Chapter – 2
Review of Related Literature and Formulation of Hypotheses
Chapter – 2

Review of Related Literature and Formulation of Hypotheses

With a view to seek some guidelines* from the previous researchers, which could be helpful in formulating the present investigation. The results of some of the representative studies are discussed below. The present review is by no means complete or exhaustive; it is an attempt to indicate the main trends in research and theory, which have a direct or indirect bearing on the present problem.

Affective disorders are not new in the history of mankind. Depression has had an extensive history in Western society since Hippocrates. They first described it as a medical illness. Descriptions of affective disorders are found among the early writings of the Egyptians, Greeks, Hebrews, and Chinese, similar descriptions are found in the literary works of Shakespeare, Dostowsky, Poe, and Meningway. Saul, King of Israel in the eleventh century B.C., suffered from manic-depressive episodes, and King George III of England was subject to periods of manic overactivity. The list of historical figures who suffered from recurrent depression is a long and celebrated ones, including Moses, Rousseau, Dostowsky, Lincoln, Tchaikovsky, and Freud (cf. Coleman, 1976).

Depression is widely used by the general public to describe those emotional states characterized by a lowering of spirits, dejection, and sadness. The state of sadness, however, does not necessarily qualify a person as having an illness or a psychiatric disease. In depressive reactions

* What is already known, what others have attempted to find out, what problems remained to be solved, what methods of attack have been promising or disappointing, the techniques and methodology followed by earlier investigators, etc.
the individual experiences a feeling of profound sadness and loneliness, and the whole world becomes joyless and gray. Nothing seems worthwhile anymore, emptiness prevails and only bad things are expected. Thought processes and behaviour are slowed down. The individual speaks slowly in a monotonous voice. He limits himself to brief answers to questions. He rarely poses questions; he avoids people and has a listless facial expressions and a stooping posture. Self-accusatory and hypochondriacal delusions are common. The individual may accuse himself of having committed various crimes, participated in immoral sexual acts, been selfish and callous with loved ones. He feels guilty of “unpardonable sins” and regards himself as basically worthless and not fit to live. He may be convinced that he has an incurable disease, that his internal organs have disappeared or are rotting away, or that his body is undergoing peculiar changes. In older depressed persons, the delusional content often centers around ideas of poverty, of suffering from some terrible disease, and of being abandoned and doomed to die in loneliness and despair.

When people become clinically depressed, they feel sad and are often tearful. They are troubled by guilt, believing that they are letting people down. They may become more irritable than usual, more anxious and tense. When the depression is at its worst, they may lose the ability to react emotionally, and find that good and bad feelings alike are lost in numbness. It becomes difficult to enjoy or to be interested in normal activities. Energy is low and everything seems only an effort. So, they tend to withdraw from the things they would normally do and may spend long hours hunched in a chair or lying in bed. Ordinary pleasures, like reading the paper or watching TV, becomes difficult and burdensome because it is hard to concentrate and to remember what has been read or said. They become preoccupied with how bad they feel and with the apparently insoluble difficulties that face them. Even basic bodily functions may be disturbed. Sleep is difficult, appetite declines, sexual desire disappears. Most dangerously, it may seem as time goes on that there will be no end to this state, that nothing can be done to change things for the better. So helplessness grows and can lead to a longing for death or thoughts of suicide.
The historical classification of depressive disorders (the term “affective disorders” was introduced by Manfred Bleuler in the 1930’s) has undergone many fascinating transformations through the centuries and was replaced in the revised edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) by the term “mood” disorders. According to the fourth Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) of American Psychiatric Association (APA, 1987) the three main categories of depressive disorders are major depression, minor depression and dysthymia. To meet criteria for a major depressive episode, the individual must experience at least five (> 5) of a list of nine symptoms during the same 2-week period. At least one of the symptoms must be either depressed mood or loss of interest or pleasure. Furthermore, these symptoms must represent a change from previous functioning. In the case of children and adolescents, irritability may substitute for depressed mood. Among the remaining symptoms are change in weight or appetite, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy and psychological symptoms, such as feelings of worthlessness or guilt, impaired ability to think or concentrate, recurrent thoughts of death, recurrent suicidal ideation or a suicide attempt with or without a specific plan. Dysthymia for children and adolescents refers to a chronic disturbance of mood involving either depressed or irritable mood for most of the day, more days than not for atleast one year, without the individual being symptom free for more than two months. Some of the symptoms of major depression should also be present. The DSM-IV-TR also includes a category of adjustment disorder with depressed mood when the predominant symptoms, such as depressed mood, tearfulness, and feelings of hopelessness occur in response to an identifiable psychosocial stressor (Appendix I).

Unfortunately, these symptoms, as specified in DSM IV (1995) can occur in a large number of combinations and to further complicate matters, they often occur in conjunction with other psychological problems such as generalized anxiety or hostility. Given the problems in definition, it is quite likely that the statement “the person is depressed” is one of the least informative communications in clinical practice (Derogatis, Klerman, & Lipman, 1972). Indeed, it has been argued that the term depression might
profitably be dropped from the clinician’s vocabulary. The term is practically undefinable in any way and it infers to a hypothetical internal state that can be conceptualized only in terms of the behaviours it is supposed to explain. Although one tends to agree with the crux of this argument, one also agrees with Lazarus’s (1966) comment that “the temptation to deny depression as a subject matter for scientific enquiry must be resisted, if for no other reason than the fact that clinicians daily are consulted by thousands of people who say they feel depressed”.

Depression is usually triggered by difficult life problems. But almost everyone experiences losses or disappointments at some point in their lives, yet only some people become seriously depressed. What accounts for this difference? Several explanations have been proposed.

Orthodox psychoanalytic theory considers psychopathology to be the result of the dynamic interaction of instincts and counter-instinctual forces. When the countering forces or defenses of the ego are not adequate in preventing anxiety provoking Id impulses from becoming conscious, symptoms appear. Consistent with this framework, Sigmund Freud (1917/1958) considered depression to be the result of unconscious aggressive impulses that threatened to become conscious and were turned inward against the self by the defense of introjection.

Freud (1917/1957) wrote how persons, who later in life, suffer from depression are characterized during their development by “a narcissistic type of object choice.” In more contemporary language, one would say that for the individual who is prone to depression, the self (or self-representation) is notably fused with objects (object representation), so that the sense of autonomy is impaired. Numerous theories have elaborated upon the dynamics of depression but virtually all have retained the central concept that aggressive impulses that are too anxiety provoking to be directly expressed are redirected towards the self (Weiss, 1944; Klein, 1935/1948; Rado, 1928; Abrahm, 1924/1966). Few empirical data exist to support such theoretical concepts proposed by psychoanalysis, and much of the data that can be found in the literature provides only indirect support. Mayo (1967), found that depressed patients, who recovered, displayed less hostility towards themselves following their recovery than they did during the course of their
illness. Blackburn (1974) and Phillip (1971) found that improved depressed patients were less intropunitive than those who showed no improvement, although hostility directed towards others did not significantly changed over the time.

Despite Freud’s theory of psychoanalysis the early concern with ego development, was not clear until ego psychology flourished in the 1950’s and actual importance of the ego came into existance. Hartmann (1958) stated that the perceptual apparatus of the ego influenced the choice of defenses. Oken (1962) added that the availability of defenses was “closely related to those personality attributes designed as ‘cognitive styles’ which represent more or less persistent, fixed modes of the organization of perceptual and cognitive processes”.

In recent years, the psychoanalytic theory has been losing ground in favour of the cognitive theories of depression (Lewinsohn & Rosenbaum, 1987). One of the early cognitivists, Becker (1962) postulated that depressive self-abusive cognition and guilt feelings stem in part from their parents extensive use of guilt-inducing socialization practices. Beck (1967) has advanced a cognitive theory of depression that attaches central importance to negative cognitive schemata that dominate depressed persons’ evaluation of themselves, their environment and their future.

The review of literature has been discussed under the following domains:-

2.1 Stress and Depression
2.2 Burnout and Depression
2.3 Hardiness and Depression
2.4 Social Support and Depression
2.5 Empathy and Depression

2.1 STRESS AND DEPRESSION

Nursing within the last 20 years has firmly embraced the idea that practice should be based on substantive research. Yet many of the issues with which modern nursing is grappling encompass complex multifaceted aspects which are difficult to conceptualise or define. Stress is one such
concept which has been increasingly invoked in both health care and lay discourses as an explanation for illness and general misfortune. A number of models of stress have been proposed, which have to a greater or lesser extent been adopted by the lay public. In many respects nursing models of health and illness have more in common with lay, rather than biomedical conceptualizations of illness aetiology. However, it is unclear to what extent nursing, lay and biomedical ideas about stress overlap (Mulhall, 1996).

Recent years have witnessed a burgeoning interest in stress and its potential to affect health. However, as with the concept of health itself, stress is prone to woolly definitions and imprecise meanings. Much as health has been described as a discourse it is still in the process of fabrication (Hockey & James, 1993). Stress is still subject to multiple explanations from a diverse set of academic viewpoints. Stress needs no introduction, it is familiar to professionals and layman alike, it is understood by all, but defined satisfactorily by none. A plethora of disciplines – psychology, psychiatry, nursing, medicine, sociology, anthropology, and pharmacology have studied stress, each with their own objectives and particular methodologies. Indeed, between 1987 and 1992 the psychological literature alone, cites 10,385 articles related to this subject (Mulhall, 1996). The concept of stress, is however, not confined to the professional discourse, it is widely invoked also by lay people as an explanation for certain forms of illness. A relationship with excessive work, modern living, type ‘A’ personality, executive lifestyle, potentially stressful life events and so on are suggested, and this view is reinforced through television programmes, magazine articles and numerous books written by professional health care workers and lay people (Cox, 1992).

Yet, although a multitude of research has been undertaken in this area, the ability of stress to produce illness remains unclear. Furthermore despite the volume of research conducted, it is evident that the concept of stress remains ill defined and there is little consensus as to exactly what the term refers to. As Cox (1992, p.25), notes “the varied influx of workers into stress research has resulted in a grand alliance and confusion of terminology”. Similarly, consensus on what constitutes effective coping still alludes the research community. Within nursing, several authors have contributed to the
literature concerning not only stress but other related concepts also such as anxiety, coping, and hardiness (Carson & Fagin, 1995; Bailey & Clarke, 1989; Astbury, 1988; Johnson, 1986; Sutterley, 1986; Zeimer, 1982). In addition, a number of nursing models focus on stress, conceptualizing it as a state of imbalance, which may respond to specific ameliorating interventions (Neuman, 1980; Scott et al., 1980). Nursing as a discipline has firmly embraced the ideology of holism, and its fundamental precept that health and illness are the synthesis of not only physical, but also psychological, social, cultural and spiritual well-being. Indeed it is a espousal of an interactional and holistic model of health and well-being, which leads to claim that nurses are "Uniquely qualified to practice stress management", (Sutterley, 1986).

Many disciplines have devoted substantial time and resources to the study of stress, that, despite the absence of an agreed definition which allows anyone to determine the existence if it exists or not. In addition it is recognised that much of the research undertaken in this field is of doubtful quality. Methodological weaknesses, practical constraints and ethical considerations are characteristic difficulties which flaw much of the work (Leventhal & Tomarken, 1987). Syme (1984) has therefore suggested that rather than regarding any one study as definitive, it may be necessary to seek for consistent patterns from across studies. Furthermore there are additional problems relating to the difficulties involved in determining the relationship between academic questions and the practical relevance of particular findings. This creates an additional atmosphere of controversy as fundamental and applied research and researchers struggle to come together. This situation prompts to note the necessity for workers from various disciplines to gain an appreciation of each others perspective (Vingerhoets & Marcelissen 1988). Hinkle’s (1987) description of medical scientists as being concerned with objective sources of stress, for example, infection, trauma; and social scientists as concerned with stress are arising from society – psychological stress is rather simplistic. The professional discourse on stress is more complex, exhibiting subtle interplay between disciplines, and considerable overlap with the lay model.
Three main approaches to stress research representing different views of its definition have been adopted viz.:

a) The Response Based Model

In the response based model stress is conceptualized as a dependent variable realised by a person's response to adverse effects. Stress here is defined as the response which an individual displays when stimulated by a stressor. This model is encapsulated by Selye's General Adaptation Syndrome (GAS) (Selye, 1936), described as below:

i) An alarm reaction where natural resistance is lowered, but body defences are mobilized.

ii) A resistance stage which leads to increased resistance and adaptation.

iii) A final stage where the energy for adaptation is exhausted and collapse ensues.

b) The Stimulus Based Model

Stress in this model is seen as an independent variable, that is, in terms of a causative stimulus. It is defined in terms of the disturbing environment, or external stresses, and the important questions concern a determination of which particular conditions are stressful. It is suggested that people may have an inbuilt resistance to stress which varies between individuals, but which has an upper limit beyond which physiological and psychological trauma results. This is an attractive model for both laymen and professionals. It is simple, it associates stress, a nebulous and 'difficult' concept, with emerging, a clearly formulated scientific discipline with 'laws'. Stress in this sense can be measured, and even the point of collapse recorded objectively.

c) The Interactional Model

Stress is conjectured as a lack of fit between the environment and a person. In these terms stress comes between its antecedent factors and its effects. This model defines stress as a dynamic system of interaction between person and environment. Cox (1992) proposes that stress is "an individual perceptual phenomenon stemming from the balance/imbalance between demand on the individual and the ability to cope". Demand arises externally from the environment, and internally from inherent psychological and physiological needs. Central here is a thesis of man's cognitive appraisal of a putatively stressful situation, and his capacity to cope both psychologically
and physiologically. Such a transactional model can be fitted to the four different standpoints on stress: the biological, the developmental, the social, and the phenomenological (Howarth, 1978). The imbalance of stress reflects the mismatch occurring in any one of these areas.

There is extensive literature and research which focuses on the service professions, professions which are very demanding of the worker and require constant care-giving and attention to the clients. Hospital settings in general, and Intensive Care Units (I.C.U.s) in particular, have been identified by many researchers as major stress workplaces (Numerof 1984; Hamilton, 1983; Eldar, 1981; Leatt, 1981; Price & Mueller, 1981; Wandelt, 1981).

Research has suggested that episodes of depression can be triggered by factors associated with work (Baba et al., 1998; Arsenault et al., 1991). Empirical studies show that stress is related to burnout, and that burnout can lead to depression, which in turn, can precipitate other forms of withdrawal (Molassiotis & Haberman, 1996; Lee & Ashforth, 1996; Kawakami et al., 1992; Snapp, 1992; Landsbergis, 1988; Motowidlo et al., 1986). While the literature clearly underscores the importance of depression in understanding, it is nevertheless fraught with a number of theoretical and empirical problems. Specifically, the studies reported are largely correlational and atheoretical (Kelloway & Barling, 1991). There are very few models that link depression to its work-related antecedents and consequences (Baba et al., 1999) Fig. 2.1. Finally, most theoretical and empirical work in this area is done with North American or European populations. Cross-cultural portability of these findings remain largely speculative (Laungani, 1996; Zanotti, 1996).

![Fig. 2.1: Theoretical model of antecedents and consequences of depression (cf. Baba et al., 1999)]
Nursing is widely acknowledged to be a stressful occupation. Gray-Toft and Anderson (1981) identified seven major sources of stress within nursing: death and dying, conflict with doctors, lack of support, inadequate preparation, conflict with other nurses, work load and uncertainty over treatment. Further, it is well accepted that nurses work in a high stress environment and a large amount of research has focused on the sources of this stress. Additionally, specialised nurses such as psychiatric nurses, have been identified as most likely to experience the negative consequences of occupational stress such as physical and psychological ill-health (Tyler et al., 1991). While research recognizes that psychiatric nurses are exposed to high levels of work stress (Karasek & Theorell, 1990). Bussing (1988) proposed that nursing is a low strain occupation when assessed using the Job Strain Model (Karasek, 1979). However, there is little empirical research in nursing that utilises the full Job Strain Model to test this assertion.

Recent studies testing the Job Strain Model support the prediction that increased job control can reduce the impact of job demands (Dwyer & Ganster, 1991). In addition to lessening the impact of job demands increased job control (task control, resource control, and control over the physical environment) was associated with greater job satisfaction. (Hurrell & McLancy, 1989).

Munro, Rodwell, & Harding (1998) examined the effects of occupational stress in psychiatric nurses well-being using the full Job Strain Model. The Job Strain Model was assessed for its ability to predict employee well-being in terms of job satisfaction and mental health. The original Job Strain Model was expanded to include social support based on previous research concerning the impact of social support on well-being. In the study, both work support and non-work support were assessed for their contribution to well-being. The results indicated that the full Job Strain Model can be used significantly to predict job satisfaction and mental health in this sample of Australian psychiatric nurses. Furthermore, social support was shown to be an important component of the Job Strain Model.
Kipping (2000) studied stress in mental health nursing. The findings demonstrate the great diversity of potential stresses within mental health nursing. They also provide support for the findings of previous studies. In common with the research cited earlier, patient issues, staff, resources, administrative issues and changes were all identified as stressful. As the questions were asked in an open format, however, respondents were not constrained by being presented with a closed list of options, as is often the case in stress research, some new issues emerged. Examples include nurses’ thoughts, feelings, and expectations of self and feeling unable to make a difference. The emergence of these categories begins to illuminate the meanings which nurses attach to their work. Given that the most frequently cited source of past stress was patient issues (59%, 262 respondents), it would be helpful to know more about what it is about working with patients that makes the work stressful. Barker (1992) studied that mental health nurses face stresses that are unique. As might be expected, violence and aggression were mentioned most frequently; however, a range of other patient behaviours and nursing interventions were also identified as stressful. These included dealing with suicidal patients, distressed patients, patients who self harm, the death of a patient, and containing and controlling patients, e.g., physical restraint, detaining people against their will and continually observing patients. While intuitively it is unsurprising that these aspects of patient care were experienced as stressful, what is less clear is what these situations mean for the nurses involved. If the interpersonal relationship between nurse and patient is at the heart of mental health nursing, as suggested by Barker (1992), then there is a need to understand more fully the meaning of this relationship to the nurse.

Tyler, Carroll, & Cunningham (1991) highlighted stress and well-being in nurses. Nurses in the public and private sectors were compared with National Health System (NHS) nurses in regard to occupational stress and its sources and self-reported health and well-being. While both groups reported similar high levels of stress experience, most noticeably, arising from high
workloads and the experience of death and dying, whereas National Health System nurses were more troubled by high work loads, and private sector nurses reported uncertainty over treatment as a more frequent source of stress than did their NHS counterparts. Levels of self-reported mental and physical health symptomatology did not differ between both the groups. Nevertheless, overall nursing stress scores and symptomatology were significantly correlated, and workload stress was the independent predictor of health and well-being status.

Nurses are exposed to the stressful effects of both patient care and management, especially head nurses (Harris, 1984; Leatt & Schneck 1980). Stress has the potential to jeopardize health (Cassel, 1976), while some existing studies have documented that there is no relationship between stress and psychological symptoms among nurse managers (Gribbins & Marshall, 1984; Harris, 1984; Hirsch & David, 1983; Kewedy, 1984; Leatt & Schneck, 1980).

Ehrenfeld (1991) discussed social correlates of job satisfaction and stress among Israeli nurses. This study focused on job satisfaction and work-related stress of nurses within the Israeli I.C.C.U. – a complex technological environment. The main purpose was to assess the contribution of multiple factors which may be associated with the nurses’ level of satisfaction and stress. These factors include personal characteristics and professional attributes of the nurse, as well as some objective and subjective characteristics of their work setting. In general, with the exception of income, nurses were satisfied. Stress presents a big problem in the I.C.C.U. Structure of work was found to be correlated with satisfaction, but only partially with stress. It was deduced that nurses are willing to ‘pay the price’ of professionalization: to work under stress and yet be autonomous, take responsibility for work decisions, and be highly involved in work, thus gaining satisfaction.

Ahuja et al. (1998) studied perceived job stress among executives in India. The executives were found at great health risk in view of the sedentary
and stressful nature of their jobs. This highlighted the important of examining both extrinsic factors that can reduce vulnerability to stress and enhance coping. Occupational stress was also viewed in an industry caused by role conflict, political pressure and responsibilities for other employees (Rajendran, et al. 1997).

2.2 BURNOUT AND DEPRESSION

Burnout is a negative experience which results from the interaction between the individual and the environment. It is an adaptation to the progressive loss of idealism, energy and purpose experienced by people working in the human services (Price & Murphy, 1984). The difficult realities of the work situation lead to gradual disillusionment, resignation and loss of spirit. Although it is a subjective phenomenon, it has a clear relationship with the organizational setting in which it occurs. In essence, burnout is a response to chronic occupational stress (Sullivan, 1993; Handy, 1988). Maslach & Jackson (1986) defined burnout as "A syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals, who do 'people work' of some kind". This definition includes three dimensions of burnout: (1) emotional exhaustion involves individuals feeling they are no longer able to give of themselves at a psychological level, (2) depersonalization refers to the development of negative, cynical attitudes and feelings about one's clients, (3) reduced personal accomplishment is the tendency to evaluate oneself negatively, particularly in relation to one's work with clients (Jensen, Kerkstra, Abu-Saad, & Zee, 1996).

Maslach (1982) described burnout as a syndrome of emotional exhaustion, depersonalization and reduced sense of personal accomplishment that frequently occurs among individuals who work in the human services and in educational institutions. Storlie (1979) paints a vivid picture of burnout as it occurs in the nurse: burnout (is) a highly personal happening inside the nurse. It would be more useful and certainly more
compassionate to ask what goes on in a professional nurse that transforms caring into apathy, involvement into distance, openness into self-protection, and trust into suspicion (Storlie, 1979). Most conceptualizations of stress (Mechanic, 1978; Selye, 1975; Lazarus, 1966) imply that it is the psychological discomfort that occurs when environmental stressors are perceived as too demanding and exceeding one's coping abilities. The environmental demands stem from occupational events.

Burnout has been linked with occupational events in health care (Maslach & Jackson, 1982; Cartwright, 1980). Greater demands from occupational events are linked with greater stress and consequently greater burnout. Studies have identified sources of occupational stress linked with burnout in critical care nurses (Topf, 1989; Bartz, and Maloney, 1986). These sources include interpersonal conflicts, ethical problems of dealing with administration, dealing with death and dying, inadequate knowledge and skill, work load, frustrated ideals and more recently, critical care units noise (Topf & Dillon, 1988; Kelly & Cross; 1985; Duxbury, Armstrong, Drew, & Heanly, 1984; Claus & Bailey, 1980).

In respect of the three burnout dimensions, research among health care social workers showed that role conflict, role ambiguity, and lack of physical comfort were significantly related to emotional exhaustion. Depersonalization was related to high role conflict, low challenge, and low satisfaction with financial awards. Significantly job characteristics in the sense of personal accomplishment were: high challenge, high work load, greater satisfaction with financial rewards, low levels of role conflict, and low levels of conflicts with professional values (Siefert et al., 1991). Among nurses, feelings of emotional exhaustion increased when the amount of workload increased. This relationship was reduced when nurses had more autonomy in their work. A negative relationship was found between amount of challenge in the job and social support experienced and feelings of emotional exhaustion (De Jonge, et al., 1994).
In addition to job characteristics, individual characteristics are related to burnout. The study of Boyle et al. (1991) among critical nurses showed that personality hardiness, social support and ways of coping were related to burnout. Hardy persons have a higher sense of commitment to work and self and feel a greater sense of control over their lives, viewing stressors as potential opportunity for change. Social support had a negative relationship to burnout too. Both work related and non-work related sources of social support were significantly negatively related to burnout. With respect to coping this study showed that problem focused coping was not related to burnout, whereas use of emotion focused coping was positively related to burnout. Peer support and support from supervisors were the two most commonly reported factors that assisted nurses in coping with job related stressful events (Boyle et al., 1991). Similar relations were found by Hare et al. (1988).

Some research has confirmed that social support received from work peers (Duxbury et al., 1984) and family friends (Cronin, Stubbs, & Rooks, 1985; Constable, 1983) reduced staff vulnerability to burnout. Interpersonal characteristics related to burnout include personal strategies. Specifically, higher levels of burnout have been reported among professionals who utilized withdrawal coping strategies and lower levels of burnout among those who used social coping strategies, such as talking about work stress and getting advice (Maslach & Jackson 1982). Fear of death, discomfort with dying patients and exposure to dying patients have also been discussed as potential contributors to burnout (Pruyser, 1982). Two empirical studies have investigated the last one of these possible relationships. One study confirmed that amount of exposure to dying patients was associated with higher levels of burnout (Dames, 1983), while the other (Yasko, 1983) found the relationship between exposure and burnout.

Cam (2001) examined the burnout in nursing academicians in Turkey. The purpose of this study was to determine the level of burnout in nursing academicians in Turkey, and to investigate the variables which were strongly correlated with the burnout nursing education settings. The sample of the
study consisted of the nursing at different universities in Turkey. Total 135 subjects out of 179 participated in the study. Maslach Burnout Inventory was used to measure the burnout. The results indicated that the most significant predictor of emotional exhaustion (EE) was work setting satisfaction, depersonalization (DP) was of job pressure, and personal accomplishment (PA) was job satisfaction in nursing education settings in Turkey.

Chung & Corbett (1998) studied responses of community health nurses identified major sources of stress as factors related to quantitative work overload, uncooperative family members and clients, unfamiliarity with situations, inability to reach physicians and personal situations. The intensity of stressors was significantly different at different age levels, in that, older nurses experienced less stress (Walcott-McQuigg, & Ervin, 1992). McGrath et al. (1989) showed that direct contact with patients and the emotional demands of patients caused community-based nurses more stress when compared with hospital based nurses. In another study, the stress experienced by community nurses decreased as the nurses recognized an improvement in the quality of care the patient received; were given adequate time to manage the requirements of the job, or developed competency in the performance of the tasks assigned in the health setting (Boswell, 1992).

Since burnout is a work related stress syndrome characterized by depersonalization, emotional exhaustion, cynicism and loss of personal accomplishment (Maslach & Jackson, 1981), stress response to work are associated with declines in professional effectiveness (Arsenault and Dolan, 1983) and work satisfaction (Duxbury & Dolan, 1983; Duxbury, Armstrong, Drew, & Henly, 1984) and with increased absenteeism (Duxbury & Theissen, 1979) and illness (Maslach & Jackson, 1981). Burnout professionals are also thought to be sensitive and empathic with clients (Drew, 1986; Cherniss, 1980). The burnout phenomenon is, therefore, costly for the individual practitioner, clients, employing agencies, the profession and society.

Pinne & Kanner, (1982) demonstrated the consequences of burnout as absenteeism, tardiness, vague somatic complaints, conflicts within the
working environment and eventual job turnover or career separation. Components of the work environment, social support system, and unique individual characteristics have been implicated in nurse burnout. Chiriboga and Bailey (1986) found that work environment and work stress variables contributed most to the prediction of burnout, and Constable and Russell (1986) found that job enhancement, work pressure and supervision support were the major predictors of nurse burnout. Chiriboga and Bailey (1986) also obtained an inverse relationship between age and burnout levels among nurses; however, the authors pointed out that this correlation may have been confounded by other demographic information such as ‘time in nursing’. Examining age, Bartz & Maloney (1986) reported that among intensive care nurses, older nurses showed fewer signs of burnout than did their younger counterparts.

Although the unit of assignment has not been shown to be a significant predictor of nurse burnout (Keane, Dueette, & Adler, 1985; Mohl, Denny, Mote, & Coldwater, 1982), one study (Parasuraman, Drake, & Zammuto, 1982) found significant differences in perceived stress among the three work shifts. Work overload, intershift problems and resource inadequacy were viewed as more severe by those on the evening shift than by day or night shift nurses. Night staff reported the lowest levels of felt stress and the highest levels of organizational commitment. Commitment was lowest among evening shift nurses.

Robinson (1991) conducted a study which was an examination of the combined ability of perceived work environment, demographic and work related variables to predict burnout among 314 nurses at a large metropolitan hospital. The three dimensions of burnout measured were emotional exhaustion, depersonalization and personal accomplishment. High work pressure and low work involvement and supervision support predicted emotional exhaustion. Task orientation, work pressure, work involvement and age, predicted both depersonalization and personal accomplishment.
McCraine, Lambert, & Lambert (1987) studied 107 registered staff nurses from an urban, community and hospital who responded to a self administered questionnaire. Consistent with previous research, burnout was significantly associated with higher levels of perceived job stress and lower levels of personality hardiness. Hierarchical multiple regression analysis further indicated that work stress (particularly stress due to work load) and hardiness were significantly additive rather than interactive predictors of burnout. That is hardiness had beneficial main effects in reducing burnout but did not appear to prevent high level of job stress from leading to high levels of burnout.

Astrom (1991) studied RNs, LPNs and nurse’s aides for the relationships between their experience of burnout, empathy and attitudes. It was found that the staff’s experience of burnout changed from a mean score of 2.7 to 2.5 in one year only. Their empathic ability was moderately high and increased from 398 (m) to 450 (m). The attitudes of staff remained unchanged and no differences were found regarding the staff’s age, place of work or time at present place of work. As for the staff’s empathy, there was no difference with respect to sex, category of staff or place of work. RN’s showed the most positive attitudes towards demented patients and differed compared to the nurse’s aides and LPN’s. Burnout correlated with lower empathy and less positive attitudes in the staff.

In recent research conducted among hospital staff nurses, symptoms of burnout were found to be significantly associated with perceptions of stressful and unrewarding working conditions as well as with a variety of other negative sequelae, including tardiness, absenteeism, use of tranquilizing drugs, physical illness, and withdrawal from others (Chiriboga & Bailey, 1986; Cronin Stubbs, & Rooks, 1985; Albrecht, 1982; Pines & Kanner, 1982).

With the increasing awareness of burnout as a problem and job stress as a contributing factor, researchers have also begun to investigate variables that may promote stress resistance among hospital nurses (Constable & Russel, 1986; DuCette & Adler 1985; Duxbury, Armstrong, Drew, & Henly, 1984; Albercht, 1982). This emerging focus derives from a growing body of
life stress research suggesting that resistance resources (Antonovsky, 1979) may buffer or neutralize the otherwise debilitating effects of stressful life events. Major attention has focused on personality variables that may operate as personal resources during encounters with stressful events (Johnson & Sarason, 1979).

Burnout has many implications for nursing care as well as for caregivers’ health and cost related to health services. Authors in the field of burnout agree that manifestation of burnout is related to important work stressors, sustained overtime; burnout appears, above all, to be an adverse work stress reaction with psychological, psychophysiological and behavioural components (Maslach, 1982; McConnell, 1982; Pines & Aronson, 1981; Cherniss, 1980; Edelwich & Brosky, 1980; Freudenberger, 1980). Jones (1981) defined professional burnout as a syndrome of physical and emotional depletion that is characterized by negative work attitudes, a poor self-concept and loss of concern for patients. It usually manifests as frequent irritation and anger with patients, withdrawal from work or absenteeism, low productivity, job dissatisfaction and a loss of creativity. In short, burnout appears to be a problem of adaptation with inhibition to work (Bibeau et al., 1988).

Duquette et al. (1994) conducted an analytical review of empirical knowledge of factors related to nursing burnout. This systemic analysis of the literature showed that the main correlates of burnout are work stressors, work support, coping strategies and hardiness. Work stressors are events related to nursing work that are perceived as menacing and stress generating; these situations could be ‘physical’ such as workload, ‘psychological’ such as death of patients and incertitude of treatment, and ‘social’ such as interpersonal conflicts (Gray-Toft & Anderson, 1981a). Many studies in the nursing literature show that work stressors may induce burnout (Lewis et al., 1992; Richardaen et al., 1992; Stechmiller, 1990; Lay, 1988; Firth et al., 1986; Kaplan, 1987; Beaver et al., 1986; Jenkins & Ostetega, 1986; Pelletier, 1984).

Work support refers to the positive social relationships involving free expression of ideas, friendship, encouragement, as well as the emotional and instrumental help persons give to each other in the work environment (Moos, 1986). Sixteen studies found a significant negative relationships between work support and nursing burnout (Fong, 1993; Plante, 1993; Saulnier, 1993;
Dick, 1992; Eastburg, 1991; Michand, 1991; Oehler et al., 1991; Ogus, 1990; Hare et al., 1988; Mallett 1988; Constable & Russell, 1986; Dick, 1986; Haley, 1986; Cronin-Stubbs & Rooks, 1985; Duxbury et al., 1984; Mickschl, 1984; Paredes, 1982;). These studies have been conducted in diverse settings, including geriatrics, across Canada and the U.S.A. Two sources of work support were mainly examined, support from superiors and support from colleagues. Both factors of work support were significantly correlated with nurse burnout.

In the perspective of Lazarus’s work (Lazarus & Folkman, 1984) the notion of coping refers to responses or adaptive strategies which an individual uses to confront stressors and reduce stress generating events on one’s functioning. Five studies investigated the relationships between nursing burnout and coping strategies. Ceslowitz (1989) surveyed 150 staff nurses, who experienced increased levels of burnout. These nurses used the coping strategies of escape and avoidance, self-controlling and confronting. Those who experienced decreased levels of burnout used the coping strategies of problem-solving, positive reappraisal, seeking social support and self-controlling. Chiriboga and Bailey (1986) studied 544 nurses employed in medical surgical units and coronary care units in six hospitals in California. Their findings showed that among nine coping strategies, only one significantly contributes to predict burnout. The anticipated coping strategy, characterized similarly as an action and vigilance strategy, correlated negatively with burnout. Kimmel (1981) studied 135 nursing personnel: ward clerks, nurses aides, licensed practical and registered nurses in a large hospital. The findings showed two types of coping related to burnout. Self-blame coping was positively related and growth coping – a dynamic state of being creatively engaged and productive – was negatively related to burnout.

Lauzon (1991) conducted her study among 173 critical care nurses from three hospitals; she found that escape/avoidance and confrontational coping were predictive of burnout. Planful problem solving and positive reappraisal were negatively related to burnout. Finally, Teague (1992) studied 153 nurses in one hospital and concluded that those who utilized more emotion-oriented coping styles reported the highest amount of burnout.
Some studies have focused on the association between staff burnout and clients who display difficult or violent behaviour (Allen et al., 1990; Maher, 1990; Thomson, 1987; Lakin et al., 1982; George and Baumeister, 1981; Zaharia & Baumeister, 1978). Most of these studies have reported inconsistent findings. For example, some nurses reported that having contact with clients provided a relatively high level of job satisfaction while others felt that it was a prominent source of job dissatisfaction and frustration (Wallis, 1986). Also, while the level of burnout increased among staff who had reduced interaction with individual clients (Allen et al., 1990; Browner et al., 1987) another study (Campbell and Mawson, 1978) found clients violent behaviour (e.g. self-injury and attacking others) was a dominant potential source of staff burnout.

Jones (1987) identified that administrative and organizational factors rather than clients’ behaviour were strongly related to nurses burnout. These factors included the inadequate fulfillment of assigned tasks (Menaghan and Merves, 1984), the policies of the institution and dissatisfaction with the agency (Thomson, 1987); the attitude of administrators, lack of opportunities for promotion (George & Baumeister, 1981), lack of clearly defined role (Allen et al., 1990; Maher, 1990; Thomson, 1987), staff shortage (Thomson 1987), and low autonomy and support from management (Rayner et al., 1990; Jones, 1987).

Demir et al. (2003) highlighted the relation between the variables of professional and private life in nurses and levels of burnout and the differences between two hospitals in this respect were considered. It was found that conditions in state hospital were more unfavourable than those in university hospital that in turn causes increase on burnout. It was also found that burnout decreases as education level, work experience and work status increase. It also increases by overtime work and the frustrations among nursing teams. Burnout levels increased when nurses were not satisfied with the facilities provided by the institution where they work. Burnout levels of nurses encountering difficulties in childcare and doing house chores were also found to be high. Burnout level is also high in nurses who suffer from health problems or whose children do so. In addition, economic hardships, living in low-quality houses and transportation difficulties increase burnout.
2.3 HARDINESS AND DEPRESSION

With the increasing awareness of burnout as a problem and job stress as one of the contributing factors, researchers have also begun to investigate variables that may promote stress resistance among hospital nurses (Constable & Russell, 1986; Ducette & Adler, 1985; Duxbury, Armstrong, Drew & Henely, 1984; Keane, Albreehl, 1982).* This emerging focus derives from a growing body of life stress research suggesting that resistance resources (Antonovsky, 1979) may buffer or neutralize the otherwise debilitating effects of stressful life events. Major attention has focused on personality variables that may operate as personal resources during encounters with stressful events (Johnson & and Sarason, 1979).

Kobasa (1979) first introduced the hardiness characteristic as a personality construct that moderates stress-illness relationships. Using the existentialist perspective, she viewed hardiness as a personality characteristic that enables individuals to remain healthy even when confronted with high levels of stress. Although others suggested that psychological variables, that is, the way people perceive stress, were important to the stressful life events model (Sarason & Sarason, 1982; Lazarus, 1966), hardiness was first hypothesized global personality construct found to moderate stress-illness relationship.

In her study of male executives with high levels of recent stressful life events, Kobasa (1979) found that those in the high stress/low illness group scored higher on the hardiness measure than those in the high stress/high illness group. These results supported hardiness as a moderator of the stress buffering health relationship. Thus, non hardy persons are affected negatively by stress whereas hardy persons are not affected negatively by stress.

Kobasa, Maddi, & Kahn (1982) demonstrated further empirical support for the moderating effect of hardiness on the stress-health relationship. In a prospective study of the original sample of male executives, they found that

* Hardiness has emerged as a positive mediating variable in an otherwise negative field of stress and illness research. Derived from existential personality theory, the hardiness characteristic has been identified as a personality resource that buffers the negative effects of stress. Individuals not only can remain healthy under stressful situations but also may benefit if they perceive the events as opportunities for mastery and personal growth.
when hardiness was coupled with stressful life events, the prediction of health was significantly enhanced. The effect of hardiness was independent of other resources like predispositions and Type ‘A’ personality.

In a series of papers Kobasa and associates (Kobasa, Maddi, & Kahn, 1982; Kobasa, Maddi, & Corrington, 1981; Kobasa, 1979) presented a model of individual vulnerability to stress. They hypothesized that the individual who remain healthy after experiencing high degree of life stress exhibit a constellation of attitudes, benefits and behaviour tendencies that distinguish them from those who become ill. This constellation is labeled as hardiness and comprises three dimensions: commitment, control and challenge. Commitment reflects a generalized sense of purpose and meaningfulness expressed as a tendency to become actively involved in ongoing life events rather than remaining passively uninvolved. Control refers to a tendency to believe as if one can influence the course of events rather than feeling helpless when confronted with adversity. Challenge is defined as the belief that change rather than stability is normal in life and that change can be a stimulus to growth rather than a threat to security (Kobasa & Maddi, 1977).

Kobasa et al. (1982) hypothesized that these interrelated elements of the hardy personality style mitigate the negative impact of stressful life events by influencing both cognitive appraisal (e.g., not interpreting events as meaningless, overwhelming or undesirable) and coping (e.g. investigating activities that lead to an effective resolution of problems caused by the events.

Hardiness has been theorized to affect stress and health in two ways. Greater hardiness has been conceived of as being associated with less psychological and consequently greater health because hardy individuals alter their perception of stress (e.g., to be a challenge). Secondly both hardy and non-hardy individuals may undergo high levels of stress due to life events. However, hardy individuals are more likely to use effective coping strategies and social resources to reduce stress and prevent illness. This tendency has been called the stress buffering effect of hardiness (Kobasa & Puccetti, 1983; Kobasa, 1982a). Kobasa and her colleagues have reported numerous studies on the relationships between hardiness, life events stress and illness among executives, lawyers and company managers (Kobasa, Maddi, & Zola, 1983; Kobasa & Puccetti, 1983; Kobasa, Maddi, & Kahn, 1982; Kobasa, Maddi, & Corrington, 1981).
Demands from occupational events

+ve

Personality -ve Occupational + +ve with Burnout

Hardiness stress

▲

'... 2.2 : Relationship Between Hardiness, Stress and Burnout
Adapted from Kobasa (1982a), (cf. Margaret Topf, 1989)

Fig. 2.2 : Relationship Between Hardiness, Stress and Burnout
Adapted from Kobasa (1982a), (cf. Margaret Topf, 1989)
Topf (1989) investigated personality hardiness, occupational stress and burnout (Fig. 2.2). Researcher investigated 100 critical care nurses. Hardiness was predictive of occupational stress and burnout. Hierarchical multiple regressions revealed that one of the three dimensions of hardiness, commitment to work was the only variable to account for significant amount of variance (upto 24%) across three of the four measures of burnout. The study did not provide support for the stress buffering effects of hardiness that is on interaction term, hardiness v/s occupational stress was not convincingly predictive of burnout in nurses.

Several studies have also confirmed that hardiness has a moderating effect on the relationships between stress and psychological strain. In these studies psychological strain or distress included various psychological measures such as depression and anxiety. Stress was assessed by several versions of life events on Daily Hassels Scale, whereas psychological strain was measured by different instruments in each study. Regardless of how stress and strain were defined and measured, results were similar. Independent of stress, strain was significantly predicted by low hardiness in lawyers (Kobasa, 1982a), women in various jobs (Nowack, 1985), evening school students (Lang & Markowitz, 1986), undergraduates (Ganellen & Blaney, 1984), and adolescents (Wendt, 1982).

The moderating effects of hardiness have also been studied in relation to burnout. Hardiness moderated the stress-burnout relationships in two groups whose work involved a great deal of interpersonal interaction: employers in the human service field (Nowack & Hanson, 1983) and female teachers (Holt, Fine, & Tollefson, 1987). Keane, Ducette, & Adler (1985), followed by McCaine, Lambert, & Lambert (1987) also found support for the moderating effect of hardiness on burnout in nurses. Results of these studies support the hypothesis that the differences in personality hardiness, as well as situational work stress, account for the burnout phenomenon.

There have been few studies of the effect of hardiness on adaptation to actual health problems. In an exploratory study of rural adults diagnosed with cancer for more than one year, Lee (1983) found that those who remained active and adjusted well to their illness had the hardiness characteristics. Contrada (1985) noted that respondents high in hardiness had a lower
diastolic pressure than respondents low in hardiness during a difficult sensorimotor task. Solomon, et al. (1987) found that higher lymphocyte counts were significantly associated with lower hardiness scores in AIDS patients and delayed conversion was related to higher hardiness scores in patients with AIDS – related complex conclusion of variable.

2.4 SOCIAL SUPPORT AND DEPRESSION

In a review of the occupational stress literature, Buunk (1990) made a distinction between four different conceptualizations of social support. First, from a sociological perspective, social support has primarily been viewed in terms of the number and strength of the connections of the individual to others in his or her social environment. In other words, the degree of one’s social integration or the size and structure of one’s social network. According to Rook (1984), social integration may promote health, among other things, by behaviour providing stable and rewarding roles, by promoting healthy behaviour, by deterring the person from ill-advised behaviour, and by maintaining stable functioning during a period of rapid change. A second perspective on social support has been provided by authors who equate social support with the availability of satisfying relationships characterized by love, intimacy, trust or esteem. For instance, Cutrona & Russell (1990) have shown that certain provisions of relationships, including attachment and reassurance of worth, can act as buffers against stress. In the third perspective, the perceived helpfulness view, social support constitutes the appraisal that under stressful circumstances, others can be relied upon for advice, information and empathic understanding, guidance and support. In this context, there is some evidence for the assumption that the mere perception that one can turn to someone for help already reduces stress (Sarason & Sarason, 1986). Finally, for some authors the concept of social support refers primarily to the actual receiving of supportive acts from others, once a stressful situation has come into existence. While the foregoing perspectives assume a certain preventive function of support against stress, this perspective focuses upon the curative function of actual help when a person is under stress (Barrera, 1986). Although, all these conceptualizations
may be important for understanding the role of interpersonal relationship in reducing stress, the four levels may bear different relationships to health and well-being.

Regardless of how it is conceptualized, social support would seem to have two basic elements: (a) the perception that there is a sufficient number of available others to whom one can turn to in times of need, and (b) a degree of satisfaction with the available support. These two factors in social support may vary in their relation to one another, depending on the individual's personality. Some people may think that only a large number of available helpers provide sufficient possibilities of social support. Others may consider that even one person is adequate. How gregarious people are and how comfortable they feel with others may determine the number of supports they believe necessary. In the same way, satisfaction with the support perceived to be available may be influenced by personality factors such as self-esteem and a feeling of control over the environment. Recent experiences may also influence a person to regard the support available as satisfactory or not satisfactory.

Over the past 10-15 years, there has been a virtual explosion of research demonstrating the role of social support in psychology. The breadth and consistency of the research on the beneficial effects of social support are impressive. Ranging from animal laboratory studies to large scale epidemiologic investigations of psychopathology, disease and mortality, the majority of the work documents that social support concepts, involving ties and transactions between individuals over time, represent a fundamental component of stress and disorder theory. Either through direct protective effects or by buffering the adverse consequences of life stresses, social support is associated with a decreased likelihood of developing disorder. The

Social support encompasses an individual's positive and negative interactions with members of society, especially with friends and relatives. Social support creates an atmosphere where the individual feels cared for and valued. Two essential constructs of social support are perceived and received social support which is weakly interrelated. One hypothesis proposes that, in the presence of adversity, social support acts as a prominent protective factor ('buffer') against mental illness. Another theory proposes that social support may act as a main effect on reduce a risk for illness, independent of adversity.
presence of supportive people in one's life enhances both physical and emotional well-being.

Social support has been a widely used concept in the field of mental health, as well as in medicine and the social sciences more broadly (Sarason et al., 1990). The quality of social relationships predicts general health and mortality, (House et al., 1988); psychiatric symptoms, (Monroe & Kessler, 1986); and the emotional adjustment to stress (Monroe, 1983).

In these wide-ranging studies, social support has typically been conceptualized as an environmental variable – an individual's social support deriving from the caring and sustenance provided by the social environment. Four lines of evidence suggest that this unidirectional model – in which the social environment impinges on the individual but not vice versa – may be unrealistic (Dick, 1986; Cronis-Stubbs, & Rooks, 1985).

First, levels of perceived social support are significantly correlated with personality, positively with extraversion and negatively with neuroticism (Windle, 1992; House, 1986; Henderson, 1981). Second, the quality of social support is moderately stable over time (Sarason & Sarason, 1986), so that social support can be conceptualized "as an individual difference variable as well as an environmental provision" (Sarason et al., 1986). Third, positive social interactions emerge in part as a result of the active effort of individuals to develop and sustain reciprocally supportive relationships (Antonucci, 1990). Fourth, two prior twin studies (Kessler, 1992; Bergeman, 1992), both using questionnaire measures, suggested that genetic factors influence aspects of social support.

While some studies on social support and psychological distress have used representative community samples (Holahan & Moos, 1986; Henderson et al., 1981), others have employed particular subgroups such as working-class women (Brown et al., 1985), the elderly (Kraus et al., 1989), or students (Cramer, 1985, 1988, 1990; McLennan & Omodei, 1988; Cohen et al., 1985). Social support has long been recognized as a significant factor in the formation of adolescent self-esteem (Rosenberg, 1981). Correlational and longitudinal studies over the last three decades have demonstrated the pervasive influence of affirmation, aid, and affection proffered by parents and peers (Hoffman, Ushpiz, & Levy-Shiff, 1988; Greenberg, Siegel, & Leitch,
1983; Brucke & Weir, 1979, 1978; O'Donnell, 1974; Rosenberg, 1965). Eaton (1978) reported that the occurrence of stressful life events is associated with more psychiatric disorders among those living alone or unmarried than those living with others or married. Andrew, Tennant, Hewson, & Schonell (1978) found that the combination of recent stressful life events, low level of social support and adverse childhood experiences successfully predicted the occurrence of maladjustment in adults. There is an evidence that the depressive individual tends to report the lack of availability of supportive others. Winefield, (1979) and Henderson (1980) concluded that a deficiency in social bonds may, independent of other factors, be a cause of some forms of behavioural dysfunction. The literature on the nature and role of social support in relation to life events is literally burgeoning. There are now a plethora of findings based on a variety of measures that social support sometimes interacts with life events, and sometimes is directly related to a vast array of mental and physical health outcomes (Thoits, 1982; Gore, 1981; House, 1981; Cobb, 1976).

Comprehensive reviews of social support in the literature (Dimond & Jones, 1982; Norbeck, 1981; Cobb, 1976) describe social support as: (a) necessary throughout the lifespan, (b) involving interpersonal interactions that produce a sense of belonging, and (c) communication of positive affect. Additionally, mutual exchange of social support is seen as augmenting feelings of personal efficacy and respect. Common to all definitions of social support is the recognition of the impact of social support on feelings of self-esteem, just as the converse was true in the definitions of self-esteem, where the importance of social support was obvious. Indeed, Harry Stack Sullivan (1953), an eminent personality theorist, defined the self as the reflected appraisals of significant others.

Although a number of studies document the importance of self-esteem and social support in the determination of health status, few focus specifically on their relationship with positive health practices (McKinlay, 1972). Only three studies were found addressing self-esteem and health practices. Hallal (1982) found that women who practiced breast self-examination had higher self-concept levels than those who did not engage in this practice. These findings were similar to those of Herold, Goodwin, & Lero (1979), who
reported that women with higher self-esteem had more positive attitudes about birth control and were more apt to obtain and use contraceptives effectively. But Andreoli (1981) found no significant difference in self-concept between hypertensive males who complied with prescribed therapy and those who did not.

Social support has been linked to positive health practices by Langlie (1977), who reported that indirect health risk behaviours such as seat belt use, exercise, nutrition, medical and dental care, and other screening examinations were influenced by social environment and individual characteristics. Family structural characteristics were found by Pratt (1971) to influence personal health maintenance practices. Coburn & Pope (1974) noted that group membership was a significant indicator of health practices, and Mechanic & Cleary (1980) posited that health practices develop as a result of social environment. The research of Hubbard, Muhlenkamp, & Brown (1984) was the only work which found specifically measured social support and its impact on positive health practices. In two separate studies they found perceived levels of social support had strong positive association with participation in positive health practices.

There is accumulating evidence that supportive – personal relationships are associated with greater psychological adjustment (Cramer, 1991. Henderson & Brown, 1988). There is substantive evidence for a small negative association between psychological distress and variously defined indices of social support (Henderson & Brown, 1988; Cohen & Syme, 1985; Biegel, McCardle, & Mendelson, 1985). Although, most of this research has been cross-sectional in design, an increasing number of prospective studies suggests that prior social support is also negatively related to subsequent psychological distress (Krause, Liang, & Yotomi, 1989; Brown, Andrews, Harris, Adler, & Bridge, 1986; Monroe, Imhoff, Wise, & Harris, 1983). Since intervention experiments are difficult to conduct in this area, causal interpretation of the observed association is problematic (Monroe & Steiner, 1986). Although this relationship is usually taken to indicate that social support reduces psychological distress, it is equally compatible with the view that psychological distress decreases social support, or that the relationship between these two variables is either reciprocal or spurious. Because of the
problems of realistically manipulating social support, most of the research in this area is of a non-experimental nature. Consequently, the causal nature of the observed association is difficult to ascertain. However, a few prospective studies which have compared the size and direction of the cross-lagged coefficients between support and adjustment, have found that the association between earlier support and later adjustment is more positive than that between earlier adjustment and later support (Cramer, 1990a, 1988; Krause, Liang, & Yamoti, 1989). These findings suggest that support is a stronger determinant of adjustment than adjustment is of support. Likewise, Cramer (1990a, 1988) using both cross-lagged panel correlation and linear structural relationships analyses, found that the association between the initial overall quality of a close relationship and subsequent self-esteem was more positive than between initial self-esteem and subsequent quality of a close relationship. This finding implies that the quality of this relationship predominantly determines self-esteem rather than the other way round. Further evidence for the causal influence of support comes from intervention studies which have found that the provision of non-professional contact is of greater therapeutic benefit than no contact (Vachon, Lyall, Rogers, Freedman-Letoofsky, & Freeman, 1980; Strupp & Hadleg, 1979).

Social support, those relationships that enhance one’s sense of security, respect, and esteem, has the potential to reduce stress and sustain health (House, 1981; Cassel, 1976; Cobb, 1976). Studies of social support among hospital-based staff nurses have found the expected relationships between stress, social support, and health (Constable & Russell, 1986; Hirsch & Rapkin, 1986; Cronin-Stubbs & Rooks, 1985; Norbeck, 1985). Only Hirsch & David’s (1983) analysis of social networks among an eclectic group of nurse managers, however, used the head nurse as the unit of analysis.

The assumed beneficial effects of social support have often been divided into two types; direct and buffer effects. Evidence for both main and buffering effects has been obtained (Cohen & Wills, 1985). Direct effects encompass the general positive influence of social support, regardless of whether someone experiences social stress or not. A buffer effect refers to the fact that a high level of social support protects the individual against the negative consequences of stressors once these have arisen (Cohen & Wills,
One of the puzzling findings in the domain of social support concerns the existence of negative direct as well as a buffer effect (Barrera, 1986). For example, in a study of nurses, Kaufman & Beehr (1986) found that all the significant buffer effects turned out to be the opposite of their expectations: the relationship between sources of stress and stress reactions appeared to be higher among individuals who had access to strong social support systems than among individuals who lacked these systems. Winnubst, Marcelissen, & Kleber (1982) found that people who had a high responsibility for others at work became more depressed when their colleagues and superiors were more supportive. In a study carried out by Hobfoll & London (1986) among Israeli women whose loved ones were mobilized in the 1982 Israel-Lebanon War, social support appeared to be related to greater psychological distress. In a study on occupational stress among nearly 2000 employees, Buunk, Janssen, & Van Yperen (1989) noted so-called boomerang effects. For example, in some cases social support aggravated the stress reactions or did not affect them at all in work units characterized by a high degree of role conflict, while, at the same time, social support reduced stress reactions in units with a low degree of role conflict. In other words, social support seemed to aggravate instead of alleviating stress. While, positive relations between stress and support may indicate that those under stress seek out help more often (Buunk & Verhoeven, 1991), in some cases social support does appear to increase the impact that stress has on well-being instead of reducing that effect. For various reasons, this seems quite understandable from a social comparison point of view.

Bowlby’s theory of attachment (1980, 1973, 1969,) relies heavily on this interpretation of social support. When social support, in the form of an attachment figure, is available early in life, Bowlby believes children become self-reliant, learn to function as support for others, and have a decreased likelihood of psychopathology in later life. Bowlby has also concluded that the availability of social support bolsters the capacity to withstand and overcome frustrations and problem solving challenges.

Further, Monroe & Steiner (1986) concluded that although it is conceivable that personality plays a dominant and immutable role in the prediction of disorder, it is equally likely that personality will provide useful
information on the components of specific support mechanisms that predict differential outcomes (Fig. 2.3). Hence, the inclusion of personality variables in social support research may be useful strategy for delineating the basic processes involved in the study.

Some research has confirmed that social support received from the work peers (Duxbury et al., 1984) and family and friends (Cronin-Stubbs, & Rooks, 1985; Constable, 1983) reduce staff vulnerability to burnout. Intrapersonal characteristics related to burnout include personal coping strategies. Specifically, higher levels of burnout have been reported among professionals who utilized withdrawal coping strategies and lower levels among those who used social coping strategies, such as talking about work stress and getting advice (Maslasch and Jackson, 1982). Fear of death, discomfort with dying patients and exposure to dying patients have also been discussed as potential contributors to burnout (Pruysers, 1984). Two empirical
studies have investigated the last one of these possible relationships. One study confirmed that amount of exposure to dying patients was associated with higher levels of burnout (Dames, 1983), while the other found no relationship (Yasko, 1983) between exposure and burnout.

In brief it can be stated that social support has emerged as an important concept in nursing and social science research. Despite inconsistencies in the way it has been defined, conceptualized and measured, social support has proven to be remarkably robust as a predictor of physical and psychological well-being, an effective coping resource, and a buffer against stressful experiences and symptoms. Because most previous research in intergenerational family relationships focused on support as an independent predictor variable rather than a dependent variable, there is limited understanding of the factors that enhanced or inhibit support patterns in later life.

In the past, many researchers assessed people’s perceptions of the quality and availability of social support using global measures (Tardy, 1985), which were criticized because they were often confounded with stress and distress (Cohen & Hoberman, 1983) and need for support (Barrera, 1981). An alternate but infrequent approach is to assess supportive behaviours that are actually enacted, rather than perceived to be available (Vaux & Harrison, 1985). Behaviourally oriented indices of support are more precise and provide additional information on how people access and utilize their social networks (Doeglas et al., 1996, Barrera, 1986;).

Previous research about social support in aging families has focused on the elderly member receipt of help in times of illness or infirmity (Brombley & Bleszner, 1997). Less well understood, and potentially quite different, are the younger dyad members’ perceptions of support transactions that exist during non-crisis situations and when elders are relatively healthy (Litwak, 1985).

Social support frequently is viewed as flowing in one direction from the provider to the beneficiary (Uphold, 1991). However, social support is reciprocal and it is important to study both provided and received support (Starrels, Ingersoll-Dayton, Neal, & Yamada, 1995; Dwyer, Lee, & Jankowski, 1994). In fact, research has demonstrated that those who provide social
support are likely to be more healthy than those who do not (Silverstein, Cohen, & Heller, 1996).

In the intergenerational literature, investigations have focused on the exchange of aid or instrumental or tangible support among kin. Less is known about the exchange of intangible, socially supportive behaviours that are classified as emotional support. As Norbeck (1988) noted, it is important to view social support as a multidimensional concept because not all types of support are equally effective in enhancing well-being.

2.5 EMPATHY AND DEPRESSION

"Helping others is a fundamental activity of nurses. It is this idea that took Nightingale to Scutari and Linda Richards to Boston City Hospital. The question of what evokes this love of ministering, this general responsiveness to people in need has yet to be answered" (Bennett, 1995).

Empathy has invariably been identified, implicitly or explicitly, by nursing theorists as central to caring, nursing competence and the nurse-patients’ relationship. So perhaps it is not surprising to find that it was addressed in one of the earliest studies reported in nursing research.

Essentially empathy is a sensitivity to the emotional experience of others, which contributes to the potential for sharing and increased understanding through an interpersonal relationship.

The word empathy was first used in modern times in 1887 by Lipps, who coined the German word “Einfühlung”; to refer to the experience of losing one’s self awareness and fusing with an object. Lipps, a psychologist, coined the term as part of his theory of aesthetics. In 1909, Titchener first used the term in the English language, which allows practitioners more effectively to actualize their value much in the same context. Clinical psychology picked up the term shortly thereafter; in 1927, Adler quoted an anonymous source as saying, “To empathize is to see with the eyes of another, to hear with ear of another, and to feel with the heart of another”. The field of aesthetic psychology relied on the term to refer to one’s personal immersion in a work of art. Clinicians then chose the term to refer to a similar phenomenon, in which the clinician becomes immersed in the viewpoint of the patient (Olsen, 1991).
Empathy is a personality attribute involving the capacity to respond emotionally, cognitively, and communicatively to others without loss of objectivity (Berger, 1987; Zolerad, 1969). Empathy is linked with helping behaviour (Barnett, Howard, King, & Dino 1981; Batson, Duncan, Ackerman, Buckley & Birch, 1981) and with more effective professional functioning (Davitz & Davitz, 1981; Williams, 1979) and is, therefore, nearly universally valued by the helping professions. Research findings related to empathy levels of helping professionals have been contradictory. Education and experience were negatively correlated with empathy (Khajavi & Hekmat, 1971; Carkhuff 1969), whereas empathy levels of nursing students did not differ by educational level (Roger, 1986) and empathy level of staff nurses correlated positively with education (Forsyth, 1979).

Kender and Hyde (1953) find a growing number of studies published over the past two decades. A simple definition of empathy has proved elusive, however, because empathy is a complex phenomenon that is frequently embedded in other processes. Even before empirical study got under way in the 1940, theoretical discourse extended conceptual definitions to include not only the empathizer’s internal subjective response but also the so-called object person’s active (though perhaps unconscious) communication of emotional cues, and both the understanding communicated by the empathizer and its accuracy as perceived by the object person’s active (though perhaps unconscious) communication of emotional cues, and both the understanding communicated by the empathizer and its accuracy as perceived by the object person. Hence, empathy is concerned to be a bi-directional and interpersonal phenomenon (Bennett, 1995).

In fact social scientists began to consider empathy’s role in human relations at turn of century. A key conceptual debate was whether to consider empathy as cognition or affect; is it an intellectual understanding of what another is thinking or feeling or is it viscerally feeling what another is feeling in words, is it recognizing emotion or sharing it?
The Oxford English Dictionary (OED) defines empathy as “The power of projecting one’s personality into and (so fully comprehending) with the object of contemplation (Simpson & Weiner, 1989). The Random House Dictionary of English Language (RHD) (cf. Flexner, 1983) defines empathy, “The intellectual identification with or vicarious experiencing of the feelings or attitude of another; the imaginative ascribing to an object, as a natural object or work of art, feelings of attitudes present in one self” (Flexner, 1983). These definitions capture different characteristics about the concept: the OED emphasizes empathy as a way of knowing, while RHD emphasizes the affective aspect of empathy.

**Empathy in Nursing**

In nursing, empathy has frequently been evolved as an important aspect of therapeutic interaction with patients. The field of psychology, especially the work of Katz and Rogers in which the concept was being used to characterize the therapeutic process, influenced early conceptions in empathy in nursing.

The most common definition of empathy in nursing research literature, as identified by Gagan (1983) was, “The ability to perceive the meanings and feelings of another person and to communicate that understanding to the other.” (Gagan, 1983). This definition has two important differences from the one previously used: first is the term “meanings”, which reveals a phenomenological influence; second is the aspect of communicating the understanding gained through the empathetic process, which is different from simple understanding.

The concept has taken several different nuances of meaning over the time. The Encyclopedia of psychology says, “Empathy is generally understood to refer to one person’s vicariously experiencing the feelings, perceptions and thoughts of another” (Corsine, 1984). With in this broad definition, various traditions have emphasized different aspects of the empathetic situation and attributed different roles to empathy in the therapeutic encounter.
Affect and cognition are potential objects of empathy. In the humanistic movement in psychology, the affective component of empathy is emphasized and the empathetic relationship, in and of itself, is considered healing. Rogers said, “Because (empathetic) understanding is rewarding, I would like to reduce the barriers between others and me”, and “My (empathetic) understanding of these individuals permits them to change” (Rogers, 1961).

The psychoanalytic tradition, especially the self-psychology branch, considers the cognitive aspect of empathy as crucial and empathy as a tool in the healing process. Kohut (1982) referred to empathy “as an information-collecting, data-gathering activity”. Schwaber (1981) referred empathy, “as a method of observation”. The empathy itself does not imply compassion or good therapy, but is a precondition to proper therapeutic intervention as the only way to accurately understand the world of another. Such information can contribute to good therapeutic responses. Recently a movement in clinical psychology in which empathy plays a central role has emerged (Olsen 1991). This movement, centered largely on work done at the Stone Center of Developmental Services and Studies at Wellesley College, postulated that the dominant view of development – that the individual moves over time from dependence on others to independence from others in functioning and self definition – is flawed. Survey stated, “it is not through separation, but through more highly articulated and expanded relational experience that individual development takes place”. The proposed theory is, for the most part, written about as a theory of women’s development and the mother-daughter relationship is the model of development, but it has been recognized that these ideas carry meaning realm of men’s development. The process of empathy makes it possible for relations to exist and be developed (Jordan, 1983) (cf. Olsen, 1991).

Hume postulated that perceived emotions brought forth similar emotions in the perceiver and referred to this phenomenon as sympathy. In keeping with the notion of sympathy, he suggested that a human experienced pleasure when contemplating the pleasure of others and labeled this the
sentiment of humanity. These phenomena were very important to Hume's system of ethics, as they provide the motivation to beneficence. So Hume constructed a moral system around a phenomenon bearing similarity to the modern concept of empathy. His moral philosophy postulated an interactional structure for empathy that motivated humans to do good to others. It is this idea of empathy as motivation introduced by Hume in the mid-1700s that is different from the work of earlier philosophers (Harrison, 1976).

While Hume relied on empathy, that is, concordant emotions between individuals in an affective experience, as a basis for his system of moral behaviour, Kant (1959), used a standard of equality as the basis of his moral system. Underlying Kant's postulates is the notion that all humans are equal and that the standard for one is the standard for all. Within his system, rules of moral behaviour must be generalizable to all people. Kant derived several categorical imperatives, or guidelines by which moral rules can be judged. His second categorical imperative stated, "Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only.

The conception of empathy in this movement is fairly conventional. Jordan said, "Empathy is the affective - cognitive experience of understanding another person". Theorists differ in the significance assigned to empathy in human development and psychological well being and basic to this theory is the assumption that the self is organized and developed through practice in relationships, where goal is the increasing development of mutually empathetic relationship.

According to the movement individuals have various capacities for empathy, and this variation depends largely on psychological well-being of the empathizer. Jordan stated “Empathy is a complex process relying on a high level of ego development and ego strength,” and “In order empathize one must have a well differentiated sense of self; in addition to appreciation of, and sensitivity to the differences as well as the sameness of the other.” For this movement, the locus of empathy is clearly within the individual; this in combination with the strong emphasis on relationships results in the concepts
of mutual empathy and mutual intersubjectivity where the affective and cognitive materials of the empathy is shared (Jordan, 1986).

William (1989) found that the empathy and burnout variables indicated that personal accomplishment and the empathy scales do comprise a common dimension, which is orthogonally, rather than negatively, related to the dimension occupied by depersonalization and emotional exhaustion. This is not consistent with the possibility that empathy might simply reflect the opposite pole from burnout, in which case the depersonalization and emotional exhaustion scales would have been expected to load negatively on factor 1. Although the empathy scales and personal accomplishment seem to reflect a common dimension, the zero-order correlations indicate minimal shared variance. The findings do not support the possibility of redundancy between empathy and burnout; however, they are consistent with literature suggesting that empathy is emotionally draining and may, secondarily, lead to the interpersonal withdrawal associated with depersonalization (Cherniss, 1980).

The importance of caregiver empathy in helping relationships has been stressed in many studies (Raudonis, 1993; Reid-Ponte, 1992; Mehrabian, Young, & Sato, 1988; LaMonica, Wolf, Madea, & Oberst, 1987). Helping relations can be of any kind referring to inter-personal alliance in which one person assists, another to fulfill his or her needs and may include both formal (professional) and informal care giving relationship. The distinction between formal and informal caregiving can be made on the basis of payment; activities for which one is paid generally are considered to be formal (Meshelanan, McCuskar, Bellavance, & Baumgarten, 1998). For both forms of care giving relationship, empathy has been identified as a key ingredient (Barrett-Lenhard, 1962; LaMonica, Carew, Winder, Haase, & Blenchard, 1976; Kalisch, 1971; Carkhof, 1969) and has been shown to increase the effectiveness of the helping behaviours (La Monica et al., 1987).

The positive influence of empathy on patient outcomes (Reid-Ponte, 1992; Warner, 1992; LaMonica et al., 1987) and on formal caregivers themselves (Astrom, Nilsson, Norberg, & Winblad, 1990; Williams, 1989; Bagshow and Adams, 1986) has been well documented (Fig. 2.4).
Fig. 2.4: Influence of Caregiver's Resources and Appraisals on Caregiver Outcomes (cf. Lee, et al. 2001)
There are two types of empathy: emotional and cognitive (Allgood, 1992; Morse et al., 1992; Roberts, 1991; Williams, 1990; Gladstein, 1983). Emotional empathy is defined as individual vicarious emotional response to the perceived emotional experience of others (Mehrabian et al., 1988). Emotional empathy has an inherited potential and is developed naturally with maturity (Morse et al., 1992). This type of empathy is contagious, in that one responds with emotions, similar to those of others.

Cognitive empathy, in contrast, is the intellectual process identifying and understanding another's feelings and perspectives while maintaining an objective stance by deliberately distancing oneself from the vicarious emotions (Morse et al., 1992; Barrett-Lennard, 1962). Cognitive empathy is likely to follow after development of emotional empathy (Morse et al., 1992; Grattan and Eslinger, 1989).

Thus according to Williams (1989) empathy is a personality attribute involving the capacity to respond emotionally, cognitively, and communicatively to other persons without loss of objectivity (Berger, 1987; Zderad, 1969). Empathy is linked with helping behaviour (Barnett, Howard, King, & Dino, 1981) and with more effective professional functioning (Davitz & Davitz, 1981; Williams, 1979) and is, therefore, nearly universally valued by the helping professionals.

Nevertheless, research findings related to empathy levels of helping professionals have been contradictory. Education and experience, for example, were negatively correlated with empathy (Khajavi and Hekmat, 1971; Carkhuff, 1969). Whereas empathy levels of nursing students did not differ by educational level (Roger, 1986), the empathy levels of staff nurses correlated positively with education (Forsyth, 1979). Nursing home staff with moderate experience (1-5 years), on the other hand, had higher levels of empathy than those with less or greater experience (Perrington and Pierce, 1985).

Further, empathy may be considered to have both trait and state components; that is, people have a level of general tendency to experience empathy (Williams 1983; Mehrabian & Epstein, 1972) that may or may not be actualized in any specific situation. Perhaps this situational variability in empathy account for reports of low levels of empathy in some nursing samples (Pluckhan, 1978; Winder, Haase, & Blanchard, 1976; Carkhuff, 1969). Empathy requires imaginatively experiencing the situation of the client.
and is, therefore, emotionally draining (Berger, 1987). As a consequence, certain practice situations may lead professionals to a defensive avoidance of empathy (Stoteland, Methews, Shermann, Hansson, & Richardson, 1978; Gunther, 1977). Although all helping professionals encounter multiple demands for empathic relationships, nurses and other health professionals who must empathize with the dying and with those in severe physical and psychological distress may be at special risk of defensive loss of empathy since these situations may be particularly threatening to experience in imagination.

Williams (1989) examined relationship between empathy and burnout in a sample of male and female helping professionals. It was hypothesized that high emotional empathy may predispose helping professionals to emotional exhaustion and that emotional exhaustion, if not mediated by personal accomplishments may lead to the development of depersonalization. The sample consisted of male and female registered nurses (RNs), social workers (SWs) and school teachers (STs). Computer-generated random samples of 250 male and 250 female (STs) and of 250 female RNs were obtained from the lists of the official state agencies representing RNs and STs in a southeastern state. The subjects ranged in age from 23 to 80 years.

The two empathy measures were positively correlated with both emotional exhaustion and personal accomplishment. Although only the latter relationship had been expected and these findings did not support the study conceptualization, they are congruent with the proposition that the emotional involvement with people involved in human service work, is both a source of satisfaction and an emotional drain. It has been suggested, in fact, that the very characteristics that attract persons to helping professions may be the source of strain and eventual burnout (Cherniss, 1980). Perhaps emotional exhaustion can be tolerated when personal accomplishment remain high or when the exhaustion is not sustained over prolonged periods. Potentially, however, emotional exhaustion may lead to defensive behaviour and avoidance of involvement with clients. Perhaps it is at this point that trait empathy declines, reducing the emotional drain through distancing behaviour. High empathy persons may be at particular risk and need greater support as they enter professional practice if they are indeed more vulnerable to such a response.
OVERVIEW

1. Depression is a common disorder with a lifetime prevalence ranging from 3% to 35% according to different community surveys (Parkiov, Vasar, Aluoja, Saarma, & Shilk, 1998). This variability may be in methodology of assessment, diagnostic criteria, different instruments, and also by specific features of the studied population.

The variation of diagnostics of depression makes difficult compare the findings of different studies. This variation and ambiguity of the definition of depression is the main reason why the picture of its epidemiology is still far from clear and consistent.

Further, despite its high prevalence in the general population the majority of depressed patients remain unrecognized and inadequately treated (Horwath, Johnson, Kleiman, & Weissman, 1994). Epidemiological data on prevalence of depressive symptoms, comorbidity and risk factors for depression are important for providing information for social and health care policy planning services and developing preventive activities.

2. Depression in particular, is big potential public health issue as ischaemic heart disease (IHD). For IHD, the major risk factors of high cholesterol, smoking and hypertension are well known and preventive strategies are proposed in relation to all these factors. In contrast, little is known about the aetiology of depression and, also there is little evidence for strategies that would lead to primary prevention of depression. From the perspective of public health, depression also must be a major priority for research.

3. The construct of depression itself requires some discussion. Not withstanding the diversity of its symptomatology, depression is recognized as an identifiable syndrome. It is typically measured either by self report instruments or by diagnostic interview. Although the self-report measures can not claim to give a clinical diagnosis of depression, they have been found to be substantially correlated with each other and with diagnosis based on clinical interviews with adults
(Roberts & Vernon, 1983; Lewinsohn & Teri, 1982; Myers & Weissman, 1980) and adolescents (Lewinsohn, Hoberman, & Roenbaum, 1988).

4. Although, a number of investigators have examined depression among adolescents, this research has generally been less fruitful. A review of more than ten years of such work leads to conclude a hazy, confused portrait. It is all that can be distilled from the investigations during the last ten years. One possible reason for this state of affairs could be that the majority of the prior investigations have examined cognitive and personality variables as predictors of depression, singularly and in isolation. Mostly bivariate correlations have been computed. The use of multivariate analysis have been ignored. This is an important methodological flaw. It is also important to determine the interdependence of several factors for conceptual reason, because depression and its correlates, typically are not manipulated experimentally. Studies that assess only one or the others of these domains (e.g. cognition, personality, demographic) may overlook unmeasured factors, closely associated with variables of interest.
HYPOTHESES

The review of literature discussed in the proceeding pages provided the guidelines for the formulation of following hypotheses:

1. **Depression would be associated negatively with social support.**
   This hypothesis derived its rationale from the earlier researches which have revealed that either through direct protective effects or by buffering the adverse consequences of life stressor, social support is associated with a decreased likelihood of developing disorder. The presence of supportive people in one’s life enhances both physical and emotional well-being.

2. **Depression would be associated positively with neuroticism, psychoticism, extraversion and anxiety.**
   This hypothesis derived its rationale from Gotlib’s (1984) investigation which revealed positive association between depressive measures, psychopathology and anxiety as derived from self report measures.

3. **Depression would be associated positively with burnout.**
   This hypothesis derives its rationale from several studies reviewed earlier with respect to the role of burnout in the development and maintenance of depressive symptoms.

4. **It is hypothesized that depression would correlate negatively with empathy.**
   This hypothesis derives its rationale from the following observations: The expression of emotions entails self disclosure and implies vulnerability to social censure. According to developmental interactionist theory (Buck, 1993, 1989, 1984), emotional regulation involves the ability to appropriately communicate one’s affective states to others. Therefore, personal and social characteristics that preclude emotional communication are likely to be associated with pathogenic outcomes. Ambivalence over expressing emotion, repressive defensiveness and fear of intimacy all exemplify problems in emotional communication. This breakdown of communication is likely to
reduce the appropriateness of the helping effort of the conflicted individual’s social network. Thus, similar to the emotional intelligence framework, development-interactions theory also predicts that individual differences that result in inappropriate emotional expressions influence individual’s social network.

5. **It is expected that internal locus of control would correlate negatively with depression.**

   Locus of control is defined as internal when individuals tend to attribute environment events to themselves and as external when individuals attribute such events to things outside their power (Strickland, 1978; Lefcourt, 1976; Rotter, 1966). Strickland suggested that internal locus of control as compared with external locus, improves functioning and greater resistance to psychological dysfunctions. Most of the research supports Strickland’s view. In contrast to people with external locus of control people with internal locus of control express greater motivation to take inoculations (Debbs & Kirscht, 1971), tend more to use safety belts when driving (Williams, 1972a), are more likely to have regular dental examinations (Williams 1972b), are more successful in weight reduction programs (Balach & Rose, 1975), and more often obey doctor’s orders and persist in required medical treatment (Strickland, 1978). In the area of mental health, it has been found that people with internal locus of control suffered less from severe psychiatric disorders (Lefcourt, 1976), especially from chronic depression (Abramson, Seligman, & Teasdale, 1978).

6. **It is hypothesized that depression would correlate negatively with hardiness.**

   This hypothesis derives its rationale from the researches conducted by Kobasa, which clearly reveals the stress buffering effect of hardiness. Hardiness has been theorized to affect stress and health in two ways. Greater hardiness has been conceived of as being associated with less psychological and consequently greater health because hardy individuals alter their perception of stress (e.g. to be a challenge). Secondly, both hardy and non-
hardy individuals may undergo high levels of stress due to life events. However, hardy individuals are more likely to use effective coping strategies and social resources to reduce stress and prevent illness.

7. **It is expected that depression would correlate positively with perceived stress.**

Recent years have witnessed a burgeoning interest in stress and its potential to affect health. However, as with the concept of health itself stress is prone to woolly definitions and imprecise meaning. Much as health has been described as a discourse still in the process of fabrication (Beattie et al. 1993). Stress is still subject to multiple explanations from a diverse set of academic viewpoints. Stress needs clear definition, it is familiar to professionals and layman alike, it is understood by all, but defined satisfactorily by none. A plethora of disciplines – psychology, psychiatry, nursing, medicine, sociology, anthropology, and pharmacology have studied stress, each with their own objectives and particular methodologies. Indeed, between 1987 and 1992 the psychological literature alone, cities 10,385 articles related to this subject (Mulhall, 1996). The concept of stress is, however, not confined to the professional discourse, it is widely invoked also by people on an explanation for certain forms of illness. A relationship with excessive work, modern living, type ‘A’ personality, executive life style and so on is suggested, and this view is reinforced through television programmes, magazine articles and numerous books written by professionals, health care workers, and lay people (Cox, 1992).