CHAPTER III

REVIEW OF RELATED STUDIES

3.1 Job Demand Control among Doctors and Managers

Stress refers to a state of the organism resulting from some interaction within the environment. Job stress is widely recognized as a major problem for both workers and organization that employees them. Job stress results in job dissatisfaction, tension, anxiety and depression and in some cases even serious mental and physical disabilities (Srivastava, 1991).

Copper and Marshal (1976) observed that occupational stress includes the environmental factors or stressors such as workload, role ambiguity, role conflict and poor working conditions associated with a particular job. In a study of job and demographic characteristics vis-a-vis stress among teacher, Lam (1991) observed that characteristics, such as age, gender, teaching experience, professional ranks were significantly related to work stress. Yue (1997) studied the work stress among teachers in Hong Kong and found that job ambiguity, need deficiency and work overload were consistently and positively correlated with job stress. Kittel and Leynen (2003) studied the work stressors and wellness (health outcomes among Belgian school teachers reported higher physical exertion, job demand and low job control than their counterparts.

Information technology industry has been reported as a stress prone workplace (Carr & Jones, 2001; Moore, 2000; Sharma, Khera, Khandekar, 2006; Thong & Yap, 2000; Wallgreen, Hansen, 2007). Rajeswari and Anantharaman (2003) conducted a study on stress among software professionals. The author investigated source of negative pressure among software professionals, from the perspective of the software development process. The results indicated that stress resulted from fear of obsolescence and individual team interaction accounted
maximum. More recently Sharma, Khera, Khandekar (2006) conducted a study on computer Related Health Problem among Information Technology Professionals. It was found that computer related morbidity has become an important occupational health problems and of great concern.

Organizational change, mergers, acquisitions and take over have been a subject of stress research in organizations (Vakola & Nikolaov, 2005; Rubey, Earnshaw, Marchington, Cooke & Vincent, 2002). Burke and Greenglass (2001) examined the effects of stress related to hospital restructuring and downsizing on full time and part time nurses staff and reported greater emotional exhaustion and poorer health than their counterparts.

Vanagas & Bihari-Axelsson (2004) conducted a study to explore the psychosocial stress level among Lithuanian General Practitioners. The response rate was 66% (N=197). Study highlighted that highest prevalence of psychosocial stress was among widowed, single and female general and lowest prevalence of psychosocial stress was among males and older age general practitioners. Psychosocial stress occurred when job demands are high and job decision latitude is low. Result also indicated that high psychological workload demands combined with low decision latitude has the greatest impact to stress among general practitioner. It was also found that high job demand, high patient load and young age of general practitioners can be a significant predictor of psychosocial stress among general practitioners.

Earlier, Appleton, House, Dowell (1998) conducted a study to determine level of psychological symptoms, job satisfaction and subjective ill health in General Practitioners and their relationship to practice characteristics and to compare levels of job satisfaction. The main outcome measures of the study included quantitative measures of practice characteristics, job satisfaction, mental health and general physical
Results indicated that 52% scored 3 or more on the General Health Questionnaire, which indicated a high level of psychological symptoms. 56% General Practitioners felt that work had affected their physical health. It was also found that physical and mental health were associated with several aspects of workload, including list size, number of session worked per week and amount of time spend on call.

In a similar study, William, Konrad, Linzer, Mc Murray, Pathman, Gerrty, Schwartz, Scheckler, Douglas (2002) studied the impact of physicians practice and patient characteristics have on physicians stress, satisfaction, mental and physical health. Total 5000 physicians participated in the study. Results indicated that physicians job satisfaction and stress mediates the relationship between physicians practice and patient characteristics as independent variables and physicians physical and mental health as dependent variables. Study further indicated that patient characteristics exerted little influence and job stress powerfully influence job satisfaction, physical and mental health among physicians. These findings support the notion that workplace conditions are a major determinant of physical well being.

Khuwaja, Qureshi, Andrades, Fatmi & Khuwaja (2002) studied Job satisfaction and stress among doctors that affected the quality of health care. The results indicated that majority (68%) of the doctors were not satisfaction with their jobs, Overall mean scores for satisfaction was low for workplace significant lower satisfaction with regard to workload, relationship with colleagues and autonomy as compared to males counterparts. Overall 48% of doctors graded job stress from high to very high level.

Freeborn (2001) conducted a study to identify the factors that predicted professional satisfaction, organizational commitment and burnout among HMO physicians. The average response rate was 80 % (N=608). Results indicated that the single most important predictor for all
three outcomes was a sense of control over practice environment. Other significant predictor includes perceived work demand, social support from colleagues and satisfaction with resources. Study also indicated that older physicians had higher level of satisfaction and commitment and lower level of burnout. Study further indicated that Pediatricians were more satisfied and committed to the HMO and were less likely to experience burnout.

Earlier, Richardson, Astrid, Burke & Ronald (1991) examined the relationship among occupational stress, job satisfaction and stress outcome, as well as the particular practice conditions that characteristics and individual differences that may contribute to stress and satisfaction in a national sample of 2584 Canadian physicians who completed questionnaire. The results indicated that sources of stress were largely related to time pressure, however, ability to help patients and relationship with colleagues were major source of satisfaction. Subjects who experienced greater level of occupational stress were less satisfied with their practice and had more negative views about the health care system. Dissatisfaction and frustration with limitations and procedure imposed on the profession by the government predicated negative attitude about the health care system most strongly.

Schattner and Coman (1998) conducted a study to identify the work related stressors of Australian metropolitan general practitioners. Results indicated that “Time pressure to see patients” was the most frequently reported stressors. It was also found that the General Health Scores did not correlate significantly with major stress outcomes measures but 12.8% of general practitioner had scores indicative of severe psychiatric disturbance. It was further indicated in the study that general practitioners working for 6 or more session per week were more likely to be moderately or severely stressed than those working part time. Contrary to other studies this study reported absence of relationship between stress and
health among practitioners, the inconsistency in findings needs further investigation.

Grazyna & Kluge (1987) earlier investigated the 5 factors responsible for stress experienced by doctors in the job. 5 factors are responsible for stress experienced by doctors in the job. Factors included the following: character of the job, the vocational role, the pattern of relations, social climate in a particular organization, and the course of the professional career. A standardized questionnaire was administered to 67 gynecologist obstetricians and ecclesiologists. Subjects’ assessed the degree of negative emotion experienced in difficult situation on the job. Results showed that stressing factors were identified in each of the studied sphere. The most painful experiences were reported in the sphere of the material and organization condition of work, further in relation to certain aspects of the job itself to certain aspects of the job itself, and in situation related to vocational role of doctors.

Agius, Blenkim, Dreary, Zealley, Wood (1996) conducted a study to assess the work demands potential stressors of health service consultants. Five hundred (n=500) NHS (National Health Service) consultants was targeted by postal questionnaires including information on demographic factors, work demands, occupational stressors. Principal components analysis showed that professionals work demands of consultants fell into three categories, clinical academic and administrative. These consultants perceived stressors, separated into four main factors clinical responsibility, demand on time, organizational constraints and personal confidence.

Linzer, Marks, Martha, Doughlas, Jeffrey, Mc Murray & Julia (2002), studied the assessed predictors to the demand–control support model of occupational stress scale responses were examined for 2,326 primary care and specialty physicians. Potential predictors include, gender, age, case mix and time pressure in patient visits, workload practice type
especially, work control, isolation and support for balancing work and home. Results showed that job demand such as solo practice; work hours, time pressure and case mix predict stress as did less control of workplace hassles. Lack of support by colleagues for balancing work and home was worsened by work demands such as complex patients and time pressure in patients visit.

Mc Glone and Chenoweth (2001) investigated the role of job demand and job control as predictors of job satisfaction in general practice (GP). The results indicated that average general practice perceived their work as characteristics by high demands and low control. 50% of the respondents were satisfied with their work. The major determinants of job satisfaction were gender, job demand, hours worked and job control. It was also found that the job control was the most powerful predictor of job satisfaction. Although no evidences was found for a modifying effect of control on the relationship between demands and satisfaction. Interaction between hours worked and control was evident.

In the study, of occupational stress, job satisfaction and well-being in anesthetists. Cooper, Clarke, Rowbottom & Aurea (1999) examined that an understanding of the extent and an etiology of occupational stress within medical specialties is lacking, despite the extensive research into stress in health care organizations. This study examines the nature of stress experienced by anesthetists and its effect on job satisfaction and individual’s well-being. The Occupational Stress Indicators (OSI) and additional anesthetist specific stress question were distributed 1000 members of the Association of Anesthetists of Great Britain and Ireland, yielding 564 useable responses. Compared to other workers, anesthetists reported high levels of stress comparable to other health care professionals. Four themes emerged; daily demands, communication within the hospital, maintaining standards of patient care, and accountability. Multiple regression analyses found that organizational issues, especially communication within the hospital and perceived lack of
control, were most important in determining job-satisfaction and individual well-being.

Peeters, de Jonae, Janssen and Vander (2004) studied the role of negative Work Home Interference (WHI) in the classical stressor strain sequence. First, the predominant time lagged path between Work Home Interference and job stressors was investigated. Furthermore, the direct and indirect (mediating) process of WHI, job stressors, and employee health was examined. The sample consisted of 383 health care employees. Results showed evidence for predominant time-lagged paths form Time 1-job stressors to Time 2 WHI and not the other way around. In addition, it appears that WHI played a partial mediating role between all 3 types of job stressors on the one hand and exhaustion on the other. Schwartzbery and Dytell (1996) studied the scales of work stress and family stress as well as outcome measures of depression and self esteem were completed by 94 mothers and 48 fathers in dual earner families. Working mothers and working fathers reported equivalent levels of family stress, job family interference, and psychological well-being, although mothers did report a higher level of lack of task sharing. Both job and family stress affected self-esteem and depression of dual earner mothers and father.

The study by Adams and Jex (1999) incorporates research regarding time management into a model of work-family conflict. The authors hypothesized that 3 types of time-management behaviour, would have both direct and indirect (through perceived control of time) relationships, with work interfering with family and family interfering with work. It was also hypothesized that both of these types of work-conflict would be related to the strain outcomes of job dissatisfaction and health complaints. This model was tested with a sample of 522 workers.

Noor (2002) studied the relationship between work family conflict and well-being, testing the 3 possible pathways (i.e. direct, moderator and
mediator effect). It was predicated that work family conflict would be negatively correlated with well-being in 310 Malaysian employed women (aged 19-59 years) with families. Measures included the interaction strain scale, spheres of control scale, the General Health Questionnaire and General Job Satisfaction Scale. Work-family conflict was a significant predictor of both job satisfaction and distress negatively related to job satisfaction and positively related to symptoms of distress. More importantly, the results provided support for the effects of all three pathways of control on the relationship between work-family conflict and well-being, depending on the outcome measures. For job satisfaction had direct effects, acted as a partial mediator and played a significant moderating role.

The cost of stress for the nation and for the particular organization is currently extremely high through absence, litigation and the fact that unhappy, tense, tied or anxious doctors produce quality care. Indeed stressed doctors may make considerably more errors than that of doctors whose sense of well being is high. Researchers and practitioners approach the topics from any different perspectives and orientation including medical, engineering and sociology (Beehr and Franz, 1987; Beehr & McGrath, 1992).

Managerial jobs have generally been identified as a high stress occupation (Karasek, 1979, Beehr, King & King, 1990; Bacharach and Bamberger, 1992; Cohen, 1997; Noblet, et al., 2001). In the pursuit for organization excellence, managers need to work under highly stressful circumstances. Researches have indicated that work related stress among the managers in reaching epidemic proportions (Williamson and Vine, 1998; Cartwright and Boyes, 2000, Noblet, Rodwell & Mcwilliams 2001) and that when compared with others occupations they are subjected to high level of stress (Cohen, 1997). The job of a manager has been identified as demanding, complex and varied. It included the management
of people, information and decision making processes and is a critical human resource (Fryer, 1997).

Ivancevich and Matteson (1999) observed that managers are responsible for the effectiveness of individuals, groups and organizations. The central role that manager play in the performance of an organizational success (Albrecht, 1979). Emsely (2003) in their study on multiple goals and other managers’ job related to tension and performance, suggested for middle managers and vice presidents job satisfaction was related more frequently to the organization’s climate and less frequently to is structure and control. Mohan and Chauhan (2000) studied 50 government, 48 private sector and 76 public sector middle managers (with 5-10 years experience) in India. They found that public sector manages reported higher scores on role erosion followed by government and private sectors managers. Earlier, Pestonjee (1987) observed that the role erosion have contributed significantly to managerial stress.

More recently, Mohr and Puck (2007) analyzed the effects of inter sender role conflicts experienced by managers of International Joint Ventures (IJV) on their individual job satisfaction and job stress. The findings show that managers experiencing high level of role conflict also report lower job satisfaction and higher job stress of International Joint venture managers. High job stress of International Joint Venture manager is related to low performance of International joint Ventures, while there is no statistically significant relationship between International Joint Venture manager's job satisfaction and International Joint Venture performance. Thus, International Joint Venture managers' job stress mediates the relation between inter sender role conflict and International Joint Venture performance.

Several investigators studied gender as a potential variable while studying stress among managers and other organizational workers (Bernin & Theorell, 2001; Guppy & Rick, 1996; Lundberg & Frankenhaeuser,
1999, Torkelson & Muhonen, 2003; Miller, Greyling, Cooper, Lu, Sparks & Spector, 2000; Vermeulen & Mustard, 2000; Vagg, Spielberger & Wasala, 2002). Torkelson and Muhonen (2003) investigated gender differences at managerial and non-managerial level in perceived stress and control and the relationship. Questionnaires were collected from 281 women and men at managerial and non-managerial levels in sales department in a large Swedish telecom company. The results showed that there was only minor difference in perceived stress and in case of control, no difference was observed when compared to men and women working at the same level in the organization. Instead the difference in perceived stress and control were found between managers and non managers.

Vermeulen and Mustard (2000) using the demand-control-support model of job strain, examined gender difference in the relationship between psychosocial work exposures and psychological distress in cross sectional sample of 7,484 employed Canadians. Compared with low strain work, high strain work and active work were associated with a significantly higher level of distress in both men and women. Differences in psychological distress in relation to psychosocial work exposures were greater for men than for women. Low social support was associated with higher distress across all categories of job strains, and the combined effect of low social support and high job strain was associated with the greatest increase in distress. This pattern was similar in men and women. This study suggests the psychosocial work exposures may be a more significant determinant of psychological well-being in male workers compared with female workers.

Vagg and Spielberger (1999) studied the need to assess the perceived severity and frequency of occurrence of specific sources of occupational stress and job pressure and lack of organizational support were recognized as key dimensions of stress in the work place. In addressing concerns about the independence of Job Stress Survey (JSS) severity and frequency ratings and the utility of the JSS for assessing jobs
with extensive person-machine interactions, the authors noted the
correlation among JSS severity and frequency scores were relatively low,
and that person focused stressor items were relevant for employees with
person machine job because most workers are required to deal with
supervisors and fellow employees. It was concluded that the JSS provides
important information about sources of occupational stress that can
adversely affect the health and productivity of men and women employed
in a wide variety of work settings.

Tetrick, Slack, Da Sliva and Sinclair (2000) compared the stress
strain process for business owners and non-owners and also examined
the differences in job demands, emotional exhaustion, satisfaction and
social support. They found that owners has less social support from work
related sources and perceived lower levels of role ambiguity and role
conflict, less emotional exhaustion and higher levels job satisfaction and
professional satisfaction than did non owners. They also found that social
support moderated the relationship between emotional exhaustion and job
satisfaction but not between emotional exhaustion and professional
satisfaction.

Stamper and Jhokke (2003) examined the impact of perceived
organization support (POS) on the relationship between boundary spanner
role stressors (role conflict and role ambiguity) and both work attitudes
(job satisfaction and intent to remain) and behaviour (task performance).
235 sales people from five different firms completed questionnaires.
Results indicates that POS has a strong effect on role ambiguity and role
conflict, as well as job satisfaction and intend to remain POS had a
moderating effects on several role stress outcome relations. Lack of
support from colleagues, friends and organization also plays an important
role in causing stressful environment.

Brief, Burke, George, Robinson et at., (1988) studied the
relationship of negative affectivity (NA) and Job Strain among 497
managers and professionals. They observed that NA inflates stress and strain and opined NA as both a methodological nuisance and substantive cause of stressful work events, and concluded that NA should no longer remain an unmeasured variable in the study of job stress. Chen and Spector (1991) reported similar findings. In addition these researchers reported that NA account for a large proportion of shared variance between stressors and physical strain (as indicated by absence, doctor visits and physical symptoms). However contrary to the earlier study by Brief et al. NA did not account for much of the variance shared by stressors and affective strains (job satisfaction, anger, and feelings of stress and frustration). This indicated that NA differential affect on physical and emotional stressors.

Ghosh (2000) studied the pattern of occupational stress in two different occupational groups, namely physicians and executives. Occupational stress inventory was administered on these groups of individuals (23 Physicians and 27 Executives) which measured these dimensions of occupational adjustment namely occupational stress, psychological strain coping resources. The subjects were selected randomly from government hospitals and financial institution. In general, the two groups were found to be within the normal range of occupational stress through executives were found to experience more occupational stress than the physicians. It was observed that executives differed significantly from the physicians in terms of role insufficiency and responsibility. That is for an executive there was poor fit between their skills and the job they were performing. Copying resources were found to be high in the area of social support and rational/cognitive coping i.e. both the groups use these resources to solve the problem.

Tetrickk and LaRocco (1987) studied understanding and control over event in work environment, perceived stress and satisfaction among physicians and dentists. The findings indicated that understanding and control were found to have moderating effects on the relationship between
received stress and satisfaction. While understanding prediction and control were found to have direct relationship with perceived stress, only control has a significant direct relationship with satisfaction. However, none of these variables were found to have significant direct relationship with psychological well-being.

Van Katwyk, Fox, Spector and Kelloway (2000) described research linking job stressors to a wide range of affective states at work. In study 1 a multidimensional scaling procedure was used on a matrix of similarity judgments by 51 employees of 56 job-related affective statements to support a 2-dimensional view of affective well-being. In study 2, ratings of the affective statements by 100 employees further supported the contention that the dimensions were pleasure displeasure and degree of arousal. In study 3, 114 full time university employees responded to Job-Related Affective Well-Being Scale, which was found to be related to measures of job stressors as well as job satisfaction and physical symptoms.

The above review indicates that role is an important dimension in understanding integration of individual with the organization and individual global well-being. The stress among medical professionals and managers is important phenomenon. The complexity of modern life is reflected in the multiplicity of roles that society. The review also revealed that differentiation of roles and the increasing complexity of role structure characterize doctors' profession as well as managerial profession. One major challenge which a professional faces today is that of managing this complex structure of roles effectively by achieving an integration of positive experiences of emotion for instance happiness, joy, satisfaction both with system of roles and also amongst the various roles he occupies. Such an integration may not only be necessary for the mental well-being and personal effectiveness, but may also be important for the organization in making the best use of an individual creativity and maximizing it through the process of synergy.
3.2 Anxiety among Doctors and Managers

Anxiety is a complex emotional syndrome which consists of unpleasant cognitive and affective status and physiological arousal as basic component (Lazarus and Averill, 1974).

Majority of studies have reported a significant and positive association of various organizational role stressors and anxiety across different occupational groups (Dunhan, 1978; Gavin & Axelod, 1977). Wilson and Brown (2002) studied the effect of a multidimensional stress management intervention on workers anxiety, perceived occupational stress and coping among nurses and found that there was no significant difference in anxiety, perceived occupational stress and coping. They also found that low level of anxiety would be associated with lower level of stress. Chen, Popovich & Kogan (1999) studied 112 employee’s working in various organizations and found that work anxiety increased when employees engaged in communication pertaining to negative job related contents.

Anxiety is also common among professional musicians (Rife, Lapidus, Shnek, 2000; Farnbach, 2001; Wilson & Ronald, 2002). Kenny, Davis, Oates (2004) explored the inter-relationship among state and trait anxiety in a group of elite operatic chorus artists employed full time by a national opera company. Results indicated that the chorus artists reported higher occupational role concerns and higher occupational personal strain than normative sample. Results further indicated that higher score on personal resources were associated with the higher scores on trait-anxiety.

Plaisier et. al. (2006) reported in their study that poor working conditions may be an important prediction of stress and may contribute to the development of anxiety. Other studies also found abundant relationship between working conditions, stress and anxiety (Karasek, 1979, Pikharl, Bobak, Pajak, Malyntina, Kubinova, Topar, Sebakova,
Nikitin, Marmot, 2004; Wang and Patten, 2001; Niedhammer, Chastang, David, Barouhiel, Barrandon, 2006). Earlier Beehr and Mc Grath (1992) reported that stress producing environmental circumstances (SPECs) in the workplace lead to anxiety, and this anxiety is considered as a work related strain. Study also revealed that social support can reduce the strain by helping in one of the three ways that is directly reducing the anxiety, by interaction with stress producing environmental circumstances to reduce the strength of their effect on anxiety and by weakening the strength of SPEC’s themselves.

In Malaysia, Rusli, Edimansyah and Naing (2008) studied the relationship between working condition (Job demands, job control and social support), stress, anxiety and perceived quality of life factors (physical health, psychological well being, social relationship and environmental conditions) among 698 male automotive assembly workers. The scales used in the study were validated Malay version of the Job Content Questionnaire (JCQ), Depression Anxiety Stress Scale (DASS) and the World Health Organization Quality of Life Brief (WHOQOL-BREF) was used. A Structural Equation Modeling (SEM) analysis was applied to test the structural relationships of the model. The results of the SEM supported the hypothesized structural model. The model showed that social support (JCQ) was directly related to all 4 factors of the WHOQOL-BREF and inversely related to stress. Job demand (JCQ) was directly related to stress (DASS) and inversely related to social relationship (WHOQOL-BREF). Stress (DASS) was directly related to anxiety and inversely related to physical health, environmental condition and social relationship (WHOQOL-BREF). Anxiety (DASS) was found to be inversely related to physical health (WHOQOL-BREF). Study further indicated that stress and anxiety (DASS) mediate the relationships between job demand and social support (JCQ) to all the 4 factors of (WHOQOL-BREF). Study also indicated that higher job control increases the social relationship,
while higher job demand increases the self perceived quality of life related to environmental factors.

Rani and Yadav (2000) studied anxiety level among working and non-working women did not find sufficient difference between anxiety scores of two groups. They further indicated that working women were better adjusted than their non working counterparts and had less anxiety in spite of their dual responsibilities. Khanna (1992) studied life stress among working and non working women in relation to anxiety and found that anxiety is significantly and negatively related to positive life change in non working women.

Sanne, Mykletum, Dahl, Moen, Tell (2005) conducted a study to test the strain/ iso strain interaction and buffer hypotheses of Job Demand-Control support model in relation to anxiety. 5562 workers participated in the study. The result indicated that the strain and iso-strain hypothesis were confirmed. The results further revealed that high demands, low control and low support individually but particularly combined with risk factor of anxiety.

Chambers and Campbell (1996) reported anxiety levels in general practitioners are associated with personal and practice characteristics. 896 general practitioners participated in the study. Results indicated that no gender difference was found in rates of anxiety. Over all 19% of respondents were cases of anxiety and 22% others had borderline anxiety scores. Results further indicated that anxiety cases were associated with living alone, amount on call duties undertaken.

Uncu, Bayram and Bilgel (2006) conducted a cross sectional study on a group of Turkish Primary health care physician with regard to job related emotional perception and their reaction in terms of stress and anxiety. 274 general practitioners participated in the study. Job related Affective Well being Scale (JAWS) and Depression Anxiety Stress Scale (DASS) was used. Results indicated that physician’s job related negative
emotional perceptions are associated with reactions in terms of stress and anxiety.

Caplan (1994) conducted a study on 81 hospital consultants, 322 general practitioner and 121 senior hospital managers to find the relationship between stress and anxiety. Results indicated that all subjects scored positively on the general health questionnaire, indicating high level of stress-scores of hospital anxiety and depression scale indicated only 46% were regarded as free from anxiety and 25% were borderline cases and 29% were likely to experience clinically measurable symptoms. Sutherland and Cooper (1992, 1993) reported that anxiety scores for both men and women doctors have significantly increased compared to pervious study (Cooper, Rout, Fragher, 1989) of 1817 general practitioners. Probst, Godenick and Palesch (2003) studied the dimension of anxiety experienced by a state wide sample of 350 South Carolina family practice residents. The findings indicated that residents reported lower level of anxiety across most dimensions compared with other residents and practicing physician’s population. It was concluded that these family practice residents did not experience excessive levels of anxiety during residency training either as a trait, state or somatic response.

D Newbury-Birch (2000) studied the work related stress and anxiety has a profound effect on an individual’s well being. In the case of doctors, this may also affect patient care. This study measured stress, anxiety and job satisfaction and the influence of personality factors on these in a group of pre-registration house officers in the North East of England. A total of 109 pre-registration house officers anonymously completed life styles questionnaires designed to measure self rated psychological stress, state anxiety, job satisfaction, and personality characteristics. Results showed that 37.5% women and 24% of men pre-registration house officers suffered form possible psychological stress altogether 38-9% of women and 5.4% of men were suffering from possible anxiety and 8.3% of women
and 2.7% of men were suffering from possible depression. Stress, anxiety and depression scores were significantly correlated, with neuroticism scores in both men and women. The personality characteristic of neuroticism was a predisposing factor for stress and anxiety in the junior doctors who may be taken into consideration when offering support and counseling.

Strazdins, D’souza, L. Y. Lim, Broom, Rodgers (2004) conducted a cross-sectional survey on 1,188 mid-aged Australian managers and professionals. It was found that both job strain and job insecurity showed synergistic association with health and anxiety. Stephen and Greenglass (1991) studied social support and anxiety among female managers and found a negative relationship between family support and job anxiety. Spector (2002) found that occupational stress has been recognized as a major health issue for modern work organization and lead to negative emotional reaction (e.g. anxiety), physical health problem in both short term (e.g. headache or stomach disease) and counter productive behaviour at work. Perception of control plays an important role in this process, being associated with all these variables. It was also found that control at work can be an important element in employee’s health and well-being.

The preceding researchers by and large predict positive association between negative emotion of anxiety and stress at workplace.

3.3 Anger among Doctors and Managers

Anger is an emotion subjectively experienced as an arousal state of antagonism towards someone or something perceived to be source of an aversive event (Novaco, 2000). It is viewed as an emotional response to provocation that is determined by three modalities of person variables: cognitive, somatic effective and behavioural (Novoca, 1975).

The workplace has been identified as one of the most interpersonally frustrating, that people have to deal with and therefore it is
expected that workers will frequently experience anger (Fitness, 2000; Grandey et al., 2002). Fitness (2000) examined similarities and differences amongst superiors, co-workers and subordinates anger experience and also the causes, features and consequences of workplace episodes. They found that features of anger episodes were different according to the status of the respondent. Superiors found to be angered by morally reprehensible behaviour and public humiliation and subordinates angered by unjust treatment. Subordinates were found to be less likely than superiors to confront the anger target and are more likely to consider the incident unresolved. Further they found that humiliating offences elicited more intense hate than non humiliating offences. Hate was also negatively associates with situational power and with perceived successful resolution of anger-eliciting events.

Grandey et al. (2002) found that over a two week period, participant at work, who in total recorded 168 anger events, experienced 42 percent “higher anger” events (i.e. event about which they reported that they felt either “quite a bit” or “extremely angry). These experiences of anger were triggered by a range of events such as perceived personal attacks, perceived incivility, interferences with task achievement and unfair treatment. Earlier, Bensimon (1997) indicated that most employees experience annoyance in the work at least 10 times each day and that 25% of workers experiences anger in the workplace. The reasons for anger include a lack of employment security, salary inequities, poor working conditions, low job control, interpersonal conflict work alienation and work harassment by supervisors and co-workers (Bensimon, 1997; Naryanan, Menon & Spector, 1999, Newman & Baron, 1977).

Fitzgerald, Haythornthwaite, Suchday Ewart (2003) conducted a cross sectional study to test the hypothesis that characteristics of work that contributed to job strain also increase anger in young service sector workers, in a sample of 230 young Black and White men and women. Results revealed that low level of job dissatisfaction were independently
associated with increased work-related anger. Results further indicated that anger experienced at work may be an early marker of job stress.

Hepworth & Tower (2004) examined the effects of individual differences variables (trait anger, self control, negative affecting attitude toward revenge and attributional style) and Charismatic leadership on incidents of workplace aggression in a sample of 213 employees from a wide range of organization. The results indicated that the individual differences variables accounted for an additional 5% after controlling for individual differences. Further study revealed that psychological empowerment partially mediates the relationship between charismatic leadership and workplace aggression.

Schat and Kelloway (2000) examined the role of perceived control in ameliorating the negative outcomes associated with the experience of violence at work using two large sample of hospital staff (N=189) and group home staff (N=195). Results suggested that perceived control did not moderate the relationship between violence and fear or between fear and emotional well-being somatic health, or health. Further study indicated that perceived control was directly associated with emotional well-being and indirectly associated with somatic health and neglect. Gordon (1997) reported that professional care givers become so stressed by impossible demands of patients that they are unable to give care they would otherwise be able to offer and their frustration could turn to undifferentiated anger affecting their performance.

Skjorshammer (2003) studied the interaction between the health professionals and the consequences of anger behaviour on work cooperation among professionals in a Norwegian hospital. Results of the study indicated that angry behaviour, in particular from doctors, is a major stress factor in the work day of nurses and has a negative impact on their work environment and professional cooperation and may even reduce the
quality of patient care. Bartlett (2002) reported that physicians who were
dissatisfied with their job tend to misdirect their anger.

Satar, Cenkseven, Karcıoglu, Tapa and Sebe (2005) evaluated anger level of 62 medical and 54 surgical residents with regard to the department in which they worked, seniority, sex, satisfaction with their work environment and number of night shifts worked per month. It was found that levels of trait anger were greater in their first two years. Men trait anger levels were greater in the residents who were not satisfied with their department. Male residents had higher level of anger than their female counterparts. Residents also clarified the person and situations that made them angry at work.

Li, Calzi, Farinelli, Ercolani, Aliants Manigrasso and Taroni (2006) conducted a study on physical rehabilitation professionals including four categories that is nurses, therapists, physicians and technicians. It was observed that feeling of anger have quite often emerged in the different groups of professionals at different levels (more or less expressed). No significant difference was found among 4 categories of professionals on anger, although feeling of anger at different level was found to be repressed or manifested and more or less tending towards hostility. The respondents reported high level of state anger while the trait anger levels were normal, together with a low level of anger temperament dimensions. As for the expression of anger high scores were obtained in the anger toward inside scale rather than anger toward the outside or controlled anger sales.

Micheles, Probst, Godenick and Palesch (2003) studied the dimension of anxiety and anger experienced by a state wide sample of 350 South Carolina family practice residents. The findings indicated that residents reported lower level of anxiety and anger across most dimensions compared with other residents and practicing physician’s population. It was concluded that these family practice residents did not
experience excessive levels of anxiety and anger during residency training either as a trait, state or somatic response nor did they significantly suppress anger.

Researchers have found that alleged gender difference in anger arises from socialization practice in the 1940's and 1950's in which males were taught to suppress it (Kemp and Strongmen, 1994; Kelly & Huston-Comeaux, 1999). Investigators attempted to study anger repression across age and gender to explore the type and nature of anger expression. The findings of these studies revealed that while girls and women scored significantly higher on anger suppression and anger control, boys and men scored significantly higher anger expression (Cox, Stabb & Hulges, 2003; Mc Canatha, Leone & Armstrong, 1997). Women are generally expected to feel comfortable in expressing happiness, sadness and fear and to feel reluctance in exhibiting anger and pride; men and expected to display the observe pattern (Kelly & Hutson-Comeaux, 1999; Plant, Hyde, Kettner & Devine, 2000).

Averill (1983) further reported that undergraduate students and community residents, women and men did not differ either in issue that provoked anger or in the level, frequency, intensity and open expression of their anger. The only difference noted was that women were 4 times more likely to cry when angry than were men. A women reluctance to express anger is associated with negative consequences of interpersonal relationship (Piltch, Walsh, Magione & Jennings, 1994; Timmers, Fischer & Manstead, 1998) and men's expression of anger is important to maintain status and power and they are least bothered about the consequences of relationship (Piltch et.al., 1994; Timmers et.al, 1998).

Later Ferguson, Eyre & Ashbaker (2000) found that men and women differed in the "unwanted identities" that prompted shame and anger, these researchers & however found no gender difference in the expression or suppression of anger. Fine and Olson (1997) found that
men and women did not differ in their anger reaction to various provocations. Earlier Bartz, Blume and Rose (1996) also reported that gender accounted for less than 1% of the variance in self-report measures of anger experiences, expression and control. Kopper & Eppersohn (1991) although reported no significant gender difference in the expression of anger, however, they did find significant relationship between sex role identity and anger prunes and anger expression.

Kiewitz (2002) inquired into the role of anger at work by proposing a theoretical framework for studying workplace anger, labeled the Work Anger Mode (WAM). In order to test the model, data were collected from 442 working adults by means of self reported questionnaire. Data analysis results support the model for the most part. Analyses revealed significant relationship between organizational injustice, interpersonal transgression, or breach of psychological contract and measures of deviant work behavior, namely personal and organizational deviance. Taken together the findings are interpreted to means that workplace anger has considerable ramification. However, while anger at work yields consequences such as decrease in employee's affective organizational commitment, overt expression of anger at work, and turnover, this does not necessary entail that employees will engage in seriously deviant work behaviour. Watson (2000) suggested that an individual felt anger and annoyance were treated unfairly by others at workplace. Kassinove and Tafrate (2003) reported that healthcare professionals tended to get angry in response to patient anger. The initiation and expression of anger differed greatly and a multitude of variables determines whether anger result in challenging behavior.

Domagalski and Steelman (2007) investigated both the independent and joint influence of gender and relative organizational status on workplace anger expression. The findings of the study showed that emotional restraint is the most frequent method of handing anger across all groups. Lower status males, however, directly express their anger
around higher status members significantly more frequently than do lower status females.

Researchers studied anger and hostility as a component of type A behaviour pattern (TABP) among human service professionals. (Hagihara, Tarumi, Miller and Marimoto, 1999; Greenglass, 1987, Burke and Deszca, 1982; Sood, 1988, Stober, 2003) Kaplas (1996) studied 200 bank officers and observed that those with Type-A behaviour, reported greater anger expression as compared to their counterparts with Type B behaviour. Greenglass (1987) examined 133 female managers and reported that for Type A, sex discrimination was positively associated with job anger when social support from one's boss was low and with increasing support Type A's were less likely to report anger.

Negative emotion of anger, hostility and aggression has also been investigated among human service professionals (Van der Ploeg, Van Bumen, Van Brummelan, 1985: Campbell and Muncea, 1994, Fitness, 2000; Mearns and Mauch, 1998). Rawat (1996) examined 200 school teachers and reported a positive and significant relationship between organizational role stress and anger (for example, ax/ex, ax/out, ax/in and ax/con). Maisto and Lester (1997) studied 47 elementary school teachers in New Zealand and found that job satisfaction was associated with scores on expression rather than suppression of anger, anxiety and depression. Mearns & Mauch (1998) examined the relationship between occupational stress, negative mood regulation expectancies, coping anger and distress among 50 police officers. They found that a high level of negative mood regulation expectancies were associated with lower levels of anger among police officers. The strong mood regulation expectancies buffer the effects of even higher level of occupational stress.

The above review indicated that researchers have focused their attention on the study of anger in the human service professionals. The available research evidence reveals that anger its modes of expression
appear to contribute to stress in the workplace. Research efforts have concentrated on the experience, expression and control of anger and relationship between these factors and stress.

3.4 Depression among Doctors and Managers

Depression is an emotional state of dejection, feeling of worthlessness and guilt and usually apprehension (Pestonjee, 1992).

Work stressors directly affect workers depressive symptoms. Kandel, Davies and Raveis (1985) examined the effect of role stress on depressive symptoms among 197 working women in New York. Occupational, household, marital and parental roles were measured. The occupational role was a significant stressor including depressive symptoms. Depressive symptoms were more severe when occupational role was combined with the household roles. Author further reported that significant stress related factors in depression was the level of control people have on work at home and at job. Cahill and Landsbergis (1996) examined job strain among 4,018 post office mail-handlers in the US using the job demands and control model. They measured job demand, job control, supervisors support, and psychological strain through a self administered questionnaire survey. Heavy job demands, low job control and low supervisors support were strongly related to psychological strain.

Mausner-Dorsch and Eaton (2000) studied the effects of psychological work environments on depression using the job demands and control model among 905 full time workers in the Baltimore area. Psychological work environments (job demand and job control) were measured by Karasek’s (1979) Job Content questionnaire (JCQ) and depression data were collected by the National Institute of Mental Health Diagnostic Interview Schedule (DIS). Low decision authority was significantly related to a high number of depressive symptoms. Heavy job demands tend to increase depressive symptoms however, this relationship was not significant.
Abramis (1994) interviewed 281 workers living in the greater Detroit area to identify a clear relationship between work stressors. Strains were measured by job dissatisfaction, anxiety, anger and depression by Hopkins symptoms checklist. Job performance was measured by technical performance, social performance, absenteeism and tardiness. Depressive symptoms were significantly related to role conflict and absenteeism was related to role conflict, job insecurity, anxiety and depression. Technical performance was significantly associated with role conflict, depression and anger. This study showed not only that work stressors were directly related to depressive symptoms and job performance but also that depression mediated the relationship between work stressor and job performance.

Driscoll, Worthington and Hurrell (1995) in a study on depression among workers found that workers assaulted at workplace experience depression. The study was conducted on 5000 public service employees. Further, the depressed employees reported higher anxiety and job satisfaction. In addition it was also found that work related social support had an influence on the experience of depression. Taris, Bok and Calje (1998) studied the relationship between job characteristics and depression among 593 young Dutch workers. The results showed that depressive workers were less likely to experience job transition than non-depressive workers. They also found that if depressive workers did experience a job transition, work outcomes were less positive than for non depressive workers. It was concluded that results between job characteristics and depression can be constructed as a reciprocal relation.

Dragano, He, Siegrist, Moebus, Jockel, Erbel (2008) conducted a comparative analysis of two theoretical models, the demand-control and the effort reward imbalance model. The investigators interviewed 1,811 working men and women from the baseline screening of an epidemiological cohort study (job stress, depressive symptoms (CES-D),
health behavior, medical history, and socio demographic characteristic). Results indicated that control, effort reward imbalance and over commitment were independently associated with depressive symptoms. Further it was reported that relatively highest level of depressive symptoms was found in employees who had low control and high over commitment. It was concluded that components of adverse psychological work environment are associated with depressive symptoms in an unselected working population.

More recently, Rusli, Edimansyah and Naing (2008) studied the relationship between working condition (Job demands, job control and social support), stress depression and perceived quality of life factors (physical health, psychological well being, social relationship and environmental conditions) were assessed among 698 male automotive assembly workers in Malaysia. The scales used in the study were validated Malay version of the Job Content Questionnaire (JCQ), Depression Anxiety Stress Scale (DASS) and the World Health Organization Quality of Life Brief (WHOQOL-BREF). A structural equation modeling (SEM) analysis was applied to test the structural relationships of the model. The results of the SEM supported the hypothesized structural model. The model showed that social support (JCQ) was directly related to all 4 factors of the WHOQOL-BREF and inversely related to depression and tress (DASS) and inversely related to social relationships (WHOQOL-BREF). Stress was directly related to depression (DASS) and inversely to physical health, environmental conditions and social relationship (WHOQOL-BREF). Depression (DASS) was inversely related to psychological well-being (WHOQOL-BREF). It was further indicated that depression (DASS) mediates the relationship between Job demand and social support (JCQ) to the 4 factors of WHOQOL-BREF.

Frone, Russell & Cooper (1995) conducted a longitudinal study on 795 employed adults and identified the association between work pressure, lack of autonomy and role ambiguity with the help of CES-D
scale. The response rate was 67%. Results indicated that work pressure, lack of autonomy, role ambiguity is all associated with depression. Earlier, Karasek (1979) examined the role of decision latitude and job demand in 1896 working males and found that decision latitude was negatively associated with depression and absenteeism. Results also indicated that the job demand is associated with depression. Later, Karasek in (1990) conducted a cross sectional study on 8504 white collar workers and found that decreased job control is associated with depression in men but not in women.

Plaisier et al (2006) suggested that poor working conditions may be an important precursor of stress and may, therefore contribute to the development of depression. Several other researchers studied depression at workplace. Majority of these studies supported the existence of depression at work place and its relation with other psychosocial variables (Karasek, 1979; Pikhart, Bobak, Pajak, Malyutina, Kubinova, Topor, Sebaova, Nikitin, Marmot, 2004; Neidhammer, Chastang, David, Barouhiel, Barrandon, 2006; Wang and Putten, 2001). Ravindran et al., (2002) reported that major life stressors contributed towards depression and depressive illness, accompanied by marked reduction in Quality of life. Virtanen, Honkonen, Kivimaki (2007) found that in a Finnish work population, high job demands and strain are associated with increased depression and increased future use of antidepressants medication among men.

Chambers and Campbell (1996) conducted a postal survey to measure depression levels in general practitioners and identified the association with personal and practice characteristics. Hospital Anxiety and Depression Scale was used and the response rate was 69%. No gender difference was found. Overall 10% of the respondents were ‘cases’ of depression and 16% others had borderline depression scores. Depression was found to be associated with over occupied job and work overload. Earlier, Sutherland and Cooper (1992, 1993) studied 91 British
General Practitioners and found that depression scores for both men and women doctors had significantly increased compared to levels in a previous study (Cooper, Rout, Fragher, 1989) of 1817 general practitioners.

Recently, Uncu, Bayram and Bilgel (2006) conducted a descriptive cross sectional study to investigate a group of Turkish primary health care physicians’ job related emotional perception and to assess their reaction in terms of stress and depression. The response rate was 74%. Job Related Effective Well-Being Scale (JAWS) and Depression Anxiety Stress Scale (DASS) were used. Results indicated that job related negative emotional perceptions are associated with reaction in terms of stress and depression.

Caplan (1994) studied stress and depression in a group of senior health services staff. Postal survey method was used to collect data from 81 hospital consultants, 322 general practitioners and 121 senior hospital managers. Results of the study indicated that 47% scored positively on the general health questionnaire indicating high level of stress. Depression score indicated that 27% of general practitioners were likely to be depressed or borderline. Study also indicated that general practitioners were more likely to be depressed than managers. There was no significant difference between general practitioners and consultants with regard to depression. Results further indicated that general practitioners were significantly more likely to show suicidal thinking than compared to consultant. No other significant difference was found between the groups.

In a study on gender differences in depression among doctors, Rout (1999) studied 130 males and 75 female doctors. The investigation revealed that male doctors showed significantly depression scores than the normal and no gender specific difference among the doctors was found. Steward and Barling (1996) examined whether work stressors and depressive mood affected interpersonal job performance of 71 physicians,
nurses, and technicians. Results indicate that role conflict was a significant work stressors related to depressive mood. Heyworth et al (1993) conducted a cross sectional study task clarity and supportive communication among 201 trainee and consultant doctors. The response rate was 72% and the findings revealed that task clarity and supportive communication are associated with lower depression.

The above review indicates the positive relationship between depression and job demand, and how job control act as a moderator to reduce depression in the workplace.

3.5 Happiness among Doctors and Managers

Happiness is a lay construct, replete with personal meaning for each one of us. It has been tended to treat happiness as psychological well being which also referred to as emotional well being or subjective well being (Diener, Suh, Lucas, Smith, 1999). Happiness is considered to be a reflection of pleasant and unpleasant affects in one’s immediate experience. It is a primary and necessary component of eudemonia or the worth life (Taylor, 1998).

Lu and Shin (1997) identified and compared perceived sources of happiness among 18-60 years old community residents in Kaohsiung, Taiwas and in West. The sources of happiness were found (gratification of need for respect, harmony of interpersonal relationship, satisfaction of marital need achievement at work, being at ease with life taking pleasure and positive affect and health). Results indicated the western conception of happiness places greater emphasis on interpersonal or external evaluation and satisfaction. The Chinese conception of happiness also has unique components such as being at ease with life.

Veenhoven (1991) in a review, reported that happiness is relative and found that (i) people tend to be unhappy under adverse conditions such as poverty, war and isolation (ii) improvement or deterioration of at least some conditions that affect happiness lastingly (iii) earlier hardship
does not favour later happiness (iv) people are typically positive about their life rather than the happiness is relative theory confuses overall happiness and contentment.

Myers and Diener (1995) studied the frequency positive affect, infrequent negative affect and a global sense of satisfaction with life, which defines high subjective well being. Four inner traits appear to mark happy people; these were self esteem, sense of personal control, optimism and extraversion. Links between religion and mental health are come from knowing about a person’s traits, close relationships, work experiences culture and religiosity. Myers (2000) reported that world wide most people tend to be moderately happy, regardless of age and gender. As a part of their scientific pursuit of happiness, researches have examined possible association between happiness and (i) economic growth and personal income, (ii) close relationship and (iii) faith in religion.

Lyubomirsky, King and Diener (2005) examined studies involving three different types of evidence cross sectional, longitudinal and experimental design to determine how happiness and positive affects are related to culturally valued success. The results of al three types of studies suggest that happiness does lead to behaviours that produce further success in work, relationship and health and these successful results in part from person’s positive affect. Study further indicated from cross sectional point of view person’s well being is associated with positive perception of self and others, sociability, creativity, prosocial behaviour, a strong immune system, and effective coping skills. The author also reported that happy people are capable of experiencing sadness and negative emotions in response to negative events, which is healthy and appropriate response.

Lyubomirsky (2001) proposes that multiple cognitive and motivational processes moderate the impact of the objective environment
on well being. The author’s approach has been to explore hedonically relevant psychological processes, such as social comparison, dissonance reduction, self-reflection, self-evaluation, and person perception, in chronically happy and unhappy individuals. In support of a construal framework, self-rated happy and unhappy people have been shown to differ systematically in the particular cognitive and motivational strategies they use.

Diener and Diener (1996) observed in a US national survey, that most people report a positive level of subjective well-being (SWB), and say that they are satisfied with domains such as marriage, work, health finances and friendship. Cross-national data suggest that there is a positive level of SWB throughout the world, with the possible exception of very poor societies. In 86% of the 43 nations for which nationally representative samples are available, the mean SEB response was above neutral.

Requena (1995) examined 3 propositions derived from network and happiness level as a subjective well-being indicator using friendship network data. A cross-national comparison between Spain and US, 1200 Spanish adult and 1534 US adults were surveyed. There was a significant strong association between happiness and friend’s network size for both countries and there was little happiness difference between them. However, close friendship has different effects on happiness in the 2 countries. Happiness increased with income although this effect was higher in Spain than in US.

Diener, Lucas, Oishi & Suh (2002) examined whether happy and unhappy individuals weighted 8 life domains (health, finances, family, friends, recreation, religion, self and education) differently when constructing life satisfaction judgment. In both studies, regression equation predicting life satisfaction showed that their were significant interaction between happiness and a person’s best domain and between
happiness and persons worst domain, even after controlling for participants standing on all other domains. Happy participants weighted their best domain more heavily than did unhappy individual where as unhappy individual weighted their worst domain more heavily than did happy individuals.

Judge, Boudreau and Bretz (1994) hypothesized model of executive attitudes involving job satisfaction, life satisfaction, and job stress and work family conflict. The results indicated the support for the overall model and the specific relationships within the model. These results simultaneously consider job satisfaction, life satisfaction, and job stress and work family conflict and observed that these variables constitute the most comprehensive evidence to date on executive attitudes.

According to Argyle (1997) there is convincing evidence that happiness and positive moods affects health directly. Happiness and positive moods are in turn caused by a number of variables, which have no direct influence on health. Thus, happiness and positive moods are an essential part of the causal chain, which results in health. Happiness and positive moods are affected by being in love, friends, leisure activities, interesting work and achievement and recognition at work and certain aspects o personality, such as extraversion and social skills like assertiveness.

Sheldon & Hovser-Marko (2001) conducted two studies to investigate the self concordance model of healthy goal striving (K.M Sheldon & A. J Elliot, 1999) to examine the motivational processed by which people can increase their level of well-being during a period of time. In study 1, entering freshmen with self-concordant motivation better attained their 1st semester goals, which in turn predicated increased adjustment and greater self concordance for the next semester's goals. Increased self-concordance in turn predicated even better goal attainment during the 2nd semester, which led to further increases in adjustment and
to higher levels of ago development by the end of the year. Study 2 replicated the basic model in a 2 seek study of short-term goals set in the laboratory.

Seidlitz, Wyer and Diener (1997) examined the relations of subjective well being with the attention paid to positive and negative life events the organization of events in memory according to whether they were positive or negative events. Using 171 college students in 2 experiments results show the more intense and more enduring reaction to positive life then to negative ones were associated with higher well-being and, for intensity of reactions, this relation was stronger for those events that were subsequently recalled. When equal number of positive and negative life events were eligible.

Diener and Seligman (2002) compared the upper 10% of consistently very happy with average and very unhappy people. The very happy people were highly social and had stronger romantic and other social relationship than less happy group. No variable was sufficient for happiness, but social relations were necessary members of the happiest group experienced positive but not ecstatic, feelings most of the time, and they reported occasional negative moods. This suggests that very happy people do have a functioning emotional system that can react appropriately to life events.

Tsuo, Liu (2001) examined the determinants of happiness and satisfaction among Taiwanese people in various life domains. This included characteristics of happiness and individual value or attitude variables as determinants of the level of satisfaction with different life domains. Results suggested that higher income is associated with level of Subjective Well Being. Measures of comparison income were significantly and negatively correlated with reported level of negatively correlated with reported level of happiness and job satisfaction. Further findings confirm that there is little gender difference in happiness and satisfaction with
different domains. The findings also confirm that the effects of personal characteristics are fundamentally different in terms of happiness and satisfaction with specific domains of life.

Researches have suggested that positive emotions are associated with approach oriented behaviour (Elliot & Thrash, 2002; Watson, Wiese, Vaidya & Tellegen, 1999). That is people in good mood are more likely to enter novel situations, interact with other people and pursue new goals (Carver, 2003). Positive emotion also signals that life is good and that no threats are readily apparent (Cantor et al., 1991; Carver & Scheier, 1998). It has also been found that happy people are more satisfied with their jobs compared with unhappy people (Connolly & Viswesvaran, 2000; George, 1995; Fisher, 2002; Judge & Ilies, 2004; Judge, Thoresen, Pucik & Welbourne, 1999; Mignonac & Hersbach, 2004; Thoresen, Kaplan, Barsky, Warren & de Chermont, 2005; Weiss, Nicholas & Davs, 1999).

More recently, Seligman (2008) reported that evidence show that happy people are more productive, and much more creative than unhappy people. Likewise, Avey, Wernsing, Luthans (2008) investigated whether a process of employees positivity will have an impact on relevant attitudes and behaviours. The study was conducted on 132 employees. It was found that (a) their psychological capital (a core factor consisting of hope, efficacy, optimism and resilience) was related to their positive emotions that in turn were related to their attitudes (engagement and cynicism) and behaviour (organizational citizenship and deviance) relevant to organizational change; (b) mindfulness (i.e. heightened awareness) interacted with psychological capital and the attitudes and behaviours.

Researchers have also attempted to investigate positive affect is a good predictor of job performance (Wright & Copanzano, 2000), and this is evident across diverse work environment. For example supervisors review happy people relatively more favourably (Cropanzano & Wright, 1999; Judge et al, 1999; Staw et al., 1994; Wright & Staw, 1999). Sales
managers with high positive affect oversee sales people who are related as high performing (George, 1995), and happy cricket players show superior performance during games (Totterdell, 1999, 2000).

George (1995) reported that workers who experienced positive emotion not only go beyond their required duties at work, but they are more invested and involved in their jobs. The oppositive of job involvement that is, withdrawal behaviour such as burnout, absenteeism, and turnover are negatively related to high positive affect (Crede et al., 2005, Miles et al., 2002; Thoresen et al., 2003).

Bono, Foldes, Vinson, Muros (2007) examined the role of organizational leaders in employees' emotional experiences. Data was collected from health care workers 4 times a day for 2 weeks. Results indicated that supervisors were associated with employee emotions in 3 ways: (a) Employees experienced fewer positive emotions when interacting with their supervisors as compared with interactions with their supervisors as compared with interaction with coworkers and customers; (b) employees with supervisors high on transformational leadership experienced more positive emotions throughout the work day, including interactions with coworkers and customers and (c) employee who regulate their emotions experienced decreased job satisfaction and increased stress. The results also suggested that the effects of emotional regulation on stress are long lasting and not easily reduced by leadership behaviours.

Iverson, Olekalns & Erwin (1998) report that people who experience more positive emotions receive more social support from both colleagues and supervisors. According to Barsade, Ward, Turner & Sonnenfeld (2000) happy chief executives with managerial teams along with high positive affect experience relatively less conflict and more cooperation and those with same managerial teams feels relatively more satisfied about their group relations. Miles et al (2002) found that it is pleasant help
others who are generally positive and cheerful, and coworkers offer support because happy workers tend to be cooperative.

Happy people show less burnout (Iverson et al., 1998) less emotional exhaustion (Wright & Cropanzano, 2000) and less absenteeism (George, 1991, Gil et al. 2004) and they are less likely to quit their jobs (Vankatwvk et al., 2000) than unhappy people. Judge et al (1999) report that employees with high positive affect are also better able to cope with organizational change than employees with low positive affect. It can be conclude that workers with high positive affect are more committed to their organization (Herrbach, 2006, Judge et al, 1999; Mignonac & Herbach, 2004; Thoresen et al., 2003).

According to Lyubomirsky, King & Diener (2005) happy people are physically healthier, live longer and cope more effectively with challenges characteristics that undoubtedly make it easier to accomplish more in their career. They also report that happy people enjoy greater workplace success and engage in more-behavior paralleling success than do less happy people. Taylor, Lerner, Sherman, Sage & Mc Dowell (2003) reported that people with positive disposition are more likely to be favorably evaluated by their friends compared to people without such a disposition.

Positive affect has also been found to intervene creativity at workplace. Research evidence also suggests that positive affect can enhance originality and flexibility (Estrada, Isen & Young, 1994; Grawitch, Munz, Elliott & Mathis, 2003, Grawitch, Munz & Kramer, 2003). Earlier Estrada et al. (1994) found that physicians in a positive mood were able to solve problems more creatively than their neutral mood counterparts.

The above review has shown that happiness plays a vital role in moderating the stress well-being relationship.
Hypotheses:

1) Doctors will report high job stress in terms of demand than their managers counterparts and managers would report high job control than their doctor counterparts.

2) Doctors will report significantly greater anger suppression (Ax/In), relatively less anger expression (Ax/Out), higher anger control (Ax/Con) and lower overall anger expression than their managers counterparts.

3) Doctors will report higher negative emotions of trait anxiety and depression than their managers counterparts and managers would report higher subjective happiness than their doctors counterparts.

4) Job Demand-Control will correlated differentially in terms of direction and magnitude of trait-anxiety, anger expression and its modes (Ax/In, Ax/Out, Ax/Con), depression and subjective happiness in doctors.

5) Job Demand-Control will correlate differentially in terms of direction and magnitude with trait-anxiety, anger expression and its modes (Ax/In, Ax/Out, Ax/Con), depression and subjective happiness in managers.

6) A subset of Job Stress (Job Demand and Job Control), trait-anxiety, anger expression and its modes (Ax/In, Ax/Out, Ax/Con), depression and subjective happiness would be a significant discriminator among the doctors and managers.