Chapter-5

Discussion
The present study depicts how meditation and cognitive restructuring is helpful for individuals experiencing problems and having neurotic tendencies to manage problems and handling effectively their problems of day to day life. Individual high on neuroticism are prone to hold unrealistic ideas which make their life miserable. It is a personality trait defined by tendency to react to events with greater than average negative affect. Although such people may appear to be happy, something is distressing their inner self. With the help of cognitive restructuring and meditation, individuals can control this negative affect to a great extent. The result of this study proves the effectiveness of these two interventions and further demonstrated that the combination of these two interventions was found to be even more powerful in controlling the negative affectivity. The validity of results is also reinforced by the fact that neuroticism scores of the subjects in the control group did not show significant change, nor there was reduction in problems perceived by them. Thus, by and large all our hypotheses were supported by our findings.

One difficulty that the researcher faced was the high drop out rate. The main reason behind the drop out in this study was the variable neuroticism itself. The subjects identified high on neuroticism are characterized by cognitive traits like fearfulness, irritability, low self esteem, social anxiety, poor inhibition of impulses and helplessness.
(Costa and McCrae, 1987). These characteristics were the reasons behind the subject's non-co-operation. In the beginning, large number of subjects were identified high on neuroticism and in their impulsiveness they agreed to participate in the study. Sometimes their social anxiety and sometimes their fear of disclosing their inner feelings made the subjects avoid meeting the researcher, because meeting a researcher is a stressful situation for subjects. Theorists such as Eysenck (1967) Gray (1991) and Tellegen (1981) have opined that individuals who are high on neuroticism have greater emotional reactivity to stressful events. They also have the tendency to manifest a greater amount of fear. Eysenck’s (1967) biological theory of personality posited that neuroticism is closely related to the activity of the autonomic nervous system such that neurotic individuals should be more sympathetically aroused by stressors than their non-neurotic counterparts. Fear is one of the emotions comprising the broader construct of neuroticism, which also includes anger, anxiety and sadness. Psychophysiological evidence exists for autonomic correlates of state emotions, such as fear and anger (Levenson 1992; Levenson Ekman and Frieson 1990 Sinha Lovallo and Parsons 1992). The fact that persons scoring high on neuroticism tend to be more psychologically reactive to stressors has been shown by recent studies like those of Larsen and Ketelaar 1998,1991; Marcco and Suls 1993;
Bolger 1990; Bolger and Schilling 1991. It was therefore no surprise that drop out rate of subjects was phenomenally high.

Researcher found the cognitive restructuring technique to be useful in controlling the trait of neuroticism. This technique works at the level of thought. Each of us is affected differently by outside events, depending on how we interpret or make sense of those events. Imagine two people walking to a party. One person is naturally outgoing, anticipates enjoying herself a great deal, and interprets the group of partygoers as friendly and receptive. The other dreads social gatherings, anticipates them by feeling miserable, and experiences people as judgmental and rejecting. Each one interprets the world in characteristic ways. These interpretations determine how events are experienced. People high on neuroticism think in an unfair and unrealistically negative way about current situation, self and future. These ways of thinking increase the negative impact of difficult life situations and predispose to negative emotional states. Someone who sees events in this biased way can become discouraged even when things are going fairly well. The cognitive restructuring technique works by helping the person to modify the biased interpretive habits. Another important characteristic of cognitive therapy is that it helps the subjects to become their own therapist, teaching subjects the ways of helping themselves, across a number of situations or problems. It
also aims to get people accept difficult life circumstances by the power of positive thinking.

The most highly reported problem among the subjects of cognitive intervention group was lack of confidence. It was observed by the researcher that the reasons cited by the subjects were not very serious but it was the negative interpretation of that situations that made them feel less confident. Working at the thought level, they realize their distortion which in turn helps them to overcome their lack of confidence.

Neuroticism is a pre dispositional factor of depression. Negative interpretation of things is the main component of depression which is best dealt with cognitive intervention. A meta-analysis of treatment studies comparing individuals who received cognitive therapy and control subjects who received no treatment yielded this finding: Cognitive therapy subjects had lower final depression scores than 99% of the no treatment control subjects (Dobson and Shaw, 1998). It is clear that cognitive therapy is better than no treatment. Another study that used medication and cognitive therapy to treat depression found that the use of drug treatment and cognitive therapy was no better than cognitive therapy alone (Beck, Hollon, Young, Bedrosian, and Budenz, 1985). The combination of cognitive therapy and drug treatment was better than drug treatment alone. More recently, DeRubeis, Gelfand, Tang, and Simons (1999) re-analyzed individual patient's data from four studies of
cognitive therapy treatment for depression and concluded that cognitive therapy was as effective as medication for treatment of patients who were severely depressed.

Meditation is found to be equally beneficial as cognitive restructuring in controlling neuroticism. Meditation works at the physiological level in controlling neuroticism. In general, meditation produces a reduction in multiple biological systems, resulting in a state of relaxation. These changes are, in most studies, significantly different between meditating and non-meditating groups. Skin resistance to electrical current provides a measure of autonomic nervous system reactivity. An increase in the skin resistance of meditators has been reported by several groups (Wallace 1970, Wallace et al 1971, Orme-Johnson 1973, Delmonte 1984, Telles et al 1995). Increase in skin resistance indicates a decrease in skin conduction and a reduction in its fluctuations. It is well established that skin resistance decreases in states of anxiety or stress, and increases during relaxation.

Stressful situations result in a hypermetabolic state, with increased oxygen consumption, heart rate and blood pressure. In contrast, the majority of scientific studies show meditation to be a wakeful state accompanied by a decreased metabolism. This generalized decrease in body metabolism manifests with a decreased breathing pattern, decreased heart rate, and decreased blood pressure. There is also a marked decrease

Galvanic skin response, or GSR, was used to measure recovery from stress. A study by Orme-Johnson (1973) showed that meditators recovered from stress more quickly than non-meditators. Specifically, habituation of the GSR to stress was faster for meditators than for controls, and meditators made fewer multiple responses during habituation, indicating greater stability in response to stress. In other experiments, meditators produced fewer spontaneous GSR than their non-meditating controls, both during and while out of meditation. Spontaneous GSR is defined as spontaneous fluctuations in skin resistance and the frequency of spontaneous GSR defines the liability of an individual to stress. For example, the frequency rises with anger, fear,
and increased epinephrine and norepinephrine blood levels. Those individuals with lower frequencies of spontaneous GSR exhibit more effective behavior in a number of stressful situations, are less impulsive on motor tasks, and have quicker perceptions. Therefore, meditation benefits practitioners by decreasing the frequency of spontaneous GSR. In general, these studies indicate that meditators possess a more adaptive pattern of stress response than controls. On another level, meditation produces specific neural activation patterns involving decreased limbic arousal in the brain (Schwartz 1975). Since the limbic system contains the hypothalamus, which controls the autonomic nervous system, reduction in limbic arousal may explain how meditation reduces stress and increases autonomic stability to stress. Ultimately, meditation strengthens and enhances the ability to cope with stress.

It is clear from the above discussions that meditation works primarily at the biological level while cognitive intervention works at the thought level in controlling neuroticism. However thought are not unrelated to feelings and therefore its benefits also permeate to some extent to physiological reactivity. The combination of the two techniques viz, cognitive intervention and meditation was found to be more powerful because focused benefits of both become available. When the subject becomes angry or anxious and interprets things in a biased way, then the use of cognitive restructuring technique questions his/her thoughts and
tries to control their anxiousness or anger. The subjects using meditation only calms down their anger or anxiousness by meditating. When the subject uses both the techniques, he target such emotions at both levels, that is, at thought level and physical level, and the process of dealing with these emotions becomes faster and easier as both the techniques get the support of each other. Because the capability to calm the mind and body is greater in the combined intervention condition, the benefits of which accrue are greater. This is also supported by the cases presented in condition C. As soon as the subjects in this condition were able to develop relaxation response their ability to solve the problems increases as indicated from the cases C-2, C-3, C-4, C-5 and C-9. Researcher observed that by the time subjects learn to solve one or two problems they were also able to develop relaxation response. The knowledge how to solve the problem and support of relaxed body and mind speed up the process of solving their problems and in cases like C-2, C-3, C-4, C-5, and C-9 subjects reported that their next problems were automatically solved. In cases like C-1, C-7 and C-8 where subjects did not report any problem being automatically solved, the problems were not based on wrong interpretation. More time was required to solve their serious problem. But here also meditation helped to boost up the process.

The only case where subject was not able to solve her problem was subject no-C-6. Subject’s problems, that is, carelessness, feelings of
inferiority and poor academic achievement, were all related to her poor understanding which was very apparent and obvious. Since cognitive restructuring involves active participation of the client, a basic level of understanding is necessary. The researcher observed that subjects who reported academic achievement or feelings of inferiority as their problems were either having wrong interpretation of the situation as case A-7 and C-9, and when their problem is real as in case no A-2 and A-3, the subject were able to learn the technique to solve their problems. Subject C-6 had a real problem as she had failed in previous classes, but she was not able to learn the techniques to overcome it. As pointed above, her level of understanding as well as her willingness to apply efforts (probably this was the outcome of her poor understanding) was to be blame.

Problems and Limitations

The small sample size may appear to be a limitation because normally in studies involving measurement of some personality or other characteristics, a large number of subjects can be administered appropriate scales/ questionnaires, and their performance analyzed. In action research, such as ours, each individual subject has to be approached personally and interface contact is required for a considerable period. Having a large number of subjects in this situation becomes
difficult. In the present study, an average of thirty sittings with each subject of half to one hour duration, spread over a three month period were conducted. Further these subjects high on neuroticism tend to be relatively unpredictable and to some extent erratic in their behaviour. Motivating them to come to meet the researcher is difficult because it is a situation in which they come face to face with their anxiety and fear, which they normally avoid. It was therefore difficult to study large number of subjects and when a considerable number of subjects dropped out in the middle or towards the end, it was really painful and frustrating.

Another factor was the difference in the attitude of males and females. Though both male and female subjects were hesitant to join the project, but the researcher being a female was able to persuade female subjects more than male subjects. Secondly male subjects did not disclose their emotional aspect so easily, that is why the drop out rate was much higher among cognitive intervention group and combined group than meditation group. Therefore it became difficult for the researcher to have a larger sample size.

Time was another factor which was responsible for the drop out. The intervention is demanding and the students did not want to give so much time. Because of their high neuroticism, this refusal was more accentuated.
Implication of the Research

Today in a single day we may be challenged to respond to more informations and make more decisions than our ancestors did in a whole life time. The accelerating rate of change and uncertainty, the immensity of personal and global crises and the staggering variety of choices and decisions which are a part of daily lives, are an important reason behind human tensions and anxieties and provide impetus for various pathologies. It is suggested by the researcher that meditation and some essentials of cognitive restructuring method which can be followed by the individual should be a part of our health programmes. Even without any psychological test to determine tensions and anxieties, it can be safely presumed that adolescents and young adults face multitude of problems and need to imbibe practices which are stress reducing. The problems in schools and colleges may not be so severe but proper coping strategies should be learnt. It is suggested that techniques of cognitive restructuring method should be a part of Teacher Training Program so that essential and practicable components are conveyed to students. Some research should be done to know which techniques work best with which type of problem. Some counseling program involving both parents and children should be run at schools and colleges.
Learning to relax should also be an important part of school curricula. It is useful for even human beings without any obvious problem, because muscular relaxation and slow controlled breathing relieve the physical symptoms of anxiety, stress and tension, which are a part of normal life. The energy of peaceful mind and body helps to deal with the problems of life more effectively and realistically. Therefore skills in meditation and relaxation which are vital to our peace of mind and the quality of our health, work and relationships should become more popular.

Since one of the difficulties with regard to cognitive restructuring as conducted by researcher is the time factor involved, work should be done to evolve shorter versions for those without major pathologies and problems. This would motivate this group to undertake this intervention more readily which would perhaps be a very good preventive approach. Researches in this area should be conducted. It is also clear from the experience gained by the researcher that students studying in colleges and schools who appear to be leading very normal lives may be facing a multitude of problems. This definitely influences their performance and sense of well being. Problems of indiscipline and student unrest can also be traced to dissatisfaction, negative attribution to phenomena and overload of physical and mental stress. Counselling should be an integral
part of all educational institutions and problems of students sorted out by appropriate techniques such as those discussed above.