Chapter Two

Review of Literature
Burnout is not a new phenomenon among the psychological concepts. A lot of studies have been carried out to understand the concept of burnout especially in human services profession and the results reveal that burnout appears to be a response to inter-personal stressors on the job, in which an overload of contact with people result in changes in attitudes and behaviours towards them.

Neville (1981) has found that administrative personnel who are responsible for providing direct services frequently must deal with the hazard associated with burnout. In the area of educational administration, special education directors face a unique set of responsibility all of which contribute to higher levels of stress and frustration (Begley, 1982).

Robert (1983) studied administrators in Colorado and found that school principals demonstrated a perception of higher job-related stress, which resulted in both physical and mental illness.

Frank (1983) conducted a research in the area of administrative stress. He found that administrators were experiencing the following factors which were playing a critical role in burnout and job-related stress; (1) administrative constraints (2) organisational
structure and climate (3) relationship at work (4) role expectation, and (5) career development. He further found that the top stressors were; (1) making decisions that affect the lives of other people in the organisation, (2) resolving interpersonal conflicts, (3) gaining public approval and financial support for programmes, (4) completing reports and paper work on time, and (5) complying with state, federal, and organisational rules and policies, respectively.

Glogow (1984) conducted a research on personnel organisations in Los Angeles County, California, amongst 103 individuals surveyed, reflected the burnout was a problem with 41% of the respondents and that stress, both inside and outside the job, contributed to burnout. Relationships with upper management were considered to be a major source of stress and burnout in these organisations.

Rifel (1986) revealed that there is a significant relationship between special education directors’ perceptions of organisational role stress and feeling of burnout. The results revealed that directors, as a total group, are influencing moderate amounts of burnout. However, burnout does not seem to be playing a significant role in the directors’ perceptions of adequacy in their assigned roles within the organisation. Directors having the special purpose schools and local educational agent experienced the most burnout. The findings indicated that there were strong relationships between the Maslach sub-scale and sub scale of the organisational stress scale. The two Maslach sub scale which shared the most relationship with the organisational role stress sub
scales were found to be the emotional exhaustion frequency and intensity cub scale of 
the Maslach Burnout Inventory.

Russell et al. (1987) examined the effects of job-related stressful events and social 
support on burnout among teachers. They have found that teachers who reported that 
they had supportive supervisors and indicated that they received positive feedback 
concerning their skills and abilities from others were less vulnerable to burnout.

Quingley, Slack and Smith (1987) investigated the degree of burnout among 
secondary school teacher coaches and attempted to identify factors and contributed to 
this burnout. Qualitative data on cause of burnout were obtained through interviews 
with selected subjects. Gender of the teacher coaches, age, size of school, the amount 
of administration support for coaching, and the compensation, recognition and rewards 
for coaching were all related to the level of burnout.

Fuehrer and Mc Gonagle (1988) studied the individual and situational factors as 
predictors of burnout among resident assistants. Women reported more stress in 
situations involving the development of values and experienced higher levels of 
burnout (e.g. emotional exhaustion and lack of personal accomplishment) than men. 
Resident assistant's in freshmen halls experienced greater stress in situation that 
require greater emotional resilience, confrontation skills and counselling skills than in 
other types of circumstances. Type of residence hall and stress experienced in 
situations requiring environmental adjustment were best predictors of burnout.
Izraeli (1988) examined spouse differences in burnout and burnout's correlates. It showed that burnout was more strongly associated with doubts about success in work performance for men than for women. Husbands who supported their wives in their domestic and professional careers were less burned out than those who did not. It is suggested that the way in which men's occupational roles are institutionalised constrain them from adjusting better to the new demands created by dual career marriages.

Hock (1988) studied the professional burnout among public school teachers. The results indicated that there was a wide variation in the degree of burnout. No differences were found in susceptibility to burnout due to demographic variables such as age, grade level, subject taught, or years of experience. Certain characteristics of teaching climate associated with high and low levels of burnout were identified. Classroom discipline problems, lack of support services for personal problems and the public images of teachers were most highly associated with burnout.

Hendrix, Antrell and Steel (1988) examined the effects of two types of social support, job and life support and burnout. It was found that job stress and life stress correlated positively with burnout, while job and life support were negatively correlated with burnout, neither job support nor life support moderated job stress or life stress burn out relationships. Females exhibited significantly higher levels of burnout, job stress and
life stress than males, however, there was no difference between males and females in
the amount of social support received.

Hale and Pratt (1988) examined the difference in nursing burnout by occupational
level. The results showed paraprofessional subjects significantly higher on two
dimensions of burnout (emotional exhaustion and depersonalization) than professional
subjects. In addition, para-professional subjects perceived less support in their work
environment than did professional subjects. Subjects working in long term care
facilities experienced emotional exhaustion more frequently than did subjects working
in acute care facilities.

Lemkan, Purdy, Rafferty and Rudisill (1988) studied the correlates of burnout among
family practice residents. The result showed a few significant relationships between
background and situational factors and burnout scores. However, numerous
relationships were found among personality measures, burnout scores and measures
of regret.

Benedict and Mondloch (1989) studied the factors affecting burnout in Para-
professional residence hall staff members. Results revealed a significant difference
between high and low achiever schools on the dimensions of disengagement,
alienation spirit controls and production emphasis. Teacher job –satisfaction was not
significantly different between public high and low achiever schools between
government high and low achiever schools. However, the level of teacher job satisfaction was higher for public school teachers.

Burke and Greenglass (1989) compared levels of self reported psychological burnout, and its antecedents and consequences. Elementary subjects exhibited significantly lower psychological burnout than junior school and high school subjects. Elementary subjects reported significantly longer classes and number of taught and they had been insignificantly longer. Similar patterns of differences were present on theoretically based antecedents and consequences of burnout, when differences were present. High school subject were more dissatisfied and in greater distress, supporting the conclusion that levels of psychological burnout among school based educators are related to age of students and level of school.

Topj (1989) studied the personality hardiness, occupational stress and burnout. Findings of the study provide partial support for hypothesis that greater hardiness would be associated with less stress and burnout. Support was not found for the hypothesis that greater stress would be linked with greater burnout.

Burke and Kirchmeyer (1990) supported Cherniss's hypothesis that people who begin their careers with a social activist's orientation run the greatest risk of experiencing a negative work setting, heightened stress, reduced work standards and poor emotional and physical well being. Findings suggest a poor fit between the social activists orientation and actual realities of the police worksetting. Burke and Kirchmeyer (1990)
examined how present career orientations and changes in career orientations related to stress and burnout. Subjects rating themselves as self-investors were the most critical of the work-setting, experienced the most stress at work, reported the most negative changes in attitudes characterizing burnout, were the least satisfied with the least well. There was a poor fit between the self-investor career orientation and police work. Miller, Ellis, Zook and Lyles (1990) studied an integrated model of communication, stress and burnout in the work place. Participants in decision-making and social support had important impact on perceived work place stress, burnout, satisfaction and commitment for care givers and support personnel. Perception on participation in the decision making process was particularly crucial in reducing role stress and increasing perception of satisfaction and personal accomplishment for hospital care givers.

Sunja (1990) studied teacher stress and burnout related to teachers' opinion towards teaching as a profession. The variable, teachers' grade level assignment, did not have a significant effect on the attitude of teachers regarding the emotional exhaustion aspect of the job related stress. The teacher's years of experience produced a significant effect on their attitudes towards job related stress.

Lee and Ashforth (1990) examined the dimensionality of Maslach's (1982) three aspects of job burnout, namely, emotional exhaustion, depersonalization, and personal accomplishment among a sample of supervisors and managers in the human services. The three aspects were found to be differently related to other variables reflecting aspects of strain, stress coping, and self-efficacy in predictable and meaningful ways.
Manning (1991) in his research found that two of the three sub-scale of Maslach's burnout inventory (emotional exhaustion and personal accomplishment) was significantly related to stress. Professors who published three or more articles per year and contributed 29% or more of their time to research experienced burn out more than who devoted less of their time to research. Stress and burnout were not found to be related to gender, age, marital status, the presence of children in the house, faculty rank or teaching load.

Evans (1991) stated that stress is the chief contributory cause of 70% of all illness today. Bacharach et al. (1991) examined an unmediated model of work based role stress and its consequences on job satisfaction and burnout to two models in which the role stress-affective work outcome relationship is mediated (partly and completely) by work-home conflict across two samples of public sector professionals: engineers and nurses. The findings indicate that a model in which role conflict and overload have both direct and indirect effects-via work home conflict-on the job burnout and satisfaction. Partial mediation model achieves a better overall 'fit' than two alternative models. Furthermore, the findings suggest that while two groups perceive many aspects of the work-home relationship differently, for both groups, work based role conflict is an important antecedent of work home conflict, and increased burnout an important direct consequence of work-home conflict.

Misra (1992) has investigated the effect of biographical variables of teachers and teacher's stress perception in teaching on their burnout feeling. The finding of the study
indicate that teachers with low stress feeling experienced more burnout—emotional exhaustion and personal accomplishment in comparison to high stress teachers. Teacher’s experience in teaching profession is responsible for burnout emotional exhaustion feeling. Teachers with less experience felt more emotional exhaustion, which is reverse in case of high experience teachers.

Leiter (1991) attempts to bring concepts developed in cognitive approaches to stress and coping to a model, which predicts burnout as a function of organizational demands and resources. Workers in a mental hospital (N=177) provided information regarding coping patterns, burnout, and organizational commitment as well as various demands and resources in the work environment. The results of the study indicate that information regarding individuals’ coping patterns contributes to the prediction of burnout, particularly the emotional exhaustion and diminished personal accomplishment aspects of the syndrome. Mental health workers who use cognitive and action control strategies to address difficulties at work tended to be less exhausted and to have a more positive assessment of their personal accomplishment. To a lesser degree, workers who used escapist cognitive and action control strategies tended to experience greater levels of emotional exhaustion.

Gary Cherniss (1992) has explored the relationship between degree of burnout experienced during the first year of the career and career adaptation during the next decade. Subjects were human service professionals originally working in the fields of public service law, public health nursing, high school teaching, or mental health. They
were studied during the first year of their careers and again 12 years later. Results showed that subjects who were more burned-out early in their careers were less likely to change careers and more flexible in their approach to work as rated by confidants at the time of follow-up. The results suggest that early career burnout does not seem to lead to any significant, negative, long-term consequences. However, burnout occurring later in the career might have more serious-long term effects.

Issac and Barry (1992) investigated the relationship of teacher burnout to the various ways that teachers view themselves professionally and to the ways in which they sense that others within the educational system view them. Findings indicate the following results: (a) the three dimensions of professional self-concept used in the study, the factors of professional satisfaction—how teachers feel about the gratification they receive from their work bore the strongest negative correlation to burnout; (b) among the possible discrepancies regarding scores on the self concept dimensions, the discrepancy between teachers' view of themselves as professionally competent and professionally satisfied bore the strongest correlation to burnout; (c) stronger correlation to burnout existed in terms of how teachers perceive themselves rather than how they feel others perceive them; (d) from teachers' perspectives, students have a more accurate view of their overall professional self-concept than do parents or principals; (e) teachers' perceptions of how students view them bore a stronger relationship of burnout than did perceptions how either students' parents or their principals view them; and (f) from teachers' point of view, both parents and principals have an exaggerated sense of
teachers' professional satisfaction, discrepancies that both cases bore significant correlation with burnout.

Schaufeli et al. (1993) conduct a study on Dutch nurses to assess three aspects of the construct validity of the two most widely used self-report burnout questionnaires. Maslach Burnout inventory (MBI) and the Burnout Measure (BM). They concluded that MBI can be employed as a reliable and valid multi-dimensional indicator of burnout in professionals who work with people. The BM assesses the non-specific affective component of burnout (i.e. exhaustion) and should therefore be supplemented by the scale that measures the attitudinal component of the syndrome.

Lee et al. (1993) examined a model of managerial burnout among human service supervisors and managers. Their findings suggest that emotional exhaustion plays a central mediating role in the burnout process. Furthermore, they have found that social support and direct control were associated with exhaustion through role stress.

Savicki and Cooley (1994) examined working conditions that lead to burnout among workers working in child protective service (CPS) and found that work environment and three dimensions of MBI were significantly related to increased burnout.
Burke and Greenglas (1995) conducted a longitudinal study to examine the antecedents and consequences of psychological burnout among human service professionals. Findings of the study reveal that work stressors measured at one point in time were significantly correlated with levels of psychological burnout reported 1 year later. Furthermore, psychological burnout was found to have relationships with a variety of individual satisfaction and emotional health measures.

Friedman (1995) attempted to identify the unique components of burnout among school principals using facet theory as a theory construction tool. A total of 571 elementary secondary school Principals in Israel completed a questionnair containing items relating to their feelings about themselves, their environment and work. Result indicated that burnout among school principals may be presented in a two-dimensional space, incorporating, experiences (weariness or discontent), and the focus (internal or external) of those experiences. Four components of the burnout phenomenon in Principals emerged in this two-dimensional space; exhaustion, self-discontent, aloofness and deprecation.

Mehr et al. (1995) examined the effects of an intensive stress-reduction program on change in daydreams and levels of burnout. Results indicate that this type of program can reduce a cycle of exhaustion and burnout and change negative and defeating patterns of behaviour.
Fejgins et al. (1995) analyzed the nature of physical education teaching, through a study of work environment factors that contribute to burnout in physical education teachers in Israel. Results of the study show that personal or occupational variable didn't affect burnout. Low remuneration, and bureaucratic and role limitations were found to be related to teacher burnout. Findings indicate that a burnout level in Israel physical education teachers was lower than classroom teachers in Israel and U.S.

Sahu and Misra (1995) attempt to find out relationship between life stress and burnout among female college teachers. Results reveal that stress experienced in family area is significantly and positively related with emotional exhaustion and depersonalization and negatively with personal accomplishment, while society related stress is found to be related with depersonalization only.

Pradhan et al. (1996) investigated the greater difference in type A behaviour pattern and its relationship with burnout among dual career medical professional couples. Results reveal moderate levels of type A behaviour pattern but low levels of burnout among the subjects. No significant gender differences were found in the experience of burnout. Further more, findings reveal that there is a significant gender differences in the in the relationship between type A behaviour pattern and burnout, the relationship being stronger in case of female than male.

Lee and Ashforth (1996) examined how demands and resource correlates and behavioural and attitudinal correlates were related to each of the three dimension of
burnout. They have found that both the demand and resource correlates were more strongly related to emotional exhaustion than to either depersonalization or personal accomplishment. Consistent with the conservation of resources theory of stress, emotional exhaustion was more strongly related to the demand correlates than to the resource correlates, suggesting that workers might have been sensitive to the possibility of resource loss.

Cordes et al. (1997) represented a paper comparing the intertemporal sequences of the burnout components proposed by Maslach (1982) and Golembiewski (1989) using responses from human resource professionals. The relationship between burnout components and several critical variables that are theoretically linked to the phenomenon are also investigated. Results support Maslach's three factor sequential model of burnout, although its superiority over the Golembiewski sequential model of burnout. Analysis of the data reveals a significant path between depersonalization and personal accomplishment, and insignificant path between depersonalization and personal accomplishment. Investigation of the relationship between the burnout components and several critical, theoretically linked variables indicates significant path between (a) role overload (b) non-contingent punishment and depersonalization, and (c) contingent rewards and personal accomplishment.

Lavanco and Gloaechino (1997) studied burnout and Type A behaviour in 2 groups of teachers (working in high school and junior high school) and nurses. Among nurses, type A scores were correlated positively with scores on burnout and negatively with
ratings of job satisfaction. The teachers on the other hand, showed greater adjustment to work than nurses.

Hona et al. (1997) represented a Canadian-Dutch comparison of teachers' burnout and found the Canadian teachers reported higher scores on emotional exhaustion and depersonalization than their Dutch peers. Differences in the number of hours employed were also significant. Full time Canadian teachers scored higher on depersonalization than their Dutch colleagues. Across countries sex and type of school appeared significantly related to burnout. Male teachers related higher on emotional exhaustion and depersonalization than women. With regard to the attitudinal components of burnout. i.e., depersonalization and personal accomplishment, secondary school teachers reported higher scores than elementary school teachers.

Westman and Eden (1997) examine the relief from job stress and burnout afforded by a vacation respite among clerks. They have found a decline in burnout during the vacation and a return to pre-vacation levels by the time of the second post-vacation measure. However, the return to work showed gradual fade-out, as burnout returned part way towards its prevacation level by 3 days after the vacation and all the way by 3 weeks after the vacation. Women and those satisfied with their vacations experienced greater relief, and quickest fade-out.
Hardy et al. (1998) examined burnout among university resident assistant as a function of gender and floor assignment. Results show that resident assistant, assigned to primarily 1st year floor reported significantly greater depersonalization and slightly greater emotional exhaustion than resident assistants do on mixed floor.

Hosomi et al. (1998) studied the incidence and types of psychiatric illness among medical personnel and personnel in support services. Subjects were male and female Japanese adults (doctors, nurses, dieticians, hospital aides, case workers, pharmacists, radiation therapists, laboratory technicians, office workers, cooks, drivers and cleaning staff of public and private hospitals and other types of health care facilities). They have found that burnout and psychiatric disorders and suicidal behaviour were prevalent.

Bussing et al.(1998) examined the role of work stress and work load in the development of burnout. Subjects were normal German adults (nurses). Work stress factors were correlated with emotional exhaustion, physical and psychomental stress factors, and social stressors.

Mishra & Panda (1998) examine the effect of teacher training programme on teachers' feeling of burnout in relation to gender. The results show significant differences in terms of emotional exhaustion and personal accomplishment but no significant effect was observed in the case of depersonalization aspect of burnout. The findings also indicate that teachers' feeling of personal accomplishment depend upon their sex and the nature of the teacher training programme they participated in.
Pradhan (1998) discusses various strategies to reduce work stress and burnout among employees in organizations. Results suggest that role characteristics, job characteristics, interpersonal relationship, organizational structure and climate and human resource management system as the source of burnout.

Thornburg et al. (1998) examined the relationship between competence and burnout in adult family childcare providers. Results show that variables (marital status, number of children, salary, hours worked and years of child care experience) have no significant impact on competence and burnout. Other variables (age of provider, educational level of the provider, use of lesson plan, perceived adequacy of space, and satisfaction with materials and equipment) show a significant relation with competence, burnout or both. Findings show that family childcare providers with higher education and greater satisfaction with materials and equipment tend to be more competent and on the other hand providers who are older and reported less satisfaction with their material and equipment experience more burnout.

Goelman and Guo (1998) review and synthesize the research on burnout among childcare workers in early childhood settings and identify a number of conceptual and empirical gaps in the literature. They have found certain factors that contribute to burnout these include wages and working conditions, unclear, ambiguous, or conflicting job descriptions, low levels of communication and social support in the workplace, educational background and employment history, personality factors and perceptions of childcare work.
Male and May (1998) examined stress and health, workload, and burnout among further education learning support co-ordinators. The results of the study have found that high level of workers is an evidence for heightened stress and stress cause burnout.

The relationship between dimensions of burnout and employee commitment to the organization in two samples was studied. The results show that low commitment contributes to the experience of burnout. Specifically in the case of nurses, commitment showed direct effects on emotional exhaustion and depersonalization and a weaker indirect effect on depersonalization. In case of laboratory technicians from the same organization such relationship was not significant (Kalliath et al., 1998).

Virginia (1998) investigated burnout and depression among Roman Catholic secular, religious order and Monastic priests. Secular clergy reported significantly greater emotional exhaustion than did Monastic clergy. Secular priest also had significantly greater depression (72%) when compared to religious (40.8%) and monastic (39.5%) clergy. Overall group comparisons revealed that secular Clergy experienced the highest degree of burnout and depression, Monastic the least and religious priest falling in between. The lack of social support and sense of isolation, for secular Clergy, were key elements associated with their experience of both burnout and depression.

Steve and Lyn (1998) examined occupational stress among direct care staff working with people with learning disabilities. They have highlighted five important demand
factors; role conflict, role ambiguity, role overload, resident characteristics and non-participation in decision making. The results suggest that Occupational Stress amongst staff caring for people with learning disabilities is best reduced by increasing support, since the job is likely to remain demanding.

Thomas and Russell (1998) conducted a one-year longitudinal study and examined the relationship of emotional exhaustion to job satisfaction, voluntary turnover, and job performance among social workers. Results suggest that emotional exhaustion was unrelated to job satisfaction but it was associated with both performance and subsequent turnover.

Weisberg and Sagie (1999) examined the impact of Burnout dimensions on the intention of female teachers in Israel to leave their current job. They have found both physical and mental exhaustion was positively and significantly influencing the intention to leave. The influence of emotional exhaustion was not significant, nor the teachers' age. Tenure was negatively and significantly correlated with both burnout and intention to leave.

Kelley et al. (1999) studied Stress and Burnout among collegiate tennis coaches. Three alternative models of stress-mediated relationships between personal/situational variables (hardiness, coaching issues, competitive level, gender, trait anxiety, initiating and consideration leadership styles) and burnout were examined. Analysis of the data revealed that the tennis coaches were suffering from levels of burnout similar to those
of other helping professionals working in higher education. Further more, women had a higher tendency than men did to find coaching issues stressful and stress has direct effects on personality/dispositional variables on burnout.

Nicholien and Euwema (1999) examined the relationship among reciprocity (with civilian, colleagues, and the police organisation), burnout and interpersonal conflict management among Dutch police officers. Results of the study show that lack of reciprocity is related to higher levels of burnout. Police officers who experience burnout have more negative attitude towards conflict management and act differently in confrontation with civilians.

Bibou-Nakcu (1999) studied burnout in relation to elementary school teachers' perceptions of school behaviour problems. The results showed that teachers' misbehaviour-related attributions and preferred practices differentiate significantly the burnout levels experienced by the teachers. One means of more adequately dealing with teacher burnout might involve the evaluation of teachers' attributions and perception regarding work stressors.

Acker (1999) conducted a study to examine the impact of clients' mental illness on social workers' job satisfaction and burnout. Results show that greater involvement was related significantly to higher levels of emotional exhaustion and depersonalization. Further, results suggest that social workers are affected negatively by this type of work.
Babacus et al. (1999) examined the role of emotional exhaustion as an important construct in sales force behaviour and attitude relationships. The results offer strong support for the relationship involving role ambiguity and conflict antecedents and organisational commitment, job satisfaction, performance, and intention to leave consequences of emotional exhaustion.

Tuuli and Karisalmi (1999) found out the relationship of Burnout and the quality of work life in the retail trade versus mental industry. Results show the great impact of five indexes (conflicts, job control, work of superior, organization of work, and monotonous job) on burnout were different in these two business lines. Age turned out to be a complicated factor in relation to burnout.

ROLE STRESS:
Kahn et al. (1964) found that high levels of role conflict were related to (a) low levels of job satisfaction, (b) a high degree of job-related tension, and most importantly, (c) low confidence in the organization.

Rizzo et al. (1970) examined role conflict and ambiguity and found that both tended to (A) correlate weekly, but positively with anxiety and propensity to leave the organization and (b) negatively with influence in the organization. Finally, they concluded that role ambiguity and role conflict result in undesirable consequences not only for organizational members but also for the organization itself.
Johnson (1979) investigated the relationship of situational and individual difference variables with role stress, psychosomatic symptoms and job satisfaction in entry-level police and safety officers. He found that high role stress was significantly correlated with low group cohesiveness, high need for independence, low need for achievement, high dogmatism, less distortion in responding, external locus of control, and more psychosomatic symptoms.

Fielder et al. (1979) investigated the conditions under which personnel in leadership and staff position effectively use their intelligence and experience in the performance of their task in military organizations. Results provide consistent evidence that individuals use their intelligence if the relationship with their immediate superior is non-stressful; they fail to use their intelligence or they misuse it when stress with the superior is high. Experience is used effectively when this stress is high but not when it is low.

Dimensions of job characteristics, role stress, work satisfaction, and functional interaction were investigated in relation to social density changes with professional employee in a petroleum-related organization. The results revealed that employees who experienced a social density increase reported significantly less role stress and job autonomy but significantly greater feedback, friendship opportunities, and work satisfaction (Szilagyi and Holland, 1980).

Harigopal (1980) investigated the influence of the personality factors ‘ego strength’ and dominance versus submissiveness’ on role stress variables, viz., role ambiguity and
role conflict. The results suggested that high and low ego strength groups differ significantly on role ambiguity and role conflict. Ego strength was found to moderate the relationship between role ambiguity and company satisfaction, role ambiguity and job involvement, and role conflict and job involvement. Dominance versus submissiveness was found to moderate the relationship between role conflict and job involvement.

Nahta (1980) studied that role conflict decreased with the increased job tenure in an Organization.

Shah (1980) studied the impact of stress on a sample of officers representing co-operative banks, marketing and consumer society, industrial society, and co-operative departments. The physiological changes felt by these officers were fatigue, exhaustion, migraine, headaches, hypertension, and loss of appetite, indigestion, sleeplessness, and dizziness.

Sen (1982) reported that bank managers with intermediate level of qualification experience less inter-role distance, role ambiguity, and role overload, because such employee, knowing that they are educationally handicapped in going up in the organization, take their duties rather lightly.

Sen (1982) reported that income is inversely related to role stress; the higher the income, the less is the level of reported role stress in bank managers.
Parasuram and Alutto (1981) conducted a study on individuals in middle and junior level positions. He found that role frustration and technical problems were the major sources of stress, i.e., stressors reflecting quantitative overload, low status, and inadequate supervisory instruction and impediments to task accomplishment in the form of technical resource inadequacies that managers tended to be more stressed by factors impinging on responsibility for production and quality.

Srivastava (1982) determined whether or not the employees' potentiality to produce comparatively more influences their perception of role based-stress. The results indicated that the employees belonging to high and low production groups significantly differed from each other with regard to their indices of perceived role stress. The employee producing more were observed to perceive lesser ambiguities, conflicts and workload with regard to their job roles as compared to those belonging to low production group.

Koch et al. (1982) investigated the relationship between perceived job related stress and certain personal characteristics among school administrators. Four factors of perceived job stress (Role-based stress, conflict-mediating stress, task-based stress, and boundary-based stress) were extracted. They found that each of these factors was related to respondents' self-report of physical health. Furthermore, these factors of perceived job stress were found to have differential effects among subjects depending upon respondents' age, years of administrative experience, and position in organisation.

Cooke & Rousseau (1984) investigated contradictory models of the effects of family role and work-role expectations on strain in teachers. Role theory predicts that multiple
roles, can lead to stressors (work overload and inter-role conflict) and, in turn to symptoms of strain. On the other hand social support research and theory suggest that multiple role, and in particular family roles, serves to reduce strain. Results indicate that work expectations were found to be related to work overload and inter-role conflict, and these stressors were found to be related to strain. Family roles were found to be related to strain in three ways: They interact with work role expectations, so that the relation between these expectations and work overload is progressively greater for single teachers, those who are married, and those who have children; they are indirectly related to strain through their relation to inter-role conflict; and finally, they are directly and negatively associated with physical strain when their relation to inter-role conflict is controlled.

Osipaw et al., (1985) showed that older respondents generally reported more overload and responsibility, boundary role, and physical environmental stresses than did their young counterparts. Older subjects also displayed a trend towards decreasing vocational, psychological, physical and interpersonal strain than did younger ones, and greater recreational self care and rational-cognitive resources than younger subjects. The study brings out the possibility of age moderating the stress-strain relationship.

Gorell et al., (1985) suggested that elementary school teachers reported significantly higher levels of stress than secondary school teachers.
Ahmad et al. (1985) conducted a study of stress among executives. A group of 30 executives from the public sector and another group of 30 executives from the private sector were compared on role stress. Out of ten dimensions of role stress, however, significant differences were obtained on only three dimensions, viz., role isolation, role ambiguity, and self-role distance. It was observed that public sector executive’s experience slightly more than their counterparts in the private sector.

Jasmine (1987) compared the level of job related stress among public and private sector blue-collar employees. The analysis of the data revealed that role incumbents of public sector organisations experienced significantly more stress than those of private sector organisations.

An interesting observation was made by Srilatha (1988) when she found that managers who were young and were earning higher salary experienced more organisational stress, role overload, and role conflict than managers who were older and were earning less salary.

Srilatha (1988) found that opportunity for promotion was negatively and significantly associated with role stress variables. She reported that managers who had received five or more promotions exhibited significantly less role overload, role conflict, and overall stress than those who had not received any promotion.
Singh (1989) studied the profiles of stress experiences of two hundred and fifty junior and middle level executives belonging to seven private and three public sector organisations of north India. He found that junior level executives experienced higher stress (viz., lack of group cohesiveness, role conflict, inequity, role ambiguity, role overload, lack of leadership support, and inadequacy of role authority) than their middle level counterparts.

Singh and Nath (1991) explored the effects of organisational role stress on job involvement among banking personnel. The result shows that subjects with high organisational role stress (overall as well as dimension wise) were less involved in comparison to the subjects of low organisational stress (overall and dimension wise) group.

Desai (1993) has attempted to identify and determine the differential response profile of three levels on management, on the different measures of stress and mental workload as well as to examine the relation between stress and mental workload in the three levels of management. The results indicated that (1) higher and middle management had higher and similar levels of stress and mental workload, followed by lower management (2) the perceived effort factor of mental workload was the main contributor for the prediction of stress, and (3) the respondents belonging to the technical departments were less stress prone, more alert and more satisfied than the respondents belonging to commercial departments.
Shirom and Mayer (1993) explored the effects of fulfilling, on a voluntary basis, the role of lay officials in a local union of teachers on stress, strain, and the relationship between the two. Levels of typical teachers’ stress, and their effects on strain were systematically compared for lay officials and rank and file members. Relative to the rank and file members, union officials reported higher levels of overload and parent-teacher conflict, but the same levels strain. The results of the regression analysis indicated that union officials’ strain was predicted by stress associated with their representational duties. For the two groups of teachers, the measures of stress exerted the same detrimental effect on each of the strains. Thus, it is concluded that lay union officials were not at greater risk of psychological strain as compared to their fellow teachers.

Akinnusi (1993) found education to be significantly associated with stress. The more qualified the managers, the more psychological stress they experience. They are also more subject to organisational stressors but suffer less job stress, probably because they occupy positions of authority and their jobs are more intrinsically satisfying than their less qualified counterparts.

Sharda and Klandermans (1993) found that emotional exhaustion was most strongly associated with intra-sender conflict and qualitative role overload among Dutch members of trade unions.

Pandey (1995) conducted a study on rail engine drivers of Indian Railways to determine the relationship between their role efficacy and role stress. The respondents were found to be suffering from the feeling of overload, resource inadequacy and personal inadequacy. In this study education was found to be positively related with role stress.
Malik and Sabharwal (1999) carried out a study to analyse the relationship between role stress and locus of control. Results indicate that externally controlled subjects perceived more stress in three areas viz., role expectation conflict, role overload and role ambiguity as compared to their counterparts.

Anirudh (1997) developed models for predicting role efficacy and role stress of workers and supervisors using demographic variables like age, education, and experience. Results revealed that out of 11 models developed for prediction of 10 dimensions of role stress and role stress total, 8 models for prediction of role stagnation, role expectation conflict, role erosion, personal inadequacy, self role distance, role ambiguity, role inadequacy, and role stress total were found to be good predictors.

Chand and Sethi (1997) found that role conflict, strenuous working conditions and role overload are the most significant predictors of job related strain.

Venkatammal (1998) examined the stress experienced by the teachers of Annamalai University. Results show that teacher belonging to Arts faculties and Science faculties do not differ significantly on occupational stress. Male teachers and Female teachers did not differ significantly on occupational stress. Lecturers, readers and professors do not differ on occupational stress. The teachers who are just satisfied with their job show more stress than the teachers who are highly satisfied with their job.

Pandey (1998) explored the relationship between personality dimensions of individuals and their perceived organisational role stress. The findings of the study indicate that psychoticism-reality and neuroticism-stability dimension are found positively associated with individuals' perceived organisational role stress; where as extroversion-introversion
dimension was found to be negatively associated with perceived organisational role stress.

Mohan and Chauhan (1999) conducted a study on middle level managers from Government, public and private sectors. The results showed that there are only two significant F -ratios for Role erosion and Self-role conflict. The managers of public sector experienced the maximum Role erosion and Self-role conflict, followed by Government and private sector. The private sector seems to have a better work climate, which is giving enough forward orientation in ones’ job role and also fewer amounts of Intra-personal conflict situations.

Westman et al. (1999) investigated crossover of stress and strain in the workplace on school principals and teachers in Israeli elementary schools. They found a significant crossover of job-induced tension but not of burnout from principals to teachers and vice-versa.

**JOB INVOLVEMENT:**

Gechman and Wiener (1975) attempted to study job involvement and satisfaction as related to mental health and personal time devoted to work. The results showed that devoting personal time to work related activities was positively associated with job involvement but unrelated to job satisfaction. At the same time mental health was not found to be significantly related with job involvement.
The situational (job) characteristics and the personal—psychological variables shared more common variance with job involvement then did personal-demographic variables (Saal, 1978).

Randall and James (1980) studied absenteeism, job involvement, and job satisfaction in organizational settings. Results indicated that both job satisfaction and job involvement were inversely related to absenteeism, but job involvement was more consistently related to absence behaviour.

Anantharaman and Subha (1980) suggested that job involvement is related to higher order need of self actualization.

Anantharaman (1980) attempted to find out the relation of Job-Involvement to age, tenure and income and locus of control among nurses. Analysis of the data indicated age, tenure and internal locus of control to be significantly related to job involvement.

Anantharaman and Deivasenapathy (1980) found that managers were more involved in their job than supervisors and workers. Workers were less involved than supervisors.

Madhu and Harigopal (1980) examined the relationship between Role Conflict/Role Ambiguity and Job Involvement, Job Performance, age and job tenure. Results for the non-technical sample indicated (a) negative relationship between Role Ambiguity and Job Involvement and Job Performance (b) positive relationship between Role Conflict and Role Ambiguity and (c) Positive relationship between Job Involvement and Job Performance. Role Conflict correlated positively with age for the technical sample.
Komaraju (1981) analyzed the influence of nature of organization (public or private sector) on three job attitude variables-job involvement, Job Satisfaction, and intrinsic motivation. Discriminant function analysis showed that within the private sector the lower management had a significantly higher degree of job involvement than the middle management. Furthermore, the middle managers in the public sector had a greater degree of job involvement than their counterparts in the private sector.

Srivastava and Sinha (1983) compared three groups of employees indicated high, moderate, and low levels of job involvement with regard to their degree of Job Anxiety. The employees' (the three groups taken as a whole) Job Involvement was observed to be positively correlated with their job anxiety regarding various dimensions of job life excepting recognition and future prospects.

Gould and James (1983) studied job involvement and organizational identification among 286 municipal employees in a large southern city. Both job involvement and organizational identification were found to be lower among male subjects whose spouses were employed than male subjects whose spouses were not employed. Further, for subjects whose spouses were employed, Job involvement and Organizational identification were found to be higher for subjects with children than it was for childless subjects.

Singh and Misra (1983) attempted to find out the influence of certain personality and situational variables on job involvement of 100 first level supervisors. Results indicated that job involvement scores were not significantly related to occupational stress and ego strength.
Ananatharaman and Sarah (1983) attempted to find out the differences if any in Job Involvement among industrial employees. Managers were found to be more job involved than supervisors and workers. Age, tenure and education of the respondents were positively correlated with Job Involvement.

Kahndelwal and Mathur (1987) investigated the relationship of job involvement to personality factors among orthopadically handicapped and non-handicapped bank employees. The non-handicapped employees were found to have higher job involvement than their counterparts. Moreover, the traits of shyness and intelligence were found to be significantly correlated with job involvement among the non-handicapped workers, while the factors like ego-strength, soberness, tendermindedness, imaginative, shrewd, and high self-control were significantly correlated to Job Involvement scores among the handicapped employees.

Sarah and Khandelwal (1988) attempted to find out the relationship of Job Involvement to perceived outcome importance and to demographic variables, of dual career couples. Men were found to be significantly more involved in their jobs than women. Education, age, and income were all positively related to Job Involvement.

Singh and Pestonjee (1990) have explored the effect of job involvement and sense of participation on job satisfaction of two categories of bank employees. Job satisfaction of bank employees was found to be affected positively by occupational level, job involvement and participation. The interactional effect of job involvement and participation was found to be significant.
Akhilesh and Mary (1991) found in their study that rewards and sanctions are significantly associated with job involvement.

Misra (1994) investigated the moderators' effect of under-participation stressors on the relationship between job involvement and job satisfaction. Findings reveal that under-participation stressors did not have a moderating effect on the relationship between job satisfaction and job involvement.

Srivastava and Krishna (1994) conducted a comparative study on male and female teachers with regard to their work motivation and job involvement. The results indicated that male teachers maintain markedly higher level of work motivation and job involvement as compared to their counterparts. Furthermore, teachers' work motivation generated by most of their needs positively correlated with their job involvement.

Bhatt (1997) investigated the correlation between job stress, job involvement, and job satisfaction among primary school teachers. Results indicated that in case of the primary school teachers' job stress was highly significantly negatively associated with job involvement and job involvement was significantly and positively correlated with job satisfaction.

Daftuar and Anjali (1997) explored the levels of organizational stress, organizational commitment, and job involvement among the sattva, rajas, and tamas personality types. They have found significant negative and positive correlation between job involvement and several areas of occupational and organizational commitment and sattva type of personality.
Sayeed (1998) found that career utility and Job Involvement are directly contributed to learning efforts and Job Involvement is a predictor of the training impact.

Elloy and Flyman (1998) examined the levels of organization commitment and job involvement of single income and dual income couples. The results indicate that in one location there was no difference in the level of organizational commitment and job involvement between individuals in dual income and single income families. In another site, however, individuals from single income families with children had higher levels of commitment than members of dual income families.

Biswa (1998) found that organization effectiveness was positively correlated with job involvement.

Joshi (1998) compared private and public sector employees in terms of job satisfaction, job involvement and work involvement. The study revealed that there is a significant difference between private and public sector employees in terms of job satisfaction, job involvement, and work involvement. Personal variables like age, length of service, work experience on their present job, and monthly income had significant effect on job involvement.

Michael and Donna (1999) studied the roles of perceived organizational support and satisfaction with reward, in explaining job involvement and two forms of organizational commitment (affective and continuance) among dairy workers. They have found that perceived organizational support was significantly linked with job involvement, and with affective and continuance commitments. Satisfaction with intrinsic and extrinsic rewards was a salient predictor of job involvement and affective commitment.
Patel (1999) investigated the impact of age on job involvement and organizational commitment of nationalized and Co-operative bank employees. Results revealed that younger employees of both nationalized and Co-operative banks significantly differed with middle aged and elderly groups of employees, the former group exhibited less job involvement and less organizational commitment than the later groups of employees. Nationalized and Co-operative bank employees belonging to the same age group did not significantly differ with each other on job involvement.

Naaz (1999) examined the effects of the job characteristics and certain demographic variables on job involvement among textile workers. Results indicate that only one job characteristic, i.e. skill variety, was found to be significant predictor of job involvement.

Joshi (1999) examined the relationship between age, job experience, monthly income and educational level of the individual employee of public and private sector, with their job satisfaction, job involvement and work involvement. The findings reveal that employees' age, Job experience and monthly income were significantly associated with their job involvement and it was also found that employees' job satisfaction and job involvement are significantly associated.

PERSONALITY HARDINESS:
Since the pioneering work has been carried out on hardiness, a number of studies have confirmed its beneficial effects on stress-induced illness.
Kobasa (1979) in a comprehensive study measured the degree of stressful life events among upper and middle level executives. One of which suffered high stress without falling ill, whereas the other reported becoming sick after their encounter with stressful life events. The results of the study indicate that high stress/low illness executives show, by comparison with high stress/high illness executives, more hardiness. The first group was found to have a strong sense of commitment to self, an attitude of vigorousness towards the environment, a sense of meaningfulness and an internal locus of control.

The mediating effects of personality based hardiness and constitutional predisposition (parents illness) on the stressful life events and illness relationship were examined. Medical examinations of the subjects were conducted on a yearly or more frequent basis during the period of the study. The statistical analysis of the data produced the results which indicate that stressful life events and constitutional predisposition increases while hardiness decreases subsequent illness (Kobasa, Maddi and Courington, 1981).

Kobasa, Maddi and Puccetti (1982) studied personality and exercise as buffers in the stress-illness relationship. Results demonstrated exercise to be associated with lower overall illness scores in executives under stress, and that this buffering effect was distinct from that attributed to hardiness. It was also found that whereas hardiness leads to decreasing the stressfulness of events, thereby decreasing their ability to produce sympathetic arousal (or organismic strain), exercise may have its general buffering
effects by relieving the organismic strain directly, without altering the precipitating event. They also reported that subjects who are high in both hardiness and exercise are more resistant to stress than those who are high in one but not in the other.

Kobasa (1982) conducted a study on male lawyers and found that out of the three components of hardiness only commitment and control were significant predictors of health whereas challenge was found to be ineffective in predicting health outcomes.

Kobasa and Puccettie (1983) examined personality, social assets and perceived social support as moderators of the effects of stressful life events on illness onset. In a group of 179 middle and upper level executives, personality hardiness and stressful life event consistently influenced illness scores. The former serving to lower symptomatology, and the later to increase it. Perceived boss support had its predicted positive effect. Executive under high stress, who perceived support from their supervisors had lower illness scores than those without support. Perceived family support, on the other hand showed a negative effects on health when reported by those low in hardiness. Finally social assets made no significant impact on health status.

Ganelien and Blaney (1984) examined the relationship and relative importance of hardiness and social support in reducing the ill effects of life stress in 83 female under graduates. Analysis of the data indicated a significant correlation of commitment and challenge dimensions of hardiness with social support but not with control component of hardiness. When interactions among life stress, social support and hardiness were
considered, only the alienation from self-scale was found to moderate effects of life stress.

Rhodewalt and Agustsdottir (1984) conducted a study to find out a relationship of hardiness to type A behaviour pattern (TABP). It was also investigated as to how stressful life events are perceived and coped with by the subjects. 600 undergraduate students were asked to report life events they experienced for the previous years; and rate each event for its desirability, controllability, and foreseeability. Results indicated that an accumulation of perceived undesirable events was associated with distress for subjects low in hardiness. The likelihood for experiencing any given event was not related to any personality type. However, hardy individuals differed from their low hardy counterparts in that, on an average, they were more likely to perceive an event as desirable and controllable.

The effects of resistance resources of personality hardiness, exercise, and social support independently to each other and in combination on probability of illness were demonstrated by Kobasa, Maddi, Puccetti and Zola (1985). Among relative effectiveness of resistance resources, hardiness emerged as more important buffer than exercise and social support which appeared to provide some protection both concurrently and prospectively, but these effects were not very strong. A combination of the three resistance resources of hardiness, social support and exercise appeared to decrease illness likelihood in the face of highly stressful conditions both concurrently and subsequently.
Halahan and Moos (1985) examined the factors that buffer the potentially negative health effects of life stress. Subjects were segregated into a distressed group (high stress, high distress) and a stress-resistant group (high stress, low distress). Findings demonstrated that those who adopted to life stress with little physical or physiological strain were more easy going and less inclined to use avoidance coping than individuals who become ill under stress. In addition, in the stress resistance group, men were more confident (self) and women had better family support than their counterparts in the depressed groups.

Singh (1986) conducted a study on 216 executive and found that subjects, who remained healthy in the face of stressful life events, possessed one of the three dispositions of hardiness. Further, low-hardiness subjects reported almost twice as much illness as high-hardiness subjects.

Schmied and Lawler (1986) examined the relationship of hardiness, type A behaviour, and the stress-illness association. However, there were no hardiness main effects or interactions between stress, type A behaviour, and hardiness. Hardiness was significantly associated with age, educational level, and marital status. No difference in hardiness composition were found between high stress/high illness and high stress/low illness groups.
Bank and Gannon (1988) in a prospective study investigated the influence of hardiness on the relationship between stressors and psychosomatic symptomatology. The impact of hardiness, life events, and hassles on reports of somatic symptoms over a period of nine months was recorded. Results showed that hardiness tended to have additive and opposite effects to that of stressors in its impact on symptomatology. Subjects higher in hardiness tended to experience less frequent stressors and to perceive the minor event they did experience as less stressful.

Manning et al. (1988) examined the direct and moderating relationship between hardiness, life and work stressors and a variety of health-related outcomes. Results indicated that hardiness did not moderate the relationship between stressors and outcomes. However, hardiness was found to have significant direct effects on emotional and psychological factors thought to be related to personal well being and work performance. Hardy subjects reported high levels of job satisfaction and fewer tension at work, experienced a higher quality of life, and were less negative about life as compared to nonhardy subjects. Hardy subjects also had fewer somatic complaints and tended to be less depressed. At the same time hardiness was negatively related to all four measures of life and work stress, implying that hardiness may not be independent of life demands.

Rhodewalt and Zone (1989) conducted a survey to study whether psychological hardiness buffers people against stressful life change through the appraisal and
interpretation of life experiences. Hardy and non-hardy participants reported life events for the previous year, physical illness for the previous 6 months and current level of depression and rated each reported event in terms of its desirability. Results indicated that, although hardiness is not associated with the likelihood of reporting any specific life event, nonhardy subjects appraise a significant higher proportion of their life experiences as undesirable than do hardy subjects report that each negative event requires greater adjustment.

Alfred and Smith (1989) assessed the cognitive and physiological responses of high and low hardy male undergraduates to a challenging task under high and low evaluate threat. They have found that in the high stress condition, high hardy individuals endorsed more positive self-statements than did low hardy individuals. Furthermore, high hardy subjects reported more positive self-statement in the high stress condition than did high-hardy subjects in the low stress condition. In contrast, low hardy subjects reported fewer positive though in the high stress condition than in low stress condition.

Contrada (1989) examined type A behaviour and hardiness as predictors of cardiovascular responses to stress in 68 male undergraduates. Systolic and diastolic blood pressure and heart rate were monitored while subjects performed a difficult mirror-tracing task. Type A assessments were associated with significantly enhanced systolic blood pressure. Hardiness was associated with significantly reduced diastolic blood pressure responsiveness. In addition, a significant interaction indicated that the type B (high hardiness) group showed the least diastolic blood pressure reactivity. A
near significant interaction (p=.06) suggested that type B (high hardiness) subjects also reported the least anger. Further exploration of the data indicated that the challenge component of hardiness accounted for its relationship to diastolic blood pressure reactivity.

Roth et al. (1989) examined the effects of exercise, participation, self-perceived fitness level, and dispositional hardiness for promoting stress resistance in a sample of 373 college students. Self report measures of stressful life experience and recent physical illness was positively correlated with stress. Multiple regression analysis indicated that neither fitness nor hardiness provided a stress-moderator effect because neither was found to significantly interact with stress in the prediction of illness scores. Structural equation analysis suggested that hardiness may effect health indirectly by first influencing either the occurrence or subjective interpretation of stressful life events.

Wiebe (1991) conducted a study on high and low-hardy male and female undergraduates. Results suggest that hardiness does moderate stress, and provide some evidence that this occurs through an adaptive stress appraisal process. High hardy subjects displayed higher frustration tolerance, appraised the task as less threatening, and responded to the task with more positive and less negative affect than did low hardy subjects. Furthermore, high hardy males displayed lower heart rate elevations during the task than did low hardy males. Appraisal manipulations had either no or opposite effect among females. These data indicate that the characteristics of
hardiness do reduce physiological arousal to stress among males. but no generalization is to be made about females.

Shepherd and Kashani (1991) examined the relationship between hardiness components and the experience of physical and psychological symptoms in male and female adolescents. A measure of psychological stress was included to permit an examination of whether the hardiness components interact with stress in predicting health outcomes. Analysis revealed main effects of stress, gender, and the hardiness components of commitment and control for several of the health measures. More important was the finding of a consistent interaction of stress, gender, and hardiness for several of the health measures. Where as low-stress males experienced few physical and psychological symptoms regardless of their levels of commitment and control, high-stress males experienced more problems when they were low rather than high in either commitment or control. However, the hardiness components did not interact with stress in the prediction of health outcomes among females.

In a retrospective study examined the relationship between stressors and psychological outcomes with regard to the moderating effects of hardiness was examined. The findings suggest that the hardy person might be relatively high in psychological health. Under a given stressful condition, executives high in hardiness scored lower psychological distress than those who were low in hardiness (Kosaka and Yoshida, 1992).
Parkes (1994) reviewed the role of individual differences in work-stress process. It was found that personality hardiness acts as moderator of stress-strain relationship.

Thomson and Wendt (1995) studied the relationship between the hardiness personality trait and school climate and the impact of these on student teacher alienation. Results reveal that individuals with higher levels of hardiness had significantly lower alienation scores across all school climate condition than their less hardy counterparts. Data also indicate that as the school climate become more supportive, student teachers who have high levels of hardiness become progressively less alienated. For those low in the hardiness construct alienation actually increased, as climate conditions become more supportive.

Hunag (1995) suggests that hardy persons are more likely to stay healthy, and perceive life changes as positive and challenging, through cognitive appraisal.

Salcova and Sykora (1995) conducted a pilot study to examine the relationship between hardiness and strain under anxiety. Sample consisted of 18 adults awaiting dental surgery and 32 control who had undergone the surgery. Individuals with less anxiety and high hardiness displayed reduced physiological response. However, the investigators found higher heart rate variability in persons with a high level of control, which they attributed to higher coping efforts.
Nathawat and Rathore (1996) examined the effects of gender, hardiness, and social support on life satisfaction in male and female upper middle class elderly (age 60-70), retired from government service. Males reported higher positive affect and life satisfaction than females. High hardy aged and elderly with high social support were more satisfied than the low-hardy aged and with low social support.

Glukoski et al. (1997) examined several variables that affect bereavement, including social support and hardiness in a 598 gay man. Social support, hardiness and number of losses all had a significant relationship with symptomatology.