IMPACT OF MEDITATION AND COGNITIVE INTERVENTION IN ALLEVIATING THE PROBLEMS OF INDIVIDUALS HIGH ON NEUROTICISM

ABSTRACT

THESIS SUBMITTED FOR THE DEGREE OF

Doctor of Philosophy IN PSYCHOLOGY

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ABSTRACT

The problem selected by the researcher for study is “Impact of Meditation and Cognitive Intervention in Alleviating Problems of Individuals High on Neuroticism.” Neuroticism refers to individual differences in emotional stability. Persons high on neuroticism are prone to experience anxiety as well as other negative emotions such as, anger, disgust, and sadness, and also prone to hold unrealistic ideas. They respond emotionally to events and interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. This predisposes such people to various pathologies. Therefore, if individuals with such predispositions are exposed to appropriate interventions which enable them to understand and manage negative emotions and to deal with life situations realistically potential distress which such people experience because of their wrong interpretations of situations can be prevented.

Cognitive intervention and meditation are two approaches that have potential to be of benefit in such situations. Studies such as those conducted by Dahlen and Deffenbacher (2000), Sagula and Rice (2004), Sinha and Jalan (2001), Bryant, Molds, Gutheric et al (2003), Grey, Young and Holmes (2002) have shown that relief was achieved by those having anxiety, depression, social phobia and post traumatic stress disorder (PTSD) through these interventions. Cognitive intervention
includes many techniques and cognitive restructuring is one of the most popular. It includes activities such as positive self statements, writing Daily Record Sheets, Weekly Activity Schedule, identification of cognitive distortions, counseling etc. Cognitive Restructuring is a useful tool for understanding and turning around negative thinking. If stress or any other factor is causing significant or persistent unhappiness, then the individual with the help of cognitive restructuring techniques can understand negative thought processes that are causing problems and restructure them in fair and balanced ways. Similarly meditation, besides its spiritual usefulness has also been found to affect individual’s life in certain practical ways. Meditative practices involves sitting and chanting mantra, focusing on breathing, being passively aware of thought process which in turn induces a host of biochemical and physical changes in the body collectively referred to as “the relaxation response.” The relaxation response includes changes in metabolism, heart rate, respiration, blood pressure and brain chemistry.

The researcher conducted the study to see the effectiveness of each intervention, that is cognitive intervention and meditation and also the combination of both interventions in solving the problems of individuals high on neuroticism.

The following hypothesis were framed by the researcher.
1. Neuroticism scores of subjects undergoing cognitive intervention will be reduced after intervention.

2. Problems perceived by the subjects undergoing cognitive intervention will be reduced after intervention.

3. Neuroticism scores of subjects undergoing meditation will be reduced after meditation.

4. Problems perceived by subjects undergoing meditation will be reduced after meditation.

5. There will be greater reduction in neuroticism scores of subjects undergoing both cognitive intervention and meditation than group undergoing only cognitive intervention.

6. There will be greater reduction in problems perceived by the subjects undergoing both cognitive intervention and meditation group than group undergoing only cognitive intervention.

7. There will be greater reduction in neuroticism scores of subjects undergoing both cognitive intervention and meditation in than group undergoing only meditation.

8. There will be greater reduction in problems perceived by the subjects undergoing both cognitive intervention and meditation than groups undergoing only meditation.

9. There will be no difference in the initial neuroticism scores and scores obtained after three months amongst control group.
10. There will be no difference in perceiving the problems initially and after three months amongst control group.

In the present study, sample consisted of 51 subjects (19 males and 32 females), age range being 18-38 years. All subjects were high on neuroticism. This was determined by scores obtained on Eysenck's "Maudsley Personality Inventory" (Hindi version adapted by Jalota, 1964). The Hindi version of MPI was administered on 400 individuals, out of which 72 subjects high on neuroticism were selected. (It may be pointed out that due to the time period involved in the procedure as well as the demands placed on the subjects, dropout rate towards middle and end was very high, reducing the actual sample).

The subjects were divided into four groups in the following manner.

1) First group of subjects was administered cognitive intervention only.

2) Second group of subjects was administered meditation only.

3) Third group of subjects was administered both cognitive intervention and meditation.

4) Fourth group of subject was not administered any intervention.

Fourth group constituted the control group which is important to ascertain to see whether the improvements in other three groups were in
reality due to intervention and not the outcome of time. Each intervention program was conducted for 12 weeks.

The following steps were involved in Cognitive Restructuring

1) The intervention was performed individually on each subject.

2) Intervention comprised of 30 counseling sessions with each subject for 30 minutes.

3) In initial sessions a proper problem list, with the help of Socratic questioning method, is made.

4) Then one problem from the list is selected and some steps to deal with the problem were mutually decided by the researcher and the subject.

5) Some home assignments were given to practise. One regular homework was to write daily record sheet.

6) Some other home assignments were given such as weekly activity schedule, some coping statements or some activities to check the validity of subject’s thought. These were planned according to the need of subject.

7) Same procedure is followed for the next problem.

Intervention was complete when all the listed problems were solved and subject feels that he/she has learned how to deal with the problems of life. Their post intervention scores were recorded. Pre-
intervention scores of all subjects had already been obtained at the time of initial screening.

Meditation involved the following steps.

1) Subject was asked to report their problems during the initial sessions.

2) Subject has to sit in a comfortable position with back straight and eyes closed.

3) Subject has to concentrate on the flow of breath

4) Subject has to keep his/her minds free from thoughts

5) Subject has to meditate daily for 20 minutes

6) After three months, post inter-neuroticism scores are recorded.

For group undergoing both cognitive restructuring and meditation, post intervention score on neuroticism was obtained by re-administering the MPI. The neuroticism scores of control group were also obtained after 12 weeks lapse (the period involved intervention in the other three groups).

Results were obtained by analyzing pre and post intervention scores on neuroticism and status of problems as perceived initially and as perceived after 12 weeks.

The results of the present study clearly demonstrate that both the interventions viz cognitive intervention and meditation benefited the subjects high ion neuroticism at two levels. Firstly reduction in
neuroticism scores form pre-intervention to post-intervention is highly significant at 0.01 level, in all the three groups that is cognitive intervention group, meditation group and combined group. Secondly subjects of these three groups were able to overcome their listed problems. Another important observation was that the reduction in neuroticism scores of those undergoing both cognitive restructuring and mediation was greater than only meditation group or only cognitive restructuring group. These improvement can be attributed to the intervention program administered on these groups because subjects in control group did not show any reduction in neuroticism scores between initial testing and score obtained after three months. Their problems also continued to persist after three months.

Fifteen case studies have been detailed by the researcher. Types of problems, nature of cognitive distortions etc. become clear from these case studies. It was found that out of 31 subjects who underwent intervention, 30 subjects showed marked improvement. This is strong evidence for the efficacy of cognitive restructuring and meditation in alleviation of problems of subjects high on neuroticism. Researcher has suggested that in view of the usefulness of these techniques, counselors in schools and colleges should be encouraged to impart training in these intervention to help adolescents who face innumerable problems during this period of storm and stress. Researches in evolving shorter but
effective versions of Cognitive Restructuring should also be conducted and knowledge of these useful intervention should form an integral part of Teacher Training Programmes.
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Certificate

This is to certify that Ms. Fauzia Shamshad has carried out her research entitled “Impact of Meditation and Cognitive Intervention in Alleviating Problems of Individuals High on Neuroticism” under my supervision.

It is further certified that her work is an original piece of work and is fit for submission for the award of Ph.D. degree in Psychology.

Prof. (Mrs.) Hamida Ahmad
Supervisor
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No words are adequate to express my feelings of gratitude to my "Lord", the most Beneficial and the merciful.

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(Fauzia Shamshad)
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Chapter-1

Introduction
An important concern of psychology is to address itself to issues and problems which distress individuals and impact negatively on their optimal functioning and sense of well being. Those manifesting full-fledged pathology receive appropriate intervention and treatment, but many of us who do not fall into the category of any well defined psychological disorder may be in the grips of anxiety and tension, which are disturbing and painful.

There are different problems in each individual’s life, and each of us deals with them in different ways. Some people tackle their problems effectively, although they may experience some degree of anger, worry or anxiety, which are unavoidable parts of human life. However some people get disproportionately worried even when problems are very small because they probably exaggerate the possible negative consequences of their problems. Most often, the reason behind this behaviour is a trait called neuroticism. This trait is a mental structure inferred from observed behaviour where a consistence occurrence of behaviours identified as neurotic is found across situations and over time. Even more important for the psychologist is to be alert for behaviours and signals which point towards occurrence of pathology in the future, and if possible to pre-empt them. It may justifiably be presumed
that individual who are high on the trait of neuroticism are likely to become pathologically neurotic in the future, as compared to those who possess the neuroticism trait within normal range. Therefore, if individuals having higher than normal level of neuroticism are identified and with the help of some interventions, their negative outlook and inappropriate behaviours are modified, the likelihood of their developing pathology would be vastly reduced.

Learning techniques like cognitive restructuring or meditation could be prove helpful in controlling such behaviour. Therefore it would be meaningful to study the impact of cognitive restructuring and meditation on alleviation of problems of individuals high on neuroticism

NEUROTICISM:

The term neurosis was coined by the Scottish doctor, William Culleirn in 1769 to refer to a “disorder of sense and motion” caused by a general affliction of the nervous system. The term (also psychoneurois or neurotic disorder) in modern psychology refers to any mental disorder which though causing distress does not interfere with rational thoughts or the person’s ability to function. This is in contrast to psychosis and to more severe disorders.
A neurosis, in psychoanalytic theory, is an ineffectual coping strategy that Sigmund Freud (1887-1902) suggested was caused by emotions from past experiences overwhelming or interfering with present experiences. For example, someone attacked by a dog as a toddler may have a phobia or overwhelming fear of dogs. Although Freud recognize that some phobia's are symbolic and expressed as repressed fear. In Carl Jung’s (1953) theory of analytical psychology a neurosis results from the conflicts of two psychic contents, one of which must be unconscious.

Despite its long history, the term, "neurosis" is no longer in common use. Current classification system of APA has abandoned the category of neurosis. Disorders formerly termed as neurosis are now described under the heading of anxiety disorders and dissociative disorders and somatoform disorders.

Neuroticism is considered to be a predisposition for traditional neurosis, such as phobias and other anxiety disorders. Neuroticism is a personality trait defined by the tendency to react to events with greater than average negative affect. In a sample of 7,076 adults, neuroticism predicted the onset of both anxiety disorders and depression (de Graaf et al. 2002). People with high level of neuroticism were more than twice as likely to develop an
anxiety disorder as those without high neuroticism. A major study of twins suggests that neuroticism explains at least part of the genetic vulnerability to depression (Fanous, Prescott and Kendler, 2004). Thus, there is good evidence that people who tend to experience negative affect are at elevated risk for developing depression.

Neuroticism refers to individual differences in emotional stability. Persons high on neuroticism are prone to experience anxiety as well as other negative emotions, such as, anger, disgust, and sadness, and also prone to hold unrealistic ideas (Costa and McCrae, 1992). As measured by such inventories as the Revised NEO Personality Inventory (NEO PI-R; Costa and McCrae, 1992), individuals scoring high on neuroticism are often tense, worried, or angry, feel inferior; are unable to resist craving; and are more likely to interpret ordinary situations as threatening, and minor frustration as hopelessly difficult. They are often self conscious and shy, and they may have trouble in controlling urges and delaying gratification. Neuroticism is related to emotional intelligence which involves emotional regulation, motivation, and interpersonal skills (Goleman, 1997).
On the opposite end of the spectrum, individuals who score low on neuroticism are more emotionally stable and reactive to stress. They tend to be calm, even tempered, and less likely to feel tense or rattled. Although they are low in negative emotions they may not necessarily be high on positive emotions.

Most researchers agree that neuroticism is temporally and situationally stable (Costa and McCrae, 1992; Eysenck, 1967; Watson and Clark, 1984). Neuroticism is typically viewed as a continuous trait, rather than a distinct type of person. People vary in their level of neuroticism, with a small minority of individuals scoring extremely high or extremely low on this dimension. Because most people cluster around the average, neuroticism test scores approximate a normal distribution given a relatively large sample of people. Neuroticism is one of the most studied personality traits in psychology, and this has resulted in a wealth of data and statistical analysis. It is measured on The EPQ, The NEO PI-R, and other personality inventories.

Neuroticism refers to the tendency to experience negative feelings. A negative feeling is a combination of different emotions like fear, anxiety, panic and sadness. While most of us do get negative at times, more and more people are regularly lapsing into
negative emotions. No one is born negative, but often traits are
genetic or develop due to certain situations like repeated failure,
trauma or an accident.

The transition from a neurotic personality to overt
symptomatology may be precipitated by factors that differ
somewhat from one neurotic reaction to another. In general, three
types of precipitants may be distinguished. First a breakdown may
occur when the individual's life situation changes, usually in the
direction of added responsibilities. Until he is promoted to a new
position, or marries, or becomes a parent, he functions well enough
and may use his neurotic traits for adaptive purpose—eg. a certain
degree of neurotic aggressiveness may stand the individual in good
stead occupationally. But he may perceive change in his situation as
threatening and dangerous. He may be reminded of childhood
dangers eg. parenthood may revive long conflicts with his own
father or marriage may revive unacceptable childhood sexual
impulses or fear of inadequacy. To quote Fenichel (1945) "Most
precipitating factors are experiences that are (objectively or
subjectively) somehow similar to childhood events that gave to
decisive conflicts". In case precipitation due to occupational
success, a frequent additional factor is that the individual
achievement may be less satisfying than those he pictured in fantasy. Paradoxically his success leads him to feel that he has failed.

A second type of precipitant consists of a progressive undermining of previously adequate defenses by physical illness, biological deprivation, actual failure, the death of a loved person or some other severely stressful condition. The precipitating trauma of combat neurosis is a special case of this type. Defenses are normally intensified under stress but if it is sufficiently prolonged and intense, the energy needed to maintain the defenses may be depleted.

The third and quite different pattern is the individual who from year to year expends more and more energy on the maintenance of defenses. As the burden of maintaining them increases, he becomes more tense and fatigued, and unable to behave spontaneously or enjoy himself. Eventually, he breaks down and develops overt symptoms. A long series of difficulties rather than a single event is responsible for his neurosis.

Eysenck and his associates (1947, 1952, 1953) have developed an objective dimensional framework in which
personality can be described in terms of several mutually orthogonal dimensions; introversion-extroversion and neuroticism in particular.

Eysenck states that the most frequent neurotic disorder of the extraverted type is hysteria. On the one hand speaking of introversion, he maintains that "This typical neurotic disorder is psychasthenia; a disorder which is characterized on the one hand by marked sensitivity, on the other hand by great exhaustion and constant tiredness". Nowadays we would probably refer to it as "anxiety state" or "reactive depression" rather than to the obsolescent term psychasthenia, which also held overtones of obsessional compulsive tendencies. On the basis of factorial study of 700 neurotics, Eysenck (1944) suggested the term "dysthmic" as a more modern equivalent to cover this syndrome of correlated affective disorder. In literal translation, this term means mood disorder and appear to single out the hypothetical underlying emotional dysfunction or hyperfunction posited by Gross (1992), Jordan (1890), and Jung (1921).

Although Jung (1921) never formally elaborated this part of the hypothesis, it can be seen quite clearly that implicit in his scheme is a second factor additional to, and independent of that of
extraversion-introversion. This factor we may call neuroticism; it is identified as that particular quality which hysteric and psychasthenics have in common as compared with normal persons. The independence of introversion and neuroticism is specially stressed by Jung. It is a mistake to believe that introversion is more or less the same as neurosis. As a concept, the two have not the slightest connection with each other. If we wish to represent a complete scheme, then, we must have recourse to two orthogonal factors or axes, one which represents the extravert-introvert continuum, the other normal-neurotic continuum.

The Psychophysiological basis of Neuroticism

Eysenck (1967) takes the view that neuroticism is characterized by individual differences in emotional responsiveness, excitability and agitation. The autonomic activation concomitant with the emotional expressions of fear, anger and distress, which characterize neurotic states, contrasts with the relatively low level of autonomic activity which may be implicated in differences in sensitivity, attention and specific cases of conditioning between introverts and extroverts.
Eysenck (1967) has suggested that behavioural differences between high and low neuroticism subjects may be interpreted in terms of differential thresholds for hypothalamic activity and in particular to differences in responsivity of the sympathetic nervous system 'with high neuroticism scores associated with greater responsivity'. This suggestion can be considered by exposing subjects from normal population to stressful stimuli or stressful conditions of varying intensity. A second suggestion with different implications is derived from the discussion of differences between corticoreticular arousal and autonomic activation (Eysenck 1967) where it is stated that for individuals who have frequently experienced strong emotions for long periods of time, the distinction between activation and corticoreticular arousal may not apply; for these individuals quite mild stimuli are emotionally activating.

The emotional stability-instability described by the neuroticism dimension has been linked solely to autonomic activity. The behaviours encompassed within the extraversion and neuroticism classification, such as dysthymia and psychopathy, may be explicated by consideration of specific emotional response
patterns or systems rather than emotional behaviour in general (cf. Izard 1972).

This direction has been advanced by Gray (1973), who proposed a modification of Eysenck (1967) position. The strength of Gray's proposal rests on the development of a model of emotions which was derived from an analysis of learning theory and physiological psychology. An attempt was made to explain differences in extraversion and neuroticism from the model. Gray identifies introversion with behavioural inhibition or fear in response to signals of either punishment or frustrative non-reward which were mediated by a system linking the orbital frontal cortex, the hippocampus, the medial septal area and the ascending reticular activating system. Extraversion is identified with approach behaviour in response to signals of rewards which are mediated by a system linking the septal area, medial forebrain bundle and medial hypothalamus. Neuroticism is depicted as a dimension of increasing sensitivity to both reward and punishment. In this view, introversion and extroversion are served by functionally distinct emotional systems, while neuroticism is determined by both.
Cognitive intervention

Cognition is a term that groups together the mental processes of perceiving, recognizing, conceiving, judging and reasoning. Cognitive science focuses on how people structure their experience, how they make sense of them, and how they relate their current experiences to past ones that have been stored in memory. These cognitions are believed to be linked to feeling, behaviour and physiology. Thus if a situation is perceived (cognition) as a threat by someone, adrenalin will be released into the body increasing the heart and breathing rates (physiology), the person will feel fear (affect or emotion) and will react (flight or fight behaviour).

Cognitions are available to our conscious minds- we can think about our thoughts and therefore we can change them. Beck described three types of cognitions which strongly influence an individuals feelings and behavior.

Information processing: Individuals are constantly receiving information from the internal (for example their own bodily reactions) and external environments which their brains process and make sense of.
**Automatic thoughts:** Many thoughts of an individual occur as if 'out of the blue'. Beck called these spontaneous cognitions “automatic thoughts”. They are part of the person’s internal dialogue, described as unplanned moment to moment thought that flow through our minds. Often on the edge of awareness, they can be difficult to recognize.

**Schema:** This is a term given to hypothetical cognitive structures which act as templates to filter incoming information. They are the unspoken rules or underlying core beliefs learned through early experiences, which every individual holds about self, others and world.

Schemas can be adaptive and healthy or maladaptive and unhealthy. Maladaptive schemas tend to be negative, rigid and absolute. It is not people’s experiences or situations that make them angry, depressed or anxious but the way they process the information and think about those experiences.

Cognitions are the primary targets for change in therapy. The process of change begins with the cognitive therapist educating the clients about the cognitive models and the role of thoughts, emotions, and behaviour. Behaviour therapy is now almost entirely
replaced by the concept of cognitive behaviour therapy. Early behaviour theory, with its emphasis on learning, seems somewhat antithetical to developmentalism. The view of early behaviourists on the development of human nature was limited to the learning concepts of operant and classical conditioning. Watson (1930) claimed that behaviour should be the sole subject matter of psychology and that it should be studied through observation. In this paradigm, conscious processes (e.g., thinking) were determined to be outside the realm of scientific inquiry.

The cognitive revolution was brought forth by Beck, Ellis and others due to the fact that as clinicians found the available system of therapy unsatisfactory. All cognitive interventions attempt to produce change by influencing thinking, which is assumed to play a causal role in the development and maintenance of psychological problems (Dobson and Dozois, 2001).

In 1970 there were only three "cognitive therapies", the Personal Construct Approach developed by George Kelley (1955), Aron T. Beck’s (1963-1970) nascent Cognitive Therapy, and Albert Ellis's (1962) Rational Emotive Therapy. These three systems are probably still most often associated with the generic term cognitive therapy. But the popularity and usage of cognitive approach in
different context to deal with psychological and behaviour problems can be seen from the emergence of large number of specific therapies that have emerged and fall under the cognitive umbrella. The current cognitive therapies include

1) Personal Construct Therapy (Kelley 1955),
2) Logotherapy (Frankl, 1959)
3) Rational-Emotive Therapy (Ellis, 1962)
5) Multimodal Therapy (Lazarus, 1971, 1976)
6) Problem Solving Therapies (D. Zurilla, and Goldfried, 1971)
7) Rational Behaviour Training (Goodman and Maultsby, 1974)
8) Rational Stage Directed Therapy (Tosi and Eshbaugh, 1980)
9) Cognitive Behaviour Modification (Meichenbaum 1977)
10) Integrated Cognitive Behaviour Therapy (Wessler, 1983)
12) Cognitive Developmental Therapy (Mahoney, 1980, 1985)
13) Epistemic Therapy (Krunlanski and Jaffe, 1983)
14) New Cognitive Psychotherapy (Surez, 1985)
The roots of cognitive therapy can be found in the early writings of the stoic philosophers Empictetus and Marcus Aurelius and the later works by Benjamin Rush and Henry Maudsley, among others. It was Epictetus who, in the first century A.D. wrote that "People are not disturbed by things but the view which they take of them." Benjamin Rush, the father of American psychiatry, wrote in 1986 that by exercising the rational mind through practice, one gained control over otherwise unmanageable passions that he believed led to some forms of madness. A century later Henry Maudsley reiterated the notion that it was the loss of power over the coordination of ideas and feelings that led to madness and that the wise development of control over thoughts and feelings could have a powerful effect. In more modern times, Alfred Adler's approach to dynamic psychotherapy was cognitive in nature, stressing the role of perception of the self and the world in determining how people went about the process of pursuing their goals in life. George Kelley is often accorded a central role in laying out the basic tenets of the approach, and Albert Bandura's influential treatise on learning theory provided a theoretical basis for incorporating observation in the learning process.
Cognitive and cognitive-behavioral intervention approaches posit that organisms are not just the passive recipients of stimuli that impinge on them but instead interpret and try to make sense out of their worlds. These approaches do not reject more traditional classical and social learning; but they also suggest that cognitive mediation plays a role in coloring the way those processes work in humans.

Theorists such as Albert Ellis, the founder of Rational Emotive Therapy, and Aron Beck, the founder of Cognitive Therapy began their careers adhering to dynamic principles in theory and therapy but soon became disillusioned with that approach and over the time, began to focus on their patients conscious beliefs. Both ascribed to an ABC model, which states that it is not just what happen to someone at point A (A antecedent event) that determines how the person feels and what he or she does at point C (the affective and behavioral consequences) but that it also matters how the person interprets those events at point B (the person’s belief). For example someone who loses a relationship and is convinced that he or she was left because he or she is unlovable is more likely to feel depressed and fail to pursue further relationships than someone who considers his or her loss a
consequence of bad luck or product of mistakes that he or she will not repeat the next time. Both theorists worked with patients to actively examine their beliefs to be sure that they are not making situations worse than what they necessarily are. Ellis typically adopts a more philosophical approach based on reason and persuasion, whereas Beck operates more like a scientist, treating his patients beliefs as hypotheses that can be tested by encouraging his patients to use their own behaviour to test the accuracy of their beliefs.

These approaches focus on the role of information processing in determining subsequent affect and behaviour. Beck, for example has argued that distinctive errors in thinking can be found in each of the major types of psychopathology. For example, depression typically involves negative views of the self and the future whereas involves anxiety an over determined sense of responsibility for ensuring safety of oneself and others. Efforts to produce change involve having the patient first monitor fluctuations of mood and relate those changes to ongoing flow of automatic thoughts, subsequently using one’s own behaviour to test accuracy of these beliefs. For example a depressed patient who believes that he or she
is incompetent will be asked to provide an example of something he or she should be able to do but cannot.

The patient is then invited to list the steps that anyone else would have to do to carry out the task. The patient is then encouraged to carry out those steps just to determine whether he or she is as incompetent as he or she believes (typically, the patient is not).

The process of changing subconscious thoughts through bringing a person to a conscious awareness of incorrect programming is called cognitive restructuring. It is a useful tool for understanding and turning around negative thinking. It helps us put unhappy negative thoughts “under the microscope”, challenging them and in many cases re-scripting the negative thinking that is behind them. In doing this, it can help us approach situations in a positive frame of mind. This is obviously important because not only negative moods are unpleasant for us, they also reduce the quality of our performance and undermine our working and social relationship with other people.

The “cognitive restructuring” tool is based on the approach to cognitive therapy. The rationale used in cognitive restructuring
attempts to strengthen the client’s belief that ‘self talk’ can influence performance and particularly that self defeating thoughts or negative self-statement can cause emotional distress and interfere with performance.

Greeg d. (2001) states that cognitive restructuring is based on the idea that we often respond to daily stressful events with a negative, distorted mental monologue. Our internal mental monologue is continuous, automatic and occurs partially outside of awareness in some people. The monologue is more likely to consist of negative, distorted thoughts, called negative automatic thoughts. When negative monologues occur to frequently or intensely in stress, unhealthy negative emotions like anxiety or anger can result.

Negative automatic thoughts are those cognitions which are closest to the surface of consciousness. Beck (1976) recognized, however, that there were also deeper cognitions which incline the person to interpret events in relatively fixed patterns. Working in parallel with personal construct theorist (Kelly 1955), he began to conceptualize the idea of cognitive structures. Beck initially used, and then abandoned, Kelly’s term ‘construct’ preferring the description of earlier psychologists. Such as Bartelett (1932) by using the term ‘schema’ or the plural; schemata’ to describe
cognitive structures. Schemata are of course not always problematic.

Beck (1976) describes a range of cognitive distortions leading to disturbance. They are as follows:

**All or nothing thinking:** This refers to polarization into two extreme categories of a phenomenon which really exists on a continuum. For example “safe” is when there is no risk at all “danger” when there is a slight risk; being ok is when I do not make a mistake at all; being bad is when I make even a small mistake.

**Mental Filter:** Positive information is excluded, leaving the field dominated by negative information. For example, concluding ‘I never get things right’ after making one small mistake, despite numerous life achievements.

**Over generalization:** Taking one negative event and using it to conclude that everything is going to be wrong. For example, spilling a cup of coffee at breakfast and concluding ‘Everything is going to be wrong today.’

**Jumping to conclusions:** Going straight to a negative interpretation when there is little or no evidence to support this for example: you end up by yourself at break-time and conclude ‘My colleagues are avoiding me.’
Discounting the positive: Positive experiences are dismissed on ground such as “Anyone could have done this”

Magnification: Difficulties and shortcomings are exaggerated. For example, forgetting a name and concluding ‘I am useless at relationships’

Should Statements: Tyrannical demand that oneself, others or the world in general must be some other way than they actually are.

Emotional reasoning: The assumption that negative emotions are a completely accurate guide to reality – Just feel they all hate me therefore they do all hate me.

Labelling: The attachment of a personality ‘tag’ to a piece of behavior. For example, failing a job interview means I’m a failure.

Personalisation: Holding oneself responsible for an event outside one’s control. For example, My husband would not drink if I was a better wife.

Mind reading: Guessing the content of someone else’s thought without checking it out with them: You’re just saying that to be nice, she thought I was terrible.

Crystal ball gazing: Predicting the future; “It’s bad now so it will always be awful”, “I am going to make a complete fool of myself”.

The first step of cognitive restructuring is to identify negative automatic thoughts. It is the most difficult part because these thoughts are so automatic, continual and occur partially outside of awareness. Consequently, we do not pay much attention to them or realize that, when we are faced with stressful situations our negative thought may be responsible for this stress. The most effective way to recognize negative automatic thoughts is to track, in writing, the feelings and negative automatic thoughts that accompany stressful situations because often individuals are unaware of their own interpretation of events. When an individual thinks about a situation in which he or she felt upset and tries to recollect what he or she was thinking about, and the emotion developed and what did the event mean to the person he is able to track the negative thoughts. By observing their own thoughts some weeks, individuals generally find that certain types of negative thoughts occur again and again, in slightly modified forms. After recognizing them, the individual realizes that we can not change the situation that causes it but we can change our emotional responses towards it. By learning how to challenge and change negative automatic thoughts, the individual can be more realistic and accurate in thinking about stressful situations.
Once negative thoughts are identified, client and counselor can work together to test out the validity of their way of thinking, treating the thoughts or negative predictions as hypotheses to be tested rather than as facts. The overall message in challenging the client’s way of thinking is to enable the client to take his /her thoughts to court, enabling information and evidence to be collected for the defense and prosecution, rather than automatic jumping to conclusions based on one way of seeing things.

There are three main approaches to challenging thoughts: the process of guided discovery using Socratic questions thought diaries and behavioral experiments. Guided discovery involves asking questions in order to understand individuals point of view and help the person to discover alternatives (Beck and Young 1985). The key method of guided discovery is the Socratic method which uses systematic questioning and inductive reasoning (Overholser, 1993).

The aim of the Socratic method is to guide discovery (Padesky 1993a). In the best cognitive therapy, there is no answer. There are only good questions that guide discovery of a million different individuals answers. The Socratic method is not a case of the counselor trying to persuade the client to see things from his
point of view. One common mistake is to ask too many leading questions, too soon, without taking time to explore why the client thinks the way he does. Questions such as ‘Do not you think it would be more helpful if you did x? or do you think this way because-------- (counselor guesses)? may well close down the process of discovery, imposing the counsellor’s way of seeing before discovering the client’s manner or enabling client’s viewpoint. Open questions, in a gentle and friendly manner, enable client and counselor to explore issues collaboratively. A useful question when wanting to clarify meanings is to ask ‘what do you mean when you say x? This helps to define more clearly the meaning of thought, which may be very idiosyncratic. Other useful questions are as follows:

- What is the evidence that x is true? What is the evidence against x being true?
- What might be the worst that could happen?
- And if that happened, what then?
- What leads you to think that might happen?
- How does thinking that make you feel?

Padesky (1993a) defines a number of characteristics of good Socratic questions. Firstly, they are those to which the client has
the answers. e.g. 'what might be the consequences of thinking x to yourself' is more likely to elicit from client a useful answer, such as. 'It makes me feel bad, it stops me getting on with my work.' Secondly, Socratic questioning draws the client’s attention to relevant information which may be outside the client’s focus. Thirdly Socratic questioning moves from the concrete to the more abstract from enabling the client to generalize from the discussion and therefore applying new information elsewhere. If the client reports being 'bad' what does this mean? Initial questions focus on specific concrete examples or areas where the client believes himself to be bad such as bad at job, bad to be so angry. Guided discovery will initially aim to explore the meaning and relevance of badness to these examples. For example, the client may discover that he is not particularly good at some aspect of his job, but generally does a good job. Whilst being angry all the time is not particularly helpful but being angry all the time does not make him a bad person. The aim of guided discovery is for the client to learn how to question thoughts and beliefs on his own. Rather than just asking questions in sessions, the therapist can teach client that if he has the automatic thought 'I am bad' he must learn to ask himself 'what does bad mean? What is the evidence I am bad? Is there anything in myself that is not all bad? Why am I ignoring this at the
moment? And other questions to reduce the potency of the negative thoughts.

Once the client has begun to question her thought and see that there might be alternatives, it is useful to record these using a full diary, sometimes known as a “Dysfunctional Thought Records” or more friendly ‘Thought diary’. When the client is able to think and record alternative thoughts, it leads to improvement in emotions.

The client should be told that it requires practice for the new kind of thinking to feel true just as it takes time for any new skill (such as driving a car) to feel comfortable and natural. With time, it begins to become natural to think about one’s life situation in a fair and realistic manner.

A behavioural experiment aims to help the client to test out thoughts and beliefs in order to discover their relative validity or truth (Beck et al 1979). According to Beck there is no such thing as cognitive technique, only a cognitive framework. He clarifies this principle of cognitive therapy and stresses that the cognitive therapist can choose from a variety of therapeutic techniques so long as the basic principle of cognitive therapy are kept. The techniques should fit with the model of therapeutic change.
Behavioural experiments involves creativity on the part of both therapists and clients. It has one important pre-condition, that is they must be ‘no-lose’ experiments aimed at both gathering information and testing out alternatives. Whatever the outcome, something has been learned. It is preferable that the outcome will not be as the client fears although if it is this can also be used as an opportunity to assess whether the fears were exaggerated or how one can learn to deal with difficult situation.

Cognitive therapy uses a range of what might be described as behavioural approaches. Weekly Activity Schedule, Distraction and Problem Solving are some commonly used techniques. The Weekly Activity Schedule is frequently used in cognitive therapy for depression, helping the clients to become more active and increase the level of enjoyable activities in life. Distraction is a means of taking the mind off problems or symptoms and paying attention to something else. It can involve physical activity, focusing on a mental image and mental chewing gum such as arithmetic or remembering means of capital cities. It is useful for clients who find it difficult to tolerate strong emotion, giving them a first aid measure for use within sessions in daily life to reduce emotion when it threatens to overwhelmed them. Problem solving
encourages the client to work out practical and psychological ways of dealing with problems using her own skill and resources as well as help from others. It can be particularly helpful for individual where life stress are contributing to their problems and where the individual is either finding difficulty in addressing or solving these problems or avoiding the problems.

**Cognitive Counselling**

Cognitive counselling begins with the initial interview. The initial interview has many purposes: initiating a relationship, providing a rationale for cognitive therapy, producing symptom relief, and eliciting important information. Right from the start, the therapist imparts to the client the expectation that cognitive therapy will be time limited. During the initial interview, therapist starts to define problems. Definition of problems entails both functional and cognitive analyses.

The functional analysis seeks to answer questions such as: what are the component parts of the problem? "How is it manifested? In what situations does it occur?" What is its frequency, intensity and duration? And what are the consequences.
The cognitive analysis identifies the client’s thoughts and images when emotion is triggered, the extent to which the client feels in control of thoughts and images can predict about the likelihood of the problems occurring and what will happen. From the beginning, therapists train clients to monitor their feelings, thoughts and behaviour and to recognize the connections between them. Homework is a main feature throughout cognitive therapy. An example of an early homework assignment might be asking to record their automatic thoughts when in distress.

During initial sessions, therapists and clients draw up problem lists which can consist of specific symptoms, behaviors or pervasive problems. Their function is to assign treatment priorities. Considerations in prioritizing treatment include magnitude of distress symptoms severity, and pervasiveness of theme. Therapists approach each problem by choosing the appropriate cognitive and behavioral technique to apply. Therapists always offer a rationale for each technique. In addition, both when suggesting and implementing techniques, therapists elicit feedback from clients.

While the early stages of counseling may focus on symptom removal, middle and later stages are more likely to emphasize changing clients pattern of thinking. Clients are helped to
understand the interrelationship between their thoughts, feelings and behavior. Once they can challenge automatic thoughts that interfere with effective functioning, then they can identify and examine the underlying assumptions or beliefs generating such thoughts. Assumptions may be revealed as themes in automatic thoughts across time and across situations. Once assumptions and core beliefs have been identified and their disruptive power understood, then cognitive therapy aims to assist clients to examine their validity and current usefulness and then discard or amend them as appropriate.

As cognitive therapy progresses, clients develop their skills of being their own therapist. Client assumes more responsibility for identifying problems, analyzing his thinking and creating suitable homework assignments. The therapist shifts from being fairly didactic to facilitating clients as they develop their cognitive self help skills. The frequency of sessions decreases as client become more proficient.

Being mainly a short-term structured approach, cognitive therapy tends to have its ending built into its beginning. Therapy ends when goals are reached and clients feel confident about implementing their new skills. From the outset therapists discuss
with client the criteria and expectation for termination. There are number of ways of assessing progress, including relief from symptoms, changes in reported and observed behavior, and change in thinking both inside and outside therapy.

**MEDITATION**

Meditation is a mental discipline by which one attempts to get beyond the conditioned, "thinking" mind into a deeper state of relaxation or awareness. Meditation often involves turning attention to a single point of reference. It is recognized as a component of almost all religions. Meditation originated from Vedic Hinduism, which is the oldest religion that professes meditation as a spiritual and religious practice. The Bhagavad Gita stresses the importance of meditation. In the Sixth Chapter of Bhagavad Gita- "The Yoga of Meditation" describes the technique of meditation and the characteristics of the Yogi who is well established in meditation. The Bhagavad Gita stresses the importance of meditation as follows. "Make a habit of practicing meditation and do not let your mind be distracted. In this way you will come finally to the lord who is the light-giver, the highest of the high".
Meditation has always been central to Buddhism and considered a key tool in spiritual development. The historical Buddha himself, Buddha Shakyamuni, was said to have achieved enlightenment while meditating under a Bodhi tree. Most forms of Buddhism distinguish between two classes of meditation practices, shamatha and vipassana, both of which are necessary for attaining enlightenment. The former consists of practices aimed at developing the ability to focus the attention single-pointedly, while the latter includes practices aimed at developing insight and wisdom through seeing the true nature of reality.

Meditation in Islam is the core of its creed. A Muslim is obligated to pray five times a day. During those times of prayer, the Muslim is expected to focus and meditate on Allah through the recitation of Quran and dhikr in order to establish and strengthen the connection between Creator and creation. This, in turn, is meant to guide the soul to truth. This meditation is intended to help Muslims maintain spiritual peace in spite of challenges they may experience in their work, social and family life. In this manner, the five time daily peaceful prayer are meant to serve as a model for the Muslims conduct during the whole day, transforming it into a
There are two more concepts or schools of meditation in Islam Tafakkur and Tadabbur, literally meaning reflection upon the universe. Muslims feel this is a form of intellectual development which emanates from a higher level, i.e., from God. This awakens and liberates the human mind, permitting man's inner personality to develop and grow so that he may lead his life on a spiritual plane far above the mundane level. This is consistent with the global teaching of Islam, which views life as a test of our pradice of submission to Allah, The one God.

Another form of mediation is Sufi mediation, similar to Buddhist meditation, known as Muraqaba (means "concentration" referring to the "concentration of abilities"). It is largely based on mystical exercise. However, this method is controversial among Muslim scholars. One group of Ulama, Al-Ghazzali, for instance, have accepted it, another group of Ulama, Ibn Taymiya, for instance, have rejected it as a bid'ah (religious innovation).

The Jains use the word Samayika, a word in the Prakrit language derived from the word samay (time) to denote the practice
of meditation. The aim of Samayika is to transcend the daily experiences of being a "constantly changing" human being, Jiva, and allow for the identification with the "changeless" reality in the practitioner, the Atma. The practice of Samayika begins by achieving a balance in time. If the present moment of time is taken to be a point between the past and the future, Samayika means being fully aware, alert and conscious in that very moment, experiencing one's true nature, 'Atma' which is considered common to all living beings.

In Sikhism, the practices of Simran and Nam Japo encourages quiet meditation. This is focusing one's attention on the attributes of God. Sikhs believe that there are 10 "gates" to the body (gates are energy centres). The top most energy level is called Damas Dwar. When one reaches this stage through continuous practice, meditation becomes a habit that continues whilst walking, talking, eating, awake or even sleeping.

In contemporary psychological literature, meditation is a broad and generic term to include all those spiritual practices prevalent in traditions like Buddhism, Christianity, Jewish Kabalah, Taoism, etc. It is also used to refer to many other mental devices or techniques developed by researchers for example, Clinically
Standardised Meditation (Carrington, 1987). Thus the term is used as a "conglomerate word" and under this conceptual umbrella a number of different techniques and intents are grouped (Carrington, 1987). They include sitting quietly, relaxing, closing the eyes, breathing deliberately, focusing attention on an object or image non analytically, observing the thought process without judging, repeating sound mentally, rhythmic moving of the body as in Sufi dervish dance and so on.

Meditation categorisation is also based on goals. Carrington (1987) speaks of "Practical" and "Spiritual" meditation. Spiritual meditation is historically embedded in centuries-old religious traditions. Practical form of meditation is contemporary and frequently practiced in the west. The objective of spiritual meditation is to attain spiritual development, through the process of deepening the range of human spirit and changing the entire life of human being. Practical meditation affects the practitioner's life in certain practical ways, without changing their lives in an essential fashion. The objective of practical meditation is to enrich the experience of the average practitioner who continues to function within the framework of ordinary society. Other researchers have
also referred to such distinctions (Johnson, 1982; Rao, 1984; West, 1986).

Compulsion to make such distinctions arise from the need to be theoretically and methodologically specific in examining meditation as a subject of scientific scrutiny. Meditative practices which involve sitting and chanting mantras, focusing on breathing, being passively aware of thought process are also considered as self-regulation strategies which act at the mental level. Many studies have been conducted on them and the relative efficacy of these techniques has been discussed and debated (Holmes, 1984; Shapiro, 1982). In terms of practical utility, meditation as a technique can be beneficial in and of itself for psychosomatic and psychological problems (Murphy and Donovan, 1997; Shapiro and Walsh, 1984; Walsh, 1999; West, 1987)

Another important focus of research on meditation is to examine its psychotherapeutic and growth benefits (Ali et al. 1988; Bogart, 1990). Investigations have found that meditative practices enhance psychological growth and well being. They also serve as therapeutic adjuncts both in reductive and reconstructive therapies, besides serving as a supportive therapy technique.
Form the view point of modern psychology, investigations on Yoga and other meditative practices are of significance in enhancing the understanding of the body-mind relationship. They have also helped in redefining the boundaries of discipline to include hitherto neglected human phenomenon viz. consciousness, as a valid subject matter (Naranjo and Ornstien, 1971; Ornstien, 1972, 1973; Osis, Bokert and Carlson, 1973; Tart, 1969, 1975; Walsh, 1980).

In their review of scientific studies of meditation, published in the International Journal of Psychotherapy, Perez-De-Albeniz and Holmes (2000) identified the following behavioural components of meditation:

1) Relaxation
2) Concentration
3) Altered state of awareness
4) Suspension of logical thought processes, and
5) Maintenance of self observing attitude.

In the words of Morse and Furst (1979) "Meditation is an altered state of awareness that is induced by the repetitive of some content stimulation". The stimulation may be external, internal or
physical. As a result of repeated constant stimulation, an individual, without trying, achieves varying degrees of relaxation, subjective change in body image, certain distortions of reality and ability to decrease the ability of the autonomic nervous system functions.

Benson (2000) of the Mind-Body Medical Institute, which is affiliated with Harvard and several Boston hospitals, reports that meditation induces a host of biochemical and physical changes in the body collectively referred to as the "relaxation response". The relaxation response includes changes in metabolism, heart rate, respiration, blood pressure and brain chemistry.

Richards and Begin (1997) gave the empirical evidences in support of meditative states producing significant healing of body and mind. Physiologically, meditation evokes a relaxed response, trains and strengthens awareness, centres the body-mind. It calms the central nervous system, relieves stress, bolsters self esteem, reduces anxiety and alleviates depression.

There have been some Indian investigations of psychological and physiological benefits of meditation. Dhar (1996) quoted the major results.
Studies on normal individuals have indicated that a regular practice of Yogic postures (physical) leads to psychological improvement in the intelligence and memory quotient and a decrease in the pulse rate, blood pressure, and respiration and body weight. The biochemical examination of the blood has shown decrease in blood sugar and serum cholesterol, and rise in the serum protein level. However, practice of breathing exercise Paranayam etc. alone produces similar results except that fall in serum lipid were more marked than was noted in the practice of physical postures. Kundalini meditation has been used with great benefit not only for improving the level of consciousness, but also in the treatment of certain mental illness. Powerful psychophysiological changes referred to as "raising the Kundalini" (Gopi-Krishna, 1976) etc. are unlikely to be fictitious.

Bhaskaran (1991) observed that meditation would appear to have preventive potentials through its relaxing effect in stress-induced psychological disorders.

"Relaxation is not something that you do. It is a natural response that you allow to happen. Relaxation is what is left when you stop creating tension." When the tension melts away, we
discover that we are at peace, at the centre and naturally in sympathy with all creation.

Whatever technique of meditation one is practising, it is necessary to have the ability to place your attention on the object of meditation and hold it there without distraction. The power of a concentrated mind can be focused effectively to enhance and deepen insight into other meditative themes or goals. Concentration meditation is the foundation for all other kinds of meditation. Through the power of concentration we build our capacity to overcome distraction and to sustain mental focus. The power of scattered mind is very limited.

In concentration meditation, whether one sit crossed legged, in a chair, or kneel with a meditation bench is largely a matter of style and preference. It is advised to experiment and see what works best. It is especially important to sit comfortably, with the spine straight and the body upright and relaxed. Sitting in this way, it will be much easier to remain alert. It is important to sit naturally and at ease and avoid forcing the body into uncomfortable postures.

Next thing in concentration meditation is to select a focus for concentration. There are thousands of object of attention that are
classically prescribed for developing concentration. An ideal concentration focus would be one that is sufficiently easy for one's attention to find and hold with clarity and one that brings peace or joy to the mind but doesn't create too much excitement or boredom as one focuses on it. If we select a focus that has meaning for us, we need to be watchful that it doesn't create too many associations or distractions.

For most people, the simplest and most direct method for developing mental stability and concentration is to focus upon the flow of breath, the steady balancing rhythm of in breath and out-breath. The breath is often used because it is easy to find and continually present. Meditating on the flow of breath is considered the most effective method for helping people with busy minds to quiet the internal dialogue.

Sri Swami Ram's lecture entitled "Science of Breath" quoted that "Science of breath is a complete Science of philosophy". Breath plays a great role for cleansing pores and lungs. The movement of lungs control various systems. If one learns to regulate the movements of lungs, one can even have control over all autonomic nervous system, involuntary system and that part of mind which is being used by involuntary system can be brought
under conscious control very easily. Science of breath is a practical Science. One cannot read or study this Science through books. If individual is sad or worried, then his breath starts behaving in a funny way. If individual is happy, then breath will behave in a different way.

To understand Science of Breath, one should practice a few days how to sit still and observed breath. There are many breathing exercises. After learning deep diaphragmatic breathing and forming a habit, one should learn alternate breathing. That helps in channel purification- Nadi Shodhana, There are various exercises of Nadi Shodhana. Later on, one can use his mind and change the breath.

Next thing in concentration meditation is to develop balance. Once the meditator has settled his/her mind on the object and is focusing his attention, he is advised to relax the mind a little. If he grasps too tightly at the object, the mind will become agitated the your body tense. If there is too much relaxation, the attention will wander or fade.

With practice and patience, the person learns to distinguish between these two states and finds the balance necessary to deepen attention.
In meditation, as one begins to relax, it is quite common to experience what are called "release phenomena". These may include jerking or quivering of the body as one is falling asleep, gurgling of the stomach, tingling feelings or numbness, memories, mental images, inner sound, or other perceptual changes. Release phenomena are common indicators that the practice of relaxation or meditation is becoming effective in dissolving deeply embedded mental, emotional and physical holding patterns. The best way to deal with these experiences is to simply allow them to arise, unfold and dissolve without distracting the attention.

Regardless of the work we do or the position we hold, our mind body is our primary instrument that is why it is no surprise that skills in meditation and relaxation are becoming recognized as vital to our peace of mind and the quality of our health, work and relationships.

From the above exposition in which the major concepts relating to neuroticism, cognitive restructuring and meditation have been clarified, it appears logical to expect that symptoms of neuroticism and problems faced by people high on neuroticism are likely to be alleviated through cognitive restructuring and meditation.
In the next chapter, empirical evidence is being cited to bring out clearly findings that have been obtained in this regard, so that by evaluating researches which support or which may contradict our research questions, hypotheses may be formulated in the proper manner.
In this chapter an attempt has been made to recapitulate the researches which have been conducted in the area. Since it is humanly impossible to list all the work that has been done, therefore important milestones and major studies which provide perspective of the present work are being put forward.

We first examine the studies regarding neuroticism studied in relation to depressive and anxiety disorder. Since both genetic and social factors are thought to contribute to neuroticism, therefore studies dealing with both aspects will be highlighted.

Longan, Phillips, Hooe (2003) studied the relationship of positive affectivity (PA) and negative affectivity (NA) (which is component of neuroticism) to anxiety and depression in children. In this longitudinal study of 270, fourth to eleventh grade children [mean age =12.9 years SD=2.23] confirmatory factor analysis supported a 2-factor orthogonal model of children’s self reported affect and revealed that the concurrent relation of NA and PA with anxiety and depression. Structural equation modelling demonstrated moderate cross-time stability of trait PA and NA consistent with a temperament view of these factors, as well as partial support for the role of PA and NA in the development of anxiety and depression symptoms in children.

Gamble, Talbot, Duberstein and Conner (2006) examined neuroticism’s role in the association between childhood sexual abuse and
severity of depressive symptoms. It was observed that neuroticism partially accounted for the association between severe childhood sexual abuse and depressive symptom severity. Self-consciousness, a facet of neuroticism conceptually related to shame, also partially accounted for that relationship. These findings suggest that neuroticism may be one way in which childhood sexual abuse contributes to depressive symptoms in later life.

Ellenbogen and Hodgins (2004) conducted study on parents with bipolar disorder, with major depression, and those with no mental disorder and their 146 children between 4 to 14 years of age. High neuroticism in parents was associated with internalizing and externalizing problems among the children as assessed by parents and teacher rating on the Child Behaviour Check List and clinician ratings. The results suggest that high neuroticism in parents with major affective disorder is associated with inadequate parenting practices and the creation of stressful family environment.

Findings of Scalzo, Williams, and Grayson (2005) indicate that mothers with poorer self-assessed health respond with more negative emotions, more extensive caretaking behaviours, tolerated more extreme sick role behaviours from the child, and rated their child’s overall health more poorly. Maternal neuroticism was found to be related to negative affect.
Another study was undertaken by Davila, Karney, Hall, Bradbury, and Thomas (2004), with the objective to examine within subject association between depressive symptom and marital quality over time to address gender differences in the magnitude and direction of these associations, and to determine whether neuroticism moderates the strength of these associations. Hierarchical linear model confirmed the existence of bidirectional within subject association between marital satisfaction and depressive symptoms. Gender difference was not significant, although neuroticism strengthen the effect of marital distress among husbands.

Gallant and Connell (2004) examined the mediating role of health behaviours in the relationship between neuroticism and depressive symptoms among spouse caregivers. Path analysis was used to test model of the caregiver stress process among 233 caregivers of people with dementia. Results indicate that neuroticism has a significant direct effect on depressive symptoms and also indirectly influences depressive symptoms through health behaviours and perceived stress.

Wupperman and Neumann (2006) examined the relations between biological sex, socialized masculinity, rumination, neuroticism, and depressive symptoms in a large sample of young adults (N=589). Structural equation modelling revealed that rumination with sadness
predicted neuroticism and depression, whereas rumination—in-general predicted only neuroticism.

Similar findings were obtained by Muris, Roelofs and Rassin et al (2006). In a sample of 73 undergraduate students support was found for a mediational model in which neuroticism was associated with cognitive factor of worry and rumination, which in turn is related to anxiety and depression.

Jorm, Christensen, Henderson and Jocomb et al (2000) in a longitudinal study of college students, found that high neuroticism and low extraversion had a synergistic effect in predicting anxiety and depression. Three years later researchers replicated their finding using data from 2 community sample in which subjects were followed over 3-4 years. Both studies found that neuroticism predicted anxiety and depression but there was no neuroticism x extraversion effects.

Watson, Gamez and Simms (2005) examined relations among neuroticism/negative emotionality (N/NE), extraversion /positive emotionality (E/PE) and mood and anxiety disorders. They found E/PE (Inversely) correlated most strongly with anhedonia/depressed affect and social anxiety. Similarly N/NE is a general predictor of psychopathology; it correlate more substantially with subjective distress and dysphoria than with other types of dysfunction.
Oldehinkel, Van den Berg, Bouhuys and Ormel (2004) examined the validity of the vulnerability-accumulation model of depressive episode in later life. Several psychosocial vulnerabilities indicators were assessed premorbidly, during the depressive episode and after remission. High level of psychological distress, low life satisfaction, chronic somatic disease high neuroticism, low scores on extraversion, mastery and self efficacy appeared to be predictors of depression in this sample.

Zobel, Barkow, Schulze and Von et al (2004) conducted a study in which elevated neuroticism, depressive temperament and dysfunctional regulation of the hypothalamic-pituitary adrenocortical (HPA) system are considered as risk factors for unipolar depression. It was concluded that this constellation may propose that HPA dysregulation is the endocrinological basis for both neuroticism and depressive temperament.

Sen, Nesse, Stoltenberg and Li et al (2003) explored the possibility that variation in the brain-derived neurotrophic factor (BDNF) gene is in part responsible for the population variation in neuroticism. A community sample of 441, 20-40 year-old subjects were studied, genotyping a G-A single nucleotide polymorphism (SNP) responsible for a valine-methionine substitution in the pro domain of BDNF. The less common conserved Met allele was associated with significantly lower mean
neuroticism scores. It is concluded that this study provides further evidence and one possible mechanism linking BDNF to depression.

Roy (2003) examined whether early childhood adversity may be a determinant of neuroticism. The result indicates that there was a significant relationship between childhood trauma scores and neuroticism scores. There were also significant relationships between childhood trauma questionnaire sub scores with emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect.

Role of neuroticism was observed in other psychopathologies also. Cervera, Lahortiga, Martinaz, Gual and et al (2003) assessed the role of neuroticism and low self esteem as risk factors for eating disorder (ED) in a representative sample of girls 12-21 years old from Navarre, Spain. Girls who were free from any ED in 1997 were followed up for 18 months and were used to examine association between neuroticism and low self esteem and incidence of ED. Results provide prospective evidence supporting the role of neuroticism and low self esteem as major determinants of ED.

In a study conducted by Miller, Schmidt, Vaillancourt Trancy, Mc Dougall Patricia et al (2006) Eysenck Personality Questionnaire (EPQ), Eating Disorder Inventory (EDI) and The Eating Attitude test (EAT-26) were completed by 196 first-year undergraduate females. It was found that high neuroticism was related to high scores on the EAT-
measure, replicating previous work. Thus a combination of neuroticism and introversion may be a risk factor for symptoms of eating disorder in a non-clinical sample of university women.

Goodwin and Hamilton (2002) sought to determine the relationship of panic attacks, cigarette smoking and neuroticism. Data suggest that neuroticism may reflect a shared vulnerability for the co-occurrence of cigarette smoking and panic attacks.

Muris (2006) examined the effects of neuroticism and effortful control on a broad range of psychopathological symptoms in youths. Non-clinical adolescents aged 12-15 years (N=173) completed a questionnaire for measuring neuroticism, effortful control and psychopathological symptoms. Results showed a positive correlation between neuroticism and symptoms, whereas, interactive effect of neuroticism and effortful control on psychopathological symptoms was found. In particular, the combination of high level of neuroticism and low level of effortful control was associated with high level of psychopathological symptoms.

In a study by Krabbendam, Janssen, Bank, Bijl et al. (2002) a population sample of 3929 individuals (aged 18-64) with no lifetime evidence of psychosis were interviewed with the Composite International Diagnostic Interview (CIDI) and were administered the Groningen Neuroticism Scale and the Rosenberg Self-Esteem Scale at the baseline and 1 and 3 years later. Baseline neuroticism and self-esteem predicted
first ever onset of psychotic symptoms at year three. When adjusted for each other and level of anxiety and depression, neuroticism was the strongest independent predictor for onset of psychotic symptoms.

The ultimate goal which human beings strive for is well being. Sense of well being is a logical consequences of both physical and mental health. It affects one’s perception of the world. (i.e. peoples evaluation of their lives and life realities). Neuroticism is one personality variable which inversely affects this sense of well being. When some problem is there, then the presence of neuroticism leads to perceive that problem in exaggerated form. Most strategies used by therapists and counsellors aim to enhance sense of well being by motivating clients to re-perceived and place their problems within realistic domain. This permits management and constructive handling of problems. Many researches have brought out the relationship of neuroticism with subjective well being.

Harris and Lightsey (2006) tested whether constructive thinking (CT) mediated the relationship between both neuroticism and extraversion and subjective well being component. Measure of each construct was administered to 147 undergraduate volunteers twice over 4 weeks. In analyses, subjective well being and constructive thinking fully mediated the relationship between neuroticism (inversely) with positive effect and happiness.
Libran and Howard (2006) examined the association between personality dimensions (extraversion and neuroticism) and subjective well being. A total of 368 students from the university of Rovira i Virgili completed the extraversion and neuroticism subscales of the revised Eysenck Personality Questionaire, the Satisfaction With Life Scales and the Positive and Negative Affect Scale. Regression analyses revealed the personality variable of neuroticism as one of the most important correlates of subjective well being.

In a study by Williams, O'Brien and Colder (2004) the effect of neuroticism (N), Extraversion (E) and their interaction on a variety of self-assessed health and health cognition variables were examined in 66 male and 69 female participants. Neuroticism was found to predict poorer health behaviour self-efficacy, particularly in the presence of low E. E was related to health behaviour outcome expectancies and likelihood estimates for positive health outcomes. The finding suggests that N and E are reliable predictors of health – relevant cognition.

Johnson (2003) found neuroticism widely documented to reflect an exaggerated reporting of physical symptoms, due to an over sensitive focus on internal stimuli in individuals high in this traits. Their study scrutinized the responses to 409 retrospective health reports to see if negative affect (NA), (indicating neuroticism), was differentially related to different types of physical complaints. The role of other personality
risk factors, related to neuroticism and coping styles was also examined. The findings show that high NA was uniquely related only to disease of tension type, such as high blood pressure, migraine, or neck pain. Of the other factors, which all correlated with NA, hostility, self-critical attitude, and coping were uniquely related to these same complaints. It is concluded that neuroticism has a more genuine vulnerability potential to disease.

Jang, Mortimer, Haley and Chisolm et al. (2002) conducted a study to explore the factors that influence older individual's subjective perception of hearing problems. In addition to objectively screened hearing ability, non-auditory factors such as stressful life conditions, visual impairment, chronic disease, disability, recent stressful life conditions were studied. Neuroticism, and social resources were hypothesized to be predictors of self-perceived hearing problems. A significant interaction was observed between neuroticism and screened hearing, indicating that the combination of poor hearing and high neuroticism increased the level of self-perceived hearing problems.

Williams, Colder, Lane and McCaskill et al. (2002) examine the relationship between neuroticism (N) and physical symptoms reports. Ninety-four individuals (aged 31-82 years) with type 2-diabetes, monitored diabetes-related symptoms, rated positive and negative affect (NA and PA) estimated their blood glucose (BG) levels, and tested their
actual BG levels with a glucometer 4 times per day for 7 days. There was
evidence that N was related to overestimation of BG. Results are
discussed with respect to potential effects of N on the processing of
negative self-relevant information and on self-regulatory behaviour in
health contexts.

Neuroticism has been found to detrimentally affect individuals'
performance in various spheres. Work place is a situation to which each
person is exposed for a considerable phase of life span. The following
studies demonstrate that although negative mood states are hedonically
unpleasant, they can be beneficial in some ways for individuals high on
neuroticism.

Tamir (2005) demonstrated that when driven by performance
goals, people can be motivated to experience unpleasant affect because of
its instrumental benefits. In 4 studies, individuals high on neuroticism
were more likely than those low in neuroticism to choose to increase their
level of worry, as indicated by self reported preferences (study 1) and by
behavioural choices in experimental settings (studies-2-4). As predicted,
such preferences were evident when expecting to perform demanding
tasks but not when expecting undemanding tasks (study-2). Study 4
suggests that such preferences for short-term unpleasant affect may be
beneficial to performances.
Tamir and Robinson (2005) found that individuals high on neuroticism were faster to make evaluations when in a negative mood state like sadness. They presented studies involving both naturally occurring and manipulated mood states and demonstrated a trait consistent interaction within the context of neuroticism and negative mood states.

Smilli, Yeo, Furnham and Jackson (2006) evaluated a model suggesting that the performance of highly neurotic individuals, relative to their stable counterparts, is more strongly influenced by factors relating to their allocation of attentional resources. First an air traffic control simulation was used to examine the interaction between effort intensity and scores on the anxiety subscale of Eysenck personality profiler. Overall effort intensity enhanced performance for highly anxious individuals more than for individuals with low anxiety. Second, a longitudinal field study was used to examine the interaction between office busy-ness and Eysenck Personality Inventory. Changes in office busy-ness were associated with greater performance improvement for highly neurotic individuals when compared with less neurotic individuals. These studies suggest that highly neurotic individuals outperform their stable counterparts in a busy work environment or if they are expending high level of effort.
Robinson, Wilkowaski and Mier (2006) hypothesized that a greater degree of stimulus–response variability could either serve an adaptive or maladaptive control purpose, depending on level of neuroticism. Specifically, a more variable relation between stimulus and response may be emotionally beneficial if such flexibility is used to support neurotic forms of self–regulation. As hypothesized, greater stimulus–response variability tended to be associated with less distress among individuals low in neuroticism but more distress among individuals high on neuroticism.

Murray, Allen and Trinder (2003) conducted study to advance understanding of mood variability by longitudinally investigating the personality correlates of variability in Positive Affect (PA) and Negative Affect (NA). A substantial random community sample (n = 303 adults) gave mood report twice a week for a 2 year period. Consistent with earlier research, the general vulnerability trait N emerged as the sole significant predictor of mood variability.

Cox, Luz, Swickert and Hitter (2004) manipulated workload levels to test Eysenck's theory of neuroticism by examining individual's differential response to the stress of sudden shifts in workload. Multiple regression analyses were conducted and results indicated that higher level of neuroticism were associated with decreased reaction time in both conditions neuroticism evidenced fewer correct response in Low-to-
Results of this study are generally consistent with Eysenck’s theory of neuroticism.

Unsal and Caliskur (2005) wanted to understand whether highly neurotic people’s evaluation of job candidates substantially differed from those who were low on this personality dimension. The students were shown a video film displaying three job candidates (qualified, unqualified or ambiguously qualified) applying for a student counseling job. They were then asked to evaluate the candidates on a number of aspects. The results showed that high-neurotic participants evaluated more negatively, and significantly differed from their low neurotic counterparts in their evaluation of the qualified candidate. Those in the high – neurotic group were also much more negative in their judgment of the hire ability of the qualified candidates. These findings highlight the importance of selector’s personality in the selection of personnel.

Gaddard, Patton and Geed (2004) investigated the ability of neuroticism to explain variance in burnout scores obtained from a sample of Australian case managers who work with individuals experiencing unemployment. In a series of hierarchical regression analyses, neuroticism added significantly to the explanation of variance in all 3 Maslaach Burnout Inventory (MBI) scales after summary scores describing work stress and work relationships had been entered at an earlier step.
Elovainic, Kivikaki, Jahera and Virtanen et al (2004) examined whether hostility and neuroticism moderated the effect of organizational justice perception of short-term sickness absence. It was observed that low relational justice perceptions were a greater risk for sickness absence for male employees with higher neuroticism than for their colleagues with lower neuroticism.

Some other important researches in this area which throw light to understand this variable are mentioned here.

Shurgot, and Knight (2006) assessed the new transactional stress and social support model, postulating the role of neuroticism, ethnicity, familism, and social support in perceived burden in dementia caregivers. Results corroborated the model, focusing on neuroticism and quality of social support in modelling, perceived burden in family caregivers. Findings call attention to the role of presumably long standing individual differences in neuroticism that influence caregiver appraisals of stress and social support.

Zhang and Huang (2002) conducted a study to investigate the relationship between thinking style and big five personality dimension in a sample of 408 (149 males and 259 females), aged 17-30 years. As predicted, the more creatively - generating and more complex thinking styles were related is the extraversion and openness personality...
dimension, and the more norm-favouring and simplistic thinking styles were related to neuroticism.

Stability of neuroticism was examined by De Gucht (2004). They examined the temporal stability of neuroticism and alexithymia in patients presenting to their primary care physician with medically unexplained symptoms and compared this to the stability of negative and positive affects, anxiety and depression. A total number of 318 patients were assessed at base line and 6 month follow up. Whereas the affective state dimension changed significantly over the follow-up periods neuroticism and alexithymia were substantially stable

Gamer (2003) in a study of 155 participants, found evidence of both stability and change in Big five personality traits for both men and women. The use of the defense mechanism of denial, projection and identification at early adult hood was found to be related to early adult personality traits, and to predict change in personality traits in middle adulthood and late middle age. Significantly, the importance of defense mechanisms for predicting personality change increased with age, while the importance of IQ decreased. The use of immature defenses of denial and projection predicted increased neuroticism, decreased Extroversion, and decreased Agreeableness. However, in interaction with IQ, defense mechanism were found to have a compensatory effect, in that low IQ in
combination with strong defense use predicted a more favourable personality outcome.

Klonowicz (2003) examined the concept of unrealistic optimism by assessing (1) intra individual differences in unrealistic optimism across various types of events and (2) the effect of situational and individual factors on unrealistic optimism. Unrealistic optimism was operationally defined as a person's tendency to underestimate the relative probabilities of negative events. Result show unrealistic-optimism depends on the context (threat), neuroticism, and socio-economic factors.

COGNITIVE INTERVENTION

Cognitive intervention is a fast growing form of psychotherapy. Its claims of effectiveness for depression is backed up by well developed research projects of Beck's work. But there was skepticism with regard to the approach's effectiveness when applied to a wider range of problems. Certain researches are cited here to demonstrate its applications to a wide range of problems successfully.

Echeburua, de corral, Zubiareta and Sarasua, (1997) compared the effectiveness of 2 therapeutic modalities in the treatment of chronic posttraumatic stress disorder (PTSD) in victims of sexual aggression: (1) self-exposure and cognitive restructuring and (2) progressive relaxation training. A multi group experimental design with repeated measures was used. Most treated patients improved, but the success rate was higher in
all measure in the exposure and cognitive restructuring group immediately on post treatment and at follow up.

Dehlen and Deffenbacher (2000) conducted study on high-anger undergraduates. They were assigned to 8 group sessions of Beck’s full cognitive therapy (FCT) focusing on both cognitive and behavioral change, cognitive restructuring only (CRO) focusing only on cognitive change, or a no-treatment control. Treatment groups, while not differing from each other showed reduction in trait anger, cognitive, emotional and behavioral components of anger, the individual’s greatest ongoing source of anger, and anger-related physiological arousal. Compared with controls, CRO reduced trait anxiety and depression.

In a study by Carter, Marin and Murrell (1991) a sample of 24 high anxiety - sensitive college students were randomly assigned to receive either five consecutive trials of voluntary hyperventilation or five consecutive trials of hyperventilation with cognitive restructuring instructions. As expected, high anxiety sensitive participant evidenced significant decreases in anxiety symptoms when habituation was accompanied by cognitive restructuring.

Steigerwald and Stone (1999) discuss alcoholism as a thought disorder and cognitive restructuring as an effective model of treatment. The benefits derived from participation in Alcoholics Anonymous (AA) as a therapeutic strategy of cognitive restructuring are presented. This
cognitive intervention is defined and examined in terms of its effectiveness with various populations in general, and specifically, with alcoholics. Therapeutic gains are discussed in areas of participation in the 12-step program such as meetings, sponsorship, and working the 12-steps (of AA). Cognitive restructuring occurs in therapy and in AA. It can, therefore, be the bridge that encourages understanding and cooperation between the 2 factors influencing recovery.

An article by Otto (1999) on cognitive-behavioral therapy for social anxiety disorder has emphasized cognitive restructuring and exposure interventions, delivered alone or in combination, in either individual or group formats as strategies for change and improving outcomes. Treatment programs emphasizing these interventions are associated with both acute improvements and longer term maintenance of treatment gains.

Henry and Wilson (1990) conducted a study on 54 Ss (aged 35-83 years) with chronic distressing tinnitus. These were randomly allocated to 1 of 4 treatment conditions: 1 attention control and imagery training (ACl); (2) cognitive restructuring (CR); (3) combined ACl plus CR; and (4) a waiting list control (WLC). The three treatment conditions (combined) were associated, with improvements in tinnitus-related distress, reductions in tinnitus-related cognitions and an increase in the frequency of use of coping strategies.
Thompson (1999) in single case study examined the treatment of blood-injury-injection (BII) phobia in a 14 year old female. Thirteen one hour sessions of cognitive behavioral therapy were conducted. The intervention included a combination of exposure, tension and cognitive restructuring in an effort to produce clinically significant reduction in anxiety and fainting in response to BII stimuli. Result shows dramatic reduction in subjective distress in BII situation from baseline to post treatment. In contrast to baseline, fainting did not occur during treatment. The subject rated cognitive restructuring as the most effective treatment component for the latter half of therapy.

Baro (1999) examined the effects of a cognitive restructuring program called “Strategies for Thinking Productively” (STP) on inmate institutional behavior and disciplinary infractions. Although research suggests that cognitive restructuring programs reduce recidivism, little is known about the effects of such programs on institutions behavior. The STP program consists of 2 phases. Phase 1 consists of an orientation to the program, and a series of 14 lessons designed to teach basic concepts and techniques (over an eight week period). Phase 2 provides an opportunity to put into practice the lessons learned in Phase 1. Inmates complete writing assignments and “thinking reports” and participate in group treatment. This study compared randomly selected inmates who participated in other self-help programs and randomly salted inmates
who participated in Phase 1 of STP with inmates who had been in Phase 2 of STP for at least 6 months. The total sample size was 123. The follow-up period was one year. The findings suggest that participation in the phase 1 appears to reduce refusals to obey a direct order, whereas participation in the Phase 2 appears to reduce assaults.

Sinha and Jalan (2001) studied the combination as well as the specific efficacy of relaxation, exposure and cognitive restructuring in regard to treatment of social phobia. The use of relaxation in the treatment of social phobia has not received much importance despite it being very effective in managing autonomic systems. In this study of a 42-year-old man with social phobia, the combination of therapies was very effective in reducing symptoms of social phobia.

Master and Jellinck (2005) found that during a psychiatric hospitalization of 5 to 10 days, cognitive-behavioral therapy (CBT) strategies can be used for the management of inpatients and to support the transition to outpatient treatment. CBT was taught from manuals and because of time limitation the focus was on basic concepts of cognitive restructuring. This appears to provide a productive approach for treating patients in a crisis inpatient setting.

Pavlin (2005) presence views that emphasize cognitive restructuring as a critical component in couples therapy. Pointing out that systems and cognitive behavioral perspectives share 'an emphasis on
multidirectional, reciprocal influence' the author views cognitive restructuring as directive approach with its focus on restructuring the core beliefs or 'schemas' which shape people's perceptions of their experiences.

Datililo (2005) presents a case study as an example of how cognitive - behavioral strategies, namely, cognitive restructuring of couples schema and the use of specific homework assignments, may be integrated into the course of couple therapy. The article suggests that all therapeutic modalities, regardless of their theoretical orientation, embrace some form of cognitive restructuring and behavioral instruction as a primary agent of change.

Bryant, Molds, Gutheric, Dang et al (2003) investigated the extent to which providing cognitive restructuring (CR) with prolonged imaginal exposure (IE) would led to greater symptom reduction than providing IE alone for participants with posttraumatic stress disorder (PTSD). Treatment involved 8 individual weakly sessions with considerable homework. Results showed, IE / CR participants had greater reduction in PTSD and maladaptive cognitive styles than IE participants at follow up. These findings suggest that providing CR in combination with IE may enhance treatment gains.

Kemp, Young, Szulecka and de pavw. (2003) present the case of a female (aged 45 years) with paraprosopia. (that is the experience of
seeing faces sometimes distorted in grotesque and threatening ways). The subject underwent neuropsychological testing and cognitive behavioral treatment. Treatment focused on relaxation training, exposure, and cognitive restructuring. Ratings of subjective distress, self-reports, and mood rating scale data were collected throughout the 8-week treatment period and at 6-week and 6 month follow-ups. Results show a reduction in the frequency of seeing the face and a substantial reduction in associated distress.

Fitch and Marshall (2002) argue to use cognitive restructuring technique as a supervision tool for counselor educators. Students in counseling practicum courses experience many self-defeating thoughts and anxieties. It is contended that these worries can impede their performance as new counselors and can have a negative impact on the supervision process.

Ehde and Jensen (2004) conducted a study to determine the feasibility of cognitive restructuring intervention relative to an education intervention for treatment of pain in person with chronic pain, secondary to disability. Participants in the cognitive groups reported greater pre-to post treatment decrease in pain than those in education group. Findings support the feasibility of conducting intervention trials in persons with disability, related to chronic pain.
Grunert, Smucker, Weis and Rusch (2003) present a detailed cognitive-behavioral analysis of two industrial victims suffering from PTSD who failed to benefit from PE (prolonged exposure) alone, but who subsequently made a quick and lasting recovery when imagery based, cognitive restructuring components were added to their exposure treatment. A comparative analysis is given by the researcher of the theoretical underpinning and treatment components of the behavioral and cognitive treatment used with the subjects in this study – PE and imagery receipting and reprocessing therapy (IRRT). PE is a behavioral treatment based upon theories of classical conditioning that relies on exposure, habituation, desensitization, and extinction to facilitate emotional processing of fear. By contrast, IRRT is cognitive therapy applied in the context of imagery modification. In IRRT, exposure is employed not for habituation, but for activating the trauma memory so that the distressing cognitions can be identified, challenged, modified, and processed.

Willson, Boufford and Mackenzie (2005) have presented reviews and meta-analysis that have supported the hypothesis that offender rehabilitation programs based on cognitive behavioral principles reduce recidivism. This article quantitatively synthesizes the extent of empirical evidence on the effectiveness of structural cognitive-behavioral programs delivered to groups of offenders. The evidence summarized supports the claim that these treatments are effective in reducing criminal behavior.
among convicted offenders. All higher quality studies reported positive effects favouring the cognitive – behavioral treatment program. Specifically, positive reductions in recidivism were observed for moral resonation therapy; reasoning and rehabilitation, and various cognitive – restructuring programs. The evidence suggests the effectiveness of cognitive skill and cognitive restructuring approaches as well as programs that emphasize moral teachings and reasoning.

Jaycox, Zoellner and Fao (2002) described a case example of a young female rape survivor. Her prior substance dependence and intense shame are also highlighted. A CBT based therapy (prolonged Exposure) was presented that entails education about common reactions to trauma reminders and cognitive restructuring. The therapy was successful in reducing the clients symptoms of PTSD, as well as her depressive symptoms and these gains were maintained at a 1 year follow up assessment.

In his article, Datilio, (2006) suggests the use of cognitive – behavioral techniques, namely cognitive restructuring combined with family – of – origin sessions, for reconstructing intergenerational family schemas. A case example portrays the use of the techniques as an effective intervention for addressing ingrained schemas such as in the case of spousal abuse.
Grey, Young and Holmes (2002) describe a distinct clinical approach to the treatment of Posttraumatic Stress Disorder (PTSD). It is theoretically guided by recent cognitive models of PTSD and explicitly combines cognitive therapy techniques within exposure / reliving procedures. A clinically pertinent distinction is made between the cognitions and emotions experienced at the time of trauma and, subsequently, in flashback experiences, and secondary negative appraisals. The term peritraumatic emotional “hotspot” is used to describe moments of peak distress during trauma. It is argued that a focus on cognitively restructuring these peritraumatic emotional hotspots within reliving can significantly improve the effectiveness of the treatment of PTSD, and help explain some treatment failures within traditional prolonged exposures. An approach to the identification and treatment of these hotspots has been detailed for a range of cognitions and emotions not limited to fear.

Hecker, Christene, Vogeltanz, Thorpe (1998) studied the relative efficacy of cognitive restructuring and interceptive exposure procedures for the treatment of panic disorder, as well as the differential effects of the order of these interventions. In a crossover design half of the participants receive four sessions of exposure therapy followed by cognitive therapy and for half the order was reversed. There was a one-month follow up period between the 2 interventions and after the second
intervention. The order in which treatment were presented did not influence outcome. Participant's tended to improve with first intervention, and maintain improvement across the follow-up periods and subsequent intervention. The findings suggest that cognitive restructuring is effective in the treatment of panic disorder.

It may be noted that the studies quoted have brought out the role of cognitive restructuring on anxiety and other disorders without reference to the specific term neuroticism. It has already been pointed in chapter one that after DSM-II, the term neuroticism has been replaced by other terms like anxiety disorders (which include disorders like Generalized Anxiety Disorder, Panic Disorder, Post Traumatic Stress Disorder etc.) and somatoform disorders. Since most of the studies quoted are fairly recent, the term neuroses and neurotic disorder are not given, instead contemporary terminology has been used.

MEDITATION

Meditation is a very vast discipline in itself. It is practised in almost all religions in different forms, but whatever the form we adopt, the state of deep trance, which is the basis of relaxation, is common to all forms of meditation. It is studied by clinical psychologists both theoretically and practically and the result of this work could be one of the most important contributions to enhancing sense of well being and total health (physical, mental and spiritual). Its effectiveness ranges from
handling simple stress to crime prevention, rehabilitation and management of various forms of psychopathologies.

Gillani and Smith (2001) presents a study in which an attempt was made to map the psychological effects of Zen meditation among experienced practitioners. Fifty nine Zen meditators with at least 6 yrs of experience practised an hour of traditional Zazen seated meditation. A control group of 24 college students spent 60 min silently reading popular magazines. Before relaxation, all participants took the Smith relaxation Status inventory (SRSI), the Smith Relaxation Dispositions/Motivations Inventory, and the Smith relaxation Beliefs inventory. After practice, participants again took the SRSI and post session analyses reveal that meditators showed greater increment in the relaxation states. Mental quiet, love and thankfulness, and prayerfulness, as well as reduced worry. The authors contend that the results support. J.C. Smith's ABC relaxation theory.

Bhushan and Sinha (2002) examined the effect on anxiety and hostility of yoga nidra meditation, a psychic sleep in which the body sleeps and the mind remains awake. Twenty seven individuals (aged 19-50 yrs) completed questionnaires concerning hostility, and hyper symptomatic, predisposing and trait anxiety before and after practising yoga nidra 1 hr daily for a 15 day period. Results show significant reduction in anxiety for those Ss experiencing hyper anxiety; no reduction
was observed for those experiencing little anxiety. The effects of yoga nidra meditation on hostility were similar to those for anxiety. It is concluded that yoga nidra is a useful technique of relaxation that can be used to manage emotional problems.

Cortese, Silenzio et al (1998) explore the way of silence and meditation as the human path to transcendence and transformation and a way of attaining universal consciousness through liberation from the shackles of the individual self. The ways of meditation are many, although they all start from a self induced state of open, expectant relaxation. Meditation modes addressed include Zen, Taoism (Lao Tzu's "negative way") and Kundalini Yoga. Today's meditators are motivated by the need for regaining something that belongs to humankind, but had been seemingly lost, i.e., silence as a necessary return to the core of their being. Meditation, as a psychic experience is universal but the modality chosen for it is an individual choice.

Rausch, Grambling and Auerbach (2006) conducted a study on 387 undergraduates students. The subjects were exposed to 20 minutes of either meditation, progressive muscle relaxation (PMR) or control conditions, followed by 1 minute of stress induction and another 10 minute each of intervention. Findings demonstrated that participants in the meditation and PMR group decreased more in cognitive, somatic and general state anxiety than controls.
Waelde, Thompson and Gallaghe (2004) conducted a study on 12 older female dementia patient family caregivers who participated in a six-session manualized yoga-meditation program designed to help caregivers cope with stress. Pre-post comparison revealed statistically significant reduction in depression and anxiety and improvement in self-efficacy. Average minutes of weekly yoga-meditation practice were significantly associated with improvement in depression. The majority of caregivers found the intervention useful and reported subjective improvement in physical and emotional functioning. These findings suggest that inner resources may be a feasible and effective intervention for family caregiving and may improve affect, coping, physical well being, and stress management.

Sagula and Rice (2004) observed that losses in relationship, work, and other areas of life often accompany the physical discomfort of chronic pain. Often the depth and intensity of the grief associated with chronic pain are overlooked or possibly misdiagnosed and treated as depression. The investigators used an 8-week mindfulness meditation program to determine its effectiveness in addressing the grieving process among 39 patients diagnosed with chronic pain. 18 patients volunteered to be in comparison group. The study was conducted in a regional hospital's pain clinic and patients completed Response to Loss Scale (measuring grief), the Beck Depression Inventory, then State Trait
Anxiety Inventory. Results indicated that the treatment group advanced significantly more quickly through the initial stages of grieving than the comparison group. In addition, the treatment group demonstrated significant reduction in depression and state anxiety.

Tacon, Me Comb, Caldera and Randolph (2003) assessed the effectiveness of mindfulness-based stress reduction programme to reduce anxiety in women with heart disease. Measures included the State-Trait Anxiety Inventory, the Courtauld Emotional Control Scale, The Problem-Focused Styles of Coping measures, and the Multidimensional Health Locus of Control scale. The intervention was providing for 2 hrs each week, for 8 weeks. A post-intervention analysis provides support for beneficial effects of this program.

Walton and Levitsky (2003) presented an article which suggest that both chronic and acute stress can cause long-lasting abnormalities in the neuroendocrine systems mediating adaptation. These abnormalities, in turn are thought to contribute to psychological disturbances such as anxiety, depression and hostility, and to behaviours such as substance abuse, violent aggression, and criminal acts. The article reviewed evidence for neuroendocrine abnormalities in aggression and crime, defined stress as it relates to adaptation and behaviour, discussed stress-induced abnormalities in neuroendocrine systems, and reviewed evidence that the Transcendental Meditation (TM) program may reduce aggression.
and crime in part by removing these stress-induced abnormalities. The (TM program) appears to reverse or remove both the physiological and psychological disturbances arising from stress, thus strengthening the individual coping abilities and restoring a sense of well-being. These normalizing effects of Transcendental Meditation program are expected to enhance an individual's resilience and to promote the ability to fulfill desire in socially responsible ways.

Kulik and Szewezyk (2002) studied two major modes of meditation that prevail that is, the Christian and the Oriental trend. Both forms have elements that are common but those that also diverge. The question of whether these forms can be combined and which of them carries meaning of life was investigated. Twenty eight young people voluntarily pursuing the Christian form of meditation (Light-life Movement) and twenty three young people pursuing the oriental form (Transcendental meditation) participated. The following methods were used in the research; the “Purpose in Life Test” the “Hostility-Guilt Inventory”. The Hoplessness Scale and “The I.P.A.T. Anxiety Scale”. Persons pursuing the Christian or the Oriental form of meditation revealed no significant differences with regard to the intensity of the sense of meaning of life. The study has revealed a distinct decrease in aggressive tendencies, level of anxiety, resistance towards frustrations
and slight decrease in sense of hopelessness. It shows that both forms of meditation exert a similar influence on the emotional reactions.

Speca, Carlson, Goodey and Angen (2000) assessed the effects of participation in a mindfulness meditation-based stress reduction program on mood disturbance and symptoms of stress in cancer outpatients. Ninety patients (aged 27-75 yrs) completed the profile of Mood States and the Symptoms of stress Inventory both before and after the intervention. The intervention consisted of a weekly meditation-based stress group lasting 1.5 hours for 7 weeks plus home meditation practice. The group was heterogeneous in type and stage of cancer. Pre-intervention mean scores of patients on dependent measures were equivalent between groups. After the intervention, patients in the treatment group had significantly lower scores on total Mood disturbance and subscales of depression, anxiety, anger and confusion and more vigor than control.

Shapiro (2005) presents literature that is replete with evidence that the stress inherent in health care negatively impacts health care professionals, leading to increased depression, decreased job satisfaction, and psychological distress. In an attempt to address this, he examined the effects of a short-term stress management program, mindfulness-based stress reduction (MBSR), on health care professionals. Results from this prospective randomized controlled pilot study suggest that an 8-week
MBSR intervention may be effective for reducing stress and increasing quality of life and self-compassion in health care professionals.

Reibei Gressson, Brainard and Rosenzweig (2001) examined the effects of mindfulness-based stress reduction (MBSR) on health-related quality of life and physical and psychological symptomatology in a heterogeneous patient population. 136 subjects (aged 23-76 yrs) participated in an 8 weeks MBSR program and were required to practice 20 min of meditation daily. Pre-and post intervention data were collected by using the short-Form Health Survey (SF-36), Medical Symptom Checklist (MSCL) and Symptom Checklist-90 Revised (SCL-90-R). Health-related quality of life was enhanced as demonstrated by improvement on all indices of the SF-36 including vitality, bodily-pain, role limitations caused by physical health, and social functioning. Alleviation of physical symptoms was revealed by a 28% reduction on the MSCL. Decreased psychological distress was indicated on the SCL-90-R by a 38% reduction on the Global Severity Index, a 44% reduction on the anxiety subscale and a 34% reduction on the depression subscale. One-year follow-up revealed maintenance of initial improvement. It is concluded that a group mindfulness meditation training program can enhance functional status and well-being and reduce physical symptoms and psychological distress in a heterogeneous patient population and that the intervention may have long-term beneficial effects.
Snaith (1998) surveyed those forms of psychotherapeutic practice in which meditation (i.e. the induction of a trance state) plays a central role. The order in which they are reviewed follows approximately the temporal sequence of their appearance. Autogenic training (J H. Schultz, 1932; W. Luthe. 1963 and W. Linden. 1990), the relaxation response (H. Benson and M. Zipper. 1976; Benson et al. 1974). Technique of anxiety control (Snaith. 1981, 1991; Snaith et al, 1992) training are described. All reviews of the topic point to benefits reported in reduction in anxiety. The advantages of self-management, by meditation or other means, include the abbreviation of therapist time; perceived self-efficacy; and the importance to the individual of the realization that he or she has played the major part in improvement, with consequent increase in self-esteem having wide implications for generalization of the beneficial effect.

Meditation is an approach that allows the individual to automatically activate the physiological and behavioural transformation necessary to produce law-abiding behaviour and also to rediscover the inner-self as a silent, peaceful state of being. Certain studies are cited here to show that meditation is an effective technique for preventing crime.

Anklesaria and King (2003) have presented a paper describing background and establishment of "Enlightened Sentencing Project", origined by Judge David C. Mason, a Missouri circuit court Judge. The project initiated by Judge Mason is a pioneering, community based
rehabilitation program in which probationers are sentenced to learn the Transcendental Meditation (TM) technique and its benefits. Thus far, in this program six Judges in Missouri have sentenced over 100 probationer's whose offenses range from drunkenness driving to manslaughter. Results have been remarkable, with offenders reporting a wide range of benefits.

Hagelin (2003) presented a special issue of Journal of Offender Rehabilitation entitled. "The Transcendental Meditation Program in Criminal Rehabilitation and Crime Prevention". This offers a profound and holistic approach to solving the problem of crime. It addresses the epidemic of stress and describes solutions based on restoration of natural laws in the life of the individual and society. This highly practical knowledge of living in accordance with natural law-the same organizing intelligence that governs the universe-have been revived from the ancient Vedic tradition of India and reformulated into a systematic scientific framework by Maharishi Mahesh Yogi.

Bowen, Witkiewitz, Dillworth, Chawla et al (2006) found that despite the availability of various substance abuse treatments, alcohol and drug misuse and related negative consequences remain prevalent. Vipassana meditation (VM), a Buddhist mindfulness-based practice, provides an alternative for individuals who do not wish to attend or have not succeeded with traditional addiction treatments. In this study the
authors evaluated the effectiveness of a VM course on substance use and psychosocial outcomes in an incarcerated population. Results indicate that after release from jail, participants in the VM course, as compared with those in a treatment as usual control condition, showed significant reduction in alcohol, marijuana, and crack cocaine use, alcohol-related problems psychiatric symptoms as well as increase in positive psychosocial outcomes.

Orme (2003) view crime as a multidimensional problem that is best prevented by programs that strengthen informal social control, which is the internalized propensity of the individual to find rewarding behaviour patterns within the law. Orme introduced the theory and research on crime prevention through the Maharishi effect, a powerful mechanism of increasing informal social control by increasing coherence and decreasing stress in the most holistic level of society, its collective consciousness. A review of 15 published studies conducted on city, state, National, and international levels found strong evidence that crime is reduced and quality of life is improved when 1% of a population practice the Transcendental Meditation (TM) program.

Similar finding were obtained by Alexander, Walton and Goodman (2003) who presented a cross-sectional study of 160 maximum-security prisoners. Inmates who had practised the TM program for an average of 20 months had improved scores relative to controls on 3 factor-analytic
component derived from 14 individual test scales. Differences were highly significant for all three components (development, consciousness and psychopathology), when TM group members were compared with nonmembers. These findings provide evidence that this program promotes improvements in both mental and physical health that support law-abiding behaviour.

Mason (2003) discussed the effectiveness of Transcendental Meditation (TM) in criminal rehabilitation and crime prevention. While there are several programmes designed to help rehabilitate criminal offenders, their success is inhibited by their failure to provide the essential element of effective rehabilitation which should be helping people who are at risk for developing something from within so that they can avoid committing the next crime. According to the author, stress dealing with feelings of personal inadequacy, demands of parents and children, demands of peers, the demands of society, together with the helplessness of poverty is the root cause of criminal behaviour. The Transcendental Meditation program reduces stress and it does so more effectively than any other technique available. It is an excellent means to help someone achieve self-esteem, self-control, and resiliency from within. It fosters more coherent thinking and it focuses the mind on life's more constructive possibilities. Transcendental Meditation has been
demonstrated to be an effective way to help an offender resist the temptation to re-offend.

Hawkins (2003) presents an article that reviews research on the Transcendental Meditation (TM) program relevant to the treatment and prevention of criminal way and substance abuse. Over the past 30 yrs, 36 studies have been conducted on the rehabilitative effects of the TM program. These studies have involved various populations including at risk youths participant in treatment programs and incarcerated offenders. A few studies examined the effects of the TM program in the general population on use of alcohol, cigarette and non prescribed drugs. Longitudinal random-assignment studies with objective measures confirm the result of retrospective studies and other earlier research. Incarcerated offenders show rapid positive changes in risk factor associated with criminal behaviour, including anxiety, aggression, hostility, moral judgment, in-prison rule infractions and substances abuse studies, taken together, indicate that the TM program reduces substance use as well as number of the risk factors that underlie substance dependence, particularly anxiety, depression, neuroticism and other forms of psychological distress.

Leung and Singhal (2004) were interested to know whether Qigong Meditation has a relationship with personality. They administered Eysenck Personality Inventory (EPI) to eighty Qigong Meditation
practitioners and seventy four non-practitioners. The results showed that the number of Qigong practice was negatively correlated with neuroticism, but there was no relationship with extraversion. Even after controlling for age, gender and education level, the practitioners were significantly less neurotic that the non-practitioner. The study of Qigong Meditation and personality may lead to a greater understanding of the various disorders characterized by high neuroticism and may provide a viable treatment option for long-term health.

Sense of well being is enhanced by meditation technique. Certain studies have cited here to demonstrate it.

Kumar and Ali (2004) have employed concentrative meditation on 67 students of 12th class. The subjects were randomly distributed into two groups, the first group was the experimental and the second was the control group. The possible changes that may occur due to meditation practice on well-being were assessed using subjective well-being scale, (SUBJECTIVE WELL-BEING SCALE) The experimental design involve administering the instrument just mentioned to control group, administering simplified Kundalini yoga for the experimental group and assessing well being of two group after a period for forty days. Statistical analysis reveals significant enhancement in the subjective well-being of the students who had undergone training on meditation.
Duncan and Weissenburger (2004) tested hypothesis that brief meditation practice daily over a short period of time would increase individuals well being and decrease their susceptibility to loneliness. Twenty graduate students in a transpersonal psychology course served as participants in the study, 13 of the students practiced a brief meditation program, while 7 student in the same classes formed on untreated group who did not meditate. This progress was measured by comparing their pre-post scores on the Outcome Questionnaire-45 (OQ-45) and the UCLA Loneliness Scale. Results indicate that the brief meditation program contributed to a decrease in feelings of loneliness. Exposure to the transpersonal psychology class and meditation, however, contributed to positive change in their feeling of well being.

On the basis of empirical evidence, the researcher postulated the following hypotheses:-

1. Neuroticism scores of subjects undergoing cognitive intervention will be reduced after intervention.

2. Problems perceived by the subjects undergoing cognitive intervention will be reduced after intervention.

3. Neuroticism scores of subjects undergoing meditation will be reduced after meditation.

4. Problems perceived by subjects undergoing meditation will be reduced after meditation.
5. There will be greater reduction in neuroticism scores of subjects undergoing both cognitive intervention and meditation than group undergoing only cognitive intervention.

6. There will be greater reduction in problems perceived by the subjects undergoing both cognitive intervention and meditation group than group undergoing only cognitive intervention.

7. There will be greater reduction in neuroticism scores of subjects undergoing both cognitive intervention and meditation than group undergoing only meditation.

8. There will be greater reduction in problems perceived by the subjects undergoing both cognitive intervention and meditation than group undergoing only meditation.

9. There will be no difference in the initial neuroticism scores and scores obtained after three months amongst control group.

10. There will be no difference in perceiving the problems initially and after three months amongst control group.

Note: The period of three months has been indicated in hypothesis 9 and 10 because three months was the period for which interventions were conducted.
Chapter-3

Methodology
The present study was conducted to see whether meditation and cognitive intervention is helpful in reducing neuroticism scores of individuals high on this dimensions and alleviating problems perceived by them. Since individuals who are high on neuroticism are usually unable to manage their stress satisfactorily and effectively, so a large number of life situations are perceived by them as problems. The researcher was interested to see the effect of meditation and cognitive intervention and also the benefits of combination of both interventions that is, cognitive intervention and mediation on their neuroticism and problems perceived. In order to rule out the possibility that pre and post intervention differences could be explained by changes attributable to passage of time, a control group in which no intervention was given but neuroticism scores and perceived problems were assessed at two points of time (time duration being same as time given to interventions, that is three months) was also formed.

Sample:

The sample comprised of 51 individuals high on neuroticism. Originally, a much larger sample of subjects was selected, but drop out rate was high because a 3 month period of intervention was not adhered to by a large number of subjects. The subjects high on
neuroticism were identified with the help of Maudsley Personality Inventory (MPI). The scale was administered on 800 male and female students of Aligarh Muslim University, Aligarh. Among which 250 individuals were identified high on neuroticism but only 72 individuals volunteered to participate in the study, out which in the end only 51 remained. The number of male subjects who left without completing the schedule was very large. The subjects were divided into four groups which were as follows.

<table>
<thead>
<tr>
<th>Group</th>
<th>Treatment conditions</th>
<th>No. of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Cognitive intervention</td>
<td>10 (9 female and 1 male)</td>
</tr>
<tr>
<td>II</td>
<td>Meditation</td>
<td>12 (6 female and 6 male)</td>
</tr>
<tr>
<td>III</td>
<td>Cognitive intervention plus meditation</td>
<td>9 (7 female and 2 male)</td>
</tr>
<tr>
<td>IV</td>
<td>No treatment (Control Group)</td>
<td>20 (10 female and 10 males)</td>
</tr>
</tbody>
</table>

TOOLS OF STUDY:

I. Maudsley Personality Inventory: [Hindi version]

The Maudsley Personality Inventory (MPI) developed by Eysenck (1959) and adapted in Hindi by Jalota (1965) was used for identifying the subjects for the study. The inventory comprises of
48 items out of which 24 items were of neuroticism. Each item in the scale has three response alternatives, scored as 0, 1, 2 from lower to higher levels of neuroticism. The maximum score one could get is 48. In accordance with norms given by Jalota (1964) the raw score of 23 is interpreted as standard score of 50. This score is equal to the average or normal score. A difference of +10 on this score is considered as high on neuroticism thus a standard score above 60 would indicate high neuroticism. A raw score of 33 was found to be a standard score 60, therefore, a raw score of 34 was taken as point for selecting subject high on neuroticism. It may further be noted that a score above 43 would indicate a standard score of 70, beyond which score would indicate not high but severe neuroticism. Therefore the range of raw score on neuroticism scale to identify high neuroticism were 34-42 and only subjects whose scores were within this range were considered. The reliability coefficient obtained by the Indian authors comparing the scores of the first half with that of the second half of the scale on a group of 150 college students with both sexes equally represented, was +0.71 (corrected) for neuroticism scale. The scale compared well with the original English version, and is being widely used in India. The sex difference on the scale was found to be negligible. The data
suggests that this Indian version of the MPI gives results not essentially different from those obtained with original version.

II. Daily Record Sheet:

Daily Record Sheet was derived from Thought Diary of Beck et al (1979). The sheet is comprised of five columns but for the purpose of study it is divided in two phases. In the first phase, there is a 3 columns sheet (situation, emotion and automatic thought columns) (Appendix II-A). This sheet is introduced to the subject. When the subject learns how to write these columns, then in the second phase subject is introduced to full sheet (second Daily Record sheet) in which, besides the above three there are two additional columns, that is ‘alternatives thought’ and ‘outcome’ (Appendix II-B). Details of each columns are as follows;

(i) **Situations column**: Unpleasant things that subject has experienced are written here. The event is narrated in this column. Filling this column helps the subject to view the event objectively and understand what kind of emotions such events create.

(ii) **Emotions column**: A number of subject come into therapy not really sure what they might be feeling. Some may be aware of feeling bad, but can not say more about the fine details. Filling this
column encourages subjects to label feelings. Feelings can most often be described in one word such as upset, scared, terrified, worried, hopeless, sad, panicky, furious and so on but subjects were free to use more than one word if they so desired.

(iii) Automatic Thoughts Column: Filling this column helps the subject to identify thoughts, particularly those associated with particular emotions. Subjects often mix up thoughts and feelings, and find it difficult to put their thoughts into words. It is seen that the question “how did you feel about that?” may elicit thought and similarly asking for thoughts may lead to an expression of emotions. It is more helpful to ask what went through your mind just then? Once the subject is able to begin to distinguish and identify thoughts and feelings, the full sheet is introduced to the subject. It has two additional columns, that is:

(iv) Alternative Thoughts Column: In this column, subject questions his automatic thoughts and writes his responses. It enables the subject to think about the alternative reasons and explanations, which leads to an improvement in emotions. In this way rather than just asking questions in sessions, the researcher trains the subject as to what kinds of the questions to ask in order look for alternatives.
(v) **Outcome Column:** Here the subject looks for some possibilities to improve her/his conditions. It could be some coping statements or some resolutions of which the subject reminds himself/herself every time a similar situation occurs. It could also be some idea which can be put into action.

**III. Weekly Activity Schedule:**

Weekly Activity Schedule (Beck et al-1979) was also an important tool used during cognitive intervention. Weekly activity schedule comprises of 7 columns and 10 rows where columns are marked with names of the days (MONDAY TO SUNDAY) rows are marked with time interval (From 6:00 AM to 10:00 PM). Time intervals are made according to subject's requirements (shown in Appendix III). The weekly activity schedule is frequently used in cognitive therapy for depression, helping the subjects to become more active and increase the level of enjoyable activities in life. Subject plans the next day's activities and when subject accomplishes that activity, it gives a sense of achievement to the subject. Planning activities in advance is a powerful means of overcoming lack of motivation and taking the mind off problems or symptoms, and focusing attention to something else. It also keeps the free mind busy in some activity in place of daydreaming.
Keeping record of Weekly Activity Schedule is also helpful in showing clearly the improvement in subject’s level of activeness.

IV. Technique Used for Concentrative Meditation:

Concentration meditation is the foundation for all other kinds of meditation because whatever technique of meditation one is practising, it is necessary to have the ability to place one’s attention on the object of meditation and hold it there without distraction. There are thousands of meditation techniques but this basic principle, however, always applies to all.

Researcher selected the breath as a focus for concentration. Breath is considered the most effective method for helping people with busy minds to quiet their internal dialogue. It does not create any association and distraction.

Along with the breath the use of “YA Allah” adds a special symbolic significance that serve well in the development of pointedness in concentration. Further details are contained in the section on procedure.

Procedure:

There are four groups in this study. One group of subjects was administered cognitive intervention only. Second group of
subjects was administered meditation only. Third of group of subjects was administered both cognitive intervention and meditation. Fourth group of subjects was not given any type of intervention. All subjects were high on neuroticism and their pre-intervention neuroticism scores were recorded. Procedures of each intervention are detailed one by one.

**Procedure of Meditation**

The subjects were brought to the research room which fulfills the pre-requisite conditions of a place of meditation which are.

a) Clean and clear space  
b) Properly ventilated and lighted  
c) Free from noise  
d) Comfortable seats.

After rapport-forming conversation which also involved motivating the subjects by telling them the benefits of meditation, subjects were told that the purpose of meditation is to help them to relax. (They were also asked to bring out problems which bothered them. In the early sessions they enumerated their problems and the researcher kept note of these problems). Subjects were instructed to conduct meditation in the following manner.
1) Subject has to sit in comfortable position on the chair.

2) Subject has to keep his/her feet flat on floor, back straight and eyes closed.

3) Subject has to concentrate on the flow of breath.

4) When the subject inhales he/she should say "Ya", when the subject exhales he/she should say "Allah". This rhythm should be maintained while breathing.

5) Subject has to keep his/her mind free from any thought. If any thought comes to his/her mind than he/she should try to leave or stop that thought there and return back to the rhythm of "Ya Allah".

6) Subject should not make too much effort to concentrate. He/she should concentrate calmly on the object (i.e. flow of breath). The mind will sway between holding its object too tightly or too loosely. If the subject grasps too tightly at the object, then mind will become agitated and body tense. If the subject relaxes too much then his attention will wander and fade away. It is important to find the balance between these two states.

7) While meditating, subject may experience jerking or quivering of the body, as falling asleep, gurgling of the stomach, tingling feeling or numbness, memories, mental images, inner sounds or other perceptual changes. The best way to deal with these
experiences is to simply allow them to arise, unfold and dissolve without distracting the attention.

8) Initially while practising meditation, subjects find it difficult to close their eyes for 20 minutes at stretch. They may feel uneasiness. They were instructed to open their eyes calmly, take few deep breaths than close their eyes again and concentrate on breath. With practice he/she will be able to close his/her eyes for complete 20 minutes.

The subject practised this techniques for 20 minutes daily for 3 months. For fifteen days, subject performed meditation in the presence of researcher after which their daily meditation was done on their own. The researcher remained in continuous contact to ascertain the situation.

Researcher took weekly feedback from the subjects in order to know the progress in their concentration level and problems. Initially concentration is momentary, then gradually it becomes sustained. As concentration grows, even when subject's attention wanders, distraction is immediately recognized and he/she returns his/her mind to the object of concentration. As the subject develops the capacity to sustain focus of attention without lapsing into
distraction or dullness. Concentration ripens and matures into a state of relaxation.

During weekly feedback, subject also reported status of problem perceived. Researcher kept note of all things such as their reports that anger and uneasiness had disappeared etc. Each individual subject's report is presented in Table 14.

After the subjects completed their three months of meditation, researcher took their post-intervention score on MP1 scale. Researcher thanked all the subjects for their co-operation.

**PROCEDURE OF COGNITIVE INTERVENTION:**

The first step in cognitive intervention is to explain the rationale of cognitive restructuring to the subject. In explaining the rationale, emotion and thinking and behaving is the central concern. Identifying and labeling negative thoughts and seeing how emotions and thoughts interact is the first step towards enabling the subject to understand her/his emotion. If the changes are made in the thinking process, changes in emotions and behaviour will follow. Cognitive restructuring is based on the idea that we often respond to daily stressful events with negative, distorted mental monologue. This monologue creates emotions, moods and feelings.
When the negative monologue occurs too frequently or intensely in response to stress, unhealthy negative emotions like anxiety, anger etc can occur. We often can not change the situation that causes stress but we can change our emotional responses to stress using cognitive restructuring [CR]. This technique involves learning to recognize, challenge, and change negative automatic thoughts so that we can be more realistic and accurate in thinking about stressful situations.

Initial sessions are spent in giving rationale and creating rapport with subject. Therefore in the beginning daily interaction was held for the following reasons.

a) Information is collected about the family.

b) Subject's relationship with family members are detailed.

c) Subject's position in the eyes of family members is also learned.

d) Subject was introduced to first daily record sheet in order to identify her thoughts and emotions.

In first “Daily Record Sheet” (DR Sheet) there are three columns. First column is of situation, second column is of emotions and third column is of automatic thoughts. When something unpleasant happens the subject was asked to write it down on DR
sheet. In 'situation' column he/she has to write what actually happened. In 'emotions' column he/she has to write how did he/she feel. In Automatic Thought column he/she has to write the thoughts that come to his/her mind. The purpose of DR sheet is to help subject to notice what and how she actually thinks. When the subject starts writing the sheet, it provides impetus for further discussion. The researcher put up questions to explore the subjects problematic thinking. The next few sessions are spent in preparing proper problem list.

The most useful conceptualization can be made by asking the client for specific, concrete, recent and severe examples of the problems bothering him/her rather than asking "how do you generally feel...? Asking questions like “Can you describe in detail a recent example of...?” is more helpful This way, the conceptualization can be specific, concrete and relevant to the subject’s concerns. A problem list is developed which is a simple list of areas that the subjects feels are problematic in their lives and want some solutions to manage them. The list in written form was kept by both subject and the researcher. It can therefore be used to review the progress during course of intervention. After problem list is completed, daily sessions are dispensed with and researcher
meets the subject twice a week. Subject is introduced to second DR sheet, it has two additional columns, namely alternative thought column and outcome column. Next step is to take one problem from the list and view it operationally.

a) **Identifying and clarifying the problems:** Subject and researcher work together to identify exactly what the problem is and other questions such as: who is affected? What are the component parts of the problem, duration and consequences are discussed.

b) **Setting a clear goal:** The subject identifies what exactly he/she wants to achieve, and by when.

c) **Generating a range of solutions:** Subject and researcher brainstorm what solutions might be possible.

d) **Evaluating the solutions:** The subject looks at the list of possible solutions and identifies which one might be helpful and which can be rejected.

e) **Selecting the preferred solutions:** The subject arranges the solutions in order of feasibility and selects one or few to try out.

f) **Trying it out and evaluating progress:** The subject tries out the selected solution and then thinks about how successful it was.
From now onward, proper structured sessions are followed. The cognitive intervention was conducted in sessions of 30 minutes duration. Each session comprised of the following components.

1. **Review of the subject's mood:** Usually question's regarding subject's mood are related to DR sheet. Asking about the mood, they repeat the same thing as they have put in DR sheet but researcher puts up questions to view the same situation again.

2. **Setting an agenda:** Above discussion provides the agenda or sometimes it is the last session issues that require further discussion and are set as a agenda. Agenda setting also aids the client's memory of the session. An agenda should help the session to begin collaboratively and maintain collaboration throughout the session.

3. **Review of previous homework and devising new homework:** One regular homework is to fill Second Daily Record Sheet. Second Daily Record sheet has two additional columns, first columns is of "Alternative thought" in which subject questions his/her Automatic thoughts. Some useful questions are as follows:

- What is the evidence that "x" is true?
• What is the evidence against "x" being true?
• And if that happened, what then?
• What leads you to think that might happen?
• How does thinking that make you feel?
• Is there any other way of seeing the situation? etc.

Second columns is of "outcome" in which subject questions herself/himself to think of ways that he/she could change to make things better for himself/herself. Some other homework is devised according to the need of particular subject. It could be some coping statements that subject repeats to herself/himself several times a day or some solution that subject may try out.

4. Session targets: This constitutes the main part of the session and will generally take up the majority of the time. The items which are worked on will be those already identified during the agenda-setting stage or issues which have arisen during the actual course of session. It is not unusual for homework to become a central focus of the session. Working on the session target is where main skills and technique of cognitive therapy will be brought to bear on the identified issues.

5. Session feedback: Continuous feedback and researcher's attempt to explain what she is doing, giving rationale for each
move means that the intervention process will be renegotiated regularly on an ongoing basis.

It requires starting work at the symptom level and only going on to work at the underlying level when it became necessary from the way discussion and subject's responses unfold. The emphasis is on working on problems rather than on correcting defects or changing personality.

The overall message in challenging the subject's way of thinking is to enable the subject to "take her thoughts to court", enabling information and evidence to be collected for the defense and the prosecution, rather than automatically jumping to conclusion as the basis of seeing things.

By following this process sincerely subject realizes that he/she is able to solve his/her problem. Researcher discusses with the subject that uptill now situation was a problem because subject had not tried to solve it. By accepting it the subject becomes optimistic to solve the next problem, and follow the same procedure. The written material of DR sheet also reveals the thinking pattern of the subject. If any cognitive distortion is identified than it is openly discussed with the subject. The subject
is asked to notice this maladaptive cognitive process and challenge or modify it. With the solution of each problem, the subject becomes more responsible and understands the procedure of solving or dealing with her/his problems.

Researcher increases the time between the sessions. Spacing sessions in this way enables the subject to have more time between sessions to practise and consolidate gains made during counseling. The intervention ended after three months. By this time the subject feels that she/he solved his/her listed problems and has learned the way how to deal with his/her cognitive distortions. Now he/she knows that it is not realistic to expect never to feel anxious, low, upset or angry. But the important point is to be able to normalize this distress.

**Things that the researcher tells the subjects:**

1) Subjects are told that goal of cognitive intervention is for them to learn to become their own therapist.

2) Intervention will be time limited but it is expected that they will be better problem-solvers in future also.

3) They should be told that it requires practice for the new kind of thinking to feel true, just as it requires practice for the
new skill (such as diving a car) to feel comfortable and natural with time. It begins to seem natural to think about one’s life situation in a fair and realistic manner.

4) Researcher tells the subject that her primary function is to help subject to find her own answers, because every individual is brought up in a unique environment and solutions are also personal.

5) Instead of talking self negatively whenever problematic situations arose, the subject after intervention, will be able to acknowledge that he/she has choices. By making coping self statements that assist him/her to stay calm and cool, establish goals, coach him/her in what to do and affirm the strength, skills and support factors possessed will help her to handle problems.

Procedure for Combined Intervention Group

The subjects in the group where both cognitive intervention and meditation were given were administered each procedure in the manner mentioned earlier in this chapter. Researcher first conducted cognitive intervention session with subject than ask them to meditate for 20 minutes.
After the subjects complete 3 months, with this combined intervention researcher took their post-intervention score on MPI scale and also evaluated the status of problems perceived by them. Researcher thanked all the subject for their co-operation.

**Procedure for Control Group:**

The subjects in this group were not administered any intervention. After taking their neuroticism score and problems perceived by them researcher remained in touch with these subjects to discuss about their problematic areas. Researcher kept note of these problems revealed during these discussions for each individual subject.

After an interval of three months researcher again took their neuroticism score on MPI scale and inquired about their problems status. Each individual subject’s report is presented in Table 16. The researcher thanked all the subjects for their co-operation.
Chapter-4

Results
The findings obtained in the study are presented in this chapter. Three months of intervention program was conducted on four groups of subjects high on neuroticism. As already given in the chapter on methodology, group 1 was administered cognitive intervention only and there are ten subjects in this group. Group 2 was administered meditation only and there were twelve subjects in this group. Group 3 was administered cognitive intervention plus meditation and there were nine subjects in this group. Group 4 was not administered any intervention and there were twenty subjects in this group. Tables 1-7 contain pre and post intervention scores on neuroticism of these groups.

**TABLE 1**

**SHOWING NEUROTICISM SCORES OF SUBJECTS UNDERGOING COGNITIVE INTERVENTION**

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
<th>Mean (Neuroticism Scores)</th>
<th>SD</th>
<th>Standard Error</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intervention</td>
<td>10</td>
<td>38.10</td>
<td>3.65</td>
<td>0.416</td>
<td>22.18</td>
<td>0.01 level</td>
</tr>
<tr>
<td>Post intervention</td>
<td>10</td>
<td>18.10</td>
<td>3.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is observed from the above table that there is a great reduction in neuroticism scores after cognitive intervention. The difference
between the means of neuroticism scores pre-intervention (38.10) and post-intervention (18.10) is very high. The calculated t-value is 22.18 which is highly significant at 0.01 level, supporting our hypothesis that neuroticism scores of subjects undergoing cognitive intervention will be reduced after intervention.

TABLE 2
SHOWING NEUROTICISM SCORES OF SUBJECTS UNDERGOING MEDITATION

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
<th>Mean (Neuroticism Scores)</th>
<th>SD</th>
<th>Standard Error</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Meditation</td>
<td>12</td>
<td>37.08</td>
<td>3.63</td>
<td>0.35</td>
<td>23.58</td>
<td>0.01</td>
</tr>
<tr>
<td>Post-Meditation</td>
<td>12</td>
<td>19.33</td>
<td>2.59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows that mean of neuroticism scores of subject before undergoing meditation is 37.08. After meditation, mean came down to 19.33. This reduction is highly significant as indicated by the t-value which is 23.59. It shows that neuroticism scores of subjects undergoing meditation are reduced after meditation hence our hypothesis neuroticism scores of subjects undergoing meditation will be reduced after meditation is supported by our results.
TABLE 3
SHOWING NEUROTICISM SCORES OF SUBJECTS UNDERGOING BOTH COGNITIVE INTERVENTION AND MEDITATION

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
<th>Mean (Neuroticism Scores)</th>
<th>SD</th>
<th>Standard Error</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Meditation +cognitive intervention</td>
<td>9</td>
<td>37.22</td>
<td>2.57</td>
<td>0.450</td>
<td>26.76</td>
<td>0.01</td>
</tr>
<tr>
<td>Post Meditation + cognitive Intervention</td>
<td>9</td>
<td>10.88</td>
<td>5.17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We find that mean of neuroticism scores of group undergoing both cognitive intervention and meditation group is 37.22 before any intervention. It is 10.88 after the intervention. This difference shows that subject made a huge improvement from pre to post intervention. It is clear from t-value (26.76) which is highly significant at 0.01 level.

TABLE 4
SHOWING NEUROTICISM SCORES OF SUBJECTS NOT UNDERGOING ANY INTERVENTION

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
<th>Mean (Neuroticism Scores)</th>
<th>SD</th>
<th>Standard Error</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before three months</td>
<td>20</td>
<td>36.90</td>
<td>2.49</td>
<td>0.23</td>
<td>0.25</td>
<td>insignificant</td>
</tr>
<tr>
<td>After three months</td>
<td>20</td>
<td>37.05</td>
<td>4.36</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Subjects not undergoing any intervention obtained mean score of 36.90 on neuroticism. After an interval of three months, the mean neuroticism score was found to be 37.05. These score does not differ significantly as indicated by t-value which is 0.25. Therefore, our hypothesis that there will be no difference in the initial neuroticism scores and scores obtained after three months amongst control group is supported by our results.

**TABLE-5**

**SHOWING COMPARISON BETWEEN COGNITIVE INTERVENTION GROUP AND MEDITATION GROUP**

<table>
<thead>
<tr>
<th>Group</th>
<th>Conditions</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Intervention</td>
<td>Pre-intervention</td>
<td>10</td>
<td>38.10</td>
<td>3.64</td>
<td>0.81</td>
<td>0.62</td>
<td>Not significant</td>
</tr>
<tr>
<td>Meditation</td>
<td>Pre-intervention</td>
<td>12</td>
<td>37.08</td>
<td>3.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Intervention</td>
<td>Post-intervention</td>
<td>10</td>
<td>18.10</td>
<td>3.67</td>
<td>0.75</td>
<td>0.87</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Meditation</td>
<td>Post-intervention</td>
<td>12</td>
<td>19.33</td>
<td>2.59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is no significant difference observed between the means of two group in pre-intervention condition as indicated from the above table. Both group made significant change from pre-intervention to post intervention that is cognitive intervention group mean came down from 38.10 to 18.10 and in meditation group mean score decreased from 37.08 to 19.33. This shows that both the groups make a drastic improvement. But there is no significant difference between the mean
of two groups in post-intervention condition. This shows that both
groups made an equal amount of improvement. In other words both
the intervention are equally effective in reducing neuroticism.

TABLE-6
SHOWING COMPARISON BETWEEN NEUROTICSIM SCORES
OF GROUPS UNDERGOING COGNITIVE INTERVENTION PLUS
MEDITATION AND GROUP UNDERGOING COGNITIVE
INTERVENTION ONLY

<table>
<thead>
<tr>
<th>Group</th>
<th>Conditions</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Intervention +</td>
<td>Pre-intervention</td>
<td>9</td>
<td>37.22</td>
<td>2.57</td>
<td>0.81</td>
<td>0.56</td>
<td>Not significant</td>
</tr>
<tr>
<td>Meditation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive intervention</td>
<td>Pre-intervention</td>
<td>10</td>
<td>38.10</td>
<td>3.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Intervention +</td>
<td>Post-intervention</td>
<td>9</td>
<td>10.88</td>
<td>5.17</td>
<td>0.96</td>
<td>3.33</td>
<td>0.01</td>
</tr>
<tr>
<td>Meditation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Intervention</td>
<td>Post-intervention</td>
<td>10</td>
<td>18.10</td>
<td>3.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is indicated from the above table that the two group did not
differ on neuroticism scores before intervention which is clear from
the mean of both the group i.e. 38.10 and 37.22. Although there is a
great reduction in mean of neuroticism scores after the intervention in
both the groups but the mean score in combined group has gone down
to 10.88 from 37.22. This reduction is significantly greater than
reduction in pre-post neuroticism scores of cognitive intervention group where reduction came down to 18.10 from 38.10. The difference in amount of reduction is found to be significant at 0.01 level. This supports our hypothesis which says that there will be greater reduction in neuroticism scores of subjects undergoing both cognitive intervention and meditation than group exposed to cognitive intervention.

TABLE -7
SHOWING COMPARISON BETWEEN NEUROTICISM SCORES OF GROUPS UNDERGOING COGNITIVE INTERVENTION PLUS MEDITATION AND GROUP UNDERGOING MEDITATION ONLY

<table>
<thead>
<tr>
<th>Group</th>
<th>Conditions</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Intervention +</td>
<td>Pre-intervention</td>
<td>9</td>
<td>37.22</td>
<td>2.57</td>
<td>0.78</td>
<td>0.09</td>
<td>Not significant</td>
</tr>
<tr>
<td>Meditation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meditation</td>
<td>Pre-intervention</td>
<td>12</td>
<td>37.08</td>
<td>3.63</td>
<td>0.78</td>
<td>0.09</td>
<td>Not significant</td>
</tr>
<tr>
<td>Cognitive Intervention +</td>
<td>intervention</td>
<td>9</td>
<td>10.88</td>
<td>5.17</td>
<td>0.84</td>
<td>4.65</td>
<td>0.01 level</td>
</tr>
<tr>
<td>Meditation</td>
<td>Post-intervention</td>
<td>12</td>
<td>19.33</td>
<td>2.59</td>
<td>0.84</td>
<td>4.65</td>
<td>0.01 level</td>
</tr>
</tbody>
</table>

We see there is no significant difference between meditation group mean (37.22) and cognitive intervention plus meditation group mean (37.08) in pre-intervention condition of above table. But there is a drastic change after intervention. The change in group undergoing both cognitive intervention and meditation is much greater. The mean
of this group at post-intervention is 10.88, why group exposed only to meditation had a post intervention mean of 19.33 on neuroticism. Hence our hypothesis which states that there will be greater reduction in neuroticism scores of subjects undergoing both cognitive intervention and meditation than group undergoing only meditation is supported by our results.

Problems enumerated by subjects high on neuroticism were tabulated in terms of frequency of their occurrence. Table-8 contains this information:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Problems</th>
<th>Frequency of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low anger threshold</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>Lack of concentration</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>Lack of confidence</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Carelessness</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Experiencing negative feelings without any reason</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Difficulty in maintaining good relationship</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Inability to get rid of some habit</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>Lack of control on thoughts</td>
<td>7</td>
</tr>
</tbody>
</table>
9 Feeling of anxiousness 7
10 Indecisiveness 4
11 Poor memory 4
12 Being touchy 3
13 Difficulty in developing particular habit 2
14 Sleep related problems 2
15 Regret about past 2
16 Getting upset because of other people's problem 1

Total 151

Problems:
1. Low anger threshold was cited as a problem. This referred to:
   a) Getting angry easily.
   b) Lack of tolerance.
   c) Becoming easily irritated.

2. Lack of Concentration includes:
   a) Being poor in studies.
   b) Becoming easily distracted and not being able to focus on one thing.

3. Lack of confidence was explained by subjects as:
   a) Poor command over English.
   b) Shyness.
   c) Lack of communicative skills.
   d) Feelings of hesitation.
4. Carelessness referred to:
   a) Habit of delaying work.
   b) Inability to complete things on time.

5. Experiencing negative feeling without any reason means:
   a) Feeling of incapability/inferiority.
   b) Feeling of goals being unachievable.
   c) Feeling incompetent despite being good in studies.
   d) Feeling of not being beautiful inspite of being very pleasant looking.
   e) Feeling that all bad things happen to me only.
   f) Feeling of sadness without there being reason.

6. Difficulty in maintaining good relationship:
   a) Need to improve relationship with family member.
   b) Inability to express feeling and emotions.
   c) Not able to maintain good friend circle.
   d) Loneliness.

7. Inability to get rid of some habit included factors like:
   a) Wanting to quit gutka.
   b) Wanting to lose extra weight.
   c) Talking too much.
   d) Habit of arguing/shouting.
   e) Habit of using foul language.
   f) Desire for Death.
   g) Inability to change unhealthy life style.

8. Lack of control on thoughts:
   a) Extreme thinking.
   b) Wondering of thoughts.
   c) Imagining the unachievable.
   d) Too many negative thoughts.
9. **Feeling of anxiousness:**
   a) Feeling of apprehension.
   b) Uneasiness.
   c) Restlessness.

10. **Indecisiveness:**
    a) Confusion.
    b) Not able to decide things.

11. **Poor memory:**
    a) Not remembering things.

12. **Being touchy:**
    a) Taking offense easily.
    b) Want to be emotionally strong.

13. **Difficulty in developing particulars habit, e.g.**
    a) Developing good communicative skills.

14. **Sleep related problems:**
    a) Insomnia.
    b) Excessive sleep.

15. **Regret about past:**
    a) Thinking too much about past.

16. **Too much concern for others:**
    a) Getting upset because of other peoples problems.
### Table-9
PROBLEMS IDENTIFIED BY SUBJECTS OF COGNITIVE INTERVENTION GROUP (N=10)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Problems</th>
<th>Frequency of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low anger threshold</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Lack of concentration</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Lack of confidence</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Carelessness</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Experiencing negative feelings without any reason</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Difficulty in maintaining good relationship</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Inability to get rid of some habits</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Lack of control on thoughts</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Feeling of anxiousness</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Indecisiveness</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Sleep related problems</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Being touchy</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

### Table-10
PROBLEMS IDENTIFIED BY SUBJECTS OF MEDITATION GROUP (N=12)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Problems</th>
<th>Frequency of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low anger threshold</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Lack of concentration</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Lack of confidence</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Experiencing negative feelings without any reason</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Inability to get rid of some habits</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Lack of control on thought</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Feeling of anxiousness</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Poor memory</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Sleep related problems</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Indecisiveness</td>
<td>1</td>
</tr>
<tr>
<td>S.No</td>
<td>Problems</td>
<td>Frequency of occurrence</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>11</td>
<td>Being touchy</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Regret about past</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

**Table-11**
PROBLEMS IDENTIFIED BY SUBJECTS OF COMBINED GROUP (N=9)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Problems</th>
<th>Frequency of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low anger threshold</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Lack of confidence</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Lack of concentration</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Carelessness</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Experiencing negative feelings without any reason</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Difficulty in maintaining good relationship</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Inability to get rid of some habits</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Lack of control on thoughts</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Feeling of anxiousness</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Difficulty in develop particular habits</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

**Table-12**
PROBLEMS IDENTIFIED BY SUBJECTS OF CONTROL GROUP (N=20)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Problems</th>
<th>Frequency of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low anger threshold</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Lack of concentration</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Lack of confidence</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Carelessness</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Experiencing negative feelings without any reason</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Difficulty in maintaining good relationship</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Inability to get rid of some habits</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 9, 10, 11, and 12 show the problems identified by the subjects in each of the four groups. It may be noted on perusing these tables that average number of problems perceived by each person in the four groups is similar. It is observed that low anger threshold is the most frequently reported problem among the subjects of control group and meditation group where as it comes at second place in cognitive intervention group and in combined group. Because in the process of cognitive intervention may detailed discussions are conducted to make a problem list so the subject look at the reason behind the anger as a problem rather than anger. In meditation group and control group subject perceives anger as a main problem. Next highly reported problems are lack of concentration and lack of confidence. In Table 9 and 12 lack of confidence is at second place where as in table-10 lack of concentration is at second place. Carelessness and experiencing negative feeling without any reasons are among
the important problem that require intervention as reported by the subjects.

The following tables gives a brief report of the outcome of interventions. We can see the exact problem and the steps taken towards the solution of that problem. In Condition ‘A’ that is when subjects were given cognitive intervention, cognitive distortion behind the problems were also reported. In the process of solving the problems, subjects realize their distortion. For Condition ‘B’ that is meditation, subjects reports about the experience with regard to the problems that he/she had after meditation. In Condition ‘C’ that is both cognitive intervention and meditation is given it is observed that the process of solving the problems is speeded up. Meditation provides peaceful mind, and the energy of peaceful mind help the process of cognitive intervention. In some cases like C3, C4, and C5, when subject is able to develop relaxation response and solve one or two problem than the other problems got automatically solved. In Condition ‘D’ that is when no intervention is provided it is seen that the problems persisted after the three month of time interval.
### Table-13

**[CONDITION – A]**

**BRIEF REPORT OF SUBJECTS ADMINISTERED COGNITIVE INTERVENTION (N=10)**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>GENDER</th>
<th>PROBLEMS REQUIRING INTERVENTION AS IDENTIFIED BY THE SUBJECT</th>
<th>ACTIVITIES TOWARD SOLUTION</th>
<th>OUTCOME</th>
<th>IDENTIFIED DISTORTION</th>
</tr>
</thead>
</table>
| 1      | Female | a) lack of communication                                      | Whether you like it or not communicate it  
|        |        |                                                                | a) discuss the problem with concerned person  
|        |        |                                                                | b) be polite while discussing  
|        |        |                                                                | c) avoid blaming others  
|        |        |                                                                | d) stop conversation with others if it takes the form of argument  
|        |        | b) experiencing very high amount of anger                     | Question your thought “why am I angry?” | SOLVED | ALL OR NONE THINKING  
|        |        | c) viewing phenomenon at extremes                              | Question your thought “why am I thinking this? Is it useful?” | SOLVED |                       |
| 2      | Female | a) poor command over English                                   | i) learn 15 word meanings daily  
|        |        |                                                                | ii) converse with friends in English  
|        |        |                                                                | iii) read English newspaper daily  
|        |        |                                                                | iv) translate one paragraph daily  
|        |        | b) poor relationship with family members                       | i) realize that it is not possible to change the other person | SOLVED | SHOULD STATEMENTS  
|        |        |                                                                | ii) read a topic in Urdu  
|        |        |                                                                | iii) re-read in English  
|        |        |                                                                | iii) learn whichever is easier  
|        |        | d) habit of sleeping too much                                  | Automatically solved | SOLVED |                       |
| 3 | Female | a) poor communication in English | i) learn five words daily  
ii) read newspaper loudly  
iii) ask yourself "is there anything to be anxious about?"  

b) Shyness | i) be first to say hello  
ii) do not decide before and what the other person will think  
iii) try to interact with one new person daily  
iv) question your thought "what is the evidence that it is true?" | SOLVED | MIND READING |
| 4 | Female | a) getting angry quickly | i) decide first, whether you are right or wrong  
ii) if you are wrong, keep silence or leave the place  
iii) if you are right, try to continue politely  
iv) never argue when you are wrong | SOLVED | DISCOUNTING THE POSITIVE |
|  | | b) feeling of incapability | i) question your thought "what is the evidence that it is true?"  
ii) try one activity daily and check the thought | SOLVED | |
|  | | c) feeling of anxiousness | Question yourself "why am I feeling this way" | SOLVED | |
| 5 | Female | a) feeling of hesitation | Make some coping statement, like  
i) "I feel good after interacting with people"  
ii) "People do not make fun they just smile while talking"  
iii) "I do not hesitate" | SOLVED | MIND READING |
|  | | b) being confused | i) put all the options on the paper  
ii) cancel out the least favourable  
iii) point out the best two | SOLVED | |
| 6 | Female | a) being confused | iv) after weighing the pros and cons of each, decide the best one 
v) stick to the decided one, keep repeating to yourself | SOLVED |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>b) concern about studies</td>
<td>Put all the options on the paper i) cancel out least favourable ii) point out the best two iv) after weighing the pros and cons of each, decide the best one v) stick to the decided one, keep repeating to yourself</td>
<td>SOLVED</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Make some coping statements i) while preparing say to yourself “I will do it nicely” ii) before sessional say “I am fully prepared” iii) after sessional try to feel satisfied and say “this is the best I can do” and feel relaxed</td>
<td>DISCOUNTING THE POSITIVE</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>a) poor control on emotions</td>
<td>Make some coping statements “God is great, leave the things on him” “I can not change others” “I have to make myself strong”</td>
<td>SOLVED</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) concern about studies</td>
<td>The pattern of study was devised a) revise the lecture of class daily b) select one topic to make notes c) complete the notes in one week d) learn those notes on Sunday e) say to yourself “I will do my best”</td>
<td>ALL OR NONE THINKING</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>a) habit of thinking too much</td>
<td>Question yourself “why am I thinking it? Is it</td>
<td>SOLVED</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MIND READING</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>a) poor relationship with parents</td>
<td>She communicated with them and accepted they are right</td>
<td>SOLVED</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>b) desire for death</td>
<td>She realised that she used it as a defence mechanism</td>
<td>SOLVED</td>
</tr>
</tbody>
</table>
|  | Female | c) lack of tolerance | i) pause for a minute before speaking  
ii) keep the pitch low  
iii) question your thought “Is there any possibility that the other person is also right” | SOLVED |

| 10 | Female | a) getting angry quickly | i) when you feel angry try to keep quiet  
ii) leave the place  
iii) continue politely | SOLVED |
|  | Female | b) habit of talking too much | Automatically reduced | SOLVED |
|  | Female | c) carelessness | i) plan the work before starting.  
ii) Do the work as planned  
iii) do the work on time  
iv) before starting a work say to yourself loudly, “I have to do it carefully”. | SOLVED |
<table>
<thead>
<tr>
<th>S. No</th>
<th>Gender</th>
<th>No of Problems identified by the subject</th>
<th>Outcome</th>
<th>Subject’s statement about experience</th>
</tr>
</thead>
</table>
| 1.    | Female | 1) Lack of Confidence  
2) Lack of Concentration  
3) Getting angry quickly | Considerable degree of confidence achieved  
High ability to concentrate  
Successful mastery | I feel something new in my personality, definitely about confidence.  
I can read, watch TV, without difficulty for long time.  
Now I do not get angry easily. |
| 2.    | Female | 1) Weak Memory  
2) Confusion | Great improvement  
Great improvement | Now I feel that it was never a problem with me.  
Now before deciding any thing I take few deep breaths and stick to decided things. |
| 3.    | Female | 1) Uneasiness before starting any work. (Apprehension)  
2) Unable to speak with confidence  
3) Lack of concentration | Problem has been overcome  
Problem has been overcome  
Improve in concentration | I take deep breaths before talking and starting any work. It makes things easier for me. I can also speak with confidence.  
My conversation power has increased.  
My concentration power has increased. |
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Female</td>
<td>1) Lack of concentration</td>
<td>Improvement in concentration</td>
<td>Now I can devote my time and efforts on one thing</td>
</tr>
<tr>
<td></td>
<td>2) Control on emotion</td>
<td>Great improvement</td>
<td>I can control my tears by taking deep breaths.</td>
</tr>
<tr>
<td></td>
<td>3) Getting too much angry</td>
<td>Achieve control</td>
<td>Before saying anything I take deep breaths which reduces my pitch of voice and it make the situation normal</td>
</tr>
<tr>
<td>5. Female</td>
<td>1) Lack of concentration</td>
<td>Improved</td>
<td>Now I can sit and study at stretch.</td>
</tr>
<tr>
<td></td>
<td>2) Restlessness</td>
<td>Problem has been overcome</td>
<td>Sitting at one place for long time is not a problem anymore.</td>
</tr>
<tr>
<td></td>
<td>3) Wandering thoughts.</td>
<td>Successful mastery</td>
<td>Now I know how we control our mind.</td>
</tr>
<tr>
<td>6. Male</td>
<td>1) Lack of concentration</td>
<td>Great improvement</td>
<td>I learn my notes much faster.</td>
</tr>
<tr>
<td></td>
<td>2) Weak memory</td>
<td>Problem has been overcome</td>
<td>It has disappeared from me</td>
</tr>
<tr>
<td></td>
<td>3) Regret a lot about past things</td>
<td>Problem has been overcome</td>
<td>Now I am a much relaxed person. Now I do not regret about past.</td>
</tr>
<tr>
<td>7. Male</td>
<td>1) Lack of concentration</td>
<td>Problem has been solved.</td>
<td>My uneasiness while doing things has disappeared, now I can do my work attentively</td>
</tr>
<tr>
<td></td>
<td>2) Getting angry quickly</td>
<td>Great improvement</td>
<td>Now I do not get irritated or angry on small-small things.</td>
</tr>
<tr>
<td></td>
<td>3) Weak memory</td>
<td>Successful mastery</td>
<td>It is unbelievable that now I do not forget things.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 minutes practice of meditation daily for 3 months</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| 8. | Male | 1) Getting angry quickly  
2) Too much use of foul language |
|   |   | Successful mastery  
Great improvement |
|   |   | Now I have control myself now I know when to become angry  
I have control over my words |
| 9. | Male | 1) Feeling heaviness and being sick  
2) Lack of concentration |
|   |   | Problem has been overcome  
Great improvement |
|   |   | The heaviness from my heart has disappeared  
Definitely my concentration level has increased. |
| 10. | Male | 1) Feeling of sadness  
2) Sleeplessness  
3) Poor Control on thoughts |
|   |   | Problem has been solved  
Problem has been overcome  
Successful mastery |
|   |   | Now I do not feel sad without any reason.  
It is no more a problem for me  
I can stop my mind from thinking absurd things. |
| 11. | Male | 1) Lack of concentration  
2) Easily irritated  
3) Lack of Tolerance |
|   |   | Great improvement  
Successful  
Great improvement |
|   |   | Now I don't get worried if there is a need to put attention on one thing  
Now I ignore small things in place of getting irritated by them  
I tolerate thing easily |
| 12. | Male | 1) Getting angry quickly  
2) Shouting |
|   |   | Problem has been solved  
Problem has been solved |
|   |   | Earlier, when I used to talk, I just shouted and got angry every time, but now it is not so |
### Table-15

**[CONDITION –C]**

**BRIEF REPORT OF SUBJECTS ADMINISTERED COGNITIVE INTERVENTION PLUS MEDITATION (N=9)**

<table>
<thead>
<tr>
<th>Subject No.</th>
<th>Gender</th>
<th>Problems requiring intervention as identified by the subject</th>
<th>Activities towards solution</th>
<th>Outcome</th>
<th>Identified distortion</th>
<th>Subjects statement about experiences after meditation</th>
</tr>
</thead>
</table>
| 1           | Female | a) habit of delaying work, and being late  
b) insincere attitude toward work  
c) difficulty in conversation  
d) lack of concentration | 1) Prepared activity schedule  
1) Before leaving the work say loudly to yourself “little bit more effort”  
1) Prepare a list of points to discuss before going to meet concerned person | Solved  
Solved  
Solved | All or none thinking | I get relaxed after doing meditation and my concentration level has increased. |
| 2           | Male   | a) laziness  
b) imagining the unachievable  
c) concern about studies  
d) lack of concentration | 1) prepared daily routine  
2) Why I am thinking it? Is it used full? Design pattern of studies. | Solved  
Solved  
Solved | Should statements | Doing meditation boosts up my level of activeness. |
| 3           | Male   | a) getting angry quickly  
ii) wanted to quit gutka  
iii) poor health | a) ask the question ‘Is this thing worth getting angry?’  
b) make some coping statements, like:  
“Should not get angry on small thing”  
“I should control my anger”. etc  
a) Make chits and write on it “I want to quit gutka”  
Read it every time it comes in front of you | Solved  
Solved  
Solved | Should statement | Meditation has helped me to quiten my internal noise and I feel something new in my personality |
<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>i) poor relationship with family members</th>
<th>Question your thoughts by asking what is the evidence that it is true? Or is there any other way to look at this situation</th>
<th>Solved</th>
<th>Emotional reasoning</th>
<th>I feel relaxed after meditation.</th>
</tr>
</thead>
</table>
|   |        | ii) way of talking                      | a) Be polite while talking  
b) Keep the pitch low  
c) Do not move your hand too much while talking  
d) Do not try to create style while talking be simple |       |                   |                                 |
|   |        | iii) habit of arguing                   | Automatically disappeared  
Meditation |       |                   |                                 |
|   |        |                                         |                                                                             |       |                   |                                 |
| 5 | Female | i) Getting angry quickly                | a) Keep silence  
b) Leave the place  
c) Take deep breath  
d) Do not speak until your breath is normal | Solved |                   | Taking deep breaths help me to control my anger. |
|   |        | ii) Lack of communication               | a) Before saying anything prepare the sentence in mind than speak | Solved | Should statement |                                 |
|   |        | iii) poor relationship with husband     | Automatically improved  
Meditation | Solved |                   |                                 |
<p>| 6 | Female | i) laziness/carelessness                | All these problems were inter related. So daily routine chart was made for the subject to follow | Unachieved |                   |                                 |
|   |        | ii) feeling of inferiority              |                                                                             |       |                   |                                 |
|   |        | iii) concern about studies              |                                                                             |       |                   |                                 |
|   |        |                                         |                                                                             |       |                   |                                 |</p>
<table>
<thead>
<tr>
<th>Gender</th>
<th>7 Female</th>
<th>i) Poor relationship with in laws</th>
<th>Question your thought by asking what is the evidence that it is true? What can you do to improve the condition (or situation)?</th>
<th>Overcome</th>
<th>Emotional reasoning</th>
<th>Now I control my tears by making my mind blank.</th>
</tr>
</thead>
</table>
|        |          | ii) Lack of conversation         | a) Gather information about topics of interest  
|        |          |                                 | b) Ask others if you don't know something and the other person knows  
|        |          |                                 | c) Develop qualities of good communicator  
|        |          | iii) Extra weight                | a) Take 5 rounds of stairs  
|        |          |                                 | b) Reduce tea intake  
|        |          |                                 | c) 1 glass of hot water in the morning  
|        |          |                                 | d) Make chits “I have to reduce weight” put it every where you spent quality time goal: 1 kg per week  
|        |          |                                 | Meditation                                                                                      |        | Solved             | |
| 8      | Female   | i) Anxiousness                  | Question your thought by asking “How continuing to think /feel this way is affecting your life”?  
|        |          | ii) Thinking too much negative  | Some coping statements were made: Question your thought by asking “Despite of the fact that things probably not go the way you want, can you still arrive some satisfaction from your life”?  
|        |          |                                 | Meditation                                                                                      |        | Overcome           | Through meditation I am able to stop my negative thoughts.  
<p>|        |          |                                 |                                                                                                  |        | Jumping to conclusion | |</p>
<table>
<thead>
<tr>
<th>Female</th>
<th>i) feelings of inferiority</th>
<th>Do a mirror exercise say to your self “I am beautiful Question your thought by asking what is the evidence that it is true”?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ii) Academic Achievement</td>
<td>Automatically solved</td>
</tr>
<tr>
<td></td>
<td>iii) Martian a social circle</td>
<td>Automatically solved</td>
</tr>
<tr>
<td></td>
<td>iv) Felling of incapability</td>
<td>Question your thought by asking what is the evidence it is true?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meditation</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Overcome</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solved</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Relaxed</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Discounting the positive</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>I feel light after doing meditation.</strong></td>
</tr>
</tbody>
</table>
Table-16
(CONDITION -D)
BRIEF REPORT OF SUBJECTS OF CONTROL GROUP (N=20)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Gender</th>
<th>Problems identified by Subject</th>
<th>Did the problem exist after three months</th>
</tr>
</thead>
</table>
| 1       | Female | 1) Carelessness  
          | 2) Getting angry easily  
          | 3) Feeling "Why it happens with me only?" | Yes  
          |        |                                              | Yes  
          |        |                                              | Yes  |
| 2       | Female | 1) Habit of delaying work  
          | 2) Moody  
          | 3) Carelessness | Yes  
          |        |                                              | Yes  
          |        |                                              | Yes  |
| 3       | Female | 1) Getting angry easily  
          | 2) Habit of delaying work  
          | 3) Lack of concentration | Yes  
          |        |                                              | Yes  
          |        |                                              | Yes  |
| 4       | Female | 1) Maintain good social circle  
          | 2) Lack of confidence  
          | 3) Get tense easily | Yes  
          |        |                                              | Yes  
<pre><code>      |        |                                              | Yes  |
</code></pre>
<table>
<thead>
<tr>
<th>Female</th>
<th>1) Lack of expression</th>
<th>2) Lack of confidence</th>
<th>3) Carelessness</th>
<th>1) Habit of delaying work</th>
<th>2) Getting angry easily</th>
<th>3) Feeling &quot;Why it happens with me only?&quot;</th>
<th>4) Overly concern for others</th>
<th>5) Laziness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*After three month of home intern*
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>After three month of time interval</th>
</tr>
</thead>
</table>
| 10. | Female | 1) Weak memory  
2) Lack of concentration  
3) Lack of confidence  
4) Getting angry easily | Yes  
Yes  
Yes  
Yes |
| 11 | Male | 1) Getting angry easily  
2) Lack of Tolerance  
3) Lack of concentration | Yes  
Yes  
Yes |
| 12 | Male | 1) Lack of confidence  
2) Getting angry easily  
3) Uneasiness | Yes  
Yes  
Yes |
| 13. | Male | 1) Getting angry easily  
2) Unable to concentrate on one thing  
3) Unability to mix with people | Yes  
Yes  
Yes |
| 14. | Male | 1) Lack of confidence  
2) Getting angry easily  
3) Unable to complete thing on time | Yes  
Yes  
Yes |
<table>
<thead>
<tr>
<th>No.</th>
<th>Gender</th>
<th>Symptoms</th>
<th>After three month interval</th>
</tr>
</thead>
</table>
| 15  | Male   | 1) Loneliness/unability to mix with people  
2) Lack of confidence  
3) Sense of unachievability | Yes  
Yes  
Yes |
| 16  | Male   | 1) Getting angry easily  
2) Confusion  
3) Think too much | Yes  
Yes  
Yes |
| 17  | Male   | 1) Self control knowingly I do wrong things  
2) Getting easily angry  
3) Speak with confidence | Yes  
Yes  
Yes |
| 18  | Male   | 1) Lack of concentration  
2) Uneasiness | Yes  
Yes |
| 19  | Male   | 1) Regret on past  
2) Getting angry easily  
3) Lack of concentration | Yes  
Yes  
Yes |
| 20  | Male   | 1) Getting angry easily  
2) Uneasiness  
3) Lack of Confidence | Yes  
Yes  
Yes |
In the following pages five case studies from the each intervention program are presented. In each intervention program initial weeks are spent in rapport formation and collecting information about the subject. In these weeks researcher discusses about the problem areas of the subject. After making their problem list, their particular intervention programs were conducted on each group, as mentioned in the methodology chapter. Each case study presents the experience the subjects had after overcoming his/her problems.

SUBJECT NO A-1
Gender: Female
Age: 22 years
Condition: Cognitive Intervention

Problems experienced by subject
1) Difficulty in communication
2) Low anger threshold
3) Viewing phenomena at extremes

The first priority problem selected by the subject was to overcome her inability to communicate and express.

She informed that she was unable to express, and when something unpleasant happened, (a) it remained in her mind for a long time, even when she did any other work or when she was talking to other persons, (b) she felt guilty for not thinking good about the other persons and (c) although she looked calm from outside, she felt there were “blasts inside”.

Following points were mutually decided to deal with the problems.
(a) Discuss the problem with concerned person (b) Be polite while discussing (c) Avoid blaming others (d) Stop conversation if it takes the form of argument.

During next five weeks subject tried to put above suggestion into practice. There were five meetings during the period and home work regarding applying the suggestions and writing about them in daily record sheet was conducted.

**Outcome:** She began to feel relaxed after overcoming this problem. She experienced a change in attitude and felt that if she could talk about her problems to others, then why not with the concerned person.

**Second priority problem was anger**

The strategy adopted to deal with the problem was to keep questioning “why am I angry?” In the process of questioning her thoughts, she found the following reasons a) she is impatient, b) She wanted everything perfect in work as well as relationships, c) She got angry only on the mistake of persons close to her, d) She got angry because she could not express her feelings.

**Following were the points decided upon to deal with the problem**

Three weeks were spent discussing this problem and writing about it in the daily record sheet. The process of questioning helped her in realizing what she should do. She attempted (a) to overcome her lack
of expression and say whatever she felt like saying. (b) to realize that everything can not be perfect. Complaints are a part of life. (c) she also realized that if any mistake is committed then it can be corrected with some effort and (d) it takes time to correct some mistakes.

Outcome: She reported that she does not get angry quickly and her anger is very much in control now.

Third priority problem was her habit of viewing phenomenon at extreme ends- totally good or totally bad, for example (a) she thinks about possibilities so extremely negative that they can rarely be real. (b) according to her people are either totally good or totally bad, one is a friend or is an enemy, nothing in between (c) because of this she makes issue of small things and takes wrong decisions.

By questioning her thought “why am I thinking this?”, she realized that she can have control over her problem.

After working three weeks on this problem and doing homework sincerely subject found that (a) her thinking became purposeful (b) she began to think about pros and cons of various things (c) feels she can control her thoughts.

Outcome: She feels relaxed as she has realistic expectations form others. She reported that “now I am much happier by making mistakes and learning from them”.

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**Distortion:** Distortions are the negative thought processes which result in making incorrect inferences. Subject’s distortion was “all or none thinking”. In Beck’s list of distortions, this has the first place. It is the polarization into two extreme categories of a phenomenon which really exist on the continuum. It is observed that because of this distortion, subject viewed every phenomena at extreme either any relationship or any work. When things are not perfect it creates anger in her. When she is not able to communicate it, the anger got piled up. Cognitive intervention helped the subject to identify her distortion.

The realization of distortion help her to correct her faulty inferences.

**SUBJECT NO A-2**
Gender: Female
Age: 20 years
Condition: Cognitive Intervention

**Problems experienced by the subject**
There were ten problems about which the subject talked in the initial two weeks but after some discussion, subject concluded that the following four problems were most important.
1) Poor command over English
2) Poor relationship with family members
3) Concern about studies
4) Habit of sleeping too much

Other problems were considered as tangential problems which would most likely be taken care of when the major problems were solved.

**First priority problem selected by subject was improving English.**
The following reason was cited for it being important (a)If a person is not able to speak in English she can not create good impression on others.(b)If someone asks something in English and she cannot reply.
She feel like “I am a flop”, “I feel inferior”. (c) It is a hindrance in understanding a class lecture.

Following points were mutually decided to do as homework to deal with the problem.

(a) Learn 15 word meanings daily (b) Read English newspaper daily (c) Converse with a friend in English for 10 minutes. (d) Translate one paragraph from Urdu to English.

Within three week, with three weekly sessions, she was able to learn the way to deal with this problem. Learning something new everyday added to her understanding which increased her confidence and reduce her feeling of inferiority. Questioning her thought “What can you do to solve this problem?” helped her to realize that nothing is difficult. If you do the work, it becomes easier.

Outcome: She has learned how to overcome this problem and became optimistic to solve next problem.

Second priority problem is to improve relationship with her family members. The reason she feels this problem as a pressure is difference between her thinking and their thinking (a) she is studying and other members do not give importance to her studies (b) her brother does not want to support her financially and says “stay at home and learn some house chores”. (c) although her mother does not stop her from studying, she does not favor or encourage her (d) her elder sisters come during exam period and pose an extra burden on
her. Moreover they get angry when she does not do their work. (e) her mother does not appreciate her work, and appears to love only her son (f) her mother does not teach her anything [Cooking, sewing etc although she is an expert in it] (g) she feels that because of all these tensions her memory is declining.

She attempted to solve this problem by communicating to them in every possible way but they all got angry on her.

Outcome: After doing all this she realized that she cannot change others when something is beyond her capabilities then why to take tension about it? So she decided not to take tension on herself, accept them as they are and find happiness in her life through her own activities.

Third problem is her “concern about studies”.

By overcoming the first problem she has understood that only she can do something to improve her condition. Now she is mentally prepared that by doing well in studies, she can build up confidence and overcome her feeling of inferiority and in the long run her financial conditions also. She feels if she gives paper in English than she will be able to score good marks.

Researcher and subject mutually make a pattern for study.

(a) read the selected topic in Urdu and understand it thoroughly,
(b) re-read the same topic in English from books, (c) learn the topic in
English or Urdu which one is easier, (d) she will spend 4 hours daily on studies

**Outcome:** By following this pattern for study she was able to learn one topic in four days. Repetition of same pattern for studying made her realize that is not impossible to give paper in English. She became optimistic that by following this pattern she will be able to score good marks in exam.

**Fourth problem has got automatically solved.**

With better time management, she completes her work and also has time to sleep. The intervention has got positive results. The entire four problems were solved. In the process of solving main problems the tangential problems got automatically solved. Firstly, her inability to express her emotions where earlier she was neither able to say something to the person to clarify her position nor she was able to cry, now she has overcome her problem. Now she can communicate with the concerned person and she can cry. Earlier when she was unable to weep she got tense and ‘wired up’. She used to feel low, tired and weak but now she feels very active and energetic. In this way she has overcome her problem of excessive sleep also.

Earlier she used to think that she loves cleanliness but now she has realized that she was obsessive about it and she has succeeded in eliminating these things from her personality.
Third thing was her inferiority complex which had certain reason like (a) she was unable to understand anything in class because of her poor English (b) at home no one give importance to her requests (c) no one appreciated her work (d) no one understood her. Now by overcoming her central problems she has realized that she does not need the appreciation of persons who do not understand her. By learning to manage her studies and English problem she got some confidence.

**Outcome:** She feels that building up confidence is in the control of individual himself. Now she feels a changed and happy person.

**Distortion:** Subject’s distortion was “Should Statements”. In Beck’s list of distortions this is distortion number seven. Should Statements consist of the tyrannical demands that are made on oneself, others or the world in general, which must become different in some way to what it actually is. Because of this distortion she wants her family members to behave in a particular way, she wants her mother to save money in some way or her brother should get up early in the morning to offer namaz so that God will bless him through increment in his earnings etc. When they do not do things according to her, she got disturbed. By identifying her distortion she realized that she is putting unnecessary demands on others and she cannot move other person according to her. In place of it she should put these efforts to improve her own condition. She works to improve her studies and realized that it is the individual’s own choice to be happy or sad.
SUBJECT NO A-3
Gender: Female
Age: 19 years
Condition: Cognitive Intervention

Problems experienced by the subject

1) Poor communication in English
2) Shyness
3) Lack of confidence

The first priority problem selected by the subject was to “improve her English”.

She considered it as a problem because a) she can not speak English although she can understand it, b) when girls around her use English words she feels inferior, c) since she had come in the hostel, where she was constantly exposed to girls speaking good English, this thing remained in her mind every moment, d) she feels anxious about it.

Following points were mutually decided to do as homework to deal with the problem.

(a) Learn five word daily and use them during conversation with friends, b) Read the newspaper loudly, c) Ask yourself “Is there anything to be anxious about”.

By doing homework sincerely she has overcome this problem and she realized that if a person does not know anything, she can definitely learn it. There is nothing to be anxious. It also helped her to gain confidence.

Outcome: The problem of weak English was solved to a great extent, but she realized that speaking in English was not her only problem,
her problem was not speaking, probably due to shyness. So she feels alone even in the gatherings of friends. Logically we came to her second problem.

**Second problem was her shyness.**

This was a problem because, a) even if she knows someone she feels hesitant to talk to the person, b) the other person always has to initiate, that is why others think she is proud, c) She needs others help to do most of her work because she cannot talk to new persons (like submitting a form, shopping, bargaining), d) If some guests come to her house, she cannot sit with them. If her mother is not at home the condition becomes worse, e) even if she knows the answer she cannot reply in the class, f) when someone asks something she cannot reply, f) when she needs someone’s help she cannot ask because she feels other person will think of her as selfish or foolish.

**Following were the points suggested to deal with the problem.**

a) Be first to say hello to someone, b) If you hesitate or feel anxious ask yourself, “Why am I anxious or hesitating”, c) Try to interact with one known person daily, d) Write in your sheet how did you feel after the interaction.

By doing homework sincerely she realized that she think too much about what the other person might be thinking about her, or they will laugh at her. But by interacting with one known person daily and checking these thought by questioning herself “what is the evidence
that it is true?” She realized that it is not true as no one is so mean as
to make unnecessary fun of others.

**Outcome:** She was able to control her shyness which was the
hindrance in her interaction with others. She had to make efforts to
interact but she feels good after interacting with others

**Third problem has got automatically solved.**

By overcoming her first and second problem she feels more confident.
She realized that confidence is something that individuals build
themselves. It is something inside the person that gives strength to the
person. Now she has joined Taikawandoo classes and NCC class as
she always wanted to see herself as a confident and strong girl.

**Outcome:** She feels herself more confident than earlier.

**Distortion:** Subject's distortion was “Mind Reading”. In Beck's list
of distortions, this is distortion number eleven. It means guessing the
content of someone's else thought without checking it out with them.
Because of this distortion she was not able to do any work with
confidence and most of the time she has to take help of others. She
was not able to talk with new persons and shy from the known persons
also. Cognitive intervention helped her to identify and overcome her
distortion.

**SUBJECT NO A-4**
Gender: Female
Age: 19 years
Condition: Cognitive Intervention
Problem experienced by the subject
1) Getting angry without justified provocation
2) Feeling of incapability
3) Too much anxiousness

First priority problem selected by subject was her anger.

a) If someone keeps back information or creates suspense she becomes angry, b) If someone talks in a slightly loud tone to her, she become angry and, c) she argues angrily to prove her point even if she is wrong, d) Sometime she gets angry without any reason and behaves rudely with other persons.

Following points were suggested to deal with the problem

a) Think before arguing whether you are right or wrong, b) If you are wrong, keep silent or leave the place, c) If you are right try to convince politely, d) Never argue when you know you are wrong, e) when you are angry without any reason sit alone, and write about it in your daily record sheet.

She took four weeks to learn to control her anger. Though she became angry but was able to control it before it took the form of a serious argument.

Outcome: She has learned to control her anger.

Second problem selected was her feeling of being incapable.

The situation in which this feeling is higher was (a) before exams. Even if she was fully prepared, she feels she will not remember anything, b) Even if the paper goes well, she thinks she will not get good marks, c) before doing anything she feels she will not able to
understand things quickly, d) Her English is not good that is why she cannot communicate well, so she hesitate to participate in any competition, f) when she thinks about her future she feels she will be incapable in future.

Researcher asked the subject to ask herself, whenever such feeling arise in your mind, “what is the evidence that it is true”?? Homework was devised in which she has to check this thought daily, e.g. after sessional test, evaluate your performance yourself, then compare it with the marks that teacher gives, participate in competitions and acknowledge your achievement.

Three weeks of sincere homework helped her to realize that she was underestimating her worth. She is not incapable at all, rather she got results according to her hard work.

**Outcome:** Participating in competitions increased her confidence. She realized that without doing any work how could one predict the result. Now she is optimistic about her future.

**Third priority problem was anxiousness**

This problem got automatically solved in the process of solving second problem. While facing a competition or exams and writing about it in her daily record sheet, she learned to face her anxiousness. She realized that some amount of anxiousness is normal but one should not allow it to affect the performance.

**Outcome:** She has learned to rationalize her anxiousness.
Distortion: Subject's distortion was "Mental Filter". In Beck's list of distortions this is distortion number second. It is excluding the positive information, leaving the ground dominated by negative information. She feels incapable even after doing that work efficiently like she feels I will not get good marks even after giving good exam, and remaining anxious about it. After getting good marks she does not acknowledge them as good marks. She gets angry on others and indulges in argument even if the other person is saying the right thing. Just because someone speaks loudly she concluded they want to fight with her. Cognitive intervention helped her to realize her distortion and she made efforts to control it.

SUBJECT NO A-8
Gender: Female
Age: 21 years
Group: Cognitive Intervention

Problems experienced by the subject
1) Lack of communication
2) Habit of thinking too much (almost to the level of obsession)
3) Habit of delaying work

First priority problem was his lack of communication

He informed that before saying anything he thinks so much that he cannot speak (a) he cannot defend himself (b) he cannot even ask the direction on road (c) sitting with many people creates tension for him because he has to think what and how to speak.
Following points were mutually decided to deal with the problem
(a) be first to say hello to a known person (b) do not predict what the
other person will think (c) if you feel like saying anything ,do not
think, just say it.

Within two weeks he observed that applying these suggestions to the
situation works. Without fully overcoming this problem he became
eager to move on to second problem as first and second problems
were interrelated.

Second problem identified by the subject was his habit of thinking too
much

He reported that when something happened (a) it remained in his mind
for 2-3 days (b) even after knowing that it is not worth thinking, he
keeps on thinking about it (c) even if he is talking to a friend and
something comes to his mind he leaves the place to think about it (d)
he reported that he feels compelled to think about it.

Following points were mutually decided to deal with the problem
(a)Try to control obsessive thinking by praying. This was subject’s
own suggestion, (b) do not stop routine work to indulge in thinking (c)
do not think about the consequences (d) question your thought “why I
am thinking this?” Is it useful? If found useless say to yourself “it is
not worth thinking”.

After two weeks, subject reported that it is not working. Researcher
advised to keep on doing his homework and also write the daily
record sheet, because it takes time for any new thinking to take place. Gradually the coping statement started showing its effect and after four weeks subject reported that he is able to reject his useless thought by saying “it is not worth thinking”

**Outcome:** He was satisfied by the result as it has reduced the burden from his mind. Now he thinks what he likes to think

**Third problem was his habit of delaying work**

He informed that because of this habit he had suffered a lot like a) several times he has lost his money b) he postponed buying a key ring and lost his keys several times: as a result he had to break his lock c) he has lost his High School marks sheet, phone charger and many things.

**Following were suggestions to deal with the problem**

Daily routine chart was devised so that he can do his routine work according to time, to avoid delay. Subject did not follow the routine as it created tension for him. He feels a burden in following the routine. After that researcher suggested to make weekly schedule, in which he can plan 2-3 works to do, one pending work and one some other work. He reported that this will not change him as he already has list of pending work in his pocket which is increasing day by day. He only does any work when it becomes unavoidable and most of the time he avoids the work so much that time to do that work had passed and he has to suffer. Researcher explained that after completing any work
you will feel so relaxed that will enhance your motivation to do next work. But he plainly refused it saying that "I cannot make so much effort, I want easy life. He does not want "now do this now do that". His philosophy is to attend a lecture and remain relaxed for the whole day, when the exam comes then study and be relaxed for the whole year.

**Outcome:** He was not able to overcome this problem because he was not ready to put efforts to solve this problem. He reported that I want to change but I cannot do things that are required to change me. He said “please tell me some indirect ways that can change me automatically”. In other words, although subject had stated procrastination as a problem, it was not really bothering him. He had evolved an easy life style that came through it and did not want to change it.

**Distortion:** Subject’s distortion was “Mind Reading”. In Beck’s list of distortions this is distortion number eleven. It means guessing the content of someone else’s thoughts without checking it out with them. It was observed that because of this distortion subject used to think too much before saying anything, because he thought, “If I will say this what will the other person think about me”, “The other person might perceive me as idiot”, etc. Due to such thoughts he was not able to say what he wanted to say. Cognitive intervention helped the
subject to identify this distortion through which he was able to control his habit of thinking too much and also his communication problem.

SUBJECT NO B-1
Gender: Female
Age: 19 years
Condition: Meditation

Problems experienced by the subject
1) Lack of confidence
2) Lack of concentration
3) Getting angry quickly

Statement about problems
1) Subject reported that she cannot talk calmly to the person. Some sort of hurries was inside me while doing work.
2) Subject cannot sit at one place even for short time. She cannot watch whole movie just because she has to sit at one place. Works are divided into small parts because she cannot concentrate on things for long time.
3) Small things irritate her and she becomes angry.

Practice of meditation
She was able to develop relaxation response in five weeks. Initially she experienced shivering while meditating and had difficulty in sitting at one place. Researcher asked the subject to divide the 20 minute duration of meditation into four parts (5 minute each) and then increase the time according to her convenience. Gradually her inner disturbance was reduce to great extend and she experienced peace inside herself. At one point of meditation she experienced that she is
sitting at place surrounded by whiteness and some light is coming on her.

**Outcome**

After practising meditation for 12 weeks, subject reported that she feels something new in her personality and feels more confident while doing things. Now she does not experience uneasiness while doing work or while sitting at one place. Now she does not get angry so easily. She get relaxed after meditation. She finds herself a calm person now.

**SUBJECT NO B-2**

Gender: Female  
Age: 22 years  
Condition: Meditation

**Problems experienced by the subject**

1) Weak memory  
2) Confusion

**Statement about problems**

1) Before going somewhere subject used to plan the thing but after reaching there she forgets the half things. During exam no matter how well she prepares, she forgets some parts of her notes.

2) Subject was confused in most of her works. She remained confused even after deciding things whether she had decided the right thing or not.

**Practise of meditation**

1 meditation with twenty minutes after developing meditation response she increased the time. During the practise of meditation when she
used to close her eyes she sees some circles are moving inside the circles but she continued the practise and those circles disappeared.

**Outcome**

After practising meditation subject reported that now she feels that she never had a problem of forgetting. She feels delighted by this change. she has also learned to deal with her second problem. She take deep breaths whenever she feel confused, she stick to decided thing. She enjoys meditation.

**SUBJECT NO B-3**  
Gender: Female  
Age: 20 years  
Condition: Meditation

**Problems experienced by the subject**  
1) Feeling of apprehension  
2) Lack of confidence  
3) Lack of concentration

**Statement about problems**

1) She used to feel uneasiness before beginning any work. She used to think so much and try to avoid starting any new work.

2) Even after knowing things she could not say it confidently. She do not know what type of doubt she had in her mind.

3) While doing any work her mind wandered at other places. If she tried to put her mind on the work she started feeling uneasiness and she left the work.
Practice of meditation

Subject was introduced to meditation and she started practising it. Initially she felt uneasiness in closing her eyes for 20 minutes, so the researcher advised her to open her eyes calmly, when such feeling arise and again close the eyes after taking few deep breaths. One day, while meditating, she experienced that her body is here and she is somewhere far away. Researcher advised to continue the practice of meditation.

Outcome: She was able to develop relaxation response in four weeks. Initially she had a problem in closing her but gradually she overcome it. She also learned to manage her other problems like whenever the feeling of uneasiness arose in doing any work she took some deep breaths and the feeling of uneasiness disappeared. Meditation also helped her to gain confidence and increase her concentration level.

SUBJECT NO B-8
Gender: Male
Age: 23 years
Condition: Meditation

Problems experienced by the subject
1) Getting angry quickly
2) Too much use of foul language
3) Lack of concentration

Statements about the problems
1) Subject reported that he becomes angry very easily. Sometimes he tried to control his anger but he could not do so.
2) When he becomes angry he started using foul language. He says he knows that it is wrong but he could not control it.

3) He feels difficulty in concentrating on things.

**Practice of meditation**

Subject was able to develop relaxation response in six weeks. Initially he put efforts to meditate but with repeated instruction he was able to learn how to meditate.

**Outcome**

After practising meditation subject was able to control his anger and his habit of using foul language. Now he uses his anger according to his convenience. He uses foul language when he feels the need to do so. His concentration level has also increased. He found meditation very useful.

**SUBJECT NO B-9**

Gender: Male  
Age: 22 years  
Condition: Meditation

**Problems experienced by the subject**

1) Feeling of heaviness and being sick
2) Lack of concentration

**Statements about problems**

1) All the required medical examination was done but no physical reason was found behind his sickness. Most of the time he used to feel some heaviness in his body. He did not feel like doing anything when such feelings arose.

2) He found it difficult to concentrate on things
Practice of Meditation

Subject was able to develop relaxation response in five weeks. During this period his feeling of sickness gradually decreased.

Outcome

After practising meditation for twelve weeks subject reported some new sort of freshness in his body. Gradually his feeling of sickness and heaviness reduced and now he rarely has this feeling of his concentration level also increased to great extend.

SUBJECT NO C-1
Gender: Female
Age: 21 years
Condition: Combined Intervention

Problems experienced by the subject
1) Habit of delaying work
2) Habit of being late
3) Insincere attitude towards work
4) Difficulty in communication
5) Lack of concentration

First priority problem selected was her habit of delaying work
a) she begins the work with full enthusiasm but delays it so much that most of the time it remained incomplete, b) most of the time she delays the work so much that the need to do that work is over, c) she feels the pressure of the pending list, nevertheless she does not do the work
Second priority problem selected was her habit of being late
a) despite being a good student she does not have good impression on
teachers because of this habit b) she is late in doing most of her work

Third priority problem was her insincere attitude towards work
Even the important work is not done sincerely, b) even after knowing
that she can do much better than what she is doing, she does not make
efforts to do things as required.

Following were the points decided upon to deal with the problem
As the above three problems were inter-related, it was decided to
make time and activity schedule to deal with the problem, in which
subject plans for the next day activities. When subject accomplishes
the activity, it gives sense of achievement to the subject. Planning the
activity in advance is a powerful means of overcoming lack of
motivation and taking the mind off problems or symptoms, and focus
attention to something else. Another homework was to practise
meditation at home.

In the initial two weeks subject reported the same condition that is,
despite feeling like doing things, she was not doing things. But the
detailed discussion and researcher’s repeated encouragement to look
out for the reason behind it helped the subject to realize that it was the
death of her father and aunt that has made her like this. She had
started thinking that no work is important enough to take tension. She
reported that before his death of the father, he had so many tensions
and responsibilities to accomplish. These tensions ruined his health and he left this world. After him, life went on as usual. Same condition was with her aunt, she had so many tensions which were extremely important for her but all those tensions ended with her life. She reported that before doing any work the first thing that comes to her mind was “is this work so important, what if die the next moment? By realizing that this is not the right attitude toward work she tried to control her thoughts by some coping statements like, life is for living not thinking about death. So one should being active, whenever one does any work one should do the best.

**Outcome:** She accepted that she had adopted wrong attitude towards the work. She made efforts to solve this problem and improvement was observed in her time and activity schedule.

**Fourth problem was her difficulty in communication**

a) if she has to say four things she will say only two 
b) if she calls someone to say something, she forgot it and after putting down the phone she would realize that she has not said what she had called for,
c) she always felt she has not said what she intended to say

**Following were the points to deal with the problem**

a) be relaxed while talking to the other person, b) make a list of points before meeting the concerned person, c) check the list before leaving the place
Three weeks of sincere efforts helped the subject to overcome her problem. Initially she was not able to apply all the point of the list but gradually she was able to put into practise all the points.

**Outcome:** She has learned to communicate things exactly as she would like to communicate.

**Fifth problem was her difficulty in concentrating on things**

a) She cannot finish work at once; b) she cannot concentrate on one thing, c) she tries to avoid work that required to concentrate on one thing.

In the process of solving above problems and sincerely doing meditation this problem got automatically solved.

**Outcome:** She feels extremely relaxed and active after overcoming these problems.

**Distortion:** Subject’s distortion was “All or none Thinking”. In Beck’s list of distortions this has the first place. It is the polarization into two extreme categories of a phenomenon which really exist on a continuum. This distortion was embedded in her attitude towards work. For doing any work, it has to be extremely important. More important than life, she does any work when she feels extreme pressure about it. Cognitive intervention helped her to realize her distortion and also helped her to find ways to overcome it. She gets relaxed after practising meditation.
SUBJECT NO C-3
Gender: Male
Age: 22 years
Condition: Combined Intervention

Problems experienced by the subject
1) Getting angry easily
2) Habit of eating gutka
3) Poor health

First priority problem selected was his anger

a) He gets angry on small things like, when someone is one or two minute late, when other person do not give priority to his work etc,
b) he gets angry even after knowing that he should not get angry on such small things
c) he does not show anger to other person but inwardly starts disliking him
d) he reported that he thinks in angry tone
e) if he sleeps in anger he hears loud noises
f) he avoids eating food in anger.

Following were the points decided upon to deal with the problem

Subject was asked to question himself “Is this thing worth getting angry” and some coping statements were made to deal with this problem like “I should not get angry on small thing”, “I should control my anger” etc. He was asked to practise meditation

Subject took seven weeks to learn to control his anger. Repeating coping statement to himself has helped him a lot. He took five weeks to be able to develop relaxation response

Outcome: He feels relaxed after being able to control his anger. It also improved his relationship with others.
Second priority problem selected was his habit of eating gutka
a) He knows this habit is effecting his health b) he looks odd while
eating it c) he wanted to quit eating it, but he is not able to do so.

Following were the points decided upon to deal with the problem
It was decided to make chits “I want to quit eating gutka” to deal with
this problem. Subject was asked to keep these chit at various places
like, in his pocket, at his study table, on the mirror
Initially this thing irritated him because it created tension for him. He
removed the chits from mirror and study table but kept in his pocket
only. Gradually he was able to reduce the amount of intake. Whenever
he put hand in pocket to take out money for buying it he felt burden in
buying gutka. But he was determined to quit it and able to do so in
five weeks.

Outcome: He was extremely happy after overcoming this habit. He
was delighted by this change.

Third priority problem was his poor health
This problem got automatically solved in the process of solving above
problems. After quitting gutka his diet increased and he was able to
improve his health

Outcome: He was amazed how he has overcome these problem. He
feels something new in his personality

Distortion: Subject’s distortion was “Should Statements”. In Beck’s
list of distortions this is distortion number seven. These consist of the
tyrannical demands that are made on oneself, others or the world in
general, which must become different in some way to what they
actually are. Because of this distortion he got angry on every one who
does not behave according to norms like the person should not be late
for appointment etc. this anger has ruined his health also. Through
cognitive intervention he was able to realize his distortion and able to
overcome his problems and meditation made him relaxed. He started
accepting people as they are.

SUBJECT NO C-6
Gender: Female
Age: 22 years
Condition: Combined Intervention

Problems experienced by the subject
1) Laziness/ carelessness
2) Feelings of inferiority
3) Poor academic achievement

First priority problem was her laziness
a) she is always late for the class, b) she sleeps too much c) she gets
easily tired d) she does not enjoy doing house chores e) most of her
work is not up to the mark.

Second priority problem was her feeling of inferiority
a) she feels she is not as active as her sisters b) she has plenty of free
time but nothing to do in that c) she wanted to learn many things like
driving a car, making chapatties and putting mehndi on hands etc. d)
she wanted to be as active as her sisters
Third problem was her poor academic performance

a) she is not able to understand lecture in class, b) she does not get good marks on what she writes in exam, c) she cannot make notes on her own d) she feel sick when sessionals are near.

All her three problems were inter-related so it was mutually decided to devised a daily routine chart, in which one activity for each problem was included. Routine was according to the convenience of subject, neither too hectic nor too light. For example, getting up on time in the morning, doing things on time, one hour for study, one hour for learning new activity and limited hours of sleep. At the end of the day, writing about how efficiently she accomplished her work.

Doing homework, that is meditation and writing daily record sheet, were the main strategies to deal with the problems.

Outcome: Even after twelve weeks subject was not able to overcome her problems because she was not sincere in doing her homework. Although she learned many things, like making chapatties, putting mehandi on hands but it made no significant change in her perception regarding the problems. While meditating she was not able to stop thoughts coming to her mind. She had to make great efforts to concentrate on breathing.
Researcher observed that following were the reasons for her insincerity:

a) researcher observed that subject did not comprehend things easily, her understanding was poor
b) because of this she could not learn things easily
c) she was youngest in the family so she does not have responsibility of any work
d) she is an overprotected child, her elder sister used to do most of her work

e) It makes no difference in the family when she does some work of her own, therefore there was no motivation from the family.

Distortion: No formally classified distortion was identified in this case. Researcher observed that subject has adopted a convenience approach. She knows what her problems are, and said she wanted to overcome them. But because most of her work was done by her sisters she did not feel the need to exert herself. Moreover, her overall understanding was very poor which was another reason behind her reluctance. She had to make very strenuous efforts to learn things which she avoided as much as possible. Therefore the researcher concluded these two reasons were behind this intervention not being successful, viz subject's poor understanding and her convenience approach that she has adopted. Any successful intervention required efforts on part of the subject. Therefore she was not able to learn meditation also.

SUBJECT NO C-8
Gender: Female
Age: 38 years  
Condition: Combined Intervention

**Problems experienced by the subject**
1) Too much anxiousness
2) Too much negative thinking

**First priority problem selected by the subject**
She informed that when she is anxious, she became speechless. For example (a) if someone speaks loudly, either younger or older, she cannot reply back (b) at work place if some changes are made, she cannot say it is inconvenient for me (c) she cannot defend herself when she is not wrong (d) it is affecting her health.

**Following were the points decided upon to deal with the problem**
The strategy adopted to deal with this problem was to meditate and write daily record sheet and saying coping statements to herself, like “I need not to be anxious” or “I should not care for the person who does not care for me”. During the next four sessions, researcher observed that most of the situations are serious and cannot be avoided but in place of being anxious if she remained calm, then she could cope more effectively. During this period she was sincere in doing homework. Within three weeks, she was able to develop relaxation response.

**Outcome:** She was able to reduce her level of anxiousness as she has realized (a) not to take the words to heart of persons who are not really concerned about her (b) that it is necessary to adjust at work
place because people there also adjust to her requirements (c) She became more aware about her health.

**Second priority problem was too much negative thinking**

She informed that all the time negative thoughts revolve in her mind such as (a) if the future of her daughter is not bright than it is better she should die today (b) her hard work is worthless as her problems were not reducing (c) since childhood nothing good happens in her life (d) her problems will end with her life.

**Following were the points decided upon to deal with the problem**

Questioning her thought by asking "despite the fact that things will probably not go the way you want, can you still derive some satisfaction from your life?"

She realized that (a) despite so much problem she is able to provide education to her children. They are her priority. She is working hard for them, her hard work is not worthless (b) today in the time of crises she is able to run her family with respect in the society (c) death is not the solution for anything, if we face a problem then there is solution of every problem.

**Outcome:** Now she has learned to look at the situations more positively. She feels relaxed and less burdened.

**Distortion:** Subject’s distortion was “Jumping to Conclusions”. In Beck’s list of distortions this is distortion number four. It is going straight to a negative interpretation when there is little or no evidence
to support this. Actually she had many problems but due to this distortion she used to make it worse by interpreting negatively and becoming anxious which in turn affects her health. By realizing her distortion she was able to normalize her thinking & become concerned about her health also. She has become more optimistic toward life.

SUBJECT NO C-9
Gender: Female
Age: 23 years
Condition: Combined Intervention

Problems experienced by the subject
1 Feelings of inferiority
2 Poor academic achievement
3 Inability to maintain a good social circle
4 Feeling of being a poor student

First priority problem selected by the subject was her feeling of inferiority

She feels (a) she is not beautiful (b) every person has got some talent but she does not have any (c) doing M.A. is no big deal (d) whatever the other person will do, he/she will definitely do better than me.

Following points were mutually decided upon to deal with the problem
(a) Do a mirror exercise: Dress neatly for college and stand in front of mirror and say “I am beautiful”. (b) Whenever feeling of inferiority comes to your mind ask yourself “what is the evidence that it is true?”. Practise meditation for twenty minutes daily.
It took six weeks to overcome this problem. Doing homework sincerely she realised she is not bad in studies as she used to think and by doing mirror exercise gradually she is able to gain confidence. She found the reason behind her inferiority complex was her socialization (upbringing). In childhood she has been taught "do not think others inferior to yourself". It took an extreme form in her and she feels everybody is superior to her. She was able to develop relaxation response in five weeks.

**Outcome:** She was able to realise her actual potential. She was able to relax herself after doing meditation.

**Second and third priority problem got solved in the process of solving first problem**

By overcoming her inferiority feeling she has learned to acknowledge her accomplishments. She realised that M.A is a step towards her academic achievement. It is not the goal. Maintaining a social circle is not a problem also as she herself withdrew from friends when she is upset or anxious.

**Fourth priority problem was her feeling of being an incapable student**

Because of this feeling (a) she has never dared to face any competitive exam (b) despite full preparation she feels I will not be able to achieve good marks (c) when the other person says she can do it easily, she feels pressurized by this
Subject keeps questioning her thought that “what is the evidence that it is true?” whenever the feeling of incapability arises in her.

**Outcome:** She was amazed how this feeling disappeared and how confident she has become. She now want to give competitive exam for Ph.D admission.

**Distortion:** Subject’s distortion was “Discounting the Positive”. In Beck’s list of distortions this is distortion number five, in which positive experiences are dismissed on ground such as “anyone could have done that”. It is observed that because of this distortion she used to perceive herself inferior in beauty, talent and studies. By identifying her distortion she was able to realize that it is not true. She realizes her actual potential. She has become more confident. Now she knows how to relax herself.

It may be noted that in group D, that is, control group, subjects were not given any intervention or instructions to solve their problems. No improvement was observed in their problems even after three months. Therefore no case studies have been presented from this group.

It can be concluded from the case studies presented in this chapter that meditation and cognitive restructuring are successful in controlling human tendency of neuroticism. However, it is difficult to say which technique is more useful because, as shown in Table-7, both the technique showed equal amount of improvement in their
neuroticism score. Therefore it is difficult to say which technique is better. However, combination of both the technique is better than only meditation or only cognitive intervention. One thing that researcher observed, was that the level of subjects genuine involvement affects the outcome of intervention towards mastering the technique of intervention, either meditation or cognitive restructuring influenced the success.

The more sincerely they learn the technique, the more quickly they overcome their problem. In cognitive intervention group subject number A-8 was not successful in solving all his problems because he was not sincere in doing his homework. He had developed an easy going life style and he was happy with that. In meditation group those subjects who are most sincere develop the relaxation response within two or three weeks and those subjects who are least sincere took more than four weeks. But sooner or later they all developed relaxation response. In combined group only subject number C-6 was not successful in solving her problem. Researcher observed that subject did not make sincere effort to learn the techniques, that is why she was neither able to overcome her problems nor she was able to develop relaxation response. Therefore, it is concluded that sincere effort on the part of subject is also an important factor for any intervention to be successful.
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
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; Marco 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 fairy 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
in the level of oxygen utilization and carbon dioxide elimination by
muscles. These findings have been verified by an impressive number of
studies. Reduced heart rate during meditation has been observed by--
et al 1991, Telles et al 1995. A decreased blood pressure has been
reported by many researchers (Wallace et al 1971, Wallace et al 1983,
oxygen consumption was found by Wallace 1970, Wilson et al 1987,
al 1987, Jevning et al 1992 reported decreased carbon dioxide generation
by muscles during meditation.

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.


Muris, Peter., Roelofs, Jeffrey., Rassin, Eric, Franken, Ingmar (2005). Mediating effect of rumination and worry on links between


Roy, Alec (2002). Childhood trauma and neuroticism as an adult: possible implication for the development of the common psychiatric disorder and suicidal behaviour. *Psychological Medicine, (Nov)*, vol. 32(8), 1471-1474


neuroticism and performance as a function of resources allocation.  
Journal of Applied Psychology, (Jan), vol. 91(1), 139-155.


**Information Obtained from Internet**


Appendices
APPENDICES

I. Hindi Version of H.J. Eysenck's M.P.I
II. Daily Record Sheet
   II. (A) First daily Record Sheet
   II. (B) Second Daily Record Sheet
III. Weekly Activity Schedule Sheet
Hindi Version of H.J. Eysenck's M.P.I.
PREPARED BY S. JALOTA AND S.D. KAPOOR

नॉइरसले की व्यक्तित्व परीक्षा

नाम .......................... ख्री/पुरुष, आयु ............ वर्ष ............
माता स्कूल/कालेज/पता .................................................................
तारीख .......................... पिता या अभिभावक या आपकी माता का अनुमानी आय: स० .............
व्यस्ताप/पेशा/धन्य .......................... .................................................................

निर्देश:
इस प्रश्नावली में आपके व्यवहार, भाव, कार्य आदि तथा सम्बन्धित कुछ प्रश्न पूछे गए हैं।
इन प्रश्नों के लिए कोई भी पूर्व निश्चित “सही” या “गलत” उत्तर नहीं हो सकते हैं। वर्तमानक एक ही परिस्थिति में यदि एक आदर्श को एक तरह का अनुभव होता है तो दूसरे को दूसरी तरह का अनुभव हो सकता है। अतः: आपके जो सही लगे वही आपके लिए ठीक उत्तर हैं।
अभ्यास के लिए नीचे दिए हुए उदाहरण से आप स्वयं समझ जाएंगे, जिसे आप मन में पहेलिए।

यदि आपको गप-शप करना पसंद है? ................. हैं  □  नहीं  □
जैसा कि आप देखते हैं कि हर एक प्रश्न के तीन सम्भावित उत्तर दिए गए हैं: “हाँ  □” “नहीं  □” तथा “सही  □” और “गलत  □” जो से दोनों सा उत्तर आपके भव अथवा कार्य को सही-सही प्रकट करता है और उसके बाद उत्तर प्रश्न के लागू दिए हुए खानों में से एक खाने में सही (✓) का निशान बनाया है।
अधिकांश अवस्थाओं में आपका उत्तर “हाँ” और “सही” में होना चाहिए। पर यदि आप किसी निश्चित न कर सकें तो “?” के साथ बाले खाने () में निशान लगा सकते हैं।
जल्दी में यदि आप गलत खाने में निशान लगा है, तो उसे दो बार काट कर ठीक स्थान पर निशान लगायें। प्रश्नों का उत्तर देने में शीघ्रता करें, बहुत अधिक सीधा-चिड़ियार में नत पड़े, बल्कि गुरुत्व मन में आये भिड़ना या उत्तर को उसी समय निशान लगा दिए।
किसी भी प्रश्न को गत ढीलिए, बल्कि हर एक प्रश्न का कुछ न कुछ उत्तर अवश्य दीजिए। साधारणतया कोई दस-पन्थिक मिनट में अधिकतर लोग समय कर लेते हैं। अतः: शीघ्रता से आर्थिक करके सारे प्रश्नों का उत्तर दे दिएहुए।

अव आप शुरू कर दीजिए।

1. यदि किसी एक अभि में बहुत जल्दी की जल्दी हो तो
   क्या उसे करने में आपकी सबसे ज्यादा खुशी होती है? ........ हैं  □  नहीं  □

2. क्या आपके अक्षर ऐसा भी लगता है जिसे बिना किसी बजह के ही अपने की कमी तो उदास और कभी प्रश्न पाते हैं? ................................. हैं  □  नहीं  □

3. जब कभी आप किसी बात पर मन लगाने की कोशिश करते हैं तो क्या आपका मन अक्षर चंचल होने लगता है? ........ हैं  □  नहीं  □
4. नए दोस्त बनाने में क्या आप अक्सर खुद कोशिश करते हैं?

5. क्या आप अपने कार्यों को जल्दी और निश्चल के साथ करना चाहते हैं?

6. क्या आप किसी के साथ बालं करते-करते कुछ सोचते रहते हैं?

7. क्या आप में कार्य करने की शक्ति कभी तो बहुत अधिक और कभी बहुत कम हो जाती है?

8. क्या आप अपने को हिंदू-दिन समझते हैं?

9. बद आपको समाज में मिलने-जुलने से रोक दिया जाए तो क्या आप दुखी होते?

10. क्या आपके विश्वास में अवसर उतार-चढ़ बना रहता है?

11. क्या आपका स्वभाव विना किसी बजार के ही बदलता रहता है?

12. क्या आप किसी कार्य की भोजना बनाने के बजाय उसे कर ही खाता पंजाब करते हैं?

13. क्या आप ऐसी बातों की कल्पना करते रहते हैं जो कभी पूरी तरह नहीं हो जानी?

14. क्या सामाजिक अवसरों पर (समारोह, सोसाइटी आदि में) आप पीछे रह जाते हैं?

15. क्या आप अपनी बीती बातों पर अक्सर सोचा करते हैं?

16. क्या आपको एक खुशनुमा पार्टी में खुश-मिल जाने में मुश्किल होती है?

17. क्या आप विना किसी बजार के ही अपने को अक्सर दुखी महसूस करते हैं?

18. क्या आप जस्तूत से स्वाद सबवाहना रहते हैं?

19. क्या आपकी अक्सर ऐसा लगता है कि आपने किसी बात को तय करने में बहुत देर लगा दी है?

20. क्या आप लोगों से मिलना पसंद करते हैं?

21. क्या आपकी अक्सर बिस्तर के कारण नीद नहीं आती?

22. क्या आप अपनी जान-प्रत्यावास, पिपी-चुपी होने तक ही सीमित रखना पसंद करते हैं?

23. क्या आप अक्सर किसी पाप का अपराध की भावनाओं से परेशान रहते हैं?
24. क्या आप अपने काम को अक्सर बहुत मन लगाकर
(गम्भीरता से) करते हैं? ............................ है □ ? □ नहीं □
25. क्या आप छोटी-छोटी बातें पर दुरा महसूस करते हैं? ...
है □ ? □ नहीं □
26. क्या आप बहुत तो समय, सोसायटियों में जाना पसंद करते हैं?
है □ ? □ नहीं □
27. क्या आप अपने को बहुत ही बेचैन व्यक्ति समझते हैं? .......
है □ ? □ नहीं □
28. क्या आप किसी दोम या टोलियों में काम करते समय नेता
(लोडर) बनना पसंद करते हैं? ............................ है □ ? □ नहीं □
29. क्या आप अक्सर अपने में अकेलापन महसूस करते हैं? ...
है □ ? □ नहीं □
30. मिन लिंग बाले व्यक्तियों (मर्द या औरत) के सामने क्या
आपको शर्म लगाती है? ............................ है □ ? □ नहीं □
31. क्या आप सपनों की दुनिया में रहना पसंद करते हैं? ........
है □ ? □ नहीं □
32. आपसे कोई बात कही जाने पर क्या आप उसका जवाब
tुरुत्त दे देते हैं? ............................ है □ ? □ नहीं □
33. क्या आप अपनी पिछली खुशियों की बातें पर विचार करने
में अधिक समय लगाते हैं? ............................ है □ ? □ नहीं □
34. क्या आप अपने को खुश-मिशाल समझते हैं? ............ है □ ? □ नहीं □
35. क्या आपने अक्सर अपने को बिना कारण उदासीन या
थक हुआ महसूस किया है? ............................ है □ ? □ नहीं □
36. क्या आप सामाजिक-मंडली में चुप रहना पसंद करते हैं? .
है □ ? □ नहीं □
37. किसी कठिनाई को पार कर लेने के बाद क्या आप
अक्सर यह सोचते हैं कि आपने वह नहीं किया जो
आपको करना चाहिए था?
है □ ? □ नहीं □
38. क्या सैर-सपाटे के बाद आप खुश आनन्द उठा सकते हैं?
है □ ? □ नहीं □
39. क्या आपके मन में इतने विचार आते हैं कि आप सो नहीं
सकते? ............................ है □ ? □ नहीं □
40. क्या आप ऐसा काम पसंद करते हैं जिसमें अधिक ध्यान
लगाना बड़ा है? ............................ है □ ? □ नहीं □
41. क्या कभी आपको किसी बार-बार आए हुए बेकार के
विचार के लिए परेशान किया है? ............................ है □ ? □ नहीं □
42. क्या आप अपने यायों को अक्सर लापरवाही से करते हैं?
है □ ? □ नहीं □
43. क्या आपको बहुत से सामान्य बी छोटी-छोटी बातें परेशान
कर देती हैं? ............................ है □ ? □ नहीं □
44. क्या दूसरे लोग आपको एक मस्त व्यक्ति समझते हैं? ...... हाँ ☐ ☐ ☐ नहीं ☐

45. क्या आप अक्सर निराश या दुखी रहते हैं? ............. हाँ ☐ ☐ ☐ नहीं ☐

46. क्या आप अपने को बहुत बादूंची मानते हैं? ............. हाँ ☐ ☐ ☐ नहीं ☐

47. क्या आपको कभी इतनी परिशानी होती है कि देर तक खुसी पर नहीं शेड सकते हैं? ......................... हाँ ☐ ☐ ☐ नहीं ☐

48. क्या आप दूसरों का मजाक उठाना पसंद करते हैं? ...... हाँ ☐ ☐ ☐ नहीं ☐

<table>
<thead>
<tr>
<th>Total of Long or Full Scale</th>
<th>N</th>
<th>E</th>
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<tbody>
<tr>
<td>Raw Scores</td>
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<tr>
<td>Standard Scores</td>
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APPENDIX II (A)

FIRST DAILY RECORD SHEET

<table>
<thead>
<tr>
<th>Situation</th>
<th>Emotions</th>
<th>Automatic Thoughts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How did I feel?</td>
<td>What went through my mind?</td>
</tr>
</tbody>
</table>
APPENDIX –II (B)

SECOND DAILY RECORD SHEET

<table>
<thead>
<tr>
<th>Situation</th>
<th>Emotions: How did I feel?</th>
<th>Automatic thoughts: What went through my mind just then?</th>
<th>Alternatives to automatic thoughts:</th>
<th>Out come</th>
</tr>
</thead>
</table>


APPENDIX -III

WEEKLY ACTIVITY SCHEDULE

<table>
<thead>
<tr>
<th>Time interval</th>
<th>Monday</th>
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