Chapter-2

Review of the Literature
A comprehensive and critical review of past researches provide a sound base for scientific investigations. An attempt has been made in this chapter to review the literature having direct or indirect bearing on the present study.

There have been conducted several studies on chronic low back pain (CLBP). Some studies in India have also been conducted in this area. The studies on CLBP clearly suggest that it exerts impairing effects on the physical and psychological well-being of the affected people. The review related to it will also make it clear that studies covering the dependent variables of the present study are hardly available.

An exploratory study by Bradley et.al. (1978) administered the MMPI scale on a homogeneous group of patients and identified four subgroups in terms of their personality profile. The fourth subgroup included the patients of low back pain of females and the personality profile described with elevated MMPI scores on hypochondriasis, depression and hysteria. They were found to be characterized as markedly depressed with lassitude, little initiative, excessive worry, pessimism and feeling of depression. The
authors commented on this personality profile that the pain patients apparently derive satisfactions from their roles as invalids.

Mc. Creary and Turner (1983) examined the descriptions of pain as psychological disorder, using 233 patients with chronic low back pain. After regression analysis it is found that the MMI clinical scales produced significant multiple correlations with the sensory as well as affective and evaluative dimensions with those scales reflecting somatic over concern most highly related to pain depressions.

Harold Douglas, De good and Raymond (1984) have done a comparative study of CLBP in USA and New Zealand. Psychological and economic factors affecting severity of disability using 198 patients suffering from CLBP. Both at pre and post testing, reported better emotional and behavioural disruption as correlate of their pain.

Mayer et.al. (1985) studied on CLBP patients utilizing novel objective functional measurements with 66 patients. Results indicated significant improvement in physical functioning of those patients, which was also accompanied by self report changes of pain complaints.
Smith et al. (1985) examined the relationship of positive and negative life events to various aspects of distress in 45 CLBP patients (Mean age 41 years) as measured by the 8 clinical scales of MMPI.

Results indicated that negative life events were associated primarily with depression and social maladjustment, while positive events were inversely related to somatic concern.

Keefe et al. (1986) conducted studies on 32 CLBP (average age 44.2 years) and 32 myofacial pain dysfunction (MPD, average age 31.1 years) syndrome patients. Both groups reported high levels of psychological distress on the SCL-9 (revised). The LBP subjects were significantly less active, took more narcotics and sedatives, show more hypnotic motor pain behaviour (e.g. guarding, rubbing and bracing) than the MPD subjects. The LBP subjects used to attention diversion and praying or hoping as pain coping skills to a much greater extent than did the MPD.

Aitken (1986), studied the role of stress in chronic low back pain patients and discussed the need to assess both biological and psychosocial aspects of pain. Findings emphasized the importance of comprehensive evaluation of subjects psychological, social and physical disturbances.
Love & Peek (1987) reported the psychological factors in chronic low back pain patients, review of studies indicate that the concept of psychological etiology of CLBP, despite wide spread use, has failed to differentiate the patients and reliability predict response to treatment. All alternative approaches have emerged in recent years profile distinction MMPI, between different types of psychological responses to CLBP. Therefore subgroups are associated to various treatment. Recommendations for further development in the use of the MMPI with the patients group or population are made.

Lindal (1987) studied psychological factors which are responsible for CLBP 87 back pain patients originating from 3 groups general populations, light industry workers and back pain patients who were scheduled for myelographies participated in the study. A subjective assessment of pain was concluded by use of graphic rating scale that was included in a pain questionnaire. All subjects rated their pain prior to tested by a psychologist.

They completed a battery of psychological tests EPI. The Rod and Frame Test and two projective personality tests (The meta contrast Technique and Separation Test). It was found that lie score on the EPI were negatively correlated with extraversion scores, the
more extraverted subjects tended to score less often on the lie scale, then the more introverted subjects.

Atkinson et.al. (1988) investigated the relationship between stressful life events and depressed mood in CLBP. It was hypothesized that adult CLBP patients with depressed mood would report significantly more on toward life events and ongoing life difficulties compared with 17 adults CLBP patients with depressed mood were likely to be in high stress condition than were either non-depressed patients or volunteers. Furthermore, the increased stress reported by the distressed group appeared to be a direct consequences of back pain related life events.

Kekerman & Stevens (1989), tried to find out the relationship between acute and chronic pain and psychological status in CLBP. 110 adult out patients with either or acute CLBP completed Mc Gill pain Questionnaire, Beck Depression Inventory, State Trait Anxiety Inventory and Life Experiences Survey. Acute and chronic subjects did not differ on dimensions of pain, but significant correlations between pain dimensions and depression, state anxiety and life experiences predicted sensory and affective pain for the poled sample. Psychological variables in the experiences of clinical pain underscore the highly affective nature of chronic pain.
Markku (1989) investigated the risk factors for CLBP and sciatica. A review of 8 prospective and 80 cross sectional retrospective studies indicated that psychological factors are closely related or associated with CLBP but are unlikely to play a causal role in back pain syndromes. These factors should be considered as potential risk or confounding factors in future studies. Also discussed is the relationship of LBP syndromes to age, sex, obesity, physical activity, work load, body height, driving motor vehicles, smoking and pregnancy.

Lindal (1990) reported the interaction between constant levels of low back pain other psychological parameters. 51 women and 36 men with varying intensities of constant pain (low back) answered a pain questionnaire that included graphic rating scales and took part in the battery of psychological tests (including the EPQ and ROD and Frame Test). This was done to corroborate the relationship, found between subjects with different intensities of pain, and their experiences of psychological problems. No significant differences on psychological measures were found between subjects with varying intensities of pain but differences were found for previous pain experiences. All subjects had significant rates of
depression and regression. Significant rates of depression and regression significantly more women had chronic pain than men.

Sivlik (1991) studied the personality trait in low back pain patients with acute and chronic low back pain: 26 acute back pain patients and 25 healthy controls aged (20-49 yrs) were tested to MMPI on Hypochondriasis, Hysteria and Depression. The Cesark Marke Personality Scale on aggression, defence status and guilt and the mood adjective checklist on hedonism activity and calmness and a pain questionnaire including pain drawing. On all of the MMPI variables, the patient group had significantly higher scores than did the controls. On the Cesark Marke Personality Scale, the patient group had significantly higher scores on guilt than the controls. There was a strong covariation between the MMPI variables and the pain drawing variables.

Lee et.al. (1991) examined psychological characteristics of 30 Chinese LBP (11 males & 4 females) patients with acute LBP (11 males and 4 females) patients with chronic LBP compared with 15 healthy controls. Subjects completed MMPI. Moderate to high elevations were found on the neurotic triad (Hypochondriasis, Depression and Hysteria) and scales for the 2 groups of LBP patients compared with controls. The 2 LBP groups were
significantly different from each other on MMPI. The composite profile of the LBP subjects was indicate a strong psychophysiological reactions with the chronic group facing worse than the acute group male profiles reflected more depression and anxiety than the female profiles.

Peter & Schmidt (1992) tested the pain perception thresholds. Pain discrimination and maximal pain tolerance on 20 CLBP patients (aged 20-53 yrs) and 23 adult controls (aged 24-25 yrs) with two electrical and pressure pain stimuli. It was concluded that CLBP patients have a decreased sensitivity for experiemental pain. Ingemar, Janolor and Per Bjurulf (1992), found that Hs and Hy scales of MMPI proved to be a better predictor than profile patterns in CLBP advocated in some studies.

Gallagher et.al. (1995) examined the prevalence of psychiatric disorders in 18 patients, disabled by low back pain, in a pain rehabilitation programme designed to restore work readiness and return to work. Psychiatric diagnosis of the subjects were carried out. Low back pain patients were reported to show a high rate of comorbid major depression, in most cases occurring after the onset of low back pain symptoms.
Dickens et.al. (2000) examined the relationship between pain, depression, disability and illness attitudes. The relationship between depression and disability was found to be highly significant when pain and illness attitudes were controlled. Association between pain and depression was found to be consistent when modulated by disability and illness attitudes. No direct relationship, however, was reported between pain and depression.

According to Vander et.al. (2000), the low back pain patients (N=298) with 3-4 sick leave were explored with the information inputs of their health status, history of suffering, occupational variables, job characteristics, and socioeconomic status. A large number of patients (N=198) who returned after the leave and reported a larger impact of psychosocial aspects of health and work with those of economic aspects when compared to relatively more physical aspects and physical requirements of job.

Crombez et.al. (2001) investigated whether the attentional effects of pain catastrophizing can be accounted for by the more general predisposition of negative affectivity. 67 pain-free students (aged 17-26 years) participated in Exp. 1 and 32 patients with CLBP (18-60 years) participated in Exp. 2. In both experiments, Ss performed an auditory reaction time task while being...
exposed to series of threatening electrocutaneous stimuli: Retardation in reaction times to auditory probes during pain was taken as an index of the attentional interruption by pain. Ss also completed self report instruments of negative affectivity and pain catastrophizing. Results show that in both experiments, pain catastrophizing enhanced attentional interference by pain. The effect was most pronounced immediately after the onset of the electrocutaneous stimulus. The effect remain after controlling for the effects of negative affectivity. It is concluded that catastrophic thinking about pain enhance attentional interruption by pain in normal samples, as well as in clinical samples of patients with chronic back pain. This effect is specific to pain catastrophizing and cannot be explained by the more general disposition of negative affectivity.

Shannon et.al. (2001) examined the changes in general health and time with back pain and neck pain. The longitudinal study located the pain symptoms in second and third surveys and the decline in general health was reported. Predictors of changes in these outcomes were found to be mainly work related variables (initial or changes values), such as job interference with family job influence, psychological demands of work and hours worked.
Crombez et.al. (2002) explored the effects of exposure to movement generalize to another dissimilar movement was investigated in 37 patients with low back pain (15 men, 22 women). Two movements were executed twice: bending forward while standing and lifting 1 leg while lying down. During each trial, baseline pain, expected pain, and experienced pain were recorded. Similar ratings for perceived harm were obtained.

Analysis revealed an initial over prediction of pain, but after exposure the over prediction was readily corrected. This exposure effect did not generalize towards another dissimilar movement. These results were only characteristics for patients with catastrophic thinking about pain. Low pain catastrophizers did not over predict pain. There were no effects of exposure on perceived harm. Exposure may profitability be conceived of as the leaving of expectations to a general rule.

Roelofs et.al. (2003) assessed by mains of a modified stroop paradigm, whether highly fearful patients with chronic low back pain pay selective attention towards related to movements and injury. Two groups of patients (18 high fear and 18 low fear) were included base done their scores on the Tamper Scale of Kinesiophobia (TSK), a measure of fear of movement or (re)injury.
A control group was recruited by means of advertisement in a local repeated measures analysis of variance was conducted to examine whether highly fearful pain patients pay more selective attention to movement and injury words, compared to patients with low pain-related fear and controls. The results from the present study do not support the proposition that highly fearful patients with chronic low back pain selectively pay attention towards related to injury and movement. Limitations of the modified stroop paradigm are discussed as well as the need for the application of alternative methods such as the dot-probe paradigm.

Satink et al. (2004) examined the influence of chronic low back pain on the motives for occupational performance of narrative interview was conducted with seven Dutch clients. Three phases in the process of living with low back pain were identified in which the self, the pain and the environment were seen as interrelated elements that influence the creation of motive.

In the first phase, clients wanted to meet social and personal expectations, which led to their ignoring the lower back pain. In the second phase, the pain took control and the clients withdrew from social participation, which led to "emotional pain". In the third phase, clients became more conscious of the dynamics and
dilemmas between the self, the pain, and the environment. Analysis of study results suggest that clients narratives can help occupational therapists gain a deeper understanding of clients experiences of dealing with chronic pain.

Gregory et. al. (2005) demonstrated marked counter dependency traits in the back and/or extremities pain group relative to the other groups. By contrast traits of alexithymia and somatosensory amplification, insecure attachment, and a high level of emotional distress characterised the other regions of the body pain group.

Mitchell and White (1977) characterized migraine headaches as psychosomatic vascular disorders and found firm evidence that the majority of migraine attacks were precipitated by strong cognitive and emotional reactions along with pessimistic thinking.

Kurdow (1978) stated that the introduction of psychosomatic agents has brought a new appreciations of the role of cerebral biogenic amines in migraine headaches had lead to a better understanding of the etiological aspects and mechanism of head pain and the possible role of psychological and personality influences.
Price and Blackwell (1980) compared 148 migraine headache sufferers matched normal controls on the Zung Self Rating Depression Inventory, Eysenck Personality Inventory, State-Trait Anxiety Inventory (STAI), Tylor Manifest Anxiety Scale (TMAS) and Health Locus of control scale. Migraine patients recorded significantly higher than the control on TMAS, STAI and Locus of Control scale. Results confirm earlier reports that migraines Ss have higher levels of trait anxiety and Locus of Control than normal.

In the study of Huber and Herper (1982), 95 patients with long term migraine histories, 71 patients suffering from psychosomatic disorders, other than migraine headache and 69 healthy control (all Ss were aged 20-50 years) were administered an assessment battery that included the MMPI and the Freiburg Personality Inventory (FPI). The finding suggested that migraine sufferers differed from psychosomatic normative groups not only in their personality profiles but also in their psychological response patterns to stress.

Passchier and Orlebeke (1984) administered a battery of tests (including Dutch version of the California Psychological Inventory and Defence Mechanism Inventory) to 59 migraine patients, 321 tension headache patients, and 26 control Ss to
explore personality traits of migraine and tension headache patients. Achievement motivation was found to be elevated in both headache groups. Tension headache Ss also exhibited greater rigidity compared to migraine and control Ss. In migraine subjects both traits were positively correlated with duration of headache attacks.

Lanzi et. al. (1988) conducted individual and parental interviews and psychodynamic tests on 45 youths suffering from classical migraine, common migraine, or chronic daily headache and 29 age-matched normal controls. Results reveal psychosomatic disturbance and the presence of psychologically important events directly associated with the onset of the disease in a high percentage of Ss.

Morrisom and Price (1989) examined complains of mood change in association with migraine and the subjective prevalence of predisposing factor in migraine attacks in 46 female (21-61 years old) new referrals to a migraine clinic. 37 of Ss complained of increased pessimism and/or depression in association with more than 50% of their migraine attacks.

Dawn and Holm (1992) reported that recurrent tension (N=43) and migraine (N=42) headache sufferers as well as headache free controls (N=59) completed the Life Event Review of the Literature 66
Inventory, Cognitive Appraisal Inventory and Coping Strategies
Inventory. An analysis of variance revealed that migraine sufferers
could be correctly identified solely on the basis of how they
appraise and cope with stress.

Merikangas et. al. (1993) investigated the association
between personality, symptoms and headache subtypes in a
prospective longitudinal epidemiologic study of a cohort of 19 and
20 years olds in Zurich, Switzerland. Personality was assessed by
the Freiburg Personality Inventory (FPI), a standardized self-report
personality instrument, which yields nine primary factors and three
secondary factors. The symptoms checklist 90 (SCL-90) was
employed to examine somatic and psychological symptoms. Subjects
with migraine exhibited elevated rates pregnancies were considered
to have migraine at their initial prenatal visit (n=508). Subjects of
the 484 women with a complete data set, 17% experienced two
or fewer headaches in the third trimester. These observations lead to
the conclusion that many migraineurs (79% in the sample)
experience improvement in headache recurrence during pregnancy.
Only 21% experienced no improvement at all. No demographic or
obstetrical factor was associated with headache improvement.
In the study of Hay et. al. (1994) 1044 women with migraine complete a self-report questionnaire on visual environmental stimuli that precipitate or aggravate migraine. 121 female controls were obtained from general practice and hospital outpatients. Ss were 16 to 75 years old. Responses of women with common migraine or controls, both with respect to number of visual sensitivities (glare, flicker, pattern and color) reported and severity of consequence of such stimuli. Reported range of sensitivities for the migraineurs peaked ages of 46 to 60 years. Calare was the most frequently reported visual stressor.

Keck and Merikangas (1994) stated that association between migraine and psychiatric disorders has been recognized for over 100 years, this association has been investigated systematically only recently in clinical and community samples. Mechanisms for comorbidity between migraine and psychopathology have also been examined in recent family, pharmacologist treatment, and challenge studies. We review the evidence of an association between migraine and mood, anxiety and eating disorders and discuss the implications of this association in the diagnosis and pharmacological treatment of patients with psychiatric disorders and comorbid migraine.
Robbins (1994) assessed the predominance of certain triggers or precipitating factors contributing to migraine in 393 female and 101 male migraine patients (aged 18.6 years), stress (62%) was the most frequently cited precipitant. Weather changes (43%), Missing a meal (40%), and Bright sunlight (38%) were also prominent factors. Significant differences were found between men and women in their response to weather changes, performs and missing a meal.

Fan et.al. (1995) compared personality traits of 50 Chinese migraineurs (aged 15-57 years) with 30 normal control Ss (19-59 years old) on the Minnesota Multiple Personality Inventory (MMPI). Experimental Ss with mean courses of illness of 8.4 years were tested using the Chinese edition of MMPI during pain free intervals between frequent headaches, while controls were tested at random. Results of comparisons on subtests of MMPI reveal that Chinese migraineurs show higher scores on neurosis, schizophrenia and social introversion, as compared to controls. Further they look more time to complete the MMPI test, which may be suggestive of partial cerebral function disturbances.

In the study of Galiano et.al. (1995) it was found that stress is the precipitation factor in migraine, which is most commonly
recognized by patients. There are many affected who describe headaches brought on by stressful situations and pessimistic thought, although they also speak of the onset of their attacks during the period of calm immediately after such moments of stress.

Robbins (1995) assessed the incidence of chronic anxiety, depression and insomnia in 494 migraine patients (393 women), aged 18-60 years old. Ss completed the headache intake Assessment Form. Some degree of chronic anxiety was, demonstrate by 59% of women and 55% of men. Among Ss with anxiety and 11% severe anxiety. 21% of the women and 12% of the men reported chronic pessimistic thinking. 28% of women and 23% of the men reported sleep onset insomnia. Difficulty maintaining sleep was reported 27% of the female and 24% of males.

Scharff, Turk and Marus (1995) examined the relationship between the International Headache Society (IHS) diagnostic category, pain characteristics such as severity and duration, perceived impact and control of chronic headache and adoptive responses. Medical history of 225 patients (mean age 36.3 years) with migrainem tension type or combined migraine and tension type headache was collected. The multidimensional pain Inventory (R.D. Kerns et.al., 1985) and the headache Locus of Control Scale
(N.J. Martin, 1990) were used to measure severity, duration perceived impact and control of headache. Results show that migraine headache patients reported to be more active than tension type patients. Headache Locus of Control was not significantly related to IHS diagnosis, external headache Locus of Control was significantly related to headache intensity and patients perception of the extent to which pain interfered with various domains of their lives, and adoptive responses.

Turner et.al. (1995) conducted an investigation of migraine headache in a general population on Maxican-Americans living in San Diego country. Specific headache triggers were reported and analyzed, the most frequently reported for females with migraine being missing meals (58.9%), weather changes (54.4%), Menstruation (53.6%), post-crisis let down (52.7%) and fatigue (51.8%). The most frequently reported trigger factors for migraine reported by males were fatigue (58.5%), sleep (as a precipitating factor) (56.3%) post crisis let down (41.2%), and weather changes (37.5%). Trigger factors were further evaluated using stratification by presence or absence of Raynaud's Phenomenon (RP), menstrual migraine, family history of migraine, and by migraine type. Odds ratios and 95% confidence intervals were calculated.

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These results suggest that subjects with migraine and RP (perhaps indicative of a systematic vascular tone disorder) and those with menstrual migraine (indicative of sensitivity to hormonal changes) may overall be more sensitive to certain environmental stimuli, particularly those change in the internal environment.

Andrasik (1996) reported that behavioural treatment for migraine have received increased attention over the past 25 years. In general, research has focused on the six following areas: (1) comparative efficacy of treatment, (2) interplay of behaviour and pharmacological approaches, (3) development of delivery models that are cost-effective, (4) identification of characteristics associated with varied levels of responses to treatment, (5) maintenance of effects and factors associated with long term outcome, and (6) mechanisms of treatment. This paper briefly and selectively reviews the available literature in an attempt to point out the status of current research.

Blomkvist et.al. (1997) considered cluster headache patients to differ from migraine patients as to behavioural patterns. There is, however, little empirical validation of such a differentiation. Methods: coping profile and social networks were studied in patients suffering from two kinds of recurrent headache. Twenty-four
female patients with cluster headache, age 23-72 years, and 24 age matched migraine patients with and without aura participated in the study. All female cluster patients treated at the neurological clinic of the hospital were included, and consecutive out patients who had been referred to the policlinics for diagnosis and treatment, whose symptoms agreed with the IHS criteria for migraine and who had ages matching the cluster headache patients, participated in the study.

Results

In the semi projective coping tests the cluster headache patients were found to be statistically significant more 'positive' as to their anticipated activities in the future compared to the migraine patient (P<0.04). No other statistical differences were found between the two groups. Compared to randomly selected and age-matched referents in the population. Cluster headache patients reported significantly poorer social support (P<0.01), while no other differences was found when the migraine patients were compared with controls.
Conclusion

The findings indicated that there are differences in perception of anticipated activities and social support between patients with cluster headache and migraine.

Mongini, Defilippi and Negro (1997) assessed the clinical and personality characteristics of patients with chronic daily migraine headache and hypertension. Findings revealed that migraine patients have scored significantly higher on alienation as compared to hypertensive patients. They had egocentric attitude.

Sorbi and Egilius (1997) reported analysis of daily stressfulness and mood changes in migraine attack. 19 female migraine patients (aged 20-40 years) kept a 10 week diary 4 times per day and produced complete data on daily hassles (incidence and stressfulness), mood (alert, tense, irritable, pessimistic, depressed and tired), sleep quality and migraine. Results showed increased hassles and pessimistic thinking, particularly in the 24 pre-migraine hours before attack and a sharp decrease in sleep quality in the night before the attack.

Davis and Holm (1998) examined the stress headache relationship from a deregulation framework by monitoring both physiological responses, (e.g. pulse, blood, volume, skin resistance,
and EMG) and self reported responses to a stressful event in tension and migraine headache sufferers, as well as in headaches free controls. Responses were analyzed via time-series analysis to determined weather self reported of stress were correlated with physiological measures of stress. It was hypothesized that tension and migraine headache sufferers would show fewer significant correlation's that control participants between their self-reports of stress and physiological activity. Data analyses supported this hypothesis for tension headache sufferers. The compelling support for the hypothesis in tension headache sufferers came from the cross-correlation between self reported stress and pulse rate.

Gerber and Schoenen (1998) reported the role of specific abnormal behavioural patterns (such as perfectionism and hyersensitivity) which have been described as psychological characteristics in migraine patients. They propose that behavioural abnormalities may be the result of a determined cortical hypersensitivity and an associated social learning process. New neuro psychophysiological data support the concept that migraine is a brainstorm related information processing dysfunction that is characterized by cortical hypersensitivity and reduced habituation to stimuli.
Wang et.al. (1999) and Lipton et.al. found associations between migraine and depression. Most recently, using a longitudinal prospective design.

Swartz et.al. (2000) demonstrated significant association between migraines and life-time major depression, panic disorder and phobia, after adjusting for age and sex. Their study did not find an association between migraine and alcohol or other substance abuse.

Mc Grath et.al. (2001) examined about triggers, causes and contributing factors of recurrent headache. Result from the author's research suggested that stress-particularly a child's inability to fully resolved a stressful situation is the major cause underlying suspected diverse environmental triggers. In particular situation specific stress is a common trigger for headache attacks. The author's research indicated that the continued failure to resolve stress initiates a cascade of pessimistic thinking that subsequently maintain this pain syndrome.

Cottrel et.al. (2002) tried to identify the area that people found most difficult in living with migraines, and in that regard, what kinds of assistance would be most helpful to them and to other people who had migraine headaches. They conceptualized five themes (i) impact on family, (ii) misunderstanding by others,
Blomkvist et al. (2002) investigated similarities and differences between patients with cluster headache and migraine patients in the reference of coping style and social support. Result showed that women with cluster headache anticipated fewer activities for themselves than women with migraine and findings were similar in the male pairs. The main with cluster headache also anticipated significantly fewer activities for themselves in the present and with others in the present and in the future than the men with migraine. There was not significant difference as to emotional leading between the two groups. A tendency to more optimistic anticipation was found in the women with cluster headache.

Han (2003) studies with the purpose of to identify the psychological factors influencing symptoms of stress in patients with migraine headache. He concluded that mood state, pessimistic thinking perceived stress and alienation are significantly influencing factors of the migraine headache.
Pedro et al. (2004) reported the effects of social support provided by the presence of patient's significant other on pain ratings, pain thresholds, and brain activity associated with tactile stimulation in 18 fibromyalgia (FM) patients and 18 migraine patients (controls) and to assess the influence of emotional context on thermal pain perception and processing of non-pain related information. The thermal pain thresholds indicated greater sensitivity in FM patients, there were significant reductions in pain sensitivity and subjective pain ratings when patients were stimulated at the painful tender point in the presence of their significant others as compared with the ratings when the patients were alone. Brain activity elicited by elbow stimulation was also significantly reduced in FM patients when a significant other was present as compared with the activity when the patient was alone. These effects were not observed in the migraine patients.

Margot (2005) worked with the objectives of describing stress exposure among Canadians aged 18 or older and analyzed short and long term associations with psychological distress and chronic conditions. The buffering role of emotional support was also considered. Using data from the National Population Health Survey (NPHS), and the Canadian Community Health Survey (CCHS)
this article described the stress levels of Canadians adults and how stress levels vary by demographic and socio-economic characteristics. Based on 1994-95 cross-sectional data, association between stress and psychological distress and chronic conditions were determined. With longitudinal data stress in 1994-95 was studied in relation to changes in psychological distress and the incidence of chronic conditions by 2000-01. These relationships were examined using multivariate techniques to control for the influence of other variables that might affect the outcomes. Findings indicated that the prevalence of chronic conditions were related to stress. The role of emotional support plays in the relationship between stress and mental and physical health was also considered.

Hartimaier et.al. (2006) developed a questionnaire to assess the short term quality of life decrements associated with an acute migraine headache attacks. A total of 101 potential quality of life items were generated by interviewing migraineurs and migraine specialists and reviewing the literature. To reduce the items, 76 migraineurs (18 years and older) were asked to identify which of the 101 items affected their quality of life in the 24 hours following onset on a Migraine and to rate them on a five point scale from "not very important" to "extremely important". Reduction of the 101
items to a 15-item questionnaire was performed by evaluating the results of subject-perceived importance (number of items an item was chosen x mean important score) in combination with principal components analysis. Five domains were identified: (i) work functioning, (ii) social functioning, (iii) energy/vitality, (iv) migraine headache symptoms, and (v) feeling and concerns.

Each domain has three items and the correlation between coefficient, ranged from 8.08 to 0.38 suggesting minimal overlap. The brief migraine quality of life questionnaire was pilot-tested in two groups of 10 migraineurs and their work functioning and social functioning was found to be impaired.

Abbate Daga et.al. (2007) suggested that the personality traits and psychosomatic mechanisms of migraine patients may make them vulnerable to stress and less capable of coping with pain. These traits correlate with dysregulated neurotransmitter systems which may also be the part of the psychobiological components of personality, depressive disorders and migraine itself. It is suggested that observed emotional distress in chronic patients is the outcome of pain experience instead of causal one.

Tetle et.al. (2008) did not find an association between migraine and alcohol or drug dependence either. Third, the
conflicting findings of the relationship between migraines might be due to differences in methodology between studies on the assessment of migraines and mental disorders.

The review presented in this chapter makes it obvious that several studies have been conducted on CLBP and migraine patients and many valuable conclusions have also been given. But studies exploring the effects of above disorders on mental health, anxiety and behavioural efficacy are generally not available. In other words, there is a general lack of such studies and owing to it, there are a number of moot questions which need answers and explanation relating to the effects of CLBP and migraine on mental health, anxiety and behaviour efficacy. So, the present study appears to fully justified.