CHAPTER II

REVIEW OF THE LITERATURE

This chapter reviews the literature relevant to the subject matter of this research. The literature survey is presented in six sections, with each section reviewing pertinent empirical studies conducted abroad and in India.

Section 2.1: briefly traces the theoretical framework of and developments in work stress research.

Section 2.2: presents an outline of the consequences of work stress.

Section 2.3: examines the need for and reviews the research on moderators of work stress and its outcomes.

Section 2.4: deals with the theoretical development of the empowerment concept and reviews related studies.

Section 2.5: presents the influence of production set-up differences (manufacturing Vs process) on employee attitudes.

Section 2.6: enumerates the research questions to be addressed by this thesis.
2.1 DEVELOPMENTS IN WORK STRESS RESEARCH

There has been an phenomenal increase in the volume of occupational work stress research. Such an increase has prompted various authors to highlight the dilemmas and difficulties facing this field of enquiry. Vingerhoets & Marcelissen (1988) stress the need for reflection on the directions future research may wish to take. This would be essential to identify and explore the avenues which look promising and also to answer the questions which remain to be addressed (Payne, Jicks & Burke, 1982).

Dewe (1989) identifies four themes that have arisen from the considerable amount of research done on this subject.

The first theme deals with the need to clarify what we mean by stress because how we define stress would decide how we research it and how we explain our results. Stress research has long been in the hold of definitions that focused only on the different components (stimulus - response) to the stress process. Then stress came to be viewed as more relational in nature (Lazarus & Launier, 1978). This view holds that there is some sort of transaction between the individual and the environment.

Literature points out that any definition of stress should take into account two important interacting processes: appraisal and coping (Lazarus & Folkman, 1987; Holroyd & Lazarus, 1982). The appraisal process could be described as perceived organisational demand which exceeds the physical or psychological resources of an individual. The cognitive process could be
described as a cognitive or behavioural attempt to deal with, reduce or tolerate excess demand (Folkman, 1984). Although many such definitions exist at the theoretical level, when it comes to the empirical level stress is defined in terms of person-environment fit (French, Rodger, & Cobb, 1974) or as 'a perceived dynamic state involving uncertainty about something important' (Schuler, 1982).

Cooper and Cartwright (1994) state that the workplace intervention strategies aim at improving the adaptability of the individual to the environment while the reality is that there is a lack of fit between the individual and the environment. They argue that more concern should be shown to 'adopting the environment to fit the individual'. It is felt that the professional interventionists are more at ease changing individuals rather than changing organisations (Ivancevich et al., 1990).

Many authors (Schuler, 1982, 1985; Payne et al., 1982; Brief & Atieh, 1987) emphasise that research must investigate both processes (appraisal & coping) because that would help in providing a better understanding of the transaction between the individual and the environment.

The second theme is concerned with the measurement of stressors. There is a demand by some to re-evaluate current measures and develop new measures that would effectively throw light on the different components of the stress process. The first of the two issues involved in this theme questions how stressors are measured. Though most researchers conceptualize occupational stress as demand based, the studies conducted have used traditional rating
scales in a way that only 'implies' demand instead of measuring it (Glowinkowski and Cooper, 1985). Much concern has also been expressed about the capability of current measuring instruments to give information on the different aspects of the stressors (Van Sell, Brief & Schuler, 1981; Parker & Decotiis 1983; Jackson & Schuler, 1985). The second issue is about the items being measured. The dramatic social and economic changes prompt us to consider the possibility of distorting some items and ignoring the presence of others, while attempting to study the traditionally measured sources of stress (Glowinkowski & Cooper, 1985) Brief & Atieh (1987) question whether some items are still significant in an individual's work life. Many researchers (Cox, 1985; Kanner, 1978, Crump, Cooper & Smith, 1980; Shaw & Riskind, 1983; Dougherty & Pritchard, 1985; Handy, 1986) have underlined the need for reconsideration of old constructs and the development of alternative approaches to measurement. Researchers have pointed out the need to investigate the demand workers themselves perceive as stressful (Brief & Atieh, 1987), the meaning attributed to such demands (Fineman & Payne, 1981) and also the temporal nature of the stress experience (Bailey & Bhagat, 1987).

The third theme addresses the need to explicitly acknowledge the role of coping in the stress process. The role of coping could be more closely studied by developing measures which describe, classify and provide a taxonomy of coping. There is a general consensus (Payne et al. 1982; Bhagat & Beehr, 1985; Sethi & Schuler, 1984; Schuler, 1984; Cohen, 1987) that how individuals cope with stress must be examined more closely. Yet, coping has not received its due share of attention in occupational stress research, report many researchers
(Beehr, 1984; Dewe & Guest, 1989; Parusuraman & Cleek, 1984; Newton & Keenan, 1985; Cox, 1987). When investigating occupational stress, few researchers (Burke, 1972; Burke & Belcourt, 1974; Pearlin & Schooler, 1978; Newton & Keenan, 1985; Latack, 1986) have endeavoured to comprehend the construct by way of examining, describing and developing a topology of coping based on strategies individuals report using. Most other researchers have preferred to use general formulations that have generally selected, grouped and described strategies on an ‘a priori’ basis. It has been pointed out (Fleming, Baum & Singer 1984) that measuring coping strategies is indeed difficult because coping is a dynamic process affected by an array of variables. Despite these difficulties the aim should be to develop coping measures that reveal the different dimensions of coping strategies (Holroyd and Lazarus, 1982) such a measure should be well constructed and designed to allow evaluation (Cohen, 1987). Dewe (1989) says that coping should be developed as the central focus of occupational stress research.

The fourth theme is devoted to the study of occupational stress research methodologies. Brief & Atieh (1987) argue that unless changes are made in the way in which work stress is investigated no meaningful progress can be made in understanding work stress better.

Many researchers (Payne et al., 1982; Kasl, 1987; Van Maanen, 1979) have accused that the reliance on quantitative techniques has become ‘ritualized’ and that there is no link any more between construct and measurement. Bhagat and Beehr (1985) advocate the use of an imaginative
mind to solve the methodology dilemma. Dewe (1989) points that not the convenience of any standard quantitative application but the resourcefulness of the researcher should determine the research design. Morgan and Smircich (1980) have pointed out that the quantitative techniques have imposed a concrete, structured view of the world and that the choice of a methodology would be greatly influenced by the social context it aims to investigate (Dewe, 1989).

Cooper and Cartwright's (1994) proactive approach to stress addresses the source or causal factor in the stress process rather than focusing totally on how the organisation can help the employees to cope with stress.

Certain cybernetic principles, especially the negative feedback loop finds a place in current theories of organisational stress (e.g. Beehr & Newman, 1978; Cummings & Cooper, 1979; French, Caplan & Harrison, 1982; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; McGrath, 1976; Newmann & Beehr, 1979; Schuler 1980). These theories point out that occupational stress not only has an adverse impact on health but it also stimulates coping which will eventually influence the determinants of stress (Edwards, 1988). Edwards (1992) argues that most empirical studies have focused on simple bivariate relationships (Beehr & Newman, 1978; Cooper & Marshal, 1976; Jackson and Schuler, 1985) overlooking cybernetic principles. It is felt that as a result of the rejection of the cybernetic principles the gap between theoretical and empirical organisational stress research has widened. This in turn has hindered the accumulation of knowledge in this important area of research (Edwards, 1992).
In India also Occupational Stress Research has been very active and productive. It has been observed that the term stress has been widely used in relation to work organisations for the past 15 years (Agarwala, Malhan and Singh, 1979). Pestonjee (1992) identified the following parameters of stress to avoid confusion in the measuring of stress:

(a) the context in which the term is used.
(b) the discipline of the researcher and the nature of stimuli considered as stressors.
(c) the response relevant to the researches.

In India one of the major areas of research has been organisational stress with particular reference to role stress. Research has been focused on causal factors of stress, stress manifestations, moderators of the stress strain relationship, types of stresses experienced by different work groups and various coping strategies employed by organisations to cope with stress.

Pareek, in addition to developing and standardizing the Organisational Role Scale (1983) to measure role stresses also identified 5 types of role stresses in addition to the already well researched three role stresses of role ambiguity, role overload and role conflict. Srivastava and Singh (1981) constructed and standardized the Occupational Stress Index. The instrument assesses an individual's stress with relation to his/her occupation with acceptable consistency. Personal correlates of Role Stress has been extensively researched, too (Pestonjee 1987(b); Palsane and Evans, 1984; Jamuna and Ramamurthi, 1984). Bhandarkar and Singh (1986) designed a study to
examine the entire stress cycle (sources of stress, consequences and moderators) and to distinguish the important contributors of stress for evolving stress reduction strategies. Stress and productivity relationship was explored by Srivastave (1983). Singh (1986) undertook an exploratory study to examine a number of research issues relating to the structure and dynamics of stress among executives. Khandwalla (1985) observed the various differences among organisations and their operating conditions and suggested that the managerial style, organisation structure and design varied to suit the contextual, operating and performance requirements. He has recommended each organisation to take the responsibility for the growth and development of the sector it is operating in and termed such move as ‘strategic’ in organisation. Bhamgara (1985) found 9 physical complaints and the percentage of such complaints to be emotionally induced. Numerous studies have also been done on comparing the stress levels of employees in the Private and Public sector (Jasmine, 1987; Pestonjee & Singh, 1987; Singh, 1987; Sharma, 1987; Dwivedi, 1989; Kumar, 1989; Ahmed, Bharadwaj and Narula, 1985). Research has also been done to study the stress of managerial personnel at different organisational levels (Kaur & Moorthy, 1986). Jha and Bharadwaj (1989) conducted an empirical study of stress and motivation of frontline managers.

secondary school teachers (Fernades and Murthy, 1989), Police (Bhaskar, 1986; Pillai, 1987) and in particular organisations (Khanna, 1985; Bhaskar, 1986; Pestonjee and Singh, 1982) were the notable among the numerous studies done on the various dimensions of stress and its components.

Occupational Stress Research has not been confined to geographical boundaries. International comparisons have been made (Cooper and Hensman, 1985; Peterson et al., 1995). Cooper and Hensman (1985) made an international comparison of senior and chief executives from ten countries. The study investigated mental health, job satisfaction and sources of job stress. The cross cultural study revealed that executives from developed economies had higher levels of mental health and job satisfaction as compared to those from developing economics. McCormick & Cooper (1988) replicated the study and concluded that executives from New Zealand had very low levels of psychometric stress as compared to their international colleagues. It was observed that these executives also reported high levels of job satisfaction. Peterson et al (1995) conducted a 21 nation study and concluded that role stress varies substantially more by country than by demographic and organisational factors.

Despite the voluminous research done consensus has not been achieved on many basic matters. In fact, the vigorous activity has only thrown up many more hitherto unexplained and unexplored questions to be answered in the years to come.
2.2 CONSEQUENCES OF WORK STRESS

The consequences of work stress has become very important to, if not dominated the HR agenda. In the Walker V Northumberland County Council, in November 1994, the High Court (U.S.) has accepted that stress causing a nervous breakdown could lead to a successful claim in negligence against the employer.

A myriad of research studies from across the world has demonstrated the costs of occupational stress in both individual and organisational terms.

There are an estimated 360 million working days lost per year through absences in the U.K. and atleast 50% of these absences are related to stress in some way (Sigman, 1992). Costs of billion per year is attributed to sickness. Stress is the most commonly (48%) mentioned health issue at work place, all across Europe (Human Resources, Mar - Apr, 1995). Links between stress and Coronary Heart Disease, mental break down, poor health behaviours, job dissatisfaction, accidents, family problems and even certain forms of cancer have been established (Mclean 1980; Frese, 1985; Cooper & Watson, 1991). Nearly 50% of all premature deaths in the U.K. are attributed to life style and stress related illnesses (Palmer, 1989). It is estimated that the U.S. industry loses approximately 550 million working days due to absenteeism and it is also estimated that about 54% of these absences are related in some way to stress (Cooper and Cartwright, 1994).
Realizing the toll taken by stress the U.K. government has stated its aim to reduce premature deaths by 30% by the year 2000 A.D. (Cooper & Cartwright, 1994). The U.S. Surgeon General’s report has also set similar goals (Bradley, 1992). In the U.S., individual insurance premiums have risen by at least 50%. During the corresponding period the employers’ contribution has also increased by over 140% (Cooper & Carwright, 1994). The cost of replacing 200,000 men between the age of 45 to 65 who either die or are incapacitated by coronary heart disease in the U.S. has been estimated at $700 million per year. The total cost of stress can thus be assessed by the absenteeism, reduced productivity, compensation claims, health insurance and direct medical expenses prevalent now in our society.

The savings made by the stress management programmes only highlight the serious consequences of work Stress. Typical figures show Savings to Investment ratios to be between 3:1 to 15:1 (Cooper & Cartwright, 1994). It is the current trend in the U.S. to hire ‘Care Companies’ to deliver a preset dollar saving (Smith & Mahoney, 1989) via their stress management programmes. New York Telephone Company has saved $ 2.7 million in absence and treatment costs in one year through its Wellness Programme which was designed to improve cardiovascular fitness (Cooper, 1985). General Motor Corporation has reported a 100% decrease in lost time and 60% decrease in accident and sickness benefits through their programmes. Other attempts like the counselling program, as introduced by Kennecot in the U.S. (Cooper, 1985) and in the U.K Post (Allinson, Cooper & Reynolds, 1989; Cooper & Sadri, 1991)
have also reported savings. All the above point to the severity of the consequences of the stress and the recognition it has received.

Schuler (1980) identified three types of stress outcomes in an organisation.

a. Physiological (Short term, long term and non specific)
b. Psychological responsiveness (both affective and cognitive)
c. Behavioural consequences (divided into Individual consequences and Organisational consequences).

The Burn Out Stress Syndrome (BOSS) (Paine, 1982) can lead to four types of stress related consequences such as depletion of energy reserves, lowered resistance to illness, increased dissatisfaction and pessimism. Veningle and Spradley (1981) have identified the five stages of BOSS as honeymoon stage, fuel shortage stage, chronic symptom stage, crisis stage, and hitting the wall stage.

It is to be noted that not all consequences of stress are dysfunctional. Kets de Vries (1979) pointed out that every individual needed a moderate amount of stress to enable the individual to be alert and capable of functioning effectively in an organisation. Pestonjee (1987) and Mathew (1985) concur with this view. Infact, Mathew even pointed out certain types of stresses essential for being a creative manager. But this is not supported by any empirical work. The only exception is the work by Pestonjee and Singh (1987) where they noted that the stress levels and job satisfaction levels were both high and it was
attributed to the characteristics of private organisations which generated greater stress and, in turn, lead to higher job satisfaction. Indian studies have shown that stress plays a vital role in the causation of cancer (Khatri, Chansouria and Udupa, 1977). Research has also established links for stress with Psycho-sexual Disease (Chaudhari, 1977; Kobayashi & Yaginuma, 1977; Sahani and Merchant 1977) with gastric ulcer, bronchial asthma and anxiety neurosis.

Given below is a listing of individual symptoms of stress and behavioural consequences (Schnler, 1980):

1. Physiological
   Short term : Heart rate, GSR, respiration, headache
   Long term : Ulcer, blood pressure, heart attack
   Nonspecific : Adrenaline, nonadrenaline, thymus deduction,
                 lymph deduction, gastric acid production, ACTH
                 Production.

2. Psychological responses (affective and cognitive)
   Fight or withdrawal
   Apathy, resignation, boredom
   Regression
   Fixation
   Projection
   Negativism
   Fantasy
Expression of boredom with much of everything

Forgetfulness

Tendency to misjudge people

Uncertainty about whom to trust

Inability to organise self

Inner confusion about duties or roles

Dissatisfaction

High intolerance for ambiguity, do not deal well with new or strange situations.

Tunnel vision

Tendency to begin vacillating in decision making

Tendency to become distraught with trifles

Inattentiveness: Loss of Power to concentrate

Irritability

Procrastination

Feelings of Persecution

Gut-level feelings or unexplainable dissatisfaction.

3. Behaviour

A. Individual consequences

Loss of appetite

Sudden, noticeable loss or gain of weight

Sudden change of appearance: Decline/improvement in dress

Sudden change of complexion (Sallow, reddened, acne)

Sudden change of hair style and length
Difficult breathing

Sudden change of smoking habits

Sudden change in use of alcohol

B. Organisational consequences

Low performance - Quality / Quantity

Low job involvement

Loss of responsibility

Lack of concern for organisation

Lack of concern for colleagues

Loss of creativity

Absenteeism

Voluntary turnover

Accident proneness.

Although the Indian studies have not come up with specific figures on the cost of occupational stress it can be inferred by the number of studies being done in this area that the seriousness of the consequences has been realized. The efforts of the industries in recent years in recognizing and controlling the stress consequences prove the above point.

Such being the consequences of stress it is essential to explore all avenues to keep under control the adverse consequences of stress.
2.3 MODERATORS OF WORK STRESS

Research has envisaged the role of institutions/organisations as agents of health promotion and research activities and observed that Behavioural Sciences Research can make a valuable contribution to enhancing the role of institutions in health.

The adverse effects of stress is two pronged. While affecting the well being of individuals in an organisation by causing psychosomatic and behavioural illness, it also directly or indirectly affects the health of the organisation in terms of men, material and machines.

Pestonjee (1992) points out that researches on moderator variables are attempts to ‘release’ the organisation and its participants from the adverse effects of stress manifestations. He says it could also explain the varying stress - strain relationships.

Two major sets of variables influence the stress strain relationship. The first set of variables is individual differences in personality, motivation involvement, job level, sex, age, etc. (Sharma 1985). The other set is socio-economic conditions like the nature, type and extent of an individual’s social relationship. Both these sets of variables influence an individual’s adoption to stress.

On the basis of methodology, studies focusing on moderator variables can be placed into two categories: The first category contains such empirical
studies in which data are not subjected to rigorous statistical analysis to establish the moderating effect of a particular variable on the stress-strain relationship. It is inferred from such studies that a particular variable actually moderates or is capable of moderating the relationship between variables. The second category contains those studies in which data have been subjected to rigorous statistical analysis.

Two statistical techniques are normally used to test the moderating effect of a particular variable. They are subgrouping analysis and hierarchical regression analysis. Researchers have used either of these tests and have sometimes used both the techniques (Singh, 1987; Pestonjee and Singh, 1988; Stone et al. 1977) while testing the moderating variable in the stress-strain relationship.

There are two types of relationship between dependent and independent variables. The first is the degree of relationship denoted by the coefficient of correlation and the second relationship is denoted by regression coefficients. It is also to be noted that a moderator variable could have three types of moderating effects. They are (1) it may moderate the degree of relationship or (2) it may moderate the form of relationship or (3) it may moderate both the degree and form of relationship.

Given below is a brief review of the salient research done on moderators of stress over the last two decades.
Numerous variables like need for clarity (Lyons, 1971) need for achievement (Johnson & Stinson, 1975; Morris & Sunder, 1979) ability (Schuler, 1977) and higher order need strength (Beehr, et al., 1976; Brief & Aldag, 1976) were studied. While investigating higher order need strength Beehr et al., (1976) found that it had an overall moderating effect on relationships between role stresses and individually valued states. Brief and Aldag (1976) on the other hand found that higher order need strength did not serve as a viable moderator. While studying the role of need for autonomy and need for achievement, Johnson & Stinson (1975) and Morris & Snyder (1979), reported contradicting views on the above said as being important moderators in the stress-strain relationship. Despite these contradictions the need to 'uncover' the personal and situational moderators of the stressors-strain relationship has been emphasised by Newman and Beehr (1979). This has been highlighted by Batlis (1980).

Johnson & Stinson (1975) studied the moderating effects of individual differences and the role ambiguity, role conflict and satisfaction relationship. Another such study of individual and interpersonal moderators of employee reactions to job characteristics was reexamined by Abdel-Halim (1979).

Stone et al., (1977) tried to determine the extent to which personality traits moderated the relationship between job scope and satisfaction with work itself. But no significant moderating effect was discovered.

Schuler (1977a) failed to produce results to support his hypothesis that employee ability reduced the negative relationship between role perceptions
and satisfaction and performance. It was also hypothesized that effect of ability would be moderated by organisational level. The findings suggested that employees with high ability were less affected by role ambiguity than employees with low ability. A reexamination of ability as a moderator of role perceptions - satisfaction relationship was conducted by Abdel-Halim (1981). The result obtained from the education and perceived ability job fit measures of employee ability were consistent with the ability - adaptability phenomenon suggested by Schuler (1977).

The affective employee responses to organisational stress and the moderating effects of job characteristics was examined by Abdel-Halim (1978) and he concluded that role stressors tend to be more aversive for individuals on low - enriched rather than high - enriched jobs.

A study by Morris & Snyder (1979) to look at need for achievement and need for autonomy as moderators of role perceptions - outcome relationship failed to provide evidence of 'pervasive' linear moderating effects due to n Ach or n Aut on the variable linkages being examined.

Batlis (1980) examined the moderating influences of locus of control and job involvement on the relationships between role conflict, role ambiguity and three individual outcomes viz. job satisfaction, job related anxiety and propensity to leave the organisation. Though the study failed to provide evidence of significant moderating effects it was found that job involvement could be used to predict the propensity to leave.
Moasholder et al., (1981) studied the moderating effects of self-esteem and organisational level on the role perception - satisfaction and performance relationship. The study discussed the importance of considering the combined effects of both situational and individual difference variables as potential buffers against aversive role perceptions.

Sandler and Lakely (1982) also studied locus of control as a stress moderator with particular reference to the role of control perceptions and social support. The findings showed a correlation between negative events and anxiety was greater for external students than for internal students. But locus of control did not effect either ratings of control over negative events or the correlations between high and low control negative events and psychological disorder. It was found that locus of control did affect the receipt and impact of social support.

Lefcourt et al (1984) studied locus of control and social support as interactive moderators of stress and suggested that social support may be most beneficial to those who are more instrumental and sparing in their approach to social interactions.

Kirmeyer and Dougherty (1988) investigated the moderating effects of supervisor support on work load, tension and coping. The buffering role of support was confirmed by statistically significant interactions. Support also buffered effects of objective load on tension-anxiety but not on coping. Theoretical models (Numerof 1983; Perlman & Hartman, 1982) of burnout have highlighted the importance of supervisory behaviours as a factor both
contributing to and moderating the adverse effects of organisational role stressors. Seltzer and Numerof (1988) confirmed the inverse relationship between consideration and burnout. Also individuals who had reported low burnout had also rated their supervisors high on consideration.

The moderating effects of work-based and non work-based social support on job security and its outcomes was studied by Lim (1996). The findings suggested that support derived from others at the workplace can contribute significantly in buffering individuals against job dissatisfaction, proactive job search and non-complaint job behaviours when their job security is at stake.

Based on the stress and coping model developed by Lazarus and his colleagues (Lazarus, 1966; Lazarus & Folkman, 1984; Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1984) a study was undertaken by Puffer and Brakefield (1989) to study the role of task complexity as a moderator of the stress and coping process. Results showed that task complexity moderator the relationship that coping had with some individual and environmental antecedents as well as work outcomes. The study also developed four categories of coping responses: active cognitive, active behavioural, cognitive avoidant and behavioural avoidant.

Douglas (1996) emphasized that to create eustress in the work place a supervisor had an important role to play.

Murphy (1988) proposed that a person’s stress - health relationship is greatly influenced by the person’s perception of control over the environment.
Miller (1979) argues that controllable events hurt a person less psychologically than uncontrollable events. Four well known constructs: locus of control (Rotter, 1966), self efficacy (Bandura, 1977), hardiness (Kobasa, 1979), and sense of coherence (Antonovsky, 1979) have been found to be negatively related with stress. They may also act as a buffer between stress and ill-health. Empowerment has emerged as a well known antidote to job stress, (Singh, 1997). Singh (1977) argues that empowerment strategies help to enhance a person's perceived ability to deal successfully with various demanding situations. Thus it could lead to effective management of stress through empowerment.

Studies on moderator variables have been conducted in India also. Basically these moderator variables can be divided into three categories.

a. Organisational variables

b. Personality variables

c. Psychological variables.

A brief survey of such studies is given below:

Needs as moderators of the stress - strain relationship has been well researched (Srivastava, 1985b; 1986a; Sehgal 1985). Approach and avoidance coping strategies as moderators have also been studied (Srivastava and Singh, 1987; Singh 1988). Srivastava and Jagdish (1989) separately explored the moderating effect of job satisfaction and mental health variables. Another
study by Pande and Naidu (1986) explored the moderating effect of effort and outcome variables.

The moderating effect of six dimensions of organisational climate (motivational) on a number of relationships between role stress and job satisfaction variables has been studied by Singh (1987). Srivastava and Jagdish (1989) attempted to study the buffering effect of job satisfaction on the relationship between perceived occupational stress and mental health. Another interesting study by Singh and Mishra (1984) examined the moderating effect of occupational stress on job involvement and job satisfaction relationship. Sharma (1983) observes that culture is an important factor in the study of mediators of organisational stress and psychological well being relationship.

Another notable contribution was made by Srinivasan (1987) to the study of moderators. The study investigated, in organisations under differing corporate ownership, the effect of executives’ sense of competence on the relationship between organisational role stress and job satisfaction. The study was conducted in one public sector, one joint sector and one private sector organisation. The results of the study indicate significant interaction terms and the nature of interactions to be predominantly positive buffering effect.

All the above mentioned only show the urgent demand to find more moderators to lessen the adverse effect of stress on the individual, especially in a work place. It also points to the importance of moderator research in any form of research related to occupational stress.
2.4 THE EMPOWERMENT CONCEPT

Management researchers and practitioners have shown great interest in the concept of empowerment and related management practices (Bennis & Nanus, 1985; Block, 1987; Burke, 1986; Kanter, 1979; McClelland, 1975; Nelson 1986). Conger and Kanungo (1988) have identified the reasons for the interest. The reasons are (1) the practice of empowering subordinates is an important component of managerial and organisational effectiveness (Bennis & Nanus, 1985; Kanter, 1979, 1982; McClelland, 1975), (2) the analysis of power and control within organisations shows that the total productive forms of organisational power and effectiveness grow in proportion to the superiors sharing of power and control with subordinates (Kanter, 1979; Tannenbaum, 1968) (3) past experiences in team building (Beckhard 1969; Neilsen 1986 suggest that empowerment techniques play a very important role in group development and maintenance. Though much has been said and written about empowerment, still the understanding of the construct is limited and confusing. Conger and Kanungo (1988) have defined empowerment as a process of enhancing feelings of self-efficacy among organisational members through the identification of conditions that foster powerlessness and through their removal by both formal organisational practices and informal techniques of providing efficacy information. In effect they viewed empowerment as the motivational concept of self-efficacy. Thomas and Velthouse (1990) and Spreitzer (1995) defined empowerment more broadly as increased intrinsic task motivation manifested in a set of four cognitions reflecting an individual’s
orientation to his or her work roles: Meaning, Competence, Self-determination and Impact.

Some other perspectives of empowerment as envisaged by other researchers and writers are given below:

Umiker (1992) identified nine types of power (authority, expertise, knowledge, alliance, charisma, fiscal, physical, supported and persuasive) prevalent in organisations and also listed four sets of factors that promote powerlessness in organisations (organisational, job design, leadership style and employee development factors). He concluded that there is a direct correlation between the amount and kind of external control of employees and the severity of their sense of powerlessness.

Garfield (1993) observed that employees would participate fully in the organisation if, and only if, they have a compelling personal reason to do so.

Eccles (1993) cautions that despite the benefits accruing out of the implementation of empowerment strategies it should not be assumed that empowerment would in any way diminish managerial responsibility for leadership, judgement and decisive action. He points out that empowerment helps to 'carry out the closely specified test with maximum responsiveness to given signals, with minimal discretion in their consequent actions'.

While discussing a tactical approach to employee empowerment, Parsons (1994) suggests that an employee-first approach to business promotes quality
improvement objectives. Thus he finds a legitimate place for empowerment in the TQM process.

In an attempt to develop and validate a multi-dimensional measure of psychological empowerment in the workplace, Spreitzer (1995) concurred with the definition of empowerment as given by Thomas and Velthouse (1990) and pointed out that the definition of empowerment was based on certain assumptions.

1. Empowerment is not an enduring personality trait that can be generalised across situations, but it was more a set of cognitions shaped by a work environment (Thomas and Velthouse, 1990)

2. Empowerment is a continuous variable and people need to be viewed as more or less empowered rather than as empowered or not empowered.

3. Empowerment is specific to the work domain and is not a global construct that can be generalized across different life situations and roles.

Ford and Fottler (1995) argue that empowerment process is one of ‘directed autonomy’ and (1) sharing of information and knowledge with employees to enable them to understand and contribute to organisational performance (2) rewarding them based on organisation’s performance and (3) giving the employees the authority to make decisions. They have argued that
more of empowerment is not always right and that empowerment is a matter of degree rather than an absolute.

Studying the issue of leadership and empowerment from a social exchange perspective, Keller & Dansereau (1995), proposed that the receipt of negotiating latitude and support for self-worth from superiors empowers subordinates by increasing their perceptions of control. In turn the subordinates reciprocate by performing in accordance with supervisory preferences. It also predicted that superiors who utilize empowering leadership practices would be viewed as 'fair' by subordinates.

McConnel (1995) argues that empowerment and delegation are no different from each other and that empowerment is 'simply delegation done properly'. The study says that both have failed because both delegate only authority and not responsibility, as often claimed. The emphasis should be, the study says on the sense of 'task ownership' on the part of the empowered employee. Task ownership is possible only when an employee is willing to take on a new task and that employee should be properly instructed, encouraged and involved in deciding what and how it should be done.

Bushe et al., (1996) studied the individual's experience as they become empowered. They, after extensive studies concluded that the success of implementation of empowerment programs would require groups of people who:

1. do the same work but work fairly independently of each other
2. have worked together for some time already
3. are competent to do the job
4. know clearly who their customers are
5. have previously had a supervisor with a participative management style.

They argue that once the above is available then the role of a supervisor can be removed.

In another related article, Bush et al (1996) have encouraged researchers to pay attention to changes in the time span in which people are expected to operate. The study predicts that a large increase in time span may lead them to failure. Hirschhorn and Gilmore (1992) had identified three boundaries (authority boundaries, task boundaries and political boundaries) that an individual needs to be clear about to be able to work together.

Now with the introduction of empowerment these boundaries are no longer rigid and binding and must be negotiated now on a relationship by relationship basis by employees (Bushe et al 1996). They have based their definition of the empowerment concept on the work of Thomas and Velthouse (1990) but they have also identified a few other facets of empowerment (choicefulness, effort, impact, self-system control, meaningfulness and universal justice).

Donovan (1996) cautions that the first step to self direction is NOT empowerment but team building. He states that developing and empowering
self-directed work is a complex task and should be considered as an investment. He says the following are necessary:

a. a sound strategy
b. practical tools for assessing, developing, and empowering teams.
c. sound preparation of the individuals who will function as team builders.
d. time and patience.

He predicts such teams could achieve significant milestones in performance and be an important part of an organisation's competitive advantage.

The question of empowering middle managers to be transformational leaders was taken up by Spreitzer and Quinn (1996). The study suggests that middle managers are capable of making both transformational and transactional changes targeted at themselves, their work unit, and their organisation. The analyses suggests that the mind set of an individual prior to a development programme would moderate the type of change undertaken by the manager. One surprising finding was that the middle managers who had plateaued were the ones most likely to make radical changes. The practical implication is that these very same people may be targeted by the organisation for downsizing even while the organisation is seeking to empower and encourage leadership from middle managers.
A study of the relationships between training for empowerment and employees' perception of empowerment by Zavodsky (1996) revealed that a lack of understanding the organisation's mission, values and guiding principles and the employee grievance that management does not act in accordance with them could affect the employee perception of empowerment and could in turn affect the empowerment training.

Mallak & Kurstet Jr (1996) attempted to define and differentiate empowerment from participative management. Their definition of empowerment embodies the concept of intrinsic motivation, internal justification for decision making, shared responsibilities, and integration for problem solving. The study argues that empowerment is more than participative management. It further argues an organisation's level of empowerment is related to its culture. A strong culture supports the empowerment process in many ways, the study says.

Another research essay by Gandz and Bird (1996) has identified the forms of empowerment as role empowerment, reward empowerment, process empowerment and governance empowerment. The benefits of successive empowerment would include things like protection of stock holder interests, balancing the interests of multiple stake-holders, benefits to the employees themselves and the achievement of socially desirable objectives. The essay also identifies some ambiguities like change and dislocation, work force adjustment, irresponsible use of power and the empowerment paradox. Many (Gruber and Tricket, 1987; Simon, 1992) see empowerment programs as a manipulative and
potentially paternalistic means of gaining greater commitment from organisational members.

Shipper and Manz (1997) point out some vital issues to organisations considering the introduction of employee empowerment.

1. A leadership perspective that recognizes the role of self-management and self-leadership for each employee should be the heart of the empowerment approach.

2. A concrete chain of command and definite hierarchy are not the characteristics of an empowered organisation.

3. Culture and norms should fill some of the void left by the absence of structure and management.

4. Lots of teamwork, instead of formally designated and permanent teams is required.

5. Self management and individual initiative may not be automatically accepted by employees.

6. Unstructured research and development with plenty of encouragement could lead to innovations.

7. Multiple opportunities and multiple rewards should be available to participants.
8. The potential flaws in the system should be acknowledged and the right organisational approach should be adopted.

Another perspective which has gained importance in organisational behaviour research is empowering in the work organisation through informal social processes and can be easily perceived in the mentor-protege relationships (Das, 1992). Such an empowerment could be named as 'Empowerment from Supervisor'. Several studies (Sinha, 1980; Singh, 1990; Kram and Hall, 1989; Tepper, 1995) of this relationship strongly indicate that it can be instrumental in supporting both career advancement and personal growth.

Das (1992) developed an empowering scale which primarily aimed to study the empowerment from a superior. It is based on the principle of empowerment through social processes especially in the mentor-protege relationship. The scale purports to study three factors of this particular empowerment dimension. The first factor could be termed as giving exposure, visibility and protection, the second as facilitating career advancement and the third as acceptance and encouragement. The research says that it is important to combine the technical capabilities of a manager with his ability to mobilize and energize his work group to show results and to demonstrate effectiveness.

Dwivedi (1995) states that empowerment is not new to Indian culture and it has been implemented in various forms in India. He calls empowerment as a continuous process that replaces the old order with the new. Empowerment is an indispensable device that redesigns roles and, builds empowering leadership, empowering attitudes and skills of empowerment.
Singh (1997) puts forth the case of using empowerment to manage stress and lists six empowerment strategies which could be the answer to stress. The empowerment strategies are (1) delegation of authority (2) participation in decision making (3) role-efficacy intervention (4) quality circles (5) empowering leadership and (6) mentoring.

Singh (1997) writes that empowerment recognizes power and authority resides all over the organisation and aims to free them for effective use. He points out if empowerment was to succeed the people in the organisation must desire to be empowered.

Keeping the employees informed is part of the empowerment process, point out Sengupta and Shaikh (1997). The article lists the possible items of information that an employee may require. They are : (1) objectives and policies (2) payment and benefits (3) conditions of service (4) manpower (5) performance (6) financial (7) prospects (8) future changes and projected statements (9) employment ratios (10) comparative information of other companies.

Pati (1997) says that empowerment which is mostly an individual affair becomes an organisational reality only when managers are ready to share their authority, responsibility and accountability with the people through whom they get their work done.
Finally it is to be remembered that to make empowerment a successful managerial tool, it is necessary to replace bureaucracy with an entrepreneurial spirit, and helplessness, with empowerment (Block, 1987).

In studying the concept of empowerment, the definitions given by (1) Thomas and Velthouse (1990) and (2) Das (1992) forms the basis for defining and understanding the empowerment concept in this particular research work.

2.5 THE INFLUENCE OF PRODUCTION SET-UP DIFFERENCES ON EMPLOYEE PERCEPTION

Over the last decade much research has been done on the causes and levels of occupational health and stress (Albrecht, 1979; Cooper, 1982; Cooper & Marshall, 1978). But these research activities have been confined to particular work groups in a single country, such as air traffic controllers (Crump, Cooper & Maxwell, 1981) the police (Cooper, Davidson, & Robinson, 1982), tax officers (Cooper & Rodden, 1985) and Antarctic scientists (McCormick, Taylor, Rivoler & Cazes, 1985). Another study undertook an international comparison of senior and chief executives from 10 countries (Cooper & Hensman, 1985). Another study (McCormick and Cooper, 1988) extended the above study by replicating the earlier research with executives from New Zealand. While explaining some variance in their results the researchers have pointed out one explanation for it could be that certain types of businesses are less stressful than others. Thus the research on work stress has been expanding to admit new dimensions like work level, organisational
climate/culture, sectoral differences etc. into its purview to test their influence on work stress.

One other study conducted a 21 nation survey of role conflict, role ambiguity and role overload as reported by middle managers. The results showed that role stresses varied more by country than by personal or organisational characteristics. It was also found that power distance and collectivism were negatively related to role ambiguity and positively related to role overload. (Peterson et al., 1995)

Khanna (1985) found that executives belong to production and R & D departments experienced higher role stress as compared to these from marketing and administration departments. This throws up the question of the influence of the type of work on work stress even within the same organisation.

Many studies have been conducted to see the influence of sectoral differences on the level of stress experienced (Srinivasan, 1987; Jasmine, 1987; Pestionjee and Singh, 1987; Singh, 1987; Sharma, 1987; Ahmed, Bharadwaj and Narula, 1985). The influence of the sector on stress can be clearly seen in these cases.

Taking the implementation of empowerment into consideration we find some interesting observations made by researchers.
Bushe et al., (1996) found that the nature of the work may require very different models and visions of what an empowered work team is. The research focused on determining if there was any difference between manufacturing and service work teams.

Ford and Fottler (1995) also point out that where the technology is simple and routine employee empowerment may be less appropriate, conversely where the technology is complex the potential gains from employee empowerment can be significant. They also argue that not all organisations are of a pure type - departments within the organisation may have different characteristics. Therefore, they suggest that some departments may be more appropriate fits for employee empowerment than others.

Although no direct comparisons between manufacturing and process industries either in work stress research or empowerment implementation research have been made, the fact remains that production set up differences could affect levels of stress among workers and also decide the empowerment strategy to be applied to alleviate the stress experience within each organisation. Hence, the comparison opens up a new avenue of exploration.

Such studies prompt a comparison of organisational setting based on differing production set-ups (manufacturing Vs processing) by this research. This research also lends scope for examining replication of results.
2.6 RESEARCH QUESTIONS FOR THE PRESENT STUDY

From an integrated perspective of the research scenario portrayed thus far, the following relevant research questions emerge for this study:

1. Is there an underlying multifactor structure to the empowerment concept?

2. What is the relationship between work stress and individually and organisationally valued states in both manufacturing and process industries?

3. Would the extent of work stress experienced by employees differ between manufacturing and process industries?

4. What is the extent and nature of effect that the concept of empowerment as a composite, as well as its dimensions individually will have with work stress in relationship to individually and organisationally valued states?

5. What is the extent and nature of effect that empowerment from supervisor will have with work stress in its relationship to individually and organisationally valued states?

6. Do effects of empowerment on work stress - individually and organisationally valued states differ under different manufacturing set ups?
Chapter III

Research Methodology