

**CHAPTER II**  
**REVIEW OF RELATED LITERATURE**

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## 2.1 Introduction

Since the development of complex organizations after the Industrial Revolution, there had been the need to increase the effectiveness of the management. With the expansion of industries and large scale production, there was requirement for the development of new organizational forms and management practices. People realised the need for effective management to increase productivity of the organization. There was no systematic body of knowledge about management practices until the Scientific Management movement took place.

With the development of Taylor's ideas (1911) Scientific Management movement took its impetus. To improve production efficiency he defined four principles of management - (1) to scientifically determine each element of a worker's job, (2) the scientific selection and training of workmen, (3) the co-operation of management and labour to accomplish work objectives in accordance with the scientific method, and (4) a more equal division of responsibility between managers and workers with the former doing the planning and supervision and the latter doing the execution. After the success of his experiment he emphasized the role of

managers to plan and evaluate.

Another significant contribution on this line was made by Henri Fayol (1949) who was a contemporary to Taylor. In contrast to Taylor's view, Fayol took a much broader view of management. He was concerned with the principles of organizations and the functions of an administrator. His important contributions were the designation of administrative functions and its universal nature. He defined administration as : planning, organizing, commanding, co-ordinating and controlling. He described co-ordination as the unifying and harmonizing phase for all activity and effort. An effective manager must co-ordinate his plans, actions and all the resources to accomplish his goals.

Max Weber developed the bureaucratic model for effective management where he described the organizational activity based on authority relations. He described a bureaucracy as composed of specialization of labor, a defined authority hierarchy, a formal set of rules and procedures, impersonal interactions and selection and promotion based on merit.

But later studies on bureaucracy revealed that as

it did not consider behavioral aspects, the consequence of this model would be disruptive in the organization. It may be an appropriate form for routine organizational activities, but there was no scope for innovation and creativity. In Scientific Management approach man had been considered as a commodity who could be motivated by money alone. Men were treated as a tool for production and it totally excluded the humanistic side of it with the assumption that the workers could be motivated by greater economic rewards. Thus, all these classical schools of management suggested a relatively restricted model excluding the behavioural aspect from consideration.

Through empirical researches on the traditional views on administration, the human relations movement started with Elton Mayo and his associates (1933). They found that productivity is influenced by a number of factors. They concluded that money was less a factor in determining productivity than group standards and security. These conclusions led to a new emphasis on human factor in the functioning of organizations and goal achievement. It recognised human beings as complex and influential input into organizational performance. The manager of the organization should

play "democratic" rather than "autocratic" leadership style. As productivity is related to feelings and attitudes, manager plays an important role in determining all these factors of individual workers. Effective communication channels on the part of the management was also stressed and "participation" was an important approach of this movement. Thus, a manager requires effective social as well as technical skills.

But the criticism made against human relations is that it has overemphasized the psychological aspects without considering the economic, political and the environmental factors.

During 1930s and 1940s a number of behavioural scientists have contributed to the organizational theory and management practice. Carl Rogers' client centred therapy (1942) made significant contribution. Lewin and his followers developed the concept of group dynamics, and action research approach to organization was based on his effort. Maslow's theory of motivation (1954) strongly influenced organizational behaviour. As a result of number of researches during this time there had been a tremendous leap in the quantity of organizational research.

In 1960s developed the Systems Approach where the organization was considered as an open system and not merely an input absorber, processor and output generator. It was viewed as made up of interdependent factors constituted of individuals, groups, attitudes, motives, formal structure, interactions, goals, status and authority. Within the societal system an organization is a subsystem and a change in any factor within the organization affects all other organizational components. Talcott Parsons' (1957) immense contribution in this field cannot be overlooked. Actually, he is the first person in his time who started thinking of human organizations in terms of a systems view. The harmonized system of human body, solar system and all other natural systems struck him and he implemented the idea to the organizations created by human beings and viewed these as a total system. He defined organization as a "system of co-operative relationships" capable of "continual action in concert" and having "primacy of orientation to the attainment of a specific goal".

According to the Systems Approach the manager of the organization should be concerned with the adaptation of the organization to its external system thus he can

make the organization effective by making it a dynamic system, constantly changing and adapting to internal and external pressures. Chester Barnard was one of the first management writers to utilize the systems approach.

An outgrowth of this systems approach is the Contingency Approach where it was advocated that it is difficult to make broad-based generalizations about management practice that are applicable to all situations. The treatment of a problem depends on the complexity of the subject and the distinctiveness of each situation. There cannot be any significant law or principle that can be applied in every instance. The role of an effective manager here is to isolate the situational determinants for each problem and act accordingly. A manager with an "intuitive sense of the situation", diagnostic capacity and able to adjust plans and actions according to the need of the situations, can work effectively.

This background reveals that there has been an effort for a long time to make organizations effective which in turn has emphasized the need for effective management. The literature shows that in course of

doing so, each time the researchers have offered a more refined model with much wider scope though all these models were structured to fit in the industrial setting.

With the same quest for effective management, though in a different field, the researcher, reviewing the literature related to the effective leaders and managers, considered logically few personality attributes, namely, intelligence, achievement motivation and role stress, in determining effective managers in the field of education.

Intelligence of a person helps him to think rationally and to solve problems in the best possible way, achievement motivation is a factor which increases the quality of one's performance; and the stress created by one's professional role in an organization affects one's effectiveness - the higher one's effectiveness, the lower is his level of stress.

The following review of literature on the above three variables related to management and leadership has presented a perspective from which the present study has emerged.



The review of literature has been classified under the following categories.

1. Managerial Effectiveness related to Intelligence.
2. Managerial Effectiveness related to Achievement Motivation, and,
3. Managerial Effectiveness related to Rolestress.

## 2.2 Studies on Intelligence

Earlier researches show that when there was "leadership" concept prevailing in the field of organizations, researchers were very much keen in observing the relationship of intelligence with leadership effectiveness, and a number of studies present evidence indicating that the average child or student leader surpasses the average member of his group in intelligence. Statistically reliable differences are reported by Sward (1933) and Hunter and Jordan (1939).

There are a number of studies which indicate a consistently positive relationship of IQ and leadership. Nutting (1923) in determining the characteristics of leadership found the correlation between leadership and intelligence and intelligence as .90. Goodenough (1930) in his study on young children found a correlation of

.10, Parten (1933) in his study on preschool children found it as .34, Flemming (1935) in his study on high school leaders found a correlation value of .44 and Zeleny (1939) in determining the characteristics of group leaders found it to be .44.

Bass (1981) while revising Stogdill's Handbook on Leadership reported twenty five studies within the period of 1948 to 1970, which were found to have a positive relationship between IQ and leadership measures. Bass, McGehee, Hawking, Young and Gebel (1953), Bruce (1953), Ghiselli (1959, 1963 and 1964), Albrecht, Glasser, and Marks (1964), Bray and Grant (1966), Rowland and Scott (1968), and many others have found positive relationship between these two variables.

Extensive reviews of the literature by Mann (1959) and Campbell, Dunnette, Lawler and Weick (1970) on IQ and leadership report medium correlations of .26 to .30.

Ackerson (1942) in his study on children found this correlation as .18 and .32 of boys and girls respectively.

Reynold (1944) in dealing with factors of

leadership of the seniors of central high school found .22 correlation between leadership and IQ.

Fiedler and Meuwese (1963) reviewed studies of three military organizations and one group creativity project and found generally high positive correlations between leader intelligence and task performance in groups which expressed esteem or acceptance of the leader, whereas the group which did not accept their leaders the correlations were found to be low or slightly negative.

Heslin (1964) found that the relationship between leader intelligence and task performance is higher in groups which have a formal leader rather than informal leader.

Again, there are a number of studies which show that extreme discrepancies between the intelligence of the leaders and their followers do not work well.

Warner (1923) in determining the influence of mental level in the formation of boy's gangs, found that the leaders and the followers differ much more in chronological age than in mental age. Her further

observation suggested that older boys with mentalities below normal tend to group with younger boys who have a mental age near their own and slightly higher. He remarked that when groups of retarded delinquent boys contact groups of brighter delinquents, the contacts are "so short and non-social that no noticeable event takes place".

Hollingworth (1926) while working with gifted children found that among children with a mean IQ of 100, the IQ of the leader is likely to fall between 115 and 110 IQ, which indicates that the leader is likely to be more intelligent, but not too much more intelligent than the average of the group led. His further observation confirmed that a child of 160 IQ has very little chance of being popular leader in a group of children of average intelligence but may become a leader in a group of children whose mean IQ is 130. One of the causes of this that he assumed was communication. The average child cannot comprehend a large part of vocabulary employed by a child of usually superior intelligence to express exact meanings in relation to his mature and complicated interests. The other barriers are differences in goals, activity patterns and interests which are very much essential for group leadership.

These findings of Hollingworth were further ascertained by a number of studies. McCuen (1929) found that "there is a tendency to select leaders with scores slightly above the average of their respective groups". He concluded that the crowd seemed to have inclination to be led by the average person and in a democratic society the leader should not be too far detached by the group.

Finch and Carroll (1932) studied three groups of 66 gifted, 66 superior and 66 average children. He concluded that "given a superior group of children to lead, the leading will tend to be done by the gifted children".

Ghiselli (1963) in his study of intelligence with managerial success on three groups of managers found that the relationship between intelligence and managerial success is curvilinear. The individuals earning both low and very high scores were less likely to achieve success in management positions than those with scores at intermediate levels.

In an extensive review of the literature by Korman (1968) on prediction of managerial performance reported that verbal ability tests of intelligence were fair

predictor of first-line supervisory performance but not of higher level managerial performance.

R.B. Cattell (1971) in his book on "Abilities : their structure, growth and action", has given an account of the distribution of intelligence scores in different operations. Wherever intelligence tests have been applied in surveys on sufficient samples, significant occupational differences have appeared. For educational administrators, professors and researchers, physicians and surgeons, the mean IQ score was 122, 134, and 128 respectively. The educational administrators had an IQ mean of 122, on the other hand, for truck drivers, unskilled labourers, carpenters, electricians it has shown a mean IQ of 96, 90, 97 and 109 respectively.

Thus, it is evident from the list that there exists a tendency for the higher occupations (in earnings, status and complexity) to be occupied by people of higher average intelligence. Though later Cattell has argued that intelligence score alone was not sufficient to predict one's success in job performance. The 'summed' values of ability and personality scores for all persons in a given occupation could give a more

distinct picture of one's success in job performance.

Chauha (1983) in his study on the characteristics of Innovative educational administrators found that the traits of innovative educational administrators were ability to take intelligent decisions, to reason, to analyze and to solve problems all of which are hallmarks of intelligence.

Virmani (1984) in the study on leadership styles and cognitive ability antecedents as performance correlates of educational leaders concluded that intelligence of heads of schools was related to their style flexibility.

Hunter (1986) showed general cognitive ability predicts performance on all jobs, including the so-called "manual" jobs as well as "mental" jobs, as he found the correlation between general cognitive ability and job knowledge to be .80. Similarly, job knowledge is correlated .80 with job performance as measured by objective work sample performance. He maintained that general cognitive ability predicts job performance in large part as it predicts learning and job mastery. Ability is highly correlated with job knowledge, and job

knowledge is highly correlated with job performance. At the aggregate level cognitive ability predicts performance with a correlation of .75. As general cognitive ability is measured by IQ tests, so, IQ tests are the single best predictor of productivity.

Now, the question is, why does cognitive ability correlate with performance in all jobs? Robbins (1991) has argued that "even simple jobs require far more learning than is evident to outsiders. Planning, judgement and memory - all major cognitive processes - are used in day to day performance on all jobs. Since learning the job is the key to job performance, and general cognitive ability predicts learning, it is to be expected that general cognitive ability will be the key predictor of job performance. High ability workers are faster at cognitive operations of jobs, are better able to prioritize between conflicting rules, are better able to adopt old procedures to altered situations, are better able to meet innovate, to meet unexpected problems, and are better able to learn new procedures quickly as the job changes over time".

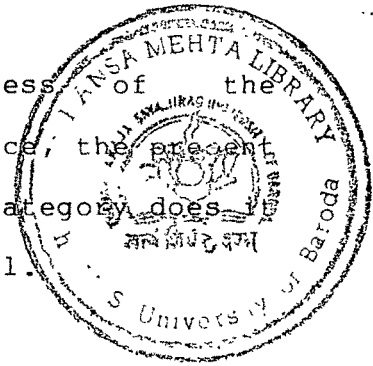
On the other hand, there are a lot of controversy among the experts regarding the use of IQ tests.



American Psychologist in February 1987 presented a survey of over 600 professional psychologists. It revealed that when it was asked whether there was a consensus on the basic definition of "intelligence", fifty-three percent agreed while forty percent disagreed. More than half of the respondents believed that IQ tests did not adequately measure important elements such as adaptation to one's environment, creativity, goal-directedness and achievement motivation. They also disagreed on the degree to which IQ test result suffer from racial, economic and test taker anxiety biases.

From the above review it appeared much confusing regarding the relationship between intelligence either with leadership or with job performance. Most of the studies have found positive relationship between these two variables but many of them did not get a significant relationship between these two. Stogdill (1974) in his survey mentioned that the average correlation was found to be .28. Moreover, these studies seem to be limited mainly in the industrial setting on managers, or on school children, very few studies have been conducted on educational managers or educational leadership. As there is a logical

relationship between the effectiveness of the educational managers and their intelligence; the present study was taken up to find out to which category does it belong - positive, negative or neutral.



### 2.3 Studies on Achievement Motivation

There are only two significant researchers on n-ach of the educational managers and their style of management. Halpin and Croft (1960) in a study of 232 school principals found that they were more pre-occupied with conformity to group mores and with being liked, accepted and popular. They tended to put consideration for their employees above a concern for attaining institutional goals and when work goals were reached, it was generally not at the cost of good relationships with their staff. They were not found to possess a strong n-ach.

In another study, Halpin (1966) found that the behavior of a leader who is effective in maintaining high morale and good human relations within the group is not necessarily effective in accomplishing high production and goal achievement. Halpin found that the work pressure to produce tangible and quantifiable

results was significantly less than in the industrial setting and advanced this as a probable reason why educational administrators were less concerned with attaining organizational goals and more concerned with maintaining good staff relationship.

Roe (1953) in a comparative study on scientists and school administrators found that scientists were characterized by a high degree of n-Ach while school administrators exhibited significantly higher n-Affiliation levels.

Zajonc and Wahi (1961) found that high n-Ach principals turn out to be more conforming than low n-Ach principals when they perceive that conformity can be instrumental in satisfying their quest for a particular goal.

Burnstein and others (1963), concluded that among school administrators, who scored high n-Ach the demands for the best performance were more decisive than the mere prestige of their position.

Newell (1978) advocated that one major cause of low n-Ach. levels among educationists was the absence of

any concrete measuring mechanism by which these personal could assess their individual levels of performance. They did not have specified units of production or of sales to measure their performance by. This seems to reflect what McClelland (1966) said about high n-Ach. persons:

'..... They show a strong preference for work situation in which they get concrete feed back on how well they are doing, as one does, say in playing golf, or in being a salesman, but as one does not in teaching, or in personnel counselling. A golfer always knows his score and can compare how well he is doing with par or with his own performance yesterday or last week. A teacher has no such concrete feed back on how well he is doing in 'getting across' to his students.'

McClelland (1955) reported a study of the relationship between persons who scored high in their n-Ach and their occupational preference. He found that those with higher n-Ach scores showed a marked preference for business and managerial occupations.

Veroff et al. (1960) using a sample of 480 men employed on a full time basis in various occupations found managers to be among those having the highest n-

Ach scores: The n-Ach scores were found to be significantly higher among persons in higher status occupations than among those in lower status occupations.

Meyer et al. (1961) found managers to be higher in n-Ach than specialists which included educationists. McClelland (1961) measured the n-Ach. of managers and professionals in U.S.A., Italy, Turkey and Poland. He found the managers to be significantly higher in n-Ach. than other professionals. It could be that managers come to occupy their positions due to their high achievement. Their job involves challenge, greater scope for decision making, risk taking and also personal responsibility. They also get recognition and reward for their work (Ghiselli, 1971).

In 1966 McClelland found that not all great achievers necessarily score high in n-Ach. He observed that many generals, outstanding politicians, great research scientists and educators do not have high n-Ach scores because their work required other personality characteristics and varying motives. A general or a politician may have a higher concern for power relationships. On the other hand, a research scientist

must be able to go for long periods without the immediate feedback that a person with high n-Ach requires.

England (1967) found that managers rated high the personal goals of achievement, success and creativity; security and leisure were rated low.

Anantharaman and Deivasenapathy (1978) found that managers have higher n-Ach. than supervisors or workers.

Hall and Donell (1979) gathered data from over one thousand managers which indicated that their speed of career advancement was associated with their achievement orientation.

Kaushik (1979) while studying the dimensions of administrative leadership of the college principals found them as achievement oriented.

Krahe (1991) evaluated the human motivation performance equation of David McClelland (1985) within the context of job performance in an applied work setting where n-Ach. was one of the factors amongst the three factors, the other two were perceived skill and

conscious motivation (v-Ach). The results indicated that McClelland's variables were modestly but reliably predictive of job performance.

The above studies show that n-Ach scores are indicative of managerial performance though for educational managers it has not shown any such relationship. There are again very less studies regarding educational managers and their achievement motivation. Most of the studies are found to be conducted on school children and university students. Hence, the present study intended to validate the present findings regarding the educational manager and to verify whether they do possess the same n-Ach pattern as the industrial managers.

#### 2.4 Studies on Stress

In the present study stress was considered as an independent variable. Its consequences has been studied on the performance of managerial work. Most of the studies are based with the assumption that there is an inverted U-shaped relation between stress and performance, that is, at low levels of stress individuals are not activated. Similarly, at high levels

of stress individuals involve their energy by coping with it. At the optimum level of stress individuals are not only activated but also devote their extra energy towards improvement of performance. Any relationship found in a single study can be said to fit somewhere in this inverted U-model (Beehr, 1985).

Baker, Ware, Spires and Osborn (1966) have shown how individual difference influence stress performance relationship. The study was conducted on 80 career army officers and it was found that some individuals were stimulated by stress and were high performers, whereas, other individuals showed behavioral disorganisation and inturn a reduction in effectiveness. They have suggested that a person's readiness to react to stress with negative or positive emotion due to their task involvement is a critical cause of performance.

Stress has been found to have relationship with some organizationally valued outcomes that seem to have bearing on performance. Stress has negative relationship with job threat and anxiety (Tosi, 1971), commitment (Erickson, Pugh & Gunderson, 1972), attitudes toward role senders (Miles, 1975), job involvement (Hollon & Chessser, 1976), pscychosomatic symptoms (Gavin



& Axelrod, 1977) and psychological well-being (Terick & LaRocco, 1987).

Organizational stress is positively related to tension (Miles & Petty, 1975; Kemery, Mossholder & Bedeian 1985), information search behaviors (Weiss, Ilgen & Sharbaugh, 1982) and turn over, turn over intentions, absenteeism (Jamal, 1984; Kemery, Bedeian, Mossholder & Tenliators, 1985).

Invancevich and Matteson (1980) found that there is considerable loss due to effects of stress on important organizationally valued outcomes, like, job satisfaction and job performance.

In order to find out the sources of stress Barnes, Potter and Fiedler (1983) found that stress associated with peers and superiors affect intellectual performance in a manner different from stress associated with parents and academic instructors. These findings suggest that different types of interpersonal stresses affect intellectual performance indifferent ways. As a principal's job is not merely a routine work and it needs the intellectial exercise to perform effectively, this study could be used in high lighting how stress is

related to the intellectual side of his job and thus affecting his overall performance.

Srivastava (1983) examined the stress performance (production) relationship, considering the latter as the determinant of the former. His hypothesis was that employees with high productivity would perceive and experience mild role stress as compared to those with low production capacity. The study was conducted on a group of 60 skilled workers with equal number of high and low products. Occupational Stress Scale (Srivastava & Singh, 1981) was used to measure role stress whereas productivity was assessed on the basis of the official production record and 'hours saved' by the employee in completing the assigned task over a period of six months. The findings suggest that the workers who maintained a constantly high production level experienced less role stress as compared to employees with low production capacity.

Jamal (1984, 1985) found that commitment moderates the stress-performance relationship and showed that 50% of the relationship between stress and performance is moderated by organizational commitment.

Singh (1986) examined the relationship between stress and performance of the 250 middle and lower level executives. Few sets of questionnaires were administered on them. Data was collected through a structured interview schedule. He found that the higher level executives experienced less stress and strain, utilised better coping strategies and enjoyed more positive outcomes. Executives of public sector organisations experienced less effective coping strategies and rated themselves as less effective than their counter parts from the private sector.

Srilata (1988) while conducting a study concluded that job as a whole was negatively and significantly associated with role stress variables.

Verma (1975) examined role conflict and the corresponding role performance among the head masters. A sample of 122 headmasters was selected randomly from the secondary schools. Role conflict was found to be positively related to worry. The older male headmasters experienced higher role conflict than the younger ones and the headmistresses.

Agarwal (1983) in his study on stress proneness,

adjustment and job satisfaction found that management based stress-proneness of principals is a significant predictor of their administrative effectiveness.

Reed (1984) studied 300 public secondary school principals to examine their degree of stress, degree of style adaptability and the predominant method of coping with stress. He has found significant relationship between principals' coping preference and leadership style.

Falinsky (1985) examined the interrelationship between rolestress, personal factors and work related outcomes within the content of school superintendencies. The role stress variables studied were role conflict and role ambiguity. The work related outcome variables were tension, anxiety, satisfaction, and perceived effectiveness.

He found role conflict, role ambiguity and challenge as predictors for tension. Role conflict, education and ability made a significant contribution to the explained variance of perceived effectiveness of the superintendents.

Shahidehpour (1985) studied leadership styles and school management under stressful conditions to determine the relationship between stressful variable and the leadership styles of selected secondary school principals. His findings suggest that secondary school principals in stressful situations will demonstrate consultative leadership behaviour, greater team building efforts, greater work facilitation efforts and show more supportive behaviour.

Rabinowitz and Stumpf (1987) found that role overload was significantly related to administrative performance assessed by peers. Wright (1987) investigated stress in the middle and elementary school administrators and their coping techniques. The result shows that fewer principals were engaged in cognitive activities as a means of reducing stress than in physical, interpersonal or organizational activities. The study shows an indirect relationship of stress with performance of the school administrators as the effective performance occurs only when one is able to cope with one's stress level.

Similarly, Blanks (1990) again studied stress and coping skills among Public school principals. His study

was designed to determine the areas that contribute to stress in principals and to determine if these principals engage in activities that help them cope with stress. He found that the greatest source of stress for principals centered around task-based activities associated with the daily operation of the school and the principals who experienced low levels of stress employed long-term coping skills.

Ukachukwu (1989) found out the relationship among degree of stress, coping strategies and leadership styles among elementary school principals. His findings reveal that the predominant leadership style was high task - high relationship which in turn definitely shows high effectiveness in performance. Their style adaptability was significantly higher in the effectiveness dimension.

Hutchinson (1990) studied the perceived sources and degrees of stress among chief executive officers in California's private non-sectarian schools. A stratified random sample of 500 private schools throughout the state of California had been taken. The findings show that 40% of the respondents indicated that stress limits their job effectiveness. The same

percentage indicated that stress had been a factor in the consideration of resigning. The qualitative data suggests that the stress of the job stems from responsibility the chief executive officer feels for the entire business of operating a private school, rather than individual job tasks.

Greff (1991) after doing his research on stress of the educational managers concluded that working stress is not necessarily a negative phenomenon. If the phenomenon is managed purposefully and pro-actively it can be instrumental to effective management and working performance. Management strategies exist to manage the phenomenon in such a way that excessive working stress can be prevented and productive working achievement be ensured.

Thus, it was observed that a lot of studies had been conducted in the area of stress, either in the industrial sector or in education sector. Role stress had been studied either as one variable or as a combination of a number of components, like, role overload, role ambiguity, self role distance etc. and mostly the researchers used questionnaires to collect their data, only a few times they introduced interview.

In the light of these studies it could be concluded that stress has varied effect on individual's performance - sometimes positive and sometimes negative. Though there are several studies on stress done at the different managerial levels of the industries there are comparatively much less studies conducted on educational managers, especially in India. The available literature showed that there was a lack of study on stress directly relating the effectiveness of the educational managers. The present study had made an effort to fulfil the inadequacy of research findings in the area of educational management relating stress, moreover, it acted as a check against the existing literature. .pa