achievement climate (t = -3.24, p< .01)
- Perception of extension climate (t = -3.51, p< .01)
- Perception of control climate (t = 6.25, p< .01)
- Perception of dependence climate (t = 2.42, p< .05)
- Perception of affiliation climate (t = -2.08, p< .05)
- Task performance (self rated) (t = -2.30, p< .05)
- Contextual performance (self rated) (t = -2.38, p< .01)
- Selling leadership style (t = 2.35, p< .05)

**Pearson Product Moment correlations** were computed for the whole sample for all the variables. Correlations were also calculated for the two groups of private and public sector separately. For the whole sample (N=222), contextual performance scores (self rated) have a negative correlation with intimacy motive scores (r = -.139, p< .05). Thus hypothesis 5a which states that intimacy motive is positively related with a manager’s contextual performance (self rated) is not supported.

Task performance scores (self rated) have a positive correlation with scores on achievement dimension of organizational climate (r = +.136, p< .05).

Also telling leadership style scores have positive correlation with scores on achievement dimension of organizational climate (r = +.172, p<.05). This shows that those who perceive the climate to be achievement oriented are high on task performance. These individuals also indulge in low task - low relationship leadership style.
Importantly, leadership style adaptability scores have a positive correlation with integrative complexity scores ($r = +.157$, $p<.05$). This substantiates the hypothesis 3 which states that in managers integrative complexity is positively related with their leadership style adaptability.

Telling leadership style scores have a positive correlation with scores on expert influence dimension of organizational climate ($r=+.232$, $p<.01$).

Selling leadership style score have a negative correlation with scores on extension dimension of organizational climate ($r = -.137$, $p<.05$).

Telling leadership style scores have a negative correlation with scores on control dimension of organization climate ($r = -.138$, $p<.05$). Selling leadership style scores has a positive correlation with control dimension of organization climate ($r=+.169$, $p<.05$).

Telling leadership style scores also have a negative correlation with scores on dependence dimension of organizational climate ($r = -.184$, $p<.01$).

Selling leadership style scores have a positive correlation with dependence climate scores ($r=+.154$, $p<.05$). Leadership style adaptability scores have a positive correlation with dependence climate scores ($r = +.174$, $p<.01$).

Interestingly, scores on Task performance (superior rated) have a positive correlation with scores on contextual performance (peer rated) ($r=+.300$, $p<.01$).

Also Task performance scores (superior rated) have a negative correlation with delegating leadership style scores ($r = -.167$, $p<.05$).

In the private sector group, the contextual performance (self rated) scores have a positive correlation with the achievement climate scores ($r=.192$, $p<.05$).
Telling leadership style scores have a positive correlation with scores on expert influence climate \((r=0.218, p<0.05)\). Thus a manager in private sector indulges more in high task / low relationship leadership style in climate of expert influence.

Also selling leadership style scores have a positive correlation with scores on dependency climate \((r=0.196, p<0.05)\). This shows that in dependency climate a manager in private sector indulges more in high task / high relationship style.

Participating leadership style scores have a positive correlation with scores on affiliation climate \((r=0.191, p<0.05)\). Thus a manager in private sector indulges more in low task / high relationship leadership style in an affiliation climate.

In the public sector group, task performance (self rated) scores have a negative correlation with scores on intimacy motive \((r=-0.198, p<0.05)\). Contextual performance (self rated) scores have a negative correlation with scores on intimacy motive \((r=-0.234, p<0.05)\). Here again the hypothesis 5a which states that intimacy motive is positively related with a manager’s contextual performance (self rated) has not been supported for the public sector group.

Task performance (superior rated) scores have a positive correlation with scores on achievement motive \((r=0.190, p<0.05)\). Here hypothesis 4b which states that achievement motive is positively related with a manager’s task performance (superior rated) has been substantiated for the public sector group.

Participating leadership style scores also have a positive correlation with scores on achievement motive \((r=0.226, p<0.05)\). Thus a manager in public sector who is high on achievement motive indulges more in task performance as well as in participating leadership style. Telling leadership style scores have positive correlations with achievement climate \((r=0.187, p<0.05)\) and expert influence climate \((r=0.231, p<0.05)\) but negative correlation with affiliation climate \((r=-0.213, p<0.05)\).

Here again negative correlation is observed between task performance (superior rated) scores and delegating leadership style \((r=-0.259, p<0.01)\). Leadership style
adaptability scores also have a positive correlation with dependency climate scores ($r=0.208$, $p<0.05$). Thus a manager in public sector has more of leadership style adaptability in dependence climate.

**Factor analysis** was done on the scores obtained on all the variables from the two types of managers—those working in the private sector and those working in the public sector. For both the groups 8 factors each were extracted. Then the coefficients of congruence were calculated to see the pattern and magnitude of similarities between the two sets of factor loadings. As the coefficients of congruence were higher than 0.5 only for seven factors so only those were considered.

The extracted factors were labeled as follows

- Achievement vs Control dependency climate
- Social maturity
- Overall performance
- Leadership style adaptability
- Expert achievement vs affiliation climate
- Selling vs participating style
- Contextual performance

As the Factor analysis yielded a high congruence among the factors of the two groups so the further analysis done was for the whole sample ($N=222$).

**Moderated Regression Analysis** was done to see the interaction (moderating) effect of integrative complexity on managerial performance and managerial styles (predicted variables). Here the motives were predictor variables.

Integrative complexity moderated the relationship between

- Hope of power and telling leadership style
- Intimacy motive and selling leadership style
- Fear of power and delegating leadership style
Moderated Regression Analysis was also performed to assess the interaction (moderating) role of organizational climate on the relationship of motives with managerial performance and managerial styles (predicted variables). Here the major findings were:

**Achievement climate** moderated the relationship between
- Achievement motive and task performance (superior rated)
- Fear of power and participating leadership style
- Fear of power and delegating leadership style

**Dependence climate** moderated the relationship between
- Intimacy motive and leadership style adaptability
- Hope of power and contextual performance (self rated)
- Intimacy motive and task performance (superior rated)

**Affiliation climate** moderated the relationship between
- Achievement motive and contextual performance (self rated)
- Hope of power and contextual performance (peer rated)

**Discussion**

Contextual and task performance emerged as two distinct types of performance after factor analysis. These two types of performances also correlated differently with different variables. Significant and positive correlations were obtained among all the performance scores. For the whole sample, the task performance (superior rated) had positive correlations with scores on contextual performance (peer rated). This shows that managers who are high on task performance are also high on contextual performance. Such people not only perform well themselves but help others also to perform well thus leading to overall efficiency of the organization. Contextual performance (self rated) had a negative correlation with intimacy motive. Task performance (superior rated) had a positive correlation with achievement motive scores in the public sector group.
Whereas the relationship of managerial performance and managerial styles is concerned, a negative correlation between delegating leadership style and task performance (superior rated) was observed. This shows that managers who adopt a delegating leadership style are not rated highly by their superior on task performance.

The inter correlation matrix between scores of all the variables shows that integrative complexity had positive and significant correlations with the motive scores. This may be because same measure i.e. picture story exercise was used to measure both motives and integrative complexity. Integrative complexity had a significant and positive correlation with leadership style adaptability. Also, integrative complexity has moderated the relationship between motives and the managerial styles adopted by the manager.

As the data was collected from two different types of companies – private and public sector so a comparison between them yielded significant differences on achievement motivation and integrative complexity. Also both these groups were significantly different on perceptions of organizational climates in their respective organizations. Factor analysis was done for the scores obtained on all the variables for the two samples of public and private sector separately. For each sample eight factors were obtained. When coefficients of congruence were calculated for all the extracted factors, the results showed high congruence between seven out of eight factors.

The moderated regression analysis showed that achievement climate moderates the relationship between achievement motive and task performance (superior rated). In high achievement climate the correlation between achievement motive and task performance becomes significantly positive. This analysis also showed that dependence climate has moderated the relationship between task performance (superior rated) and intimacy motive and also the relationship between contextual performance (self rated) and hope of power. In high dependence climate the correlation between intimacy motive and task performance (superior rated) becomes significantly positive. Affiliation climate has also moderated the relationship between achievement motivation and
Summary...

contextual performance (self rated) and also between hope of power and contextual performance (peer rated).

The moderated regression analysis with leadership styles as predicted variables showed that achievement climate moderates the relationship between fear of power and participating leadership style and also between fear of power and delegating leadership style. Dependence climate has moderated the relationship between intimacy motivation and leadership style adaptability. In high dependence climate the correlation between intimacy motivation and leadership style adaptability becomes significantly positive.

Conclusions

• Contextual performance and task performance are two different types of performance. Self rating bias is very much visible as the relationship of self rated performance with the predictors is different than the relationship of other rated performance with the predictors.

• It has been found that Managers who are high on Integrative complexity are also high on leadership style adaptability. Integrative complexity moderates the relationship between motives and managerial styles but not the relationship between motives and managerial performance.

• The study of organizational climate as moderator showed that only achievement, dependence and affiliation climates have moderated the relationship of motives with managerial styles and managerial performance. The expert influence, extension and control climates have not shown any moderating effects. Organizational climate moderates the relationship between motives and managerial styles adopted by managers. Organizational climate also moderates the relationship between motives and managerial performance.
Limitations and Suggestions for future research

• The participants in the present research were drawn from two private sector companies and one PSU. Within each group the sampling was incidental. Only those subjects who happened to be there and met the laid down criterion were studied. It would have been desirable to test a larger number of people from both sectors.

• The results can be more comfortably generalized if a wider array of companies are sampled and studied. All the three companies from where the data was collected are heavy engineering firms. These firms are very different from the new breed of multinational software companies like Dell, Infosys and Wipro and so these findings should be generalized with great caution.

• In this study though superior ratings and peer ratings were considered for task and contextual performance respectively but LEAD - self was used to measure the managerial styles adopted by the subjects. Here if LEAD - others was used then it would have been interesting to observe the findings.

• In this study the personality variables have not been considered. It would have been interesting to observe the relationship between integrative complexity and personality variables and their combined effect on managerial effectiveness. The study of relationship between personality and organizational climate will also throw more light on the theory of person environment fit.

• Extensive integrative complexity research can be done in India to study the pattern of prevalence of this variable as outstanding administrators and leaders like APJ Abdul Kalam, Narayan Murthy and Azim Premji have been successful because of their non conventional and independent thinking. Archival material in the form of speeches and news paper articles
can be analyzed to show how integratively complex the past Indian leaders have been under different situations. And what has been the pattern of integrative complexity during the important events in the history of this country can also be studied.

An extensive longitudinal research needs to be done to study the linkage between motives and integrative complexity. It needs to be explored what role integrative complexity plays in the leader-motive syndrome given by McClelland and Boyatzis (1982). In this profile the effective leaders have a higher need for power, higher activity inhibition and lower need for affiliation than less effective leaders. One hypothesis is that integrative complexity plays a role much like activity inhibition in channeling the need for power in socially constructive and adaptive directions. But the results have been conflicting. In some studies due to the unpredictable quality of integrative complex thinkers, they are perceived to be irresponsible, inconsiderate and distrustful. So this area needs further exploration and research.