

**TEST ANXIETY AND COPING AMONG SENIOR
SECONDARY STUDENTS: A
PSYCHO-SOCIOLOGICAL STUDY**

*Dissertation submitted to the Jawaharlal Nehru University
in partial fulfilment of the requirements for the
award of the degree of*

MASTER OF PHILOSOPHY

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2003**



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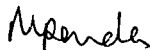
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21st July 2003

CERTIFICATE

This is to certify that the dissertation entitled "**Test-Anxiety and Coping among Senior Secondary Students: A Psychosociological Study**" submitted by **Dheeraj Kumar Gupta** in partial fulfilment for the award of the degree of **Master of Philosophy** of this University is his own original work. This dissertation has not ^{been} submitted for the award of any other degree to this University or any other University.

We recommend that this dissertation be placed before the examiners for evaluation.


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ACKNOWLEDGEMENT

At the outset, I have pleasure in accepting that the completion of this project has given me immense satisfaction. During the selection of the project topic, my supervisor Dr. (Mrs.) Minati Panda, played a key role. It was her contribution, constant support, active guidance and untiring patience that helped me and my study in meeting logical end. This work done under her has enabled me to enrich my knowledge and experience bank. I therefore wish to express my gratitude to her for the same.

I am extremely thankful to all the faculty members of Zakir Hussain Centre for Educational Studies for their encouragement and support. I would like to express my thanks to Dr. G.C.Pal regarding his suggestion in constructing the questionnaire and his valuable comments.

I also take this opportunity to say special thank to the authorities of the schools permitted for the data collection. I owe my debt to all those students who have given their responses as subjects in the study and co-operated with me throughout the period of investigation.

I am grateful to the library authorities at NCERT, NEEPA, JNU, and Psychology Deptt., University of Allahabad for allowing me to consult their valuable collections.

I would like to thank Mrs. Pingala, system analyst, SSS, JNU for her help in statistical analysis.

I am also thankful to my friends especially Rajeev, Basant and seniors for their affectionate encouragement and required help.

Finally, I warmly remember my parents, younger brother & sisters Ashish, Manjary, Bhawana, and Sapana, my maternal uncle Mr. Dharmendra Sahu, and other family members, who have always been at every stage and moments of my life. I also remember my loving grand father and Nanaji, who are unfortunately not in this world now. Without whom the life would have been a solitary confinement.

Dheeraj Kr Gupta

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CHAPTER-1

INTRODUCTION

The history of mankind starts with feelings of elation, happiness and pleasure characterising the primitive man on one hand and the feelings of fear, displeasure and stress on the other. From the early dawn of the world, anxiety has become most prominent in the thoughts of those theologians who are most intimately concerned with the political and economic issues of our day and those philosophers who have experienced in their own lives the cultural crisis and upheavals of society. Nonetheless, it is a phenomenon that is experienced by every common man in some degree at some point of time.

As we have entered in the new millennium, life has become extremely fast paced and complicated. Not only are changes occurring faster than before but the developments in many varied areas impinge simultaneously on the individual. The need to adapt to this rapid pace of change has resulted in the emergence of stress, anxiety, depression etc. as a popular construct both in public imagination as well as in academic discourse.

Any situation that threatens the well being of the organism is assumed to produce a state of anxiety. Conflicts and other type of frustrations are one source. Threats to physical harm, threats to one's self-esteem, and pressure to perform beyond one's capabilities also produce anxiety. Anxiety also refers to the unpleasant emotion characterised by terms like "worry," "apprehension," "dread," fear that we all experience at times in varying degrees. As a result of the feelings of stress, a characteristic emotional state is generated within the human organism. This emotional state consists of a generalised psycho-physiological tension called anxiety, which is combined with the psychological attitude of guilt.

Anxiety has been given an important place in existentialism where it is regarded as the threat of "non-being". This threat of non-being lies in the psychological and spiritual realms as well as in physical death, namely the threat of meaninglessness in one's existence. According to Neibuhr, as reported by May (1960), anxiety has its source in the fact that man is on the one hand involved like animals in contingencies and necessities of life but on the other hand has freedom.

Man being both bound and free, both limited and limitless is bound to feel anxious. Anxiety is the inevitable concomitant of paradox of freedom and finiteness in which man is involved. Similarly, according to Kierkegaard's conception, as reported by Dagaur (1988 a), anxiety is a natural outcome of the central thesis of existentialism. According to him, self-actualisation of individual is the goal of human life. In the process of individuation man is faced with 'possibility' and 'choice'. As the child grows he develops self-awareness that leads him to choose between alternatives and brings in confrontation with his environment. The problem, thus, concerns inner conflict, which results in anxiety.

Starting from these early conceptions of anxiety, regarding as a vague and diffused feeling through gradual development, anxiety has become the most prominent, pervasive and profound phenomenon in psychology as well as daily living.

R. R. Willoughby asserts, as reported by May (1960), "Anxiety is the most prominent mental characteristic of occidental civilisation". He presents statistical evidence in the form of rising incidence in three field of social pathology, namely suicide, divorce and mental disease rate and believes that these may reasonably be understood as reactions to anxiety. These three forms of socio-pathology can be due to other motivations than anxiety but they indicate radical social upheavals in society involving psychological and emotional trauma. May (1960) regards these three as symptoms and products of traumatically changing state of culture and anxiety too as a product and symptom of cultural state. Not only in the understanding and treatment of emotional disturbance has anxiety been recognised as the "nodal problem" but it is now seen nodal in such different areas as literature, sociology, education, political and economic thought, etc. The change from anxiety as a matter of "mood" to a recognition that it is an urgent issue to be defined and classified is the significant phenomena of our age.

Anxiety is the most widely used concept in the field of psychology. The personality theorists, learning theorists and psychoanalysts have all utilised it in some

way or the other. On the one hand investigators are concerned with its manifestations in different behavioural situations and on the other hand it has a long historical standing in the field of clinical psychology.

In addition to anxiety's nuclear meaning, probably acceptable to every one, that anxiety is a fearful, unpleasant feeling state with some physiological concomitants; there are many differences and nuances in the use of the term. Sometimes it is used as an altogether empirical construct, a desirable label for a class of related responses whose constituents are unpleasant feeling and the like, and sometimes, a hypothetical construct which can not be directly measured but give rise to observable phenomenon.

1.1 Distinguishing anxiety with other related terms:

Several related terms are frequently used synonymously with anxiety are- fear, stress, conflict, frustration and hassles. In this section the attempt has been made to distinguish conceptually these related terms.

Anxiety refers to, a specific unpleasurable state of tension that indicates the presence of some danger to the organism. A clinical definition of anxiety used for severe anxiety reactions says that *anxiety is a sudden onset of intense apprehension, fear, or terror, often associated with feelings of impending doom* (American Psychiatric Association, 1980). Fear is distinguished from anxiety in the sense that anxiety is a general state of apprehension while fear has a specific object. Stress refers to *the nonspecific response of the body to any demand made upon* (American Psychiatric Association, 1980). Distinguishing anxiety from stress has been found nearly impossible. Stress and anxiety both refer to the subjective psychological result of environmental pressure whereas the competition between two goals results in conflict. Frustration refers to the psychological state of unpleasuriness, when some barrier comes between the person and the attainment of a goal. However, hassles are the irritating, frustrating, distressing demands that in some degree characterise everyday transactions with the environment.

1.2 Test Anxiety:

Test situations occur so frequently and assume so much importance in the lives of so many people (Sarason, 1980). Tests have been the deep-rooted feature of the education. It helps the learner to know his/her strength and weakness. The process of testing in particular applies to students to monitor progress, diagnose problems, measure aptitude and intelligence, screen for admission to schools and place admitted students in their classes (Hembree, 1988). It provides the opportunity to the teacher to have an assessment of the student's performance and assessment of the efficacy of the teacher's learning strategy employed with view to provide differential treatments. In all these circumstances importance attached to the results of test by the society in the wake of growing competition create psychological fear and tension in the minds of the students as only achievers are glorified in the society. Anxiety due to test has been a universal and pervasive phenomenon in the sense that everyone irrespective of Gender, SES, family backgrounds, religion, age etc. experiences it. The difference is only in terms of the degrees. Tests fill one with fear, anxiety, uncertainty, depression, and dejection after failure (Hedge, 2001). The performance of test- anxious students stand to be depressed not from a lack of ability but a dysfunction in trying to show it (Hembree, 1988). Test-anxious students comprise a sizable number. Hill and Wigfield (1984) projected that there are around ten million pre-school students and the condition seems pervasive in the college as well (cited by Hembree, 1988, p 75). Test-anxiety seems to have immense psychological effect, which results in suicide, dropout, nervous breakdown, academic dishonesty (such as cheating, copying from others), and procrastination etc.

1.3 Definitions of test-anxiety:

Sarason (1961) provides one of the most cited definitions of test-anxiety. According to Sarason, "test-anxiety" responses are associated by personally threatening conditions in the environment. These responses interfere with on going task-relevant activity and lead to a lowering of performance level. He argues that anxiety seems likely to include both heightened physiological activity e.g. heart rate,

palmer-sweating and self-depreciating ruminations e.g. “I can’t pass this test”, “I wonder how other students are doing”.

Proposing a bi-dimensional theory, Alpert and Harber (1960) labelled the construct of test-anxiety as facilitating and debilitating anxieties. They suggested that the constructs might be independent such that persons may possess a large amount of both the anxieties or one but not the other or none of either.

In 1967, Libert and Morris introduced a two-component conceptualisation of anxiety into test-anxiety literature (Morris, David and Hutchings, 1981). According to this view the experience of anxiety is separable at least into two major components such as *Worry* and *Emotionality*. *Worry* refers to the cognitive elements of the anxiety experience such as negative expectations and cognitive concerns about oneself, the situation at hand and potential consequences. *Emotionality* refers to one’s perception of the anxiety experiences i.e. indications of automatic arousal and unpleasant feeling states such as nervousness and tension. They argue that cognitive and emotional components of the anxiety experience are expected to convey in the stress situation because the situation contain elements related to the arousal of each component. These two components are theorised to be conceptually independent.

Wine (1971) proposed an attentional theory according to which, individuals divide their attention between task-relevant activities and pre-occupation with worry, self-criticism and somatic concerns with less attention available for task directed efforts.

Speilberger (1972) proposed trait-state theory. A ‘state’ is a transitory emotional state of tension and nervous reaction whereas a ‘trait’ is chronic anxiety proneness characterised by a state reaction in a wide range of situations. According to this theory, test-anxiety is a form of trait anxiety. High anxious persons respond to testing with evaluations in a state. Worry is then triggered by the ‘state’ anxiety manifestations. These latter reactions also activate random error tendencies.

1.4 Theories of Anxiety:

(a) Psychoanalytic Approaches:

Freud's View of Anxiety:

Freud believed that neurotic anxiety is the result of an unconscious conflict between id impulses and the constraints imposed by ego and superego. Many id impulses pose threat to the individual because they are contradictory to personal values or because they are in opposition to what society permits. Individuals then engage in defensive manoeuvres to cope with the danger. These manoeuvres form an important part of Freud's theory of neurotic behaviour. They are all methods for keeping anxiety-producing impulses out of one's conscious awareness. According to Freud as reported by Dagaaur (1988 a), anxiety "is a special state of unpleasure with acts of discharge along particular path". Differentiating anxiety with fear, he describes three types of anxiety: reality anxiety, moral anxiety and neurotic anxiety. Reality anxiety is essentially synonymous with fear, and can be stated as a painful emotional experience caused due to dangerous situation in the environment, which threatens the functioning of the organism. This kind of anxiety is learned through simple learning processes related to or acquired from early experience of helplessness. Moral anxiety is the experience of guilt or shame and results from the perception of danger from the super-ego. It is a fear of being punished by parents. Neurotic anxiety is caused by perception of danger from Id-instincts, i.e. the danger feared in neurotic anxiety is simply that of inner impulse: it is a fear about what would happen should one fail to attain what one intends to attain. During anxiety, the ego perceives a danger situation. The danger may have its source in the external world (reality anxiety) or in the super-ego (moral anxiety) or in the Id (neurotic anxiety).

(b) Neo-Freudian Approaches:

Sullivan's Views:

According to Sullivan, man's existence is inconceivable without the existence of "other persons". Man starting from infancy to adulthood continually unfolds interpersonal relations with the "significant others". Anxiety, according to Sullivan,

as reported by Dagaur (1988a), arises solely from the dysfunctions in the interpersonal relations of the individual with the significant others. Therefore, all tensions do not produce anxiety. For example, tension associated with satisfaction of bodily needs does not produce anxiety, but the tension that is associated with interpersonal relations invariably causes anxiety. Anxiety may be mild or severe depending upon the real or fancied degree of significance of others, and the severity with which disapproval is communicated.

Jacobson's Views:

Jacobson postulated as reported by Dagaur (1988 a), that organism prefer certain paths for discharge of energy to gain pleasure. Pleasure is not simply tension reduction; it involves individual's preferences for particular tension discharge patterns. Pleasure principle, according to her is a general tendency of the organism to maintain an optimal level of excitation through the use of preferred pathways of discharge.

Jacobson argues that all affects (tensions) are not necessarily disruptive or unpleasant. Many affects are associated with normal ego functioning and their tensional qualities do not make them pleasant or unpleasant. She divides all affects into two categories: (1). Intro-systemic i.e. those arising directly from tension in the Id (sex etc.) or tension in the ego (fear, pain, objects of love and hate) and (2). Inter-systemic, i.e. those induced by tensions between (a) ego and id (complexes of disgust, shame and pity etc.), (b) ego and super-ego (guilt feeling depression etc.). So, anxiety is specific states of unpleasure induced by inter-systemic tensions. Jacobson considers anxiety as an adaptive phenomenon that the ego utilises in continuing development and differentiation. Thus, anxiety is a danger to ego; it also provides opportunity for the development of new and more appropriate discharge pathways i.e. behaviour.

Ernest Schachel's Views:

Ernest Schachel believes that man lives throughout his life in a conflict of emergence from embeddedness (Dagaur, 1988 a). The principle of emergence refers to individual's interests in and inclination towards, an ever-expanding stimulating

world. The principle of embeddedness on the other hand, refers to individual's needs for safety and security. So conflict lies in individual's need to realise his or her potentialities while at the same time preserving his safety and familiarity with both himself and his environment.

Anxiety arises with any separation from the state of embeddedness or with the threat of such separation. The attempt to emerge from embeddedness sets off anxiety and individual in encountering the world experiences some kind of helplessness. The area in which the threat of separation is most readily experienced, the extent of these areas and kinds of events or situations which are most likely to constitute such a threat, differ from one person to another in accordance with their life histories and probably also with the in-born predispositions towards anxiety.

Otto Rank's View:

Otto Rank as reported by Dagaur (1988a), relates anxiety to the central problem of human development viz. individuation- the need to live as an autonomous individual. Anxiety, for him, is apprehension involved in separation. In the process of individuation, one faces two forms of fears- the life fear and the death fear. The life fear is anxiety at going forward and becoming an individual, i.e. apprehension involved in every new possibility of an autonomous activity. The death fear is anxiety at going backward- losing individuality.

K. Horney's View:

According to K. Horney, anxiety is a threat to what she called the "core or essence" of personality. It is a reaction to threat to what the individual holds essential to his existence as personality (Dagaur 1988a). Individual develops some pattern as the basis of one's safety. Any thing, which is likely to jeopardise the individual's specific protective pursuits, may provoke anxiety. Horney distinguishes between fear and anxiety: fear is a reaction to specific danger to which specific adjustment at least in theory can be made, while anxiety is characterised by diffuseness and uncertainty.

(c) Learning Theories:

Anxiety as a learned response:

Learning theory focuses not on internal conflicts but on ways in which anxiety becomes associated with certain situations via learning. In a classic experiment by John B. Watson, a young child (11-month-old boy) learned to be afraid of a rat because of its association with fear-producing stimulus. Watson and Rayner in their experiment found that this fear generalised to other furry objects as well. Situations that were anxiety producing in childhood may continue to be avoided in adulthood, because the individual has never reappraised the threat or developed ways of coping with it.

Apart from this, some fears have payoff i.e. immediate positive reinforces. Fear of examination may get attention of parents, friends, teachers and significant others. Fears may get sympathy. However, more often negative reinforcement is involved in fear development. Fears are self-developing if someone runs away from and/or avoid the frightening situation. For example, suppose someone have fear of being in evaluative situation. Then by avoiding an evaluative situation he/she may get great relief. This relief is negative reinforcement. Thus in future, the tendency to engage in avoiding behaviours in the evaluative situation would be strengthened.

Fear or anxiety may also be learned through vicarious reinforcement. For example, if a child observes that everybody (significant others) respond to a particular situation in anxious way and perceive that situation as a threatening, it is very likely that he/she also respond to that situation in anxious way and perceive that situation as threatening.

(d) Socio-Cultural Approach:

E. Fromm as reported by Dagaar (1988a), view anxiety in the context of individual freedom and isolation. A child begins his life with the primary ties with the parents. During the process of growth he tends to be free from parental dependency

and acquires individuation. The process of individuation involves some actual or potential threats. This separation from the world which, in comparison with one's individual existence, is overwhelmingly strong and powerful, and often threatening and dangerous, creates a feeling of powerlessness and anxiety. As long as one was integral part of the world, unaware of the possibilities and responsibilities of the individual action, one needs not to be afraid of it.

Fromm holds that the nature of freedom is dialectical. There are two possibilities: either one accepts to confront anxiety with a view to overcome it, or, one tries to allay it. The first possibility occurs, while separating the ties (to acquire freedom); the individual is ready for new relatedness or new constellations. Such a state of affairs leads one to healthy and happy growth and development. In the second possibility the individual either accepts complete conformity to social demands (there by surrendering his freedom) or tends to develop new dependencies making compromises with anxiety-producing situation. According to Fromm, in any of these ways the escape from anxiety is only temporary. This apparently leads to adaptation to circumstances but ultimately may take a severe pathological form.

(e) Existentialist Approach:

We all strive to make sense of our existence. Since we can influence our future, we feel some responsibility for our lives. According to the Existentialist, anxiety comes from the threat of non-being, death and from the dread of having to change to become something different. Fears are attacks from the outside, whereas anxiety reflects an internal threat to our very essence as a person. Anything that questions our values, anything that alienates us from others or from nature, and anything that challenges our ideas about the meaning of life causes anxiety. According to this theory, anxiety is not learned, we are born with it, and it is in the nature of humans. Serious anxiety reduces our ability to guide our lives and we end up feeling life is meaningless, that is called existential anxiety.

According to May (1950), anxiety is a threat to the “core” of essence of personality- the security base of a person or the values held essential by an individual to live as an integrated personality. Differentiating anxiety from fear, May holds that anxiety response is undifferentiated while the fear response is differentiated. What is threatened in anxiety experience is the security base, which cannot be specifically located.

(f) Integrative View:

Fischer as reported by Dagaur (1988a) examined the concepts of anxiety from the various viewpoints and offers, what he calls “Integrative” view of anxiety. He defines anxiety as “the experience of being impelled to actualise for which abilities have already been apprehended as uncertain”.

Dagaur (1988 a) reports that in Fisher’s definition the term “uncertain” is very important. If one were certain of success there would not have been any question of being anxious. And even if one were sure of failure, the need to become anxious would not arise. The scope of anxiety in Fischer’s definition is especially important in “test-anxiety”, as the notion circumscribe the area of anxiety to one’s abilities (Dagaur, 1988a).

1.5 Nature of Anxiety:

It has been said that anxiety is the most basic emotion. In a sense it is true because anxiety is a primitive response to threat. It has its origin in the behaviour of lower animals. When animals are threatened by danger, they must fight or escape if they are to survive. In either case, a complex physiological reaction prepares the animals so that it is better equipped to meet the danger. These emergency changes are of various kinds. One of the most basic responses is the release of the hormone adrenaline by adrenal glands. The increased presence of the hormone in the body results in a speeding up of the heartbeat, increased blood pressure, more rapid breathing and to release of strength-giving sugars stored in the liver. All these

changes are meant to prepare the animals to meet the threat of physical energy. The same reactions occur when people are faced with threatening situations. However, while lower animals are threatened primarily by external environmental dangers, people are also threatened by their own impulses. The psychodynamic model maintains that the awareness of the physiological changes in the body is anxiety, and that it appears when unconscious conflicts threaten to become conscious.

One of the problems associated with the concept of anxiety is the necessity to differentiate it from fear. While this differentiation is not always easy or even possible; fear is a relatively well-defined response to a real or imagined danger and anxiety is more likely to be vague, diffuse, and undefined. Anxiety is conceptualised as a specific emotion. Theories of different emotions, describe it as a fundamental emotion where as cognitive theories of emotions conceptualise it as dependent on special appraisals. In stress research, anxiety is described as a typical stress emotion (Folkins and Sime, 1981). Although anxiety is a negative emotion like fear, a number of authors have distinguished between anxiety and fear. From an evolutionary perspective, Pongratz (1973), views fear as a biological, self-protective, adaptive mechanism whereas anxiety is associated with learning and socialisation processes. Lazarus (1966) regards anxiety as a signal, which is conveyed via symbolic elements. Hence, from an evolutionary perspective, it can be said that anxiety as opposed to fear, is associated with the development of the higher nervous system and the abilities of abstraction and anticipation.

Anxiety is often treated as similar to stress. Spielberger (1972) defines stress as closely related to state and trait anxiety. He limits the term 'stress' to objective conditions (stimuli) in the personal environment. The individual's subjective appraisal of these stimuli as physically or psychologically threatening is denoted by the term 'threat'. As a consequence of threat, the person responds with anxiety.

Another problem involves the difference between normal anxiety and pathological anxiety. The first occurs when the reasons for the anxiety are obvious.

The second occurs when the reasons are not apparent. Most of the anxiety that grows out of unconscious conflict belongs to the pathological anxiety.

Anxiety plays two major roles in the dynamics of personality organisation and disorganisation. First, it serves as a signal; second, it is a symptom. Anxiety as a signal alerts one to impending danger. It enables a person to set into motion the defensive and adjustive processes, which will serve to protect him or her against the inner threats. Anxiety as a symptom is an expression of the breakdown of the defensive operations in the personality. In this role, anxiety becomes the basic symptom of a number of personality disturbances.

Analysis of anxiety from the sociological perspective reveals that social context is the essential background in which it happens to ensure. Without consideration of social living, anxiety cannot and does not occur. Second, uncertainty of results/consequences of one's self-initiated actions is necessary condition of its occurrence. In most cases an individual feels anxious because of the apprehension of his being disapproved by the "significant others". The other source of anxiety is due to the subjective feelings of uncertainty while one wills to actualise. It is also an apprehension of being disapproved in the event of failure. The individual, in such a situation, is haunted by the apprehension about what would happen, should his abilities fail him. It is observed that inferior self-perception is the basis of this kind of anxiety and the main area is of human competence. Dagaur (1988 a) calls such an anxiety as "inferiority anxiety". The very idea of failure of what one's will to actualise makes one feel inferior to others and hence anxious.

1.6 Coping: The Concept:

When the individuals are under continuous pressure, strain and stress whether real or anticipatory, it puts extra demands on them. The stress states are painful for them, they want to prevent or alleviate it or else they want to cope with these. They may use an array of overt and covert behaviours and strategies to get away from these. Coping plays a central role in managing the stress producing circumstances.

Coping refers to the responses, which are directed towards dealing with demands made upon the individual. Coping behaviour has been defined by Mechanic (1967) as “the application of a person’s acquired skills, technique and knowledge to solve the problems that he/she is facing”. When a person is exposed to a stressful demand, he/she initiates behaviours and thoughts, which attempt to remove the stress or to reinterpret its effects. Thus, coping is the action taken in the face of stressful situation in order to make an effort to lessen the threat to one-self. Through coping process, a person can deal with anxiety by maintaining contact with reality, openly exploring a full range of options, consider the consequences of various courses of thinking and action, be creative and flexible and realistically manage and express feelings and desires (Hann, 1982). How far the person is able to successfully cope with anxiety depends to some extent on whether the coping strategy employed is adaptive for that particular situation. Coping may reduce the negative effects of anxiety, or it may create new problem.

According to Lazarus (1966, 1981), coping refers broadly to the efforts of the person to manage environmental and internal demands. Coping is synonymous with adjustment in the sense that both are problem-solving processes in the face of demands and difficulties. Adaptation is the generic term for all the behavioural and physiological process, relevant to biological survival, health and the maintenance of the quality of individual and group life (Coelho et al., 1974). Coping behaviour in this sense is a subject of adjustment behaviour. Adjustment is a broader concept referring to all reactions to environmental and internal demands while coping is restricted to the actions of a person towards handling stressful demands. Thus, the term “coping” is preferred when the focus is narrowed down to adoptive efforts under condition of threat, challenge and harm when an automatic adoptive response is not readily available. In this case, the individual must evolve ways for handling a difficult transaction with the environment and make an effort to “master” conditions of harm.

Coping strategies may emphasise the physical or physiological component of stress. Coping skills may involve thinking about stressors as challenges rather than threats i.e. changing the way that the stressors are perceived. They may include overt

course of action to take. It also encompasses complex patterns of acts extended over a period of time, which evolves with time as the adoptive problem and psychological state of the individual changes. Cognitive methods involve changing how people think about and interpret stressors and thus changing how they respond to them. Cognitive reappraisal and restructuring can help one to think of a stressful event as a positive challenge. Cognitive coping strategies help people think more constructively, rationally and calmly when they experience stress. If constructive new thoughts are actively practiced in a place of worrying or frightening thoughts, it can make the stressors seem less disruptive, threatening and eliminate much of the arousal associated with stress.

1.7 Functions of Coping:

Coping can serve one of the two functions, problem solving or emotion-regulation (Hamburg, Coelho and Adams 1974; Lazarus, 1975). Problem solving functions involve dealing with internal and environmental demands that create threat, such as studying for an exam or confronting a noisy neighbour. Emotion regulating functions involve efforts to modify the distress that accompanies threat, for example by denying that the threat exists or by drinking to excess. Pearlin and Schooler (1978) considered functions of coping by making a distinction between behaviours of problem solving and those that control the emotional response itself.

However, the distinction is not always easy to make, because a similar behaviour can serve several functions. Folkman, Lazarus, Dunkel-Schetter, DeLongis and Gruen (1986) suggested that one might need to know the context before being able to distinguish which function a coping strategy serves. Most people use both types of strategies simultaneously.

1.8 Types of Coping:

Although several attempts have been made to classify appraisal and coping responses (Haan, 1977; Moos, 1976; Lazarus and Launier, 1978), no accepted method has yet emerged. Coping strategies could be classified in three broad categories:

(a) Behavioural Coping Techniques:

This involves rearranging the world in ways that minimise the impact of stressors. Taking action to eliminate the threat (or potential threat) not only removes the present demands but also reduces the possibility of continued stress. For instances, carefully planning strategies for handling problems to eliminate the source of stress, learning how to relax or getting enough rest, doing exercise etc.

(b) Physiological Coping Techniques:

The pattern of stress response sometimes treated with the help of tranquillising drugs, alcohol etc. These help in reducing the effects of stress over the short term but also tend to create problems of their own. When used on a regular basis, they lead to problems such as addiction and physical illness. Reduction of physiological stress through non-chemical means include relaxation and meditation.

(c) Cognitive Coping Techniques:

Coping in the psychological sense refers to specific adaptation or single acts. Although there are many ways to classify the coping response, most approaches distinguish between strategies that are active in nature and oriented towards confronting the problem and strategies that entail an effort to reduce tension by avoiding dealing with the problem. Moss and Billing (1978) have organised the dimension of appraisal and coping in the selected measurement procedures into three domains according to their primary focus on appraising and reappraising a situation, dealing with reality of the situation and handling the emotions aroused by situation. They used this preliminary classification scheme to categorise coping responses into nine types.

(I) Appraisal Focused Coping

Appraisal focused coping involves attempts to define the meaning of a situation and includes strategies such as logical analysis and redefinition.

- 1) Logical Analysis- Strategies in this category include trying to identify the cause of the problem, paying attention to one aspect of the situation at a time, drawing on relevant past experiences and mentally rehearsing possible actions and their consequences.
- 2) Cognitive Redefinition- This category includes cognitive strategies by which an individual accepts the reality of the situation but restructures it to find something favourable. Such strategies involve reminding oneself as well off with respect to other people, concentrating on something good that might develop from the situation and altering values and priorities in line with changing reality.
- 3) Cognitive Avoidance- This category include such strategies as denying fear or anxiety, trying to forget the whole situation, refusing to believe that the problem really exists, and engaging in wishful fantasies instead of thinking realistically about the problem.

(II) Problem-Focused Coping

Problem-focused coping seeks to modify or eliminate the source of stress or anxiety to deal with the tangible consequences of a problem or actively to change the self and develop a more satisfying situation.

- 1) Seek Information or Advice- Responses in this category include seeking more information about the situation, obtaining direction and guidance from an authority, talking with one's parents, friends, and relatives about the problem; and asking someone to provide specific kind of help.
- 2) Take Problem-Solving Action- These strategies include making alternative plans, taking specific action to deal directly with the situation, learning new skills directed at the problem and negotiating and compromising to try to resolve the issue.
- 3) Develop Alternative Rewards- This strategy involves attempts to deal with the problematic situation by changing one's activities or creating new sources of satisfaction. Examples are, building alternative social relationships, developing

greater autonomy and independence and engaging in substitute pursuits such as doing volunteer work or studying religion or philosophy.

(III) Emotion Focused Coping

Emotion-focused coping includes responses whose primary function is to manage the emotions aroused by stressors and thereby maintain an affective equilibrium.

- 1) Affective Regulation- These strategies involve direct effort to control the emotions aroused by the problem by consciously postponing to pay attention to an impulse (suppression), experiencing and working through one's feeling, trying not to be bothered by conflicting feelings, maintain a sense of pride and keeping a stiff upper lip and tolerating ambiguity by withholding immediate action.
- 2) Resigned Acceptance- This category includes responses such as waiting for time to remedy the problem, expecting the worse, accepting the situation as it is, deciding that nothing can be done to challenge things and submitting to fate.
- 3) Emotional Discharge- This category includes the verbal expressions to let off steam, crying, smoking, and engaging in impulsive acting out. These responses may involve a failure of affective regulation.

Maddi and Kobasa (1984) talked about two approaches of coping:

- a) Transformational Approach- In transformational approach one interacts with the events and thinks about them optimistically and acts towards them decisively, to change them in a less threatening events or situations.
- b) Regressive Approach- Regressive approach includes strategies wherein one thinks about the events pessimistically and acts evasively to avoid contact with them.

Lazarus (1975) suggested a classification of coping process that emphasises two major categories- *direct actions and palliative modes*. Direct action includes behaviours or actions which when performed by the organism in face of a stressful situation are expected to bring about a change in stress causing environment. Palliative mode of coping refers to those thoughts or actions whose purpose is to relieve the organism of any emotional impact of threatening situation or put pressure on the individual. There is however, no clear consensus as to which coping strategies or modes of coping are most effective.

1.9 The Present Study:

Title of the Study:

“Test Anxiety and Coping among Sr. Secondary Students: A Psycho-Sociological Study”.

The present study *“Test-Anxiety and Coping among Sr. Secondary Students: A Psycho-Sociological Study”* is an attempt to study the phenomenon of test-anxiety from psycho-social perspective.

Researches on test-anxiety typically have focused on methodology of measuring the construct, the impact of test-anxiety on academic performance and other behavioural outcomes. However, despite decades of research into feelings of anxiety during evaluative situations, there is little agreement on many issues central to the experience of its causes and its impact.

Early works defined test-anxiety as a singular attribute that could be measured with unidimensional scales (Sarason, 1960). However, even with early studies employing unidimensional measures of test-anxiety, there was a perception that there were at least two manifestations of test-anxiety. Sarason (1961) proposed that interfering anxieties encountered in evaluative situations were likely to be a combination of “heightened physiological activity” and “self-depreciating ruminations”. Since the early 1970s there has been wide acceptance of the view that the test-anxiety is composed of two dimensions (traditionally refers to as emotionality and worry). According to Cassady and Johnson (2001), the previously used label of

“worry” insufficiently represents the broad class of cognitive manifestations of individual’s cognitive reactions to evaluative situations, or internal dialogue regarding evaluative situations, in the times prior to, during and after evaluative tasks. According to them, thoughts commonly entertained by individuals dealing with high levels of cognitive test-anxiety centre on:

- (a) Comparing self performance with peers
- (b) Considering the consequences of failure
- (c) Low level of confidence in performance
- (d) Excessive worry over evaluation
- (e) Causing sorrow to the parents etc.

The learning theories, as discussed in the earlier sections of the chapter, defined anxiety as a learnt response, which is conditioned. Since learning cannot take place in social vacuum, social aspects could be considered important in the experience of the test anxiety. Considering that man as phenomenological self exists in a social matrix with complexity of involvements with other “being” and “thing”, he inherently needs appreciation and approbation of all his actions from those he consider significant and he does not want to be depreciated or disapproved for his action. The significance of the social aspects in anxiety could also be traced into the Neo-Freudian’s approach such as Sullivan’s view (according to which interpersonal relationships with significant others is important source of anxiety) and Socio-Cultural perspective of E. Fromm.

Thus, the social context is the essential background, which determines the levels and the kinds of experienced anxiety. It could be said that without considering the social milieu, anxiety cannot be fully understood. Social context of the individual affects several aspects such as expectations of the parents and significant others, the importance and values attached to the grades, the role it plays in determining the choices and the future prospects both in academics and non-academic areas, the contribution of all these in shaping the world view of children etc. It is also important to understand how a child perceived these, how he reacts in a critical situation and

meets the demands posed by the self and society and maintain a particular kind of self-image both private and public. All these determine the academic behaviours of the child and his/her psychological well-being. Therefore it becomes important to study the concept of test-anxiety from a psycho-social perspective.

A number of research studies have already supported the fact that the expectations from male and female children differs, and so also among the children of different socio-economic backgrounds. Thus, a study of test anxiety should be rooted in the existing socio-cultural milieus.

The problem of coping with stress and pressure situations belongs to the area of psychology where meaning of life is seen as having a great positive role. Life meaning is considered an important source of positive coping and stress management in several theories. As mentioned by Peter Halama, meaning of life can be regarded as a strong protective factor in maintaining health and coping ability. According to Halama, in the recent years meaning of life has been regarded as a more complex construct. The dimensions most often discussed relate to the way in which meaning is experienced (structural component), the contents of experience (source of meaning), the diversity with which meaning is experienced (breadth) and the quality of experience of meaning (depth). Since the meaning of life to the individual depends to a large extent on his values, the way of perceiving the situation etc., which are the result of socialisation during their childhood. Thus, it could be argued that there would be differences in the meaning of the life across different gender and SES groups and hence the coping strategies could also differ. Some research studies conducted in this area have already supported that fact that coping strategies differ across gender and SES.

Therefore, adoption of a psycho-sociological perspective would provide valuable insights in the area and will help in understanding test anxiety and designing interventions to overcome with test-anxiety.

In the present study the phenomenon of 'Test Anxiety', 'Sources of test-anxiety' and 'Coping strategies' have been analysed among the students of senior secondary

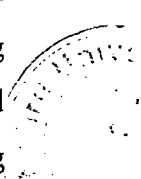
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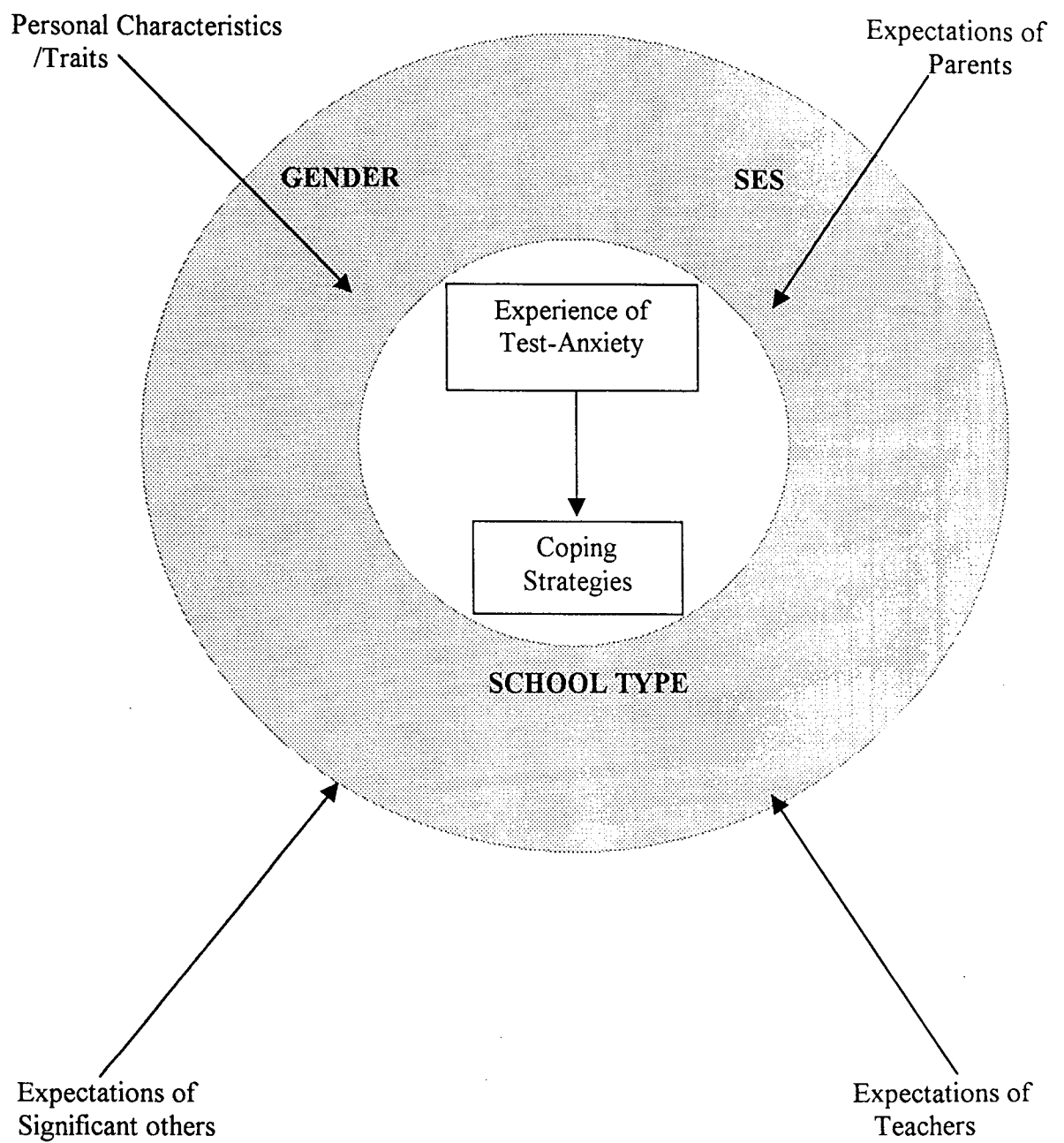


level, different gender (male/female) and different school type (govt. school/convent school). The study also aims to find out the relationship between test anxiety and coping strategies. The main assumption of the study is that anxiety and coping strategies are learned responses. Learning of these responses occur in the social matrix. The social matrix of the children may differ across gender, SES and school type due to the differences in values and socialisation process. Thus, it is possible that the nature and the degree of test-anxiety and coping strategies employed by these supposedly diverse children may differ significantly.

According to the conceptual framework of the study, the personal characteristics or traits and expectation of parents, teachers and significant others differ across gender, SES, and school type. Socialisation of the children may differ across these groups due to the differences in expectations. Therefore the emotionality and the cognition about *Physical, Social, and Self related dimensions* in the test situation might differ in them. Self related changes in emotions and cognitions could again be categorised into two sub-dimensions: (a) *Self-worry related to Performance in test/academics* and (b) *General appraisal of self*. These two sub categories are cyclic in nature i.e. they influence each other.

The sources of test anxiety may also differ both in terms of degree or kinds due to differences in socialisation and expectation across these groups. These differences in test anxiety experience and differences in socialisation and expectations across these groups could also influence the coping strategies used by the students.

Thus, the experience of test anxiety and coping strategies could differ across the students of these groups. This could be diagrammatically represented as follows:



“Figure No. 1 Conceptual Framework of the Study”

CHAPTER-2

LITERATURE REVIEW

This chapter focuses on review of the significant studies which have been undertaken in the areas related to test-anxiety and coping strategies especially among senior secondary students.

Anxiety has become a major talking point in past few years among the general public as well as academicians. Test anxiety is a growing concern for many teachers, students and parents. Test anxiety can have a detrimental effect on student's achievement, learning and self-esteem. Researchers have directed their attention to test-anxiety among various populations. In this chapter, the review of literature has been organised in the following manner:

- Nature of test anxiety
- What causes test anxiety?
- Differences in test anxiety across gender and SES
- Test anxiety and Coping Strategies
- Differences in Coping Strategies across gender and SES

2.1 Nature of test-anxiety:

In the past four decade, several researchers have examined the test anxiety. Mandler and Sarason (1952) interpreted the difference in performance on the basis of learnt psychological drives. According to them two kinds of drives are evoked by the test situation. First is task-directed drive. This stimulates behaviour to reduce the drive by completing the task. Second is learned anxiety drive. This drive stimulates two opposite and incompatible behaviours: (a) task-relevant efforts to finish the task and thereby to reduce the anxiety and (b) self-directed, task-irrelevant responses, manifested by feeling of inadequacy, helplessness, heightened somatic reaction, anticipations of punishment or loss of status and esteem, and implicit attempts to leave the testing situation. According to Sarason (1961), "test-anxiety" responses are associated with personally threatening conditions in the environment. These responses interfere with on going task-relevant activity and lead to a lowering of performance level. Sarason argues that anxiety seems likely to include both heightened physiological

activity e.g. heart rate, palmer-sweating and self-depreciating ruminations e.g. “I can’t pass this test”, “I wonder how other students are doing”.

Oetting (1996) analysed the relationship among examination anxiety, physiological response and scholastic performance. According to Oetting, the anxious and non-anxious groups responded differently to the test situation. In the non-anxious group skin resistance changed differently for individuals in the group. Those subjects, whose resistance tended to be high, tended to remain high and show elevations in resistance during the test. Those subjects, whose skin resistance was low, tended to stay low or drop further in resistance. In the anxious group, a totally different pattern emerges. Subjects, whose base level of resistance were high showed drops in resistance, indicating they reacted to the presentation and taking of the test. Subjects, whose base level was low, showed increase during presentation and taking of the test suggesting that they had already reacted strongly to the situation and the actual exposure to the test led to the recovery toward their base level. These differences indicate that the non-anxious students either react minimally or mildly, to the test situation. The test-anxious students react in different patterns, either before the test settling down, during testing or when faced with the actual test.

Theorists after Mandler and Sarason built on their behavioural interpretation. Proposing a bi-dimensional theory, Alpert and Harber (1960) labelled the construct of test-anxiety as facilitating and debilitating anxieties. They suggested that the constructs might be independent such that, persons may possess a large amount of both anxieties, or the one but not the other or none of either.

In 1967, Libert and Morris introduced a two-component conceptualisation of anxiety into test-anxiety literature (Morris, David and Hutchings, 1981). According to this view the experience of anxiety is separable into at least two major components- *Worry and Emotionality*. Worry refers to the cognitive elements of the anxiety experience such as negative expectations and cognitive concerns about oneself, the situation at hand and potential consequences. Emotionality refers to one’s perception of the anxiety experiences i.e. indications of automatic arousal and unpleasant feeling states such as nervousness and tension. They argue that cognitive

and emotional components of the anxiety experience are expected to convey in the stress situation because the situation contains elements related to the arousal of each, the two components theorised to be conceptually independent. Morris and Libert (1973) in their study showed that the threat of electric shock (with no performance evaluation implied) while working on an intellectual task tend to arouse emotionality only and that failure feedback in the same setting aroused worry only and that the correlation between the two when so manipulated was minimal.

In another study conducted by Morris, Brown and Halbert (1977) of preschool children it was found that each component could be aroused independently by exposure to video-taped peer models exhibiting behaviour and verbalisation indicative of either emotionality or worry immediately prior to performing an intellectual task. These studies have demonstrated the potential independence of worry and emotionality responses. Worry and emotionality responses are theorised to be conceptually independent in the sense that the two anxiety components are aroused and maintained by different situational conditions. The failure threat used by Morris and Libert (1973) aroused worry but had no effect on emotionality and the same was true of a difficulty-of-items manipulation used by Morris and Libert (1969). Likewise, subjects receiving ego-involving instructions associated with an anagrams task (Deffenbacher, 1978) had significantly higher worry scores, but no higher emotionality scores, than subjects receiving reassuring instructions.

Wine (1971) proposed an *attentional theory* for test anxiety. According to this theory test anxiety divide the attention between task-relevant activities and pre-occupation with worry, self-criticism and somatic concerns. Thus less attention is available for task directed efforts.

According to Morris, David and Hutchings (1981), the experience of worry is aroused and maintained by situational factors that influence one's cognitive evaluations. The cues that are theorised to be salient to the arousal and maintenance of the emotionality experience, in contrast, are typically of shorter duration and

seem to consist primarily of initial non-evaluative cues such as the stimulus setting of the classroom; the instructor's passing out test, students' conversation about the test etc. These clues soon lose their salience as attention is turned to the test itself.

Benzamin, Mckeachie and Yi-Guanglin (1987) mentioned that traditional test-anxiety theories argue that a high anxiety level produces task-irrelevant responses necessary for good performance. They projected *information processing model*, which explains the performance deficit of highly test-anxious students in terms of problems in encoding and organising information as well as in retrieval of this information in test situation. They used technique that enabled to measure objectively the organisation of course material in a non-evaluative situation. Results indicated that highly test-anxious students showed a disadvantage in organisation of course material in comparison with other students. They also found that highly test-anxious students could be differentiated by their information processing skills. Those with good study habits have a major problem in retrieval for a test and do not have problem in encoding and organising the information whereas those with poor study habit have problems in all stages of processing.

Speilberger (1972) proposed *trait-state theory*. A *state* is a transitory emotional state of tension and nervous reaction where as a *trait* is chronic anxiety proneness characterised by a state reaction in a wide range of situations. According to this theory, test-anxiety is a form of trait anxiety. High anxious persons respond to testing with evaluations in a state. Worry is then triggered by the state anxiety manifestations. These latter reactions also activate random error tendencies.

Keogh and French (2001) in their study analysed the relationship among test anxiety, evaluative stress and susceptibility to distraction from threat. They conducted an experiment to investigate susceptibility to distraction in high and low test-anxious students. According to them, test anxiety is a situation-specific trait. They used an evaluation-related stressor to trigger test-anxious reactions. They found specific susceptibility to distraction from threat amongst high test-anxious participants who received the evaluation-related stressor. However, this effect was only found when

participants were using focused attention. This suggests that the disturbed performance often found to be associated with test anxiety might be due to an inability to ignore threatening material when attempting to focus attentional resources.

Another Model proposed by Spielberger and Vagg (1995) is *transactional process model*, according to which both dispositional and situation factors contribute to perceptions of threat and resultant anxiety during test taking. Threat perceptions vary dynamically with progress on the test because inability to answer a question results in negative feedback, thereby increasing worry cognitions. Thus, fear anxiety during tests is affected by performance feedback and personal interpretation of that feedback (i.e., cognitive appraisal), rather than determined solely by dispositional anxiety. However as cited by Zohar (1998), the transactional model presented by Spielberger and Vagg is a heuristic model, because there is as yet no empirical evidence.

Zohar (1998) proposed *additive model* of test-anxiety. According to this model each individual has some stable disposition (i.e., dispositional test anxiety or TA-trait), and the level of anxiety associated with different tests is expected to deviate from that level depending on situational factors as appraised by that individual. This model conceives of emotional reaction as an outcome of personal disposition and situational factors as assessed by the person. Additive model of test anxiety asserts that the impact of test anxiety is an additive function of two factors: the individual's trait test anxiety and situation-specific variables. According to Zohar (1998), individuals with high levels of test anxiety will experience severe performance declines only in situations that activate the state test anxiety factor. Common situational factors include low self-confidence for the specific task, perception of the exam as posing a high level of threat, or an awareness of being under-prepared for the examination.

Sibia (1989) conceptualised test anxiety as a reaction to a perceived examination threat. According to her this threat results from an anticipation of a personally important loss or failure. Individual differences in development of test anxiety are

usually because children become aware of academic demands in early childhood when they first enter school. They compare their performance with that of their peers and by this social comparison, develop a sense of personal competence or inferiority within a certain range of situation. If a perceived academic demand exceeds the child's level of coping competence, the situation will be appraised as threatening. She found that self pre-occupation and internal attributions of failures are additional determinants of the test anxiety.

Cummunian (1989) conducted a study to identify the relations among depression, anxiety and self-efficacy. Correlations among the scores from anxiety, depression and self-efficacy scales were calculated to find out whether these seemingly different concepts (anxiety, depression and self-efficacy) can be distinguished both statistically and in terms of content. The results of the study indicate that self-efficacy scores are negatively correlated with depression scores. Therefore, it could be said that those individuals who believe that they are capable of performing a task, experience low level of anxiety and depression whereas, those who perceive themselves not capable of performing the task, experience high level of anxiety.

Summarising the findings of the above reviewed studies in this section, it could be said that test anxiety is manifested in the form of physiological change, change in the cognitive processes such as self rumination, negative expectations and cognitive concerns about oneself etc. The individuals' self-concept such as self-efficacy etc. also influences the experience of anxiety. As anxiety during the test or examination situation is found to be affected by performance feedback and personal interpretation of that feedback in the studies, it could also be argued that tests will induce the tendency among the students to indulge in the activities of appraisal of their performance and general appraisal of the self on the whole. The studies regarding the presence of others' influence on the experience of anxiety also emphasise this aspect. The studies have also provided importance to the social comparison in the experience of the test anxiety. These manifestations differ among various individuals depending upon individual characteristics, personality dispositions and situational variables such

as presence of others. Thus test anxiety could be understood by analysing physical change, social change, self-worry related to performance and general appraisal of the self.

2.2 Causes of Test Anxiety:

A number of research studies have also examined the possible causes of test anxiety. According to Mealey and Host (1992) two main sources of test anxiety have been identified. First, researchers believe that some highly test-anxious students have deficits in the organisational stage of test preparation, which leads to inadequate learning (Culler and Holahan 1980, Naveh-Benjamin, McKeachie, Lin, and Tucker, 1986, Kleijin et. al. 1994, Wittmaire 1972). Because some students are unable to process or organise information effectively for recall, they experience high level of anxiety before going into a testing situation.

Kleijin et al. (1994) in a number of studies found an association between cognitions and anxiety and between task-related thoughts and test anxiety. In their studies they examined relations among scores on test anxiety, optimism, study cognition, study habits, and academic performance and found significant correlations among time management and academic performance. They claim that test-anxious students do not use their study skills in an optimal way. Productive study methods are characterised by “time management” and “strategic studying”. In the study conducted by Culler and Holahan (1980), high test anxious students demonstrated poor study skills. However high test anxious students reported significantly more study time than low anxious students. According to Culler and Holahan, this indicates that high test anxious students attempt to compensate for their lower study competence by increasing the amount of total study time. They also found that high test anxious students who had developed and exercised better study skills did better academically than those with poor study habits. This finding tends to contradict the common stereotype of the high test-anxious student who knows the subject matter but “freezes up” at test time. This suggests that at least part of the academic performance

decrement could be due to less knowledge of the relevant materials, which is a function of differential study skill.

Hembree (1988) in his comprehensive study, in which results of 562 studies were integrated by meta-analysis mentions that test-anxiety is directly related to fear of negative evaluation, dislike for tests and less effective study skills.

The second major cause of test anxiety stems from habitual, irrelevant and negative thoughts that some students have during a testing situation (Sarason 1984; Wine 1971). These negative thoughts distract students from the task of taking the test and cause them to focus on their fears, inadequacies, and past failures. The effect is the creation of an attitude of "learned helplessness. Learned helplessness occurs when students who have failed or done poorly in the past develop negative self-images, causing irrelevant thought patterns during the test. "I can't do this," "I'm not smart enough," "The teacher is watching me," and "Everyone is finishing before me" are common thoughts that these types of test anxious students have reported during testing situations (as cited by Donna L. Mealey and Timothy R. Host 1992). Although these students may have adequate study skills, they become distracted and anxious during the test, causing poor performance.

According to Morris, Davis & Hutchings (1981) individuals with high trait test anxiety tend to perform less well under conditions of evaluative stress though the relationship between anxiety and performance is quite complex. When students become preoccupied with their own self-evaluation and with the negative possibilities involved in this situation, their performance suffer because of the misdirection of attention away from the task at hand (Houston, 1977).

Sarason (1984) analysed the nature of test anxiety and its relationship to performance and cognitive interference from the standpoint of attention process. The scales of the reactions to tests questionnaire- worry, tension, task- irrelevant thinking, and bodily symptoms- were compared with regard to intellectual performance and cognitive interference. The results were consistent with the idea that the problem of anxiety is to a significant extent is a problem of intrusive thought that interferes with

task-focused thinking. Sarason also found that self-preoccupying intrusive thinking could be reduced by means of a task-focusing experimental condition.

In the related matter, other studies have also shown a link between poor study skills and learned helplessness (Naveh- Benjamin, McKeachie, and Lin 1987). Students, who think they are studying effectively but in fact they are not having effective study habits, easily develop a sense of learned helplessness and come to fear taking tests.

Culler and Holahan (1980) in their study investigated (a) differences in study related behaviours between high and low anxious individuals and (b) differential effectiveness of study related behaviours for both groups. Results demonstrated that high test-anxious students have poor study skills. For high test-anxious students, quality of study habits and amount of study time were positively related to academic performance where as missing classes and delaying examinations were inversely related to performance. The explanation provided by them for how study behaviour which is external to testing situation affects the performance decrement is that the worry responses generated in the testing situation are a product of both the increased anxiety and the knowledge that there has not been adequate preparation for the test. This would mean that the student with good study skills might experience less worry and thus have more attention for the test taking task in the testing situation.

Cassady and Jhonson (2002) also found support for cognitive explanations of performance deficits encountered by students with heightened levels of test anxiety. Specifically, it appeared that students might experience cognitive interference while preparing for examinations, taking examination or both. Interference during preparation may lead to a poor conceptualisation or organisation of the content, limiting the ability to retrieve key information during the test (Naveh- Benjamin 1991).

Ganzer (1968) found that test anxious participants did more poorly on a task when they were observed by an audience, whereas the performance of participants low in test anxiety improved under these conditions.

In a study done by Kurosawa and Harackiewicz (1995) participants performed a cognitive task under evaluative, self-awareness and neutral conditions. They found that task performance was determined jointly by trait test anxiety and situational factors. It was also found that test-anxiety led to poorer performance in both evaluative and self-awareness situation relative to the neutral situation.

Lewis and Linder (1997) attributed an overly active sense of self-awareness as a cause of test anxiety. They have found that the presence of an audience even if it is just the teacher, induces a state of heightened self-awareness. They have found that a sense of competition, will lead to a heightened sense of self-awareness. They stated that inward focused attention and a state of heightened self-awareness will increase performance up to a certain level, but if the student becomes overly self-aware or inwardly focused, it will lead to performance decrement.

It is evident from these studies that there are three main categories of test-anxious students: (1) those who do not have adequate study and test preparation strategies (2) those who have adequate strategies in their repertoire and use them but become distracted during testing; and (3) those who mistakenly believe that they have adequate strategies, do poorly on tests, and anxiously wonder why (Mealey and Host, 1992). The review also indicates that in the research studies mentioned above the main emphasis had been given to the personal components of the anxiety only. The significance of the social factors has not been investigated in much detail in these studies.

2.3 Differences in Test Anxiety across Gender and SES:

In a variety of academic situations, researchers have found that female students are more worried and anxious than are male students (Chang, 1997; Daly, Kreiser, & Rogharr, 1994; Felson & Trudeau, 1991; Onwuegbuzie, Bailey, & Daley 1997). In addition, as evidenced in an article by Berger and Shechter (1996), there is enough of a difference in the way the two genders handle stress. For many reasons, male and female students can react differently to similar settings. In the simplest term, what is often seen

as a source of pressure and discomfort for female students may not be as nerve-wracking for male students.

According to Pappamihel (2001), in mainstream classes, gender does influence the anxiety levels of Mexican boys and girls differently. Pappamihel found that female students have significantly higher English language anxiety scale (ELAS) score than male students. This result is in congruence with other anxiety research indicating that female students tend to be more anxious and worry oriented than male students (Bernstein, Garfinkel, & Hoberman, 1989; Gierl & Rogers, 1996; Plancherel & Bolognini, 1995).

Hembree (1988) in his comprehensive study found across grade levels, females exhibit higher test-anxiety than males. Everson et al. (1994) while analysing the gender (worry and emotionality) differences in test anxiety found that the dual factor structure of test anxiety did not vary between males and females. However they detected a generally higher level of reported anxiety among females. On the basis of the unique factor variances, they concluded that items used for test anxiety tests might not be equally reliable for males and females.

Anita Gupta (1989) in her study tried to test the predictions of Spielberger's trait-state anxiety theory under conditions of ego-threat as contrasted with the conditions of reassurance on high school boys and girls of Himanchal Pradesh. The aim was directed towards testing the generalisability of this theory to the high school students who differ in their cognitive capacity (intelligence). She found that regardless of intelligence and stressor conditions, high and low anxiety schoolgirls do not differ significantly in their performance. Irrespective of trait anxiety and stress conditions, high intelligent school girls perform significantly better than their low intelligent counterparts. Her findings based on bi-variate comparisons are restrictive though significant triple interaction of all these three independent variables emerged; (a) Under ego-stress instructions, high-anxiety- high intelligent students perform poorly as compared to their low anxiety- high intelligent counterparts. However, low intelligent students perform poorly regardless of their anxiety levels. This signifies that the debilitating effects of the high anxiety and ego-stress are nested in high

intelligence levels only. (b) Under reassuring instructions, the debilitating effect of high anxiety on performance of high-anxiety-high intelligent students was obliterated. It was also found that reassurance was detrimental to the performance of low anxiety students with either low or high intelligence.

Hennu Gupta (1987) analysed relationships between locus of control, anxiety and level of aspiration and academic achievement of secondary students. She found that anxiety has a significantly negative correlation with academic achievement for total sample. She also found that for boys from the arts and the science stream, and girls from the science stream, anxiety was best predictor of total variance of academic achievement.

Jindal and Panda (1982) in their study found that the low- achieving boys have high level of general anxiety. It is also found that the girls in general (irrespective of achievement level) possess more anxiety than boys. The high-achieving girls are found to have more anxiety only concerning their bodily functions where as they do not differ significantly from other groups in the personality disposition of general anxiety. The former type of anxiety and tension found in them may form a natural part of the process of growth and development at the stage of adolescence and puberty. The fact of low-achievement in case of both boys and girls may be due to the presence of high level of anxiety in them.

Rothblum, Soloman and Murakami (1986) examined affective, cognitive and behavioural difference between high and low procrastinations. Procrastination could be defined as delay doing something you should do usually, because you don't want to do it. They defined academic procrastination for their research purpose as the self-reported tendency (a) to nearly always put off academic tasks and (b) to nearly or always experience problematic levels of anxiety associated with this procrastination. They found that regarding the affective measures, both women and high procrastination report more test anxiety. High procrastinations are also more likely to report weak state anxiety. Low procrastinators do not report much anxiety at any time as mid term exam

approach, where as high procrastinators (particularly women) report stable levels of high anxiety across sessions.

Few studies have also been conducted on anxiety and SES differences. Schawarzer (1997) in his paper mentioned that research studies conducted by Lewis, (1996); Lenzi et al., (1993); Zeidner, (1988) have found that trait anxiety is on average higher among lower social class individuals than among middle class individuals.

The review of literature in this section suggests that the test anxiety may differ among the students of different gender and SES. Researchers mostly pointed out differences in study habits, time management and the procrastination tendencies as the major sources for such variations. However, the literature has been found scanty in regard to specific contribution of SES and School type in the test anxiety measures.

2.4 Test-anxiety and Coping:

This section reviews research on students coping with test situation and the relationship between test-anxiety and coping efforts. According to Zeidner (1995) adaptive coping in exam situations involves a flexible repertoire and combined use of alternative coping strategies, involving task-oriented and emotion-oriented forms of coping. He mentioned in his article that coping strategies in exam situations are found to work with modest effects and make a difference, mainly with respect to affective outcomes. With respect to cognitive outcomes, coping has little meaningful influence on exam performance. Furthermore, coping with a stressful exam situation is a process; it is a transaction between a person and an event that plays across time and changing circumstances, with the relevance of a coping reaction varying with the phase of the stressful examination considered. According to him stress researchers have traditionally been more interested in the effects of evaluative stress on anxiety and test attainment than in the role of coping in influencing adaptive outcomes.

Hembree (1988) mentioned that test-anxiety can be effectively reduced by a variety of behavioural and cognitive behavioural treatments delivered in a broad

assortment of conditions. Such treatments reduce both worry and emotionality and they generalise to increase in facilitating test-anxiety.

Keogh and Herdenfeldt (2002) conducted a research study to determine whether gender differences would be found in the effect that sensory-focused and emotion-focused coping instructions have on cold pressure pain experiences. Participants consisted of 24 male and 26 female healthy adults, all of whom reported no current pain. They found that gender differences exist in pain perception, with females typically reporting more negative responses to pain than males. According to them it also seems as if males and females use and benefit from different coping strategies when under stress; females seem to prefer emotion-focused coping, whereas males prefer sensory-focused coping. Unfortunately, experimental research that examines such differences in the context of pain has not yet been adequately investigated. A consistent pattern of effects was found, over both behavioural and self-report measures of pain. Compared to females, males exhibited less negative pain responses when focusing on the sensory component of pain (i.e., increased threshold, tolerance and lower sensory pain). Furthermore, compared to sensory focusing, emotional focusing was found to increase the affective pain experience of females. Together these results confirm that important differences exist between men and women in the effect pain coping instructions have on the experience of pain.

Pal and Singhal (2002) in their study 'coping with examination distress' examined, student's perceptions of board examinations and their coping strategies. Result revealed that board examinations had differential effects on the levels of goal attainment, affective aspects, examination planning and coping strategies of class X and XII students. They found that class X students set more challenging goals and reported a higher feeling of excitement than class XII students. On the other hand, class XII students reported more nervousness than class X students. Student's appraisal of examinations changes significantly related to coping strategies of problem focusing, wishful thinking and social support.

The brief review of the literature in the area of coping strategies to date has left several questions unanswered and these provided the impetus for the research reported in this study: (1) What strategies do students employ to help them cope with practicum stresses and which of these do they regard as most important? (2) Are some strategies more effective than others in helping students cope with practicum stresses? The studies related to the relationship between test anxiety and coping strategies have also been very limited, and many researchers have emphasised the need for further research in the area.

2.5 Differences in Coping Strategies across Gender and SES:

Research studies in the area of coping strategies have also found differences in coping strategies across gender and socio-economic status (SES). Kavsek (1992); Kavsek, Tismer and Hanselmann (1995); Seiffge-Krenke (1993) observed gender differences in the use of social resources among adolescent samples. As the girls grow older, they are found to seek advice, help, comfort, or sympathy from others more often than do boys, regardless of the nature of the problem. Girls discuss their problems more often with others and try to clarify their difficulties by taking them over openly.

Seiffge-Krenke (1993) found that regardless of the type of problem, female adolescents tended to address problem immediately, talk about them frequently with significant others and usually try to solve a problem with the person concerned. They worry a lot about the problem, think about possible solutions, and expect negative consequences much more frequently than do boys.

Verma et al. (1995) conducted a study to examine the coping strategies among college students. The main findings were as follows:

- (a) College students coped with difficult situations in a mature manner, yet they tend to withdraw from problems they faced in life.

(b) Gender differences were observed. Males occasionally sought refuge in alcohol or drugs to escape their problems and female resorted to prayer and hoped for the better.

(c) Females became more emotionally upset as compared to males who confronted the problem and made an attempt to solve it.

Taylor (1998) has analysed the coping strategies across different SES groups. According to Taylor one might predict that avoidant coping strategies and, possibly, emotional regulation strategies, would be more characteristic as one moves down the SES ladder, because threats from the environment may overwhelm the personal resources of the individual, or the problems created by the environment may be largely uncontrollable; by contrast, the higher one's position on the SES ladder, the more likely one may be able to exert control over stressful events, thus leading to the deployment of active coping strategies. Guney and Sevgi (1992) examined children's ideas about what to do when they are feeling depressed/unhappy, to investigate whether there are sex and SES differences in the number and effectiveness ratings of coping strategies given by children and finally to investigate the relationship between the number and effectiveness of coping strategies given and depressive symptomatology. The result of the study suggests that SES and gender factors affect the choosing of the coping strategies.

The review of the literature in the area of differences in the coping strategies among the students of different gender and SES leads us to the conclusion that in most of the cases the findings have been borrowed from the studies in clinical settings and very few studies have investigated the coping differences across the students of these groups in the test anxiety situations itself. Not much research studies have also been carried in this area, which could through light on differences in different school types.

Conclusion:

On the basis of review of the literature, it can be said that researchers have studied test anxiety and coping strategies from a number of perspectives and cover a vast area. However, among the Indian researchers the empirical studies on the nature and the sources of test anxiety, and coping strategies among the students are very less. There is also paucity of standardised instruments that can be used by the researchers to measure different coping strategies adopted by the individual to deal with stressful situations. In most of studies the social aspects have been under emphasised.

Studies exploring the phenomenon of test anxiety and coping strategies adopted by senior secondary students are conspicuous by their absence. Thus it might be interesting to investigate the magnitude, nature and sources of test anxiety and coping strategies adopted by them. In this context, several questions emerged, which are enumerated below:

1. What are the magnitude and the nature of test anxiety among the senior secondary students?
2. What are the sources of test anxiety among the senior secondary students?
3. How is this magnitude reflected across different gender, SES and school types?
4. What are the coping strategies used by senior secondary students. Are there differences in employment of coping strategies across different gender, SES and school types.
5. Is there any relationship among test anxiety, sources of test anxiety and coping strategies in senior secondary students?

The present study is an attempt to answer these questions. It was also thought worthwhile to understand experiences of the students of convent and government schools in order to understand the culture and environment of the schools and its impact on students' test anxiety and coping.

CHAPTER-3
METHODOLOGY

As would be apparent from the chapter dealing with the review of literature related to the phenomena of test-anxiety experienced by the students and the coping strategies adopted by them, the present research problem has not been studied from psycho-social perspective. It was thus deemed worthwhile to identify and study the test-anxiety and coping strategies among senior secondary students from psycho-social perspective with the main aim being amply reflected in the title:

“Test-Anxiety and Coping among Senior Secondary Students: A psycho-sociological Study”

Rationale of the Study:

Test-anxiety studies have been conducted from different perspectives. Spielberger (1972) defined test-anxiety from trait perspective. According to him, test-anxiety is a form of trait anxiety. High anxious persons respond to test with evaluation in a state. Libert and Morris (1967) and Sarason (1961) defined test-anxiety from cognitive and physiological perspective. Researcher like Zohar (1998), Kaorukurosawa and Harackiewica (1995) have analysed test-anxiety using both trait and situation specific variables. If we analyse how the researcher conceptualises test-anxiety, we could observe that in test-anxiety studies, psycho-social aspects have not been given due importance in spite of the fact that in various psychological studies these have been found to be significant factors of anxiety. Anxiety is considered as a learnt concept and conditioning. Coleman (1988) points out that a tense and anxious mother can transmit her anxiety to even a very young infant. If interactions with such a parental model continue, the child may learn anxiety reactions similar to those of the parent. In his studies of behavioural disorders of children, Jenkins (1968, 1969) pointed out that anxiety often come from families in which parents have high expectations from their children while at the same time reject their accomplishments as substandard. An individual reared in such a setting often appears to adopt perfectionist paternal standards for himself and become self-critical and anxious if he fails or thinks he is in danger of failing to meet them. Not only this, going by social learning theory, if a child finds that role models such as parents, teachers and significant others are anxious about

test they may be conditioned to perceive the examination as threatening and behave in anxious way in the test-situations. As Dagaar (1988a) points out that apprehension of threat in the situation is not to the “physical organism” but to the psychological self of the individual. The psychological self, as we know comprises the totality of relationships with the physical and social environment of the individual.

In most of the test-anxiety measures, test-anxiety is measured by taking “emotionality and worry”. Emotionality includes indications of automatic arousal and unpleasant feeling states such as nervousness and tension and worry includes the cognitive elements of the anxiety experiences such as negative expectations and cognitive concerns about oneself, the situation at hand and potential consequences of failure. Various researchers have raised questions regarding the validity of the measurement of test-anxiety. According to Hembree (1988), on the individual level, the I.Q., Aptitude, and progress of test-anxious students are consistently misinterpreted and undervalued. He also raised questions regarding the entire testing process as according to him it is systematically biased. In India, most of the researchers have used western instruments and its translated version to study test-anxiety. Not much empirical research studies have also been in the area to investigate the authenticity of these instruments.

The present chapter discuss the objectives of the study, rationale behind the objectives, design of the study, operational definitions of the dimensions, variables included in the study, sample of the study, procedure for data collection and administration of questionnaire and the analysis of the data. In analysis of data the statistical analyses and qualitative method used in the study are discussed.

This chapter focuses on describing the methodology used in planning and conducting the present study. The present study will explore how the psycho-social factors such as expectations of parents, teachers and significant others influence the test-anxiety and coping behaviour of the students. The study also aims to find out the differences in test-anxiety and coping strategies across gender, socio-economic status

and school type and relationship between test anxiety and coping strategies across these groups. The objectives of the study are as follows: -

3.1 Objectives:

Objective 1: To measure test-anxiety and sources of test anxiety among the senior secondary students. To find out the difference in test-anxiety and sources of test anxiety across different gender groups, SES and school type.

Hypotheses:

Hypothesis 1: The senior secondary students will experience high level of anxiety at the time of examination. The sources of stress will be both personal and social factors.

Hypothesis 2: Male and Female students will experience different levels of test anxiety.

Hypothesis 3: The socio-economic status and school type will determine the magnitude and the nature of the test anxiety among the students.

Rationale:

In various research studies, it has been found that the expectation and reactions of the parents, teachers and significant others and the stereotypes in the society differ across different socio-economic and gender groups. Deaux and Lewis (1984) in their study have found that in many cultures, males are assumed to possess such desirable traits as decisiveness, forcefulness, confidence, ambition and rationality. In contrast, assumptions about females include less desirable traits such as passivity, submissiveness, indecisiveness, emotionality and dependence. For example, in patriarchal society male child is considered to be the “bread winner” and female child is expected to excel in the “house hold works”. Such stereotypical beliefs are found in some forms in all socio-economic strata. These beliefs influence the degree and the kinds of anxieties experienced by the children in different societies. This could be precisely because different evaluative and classifying standards are created and emphasised in these subgroups. The importance attached to test situation or standards

set for the performance from parents, significant others and the students themselves may differ across different subgroups. According to Kelly a classifying and evaluative standard is created by the subject with regards to the object in the life space (including psychological space) to assess similarity and the differences from one another. In an early experiment of Bruner and Goodman (1947), ten-year-old children estimated the size of coins by adjusting a circular spot of light so that its area seemed to them equal to the size of coin. In the case of every coin the “poor” children over-estimated its size on the average more than the “rich” children. Thus importance attached to a situation depends on the background of the individual. Extrapolating from this it can be logically argued that the students of different socio-economic strata and gender may attach different importance to the test situation and thus experience different degrees as well as kinds of test-anxiety.

In the test-anxiety researches a number of studies have been conducted on the difference in test-anxiety in males and females. Ray Hembree (1988) in his comprehensive study found that across grade levels, females exhibit higher test-anxiety than males. Everson et al. (1994) while analysing the gender differences in test anxiety found that the dual factor structure of test anxiety (worry and emotionality) did not vary between males and females. They detected a generally higher level of reported anxiety among females and suggested that items used for test anxiety tests may not be equally reliable for males and females.

Extrapolating from these, it can also be logically argued that the students of different school type may also attach different importance to the test situations and thus experience different kinds as well as levels of test anxiety due to cultural and sociological differences across these school types.

Thus it might be interesting to study the difference between the gender, different socio-economic strata, and students of different school type on test-anxiety and sources of test anxiety.

Objective 2: To explore how the students cope with test-anxiety. Do gender, socio-economic status and school type mediate and determine the coping strategies of the students.

Hypotheses:

Hypothesis 4: Male and Female senior secondary students will adopt different strategies to cope with test anxiety.

Hypothesis 5: Socio-economic status and School type will determine the coping behaviour of the Sr. secondary students.

Rationale:

Coping strategies refer to the ways to respond in a specific manner to situation that are stressful. It plays a central role in managing stress producing circumstances. Coping strategies may be either oriented towards avoiding the problem or towards dealing with the problem. Pal and Singhal (2002) have conducted a study on “coping with examination distress” among senior secondary students. A number of research studies have found the difference in the coping strategies across gender and socio-economic status. Kavsek (1992); Kavsek, Tismer and Hanselmann (1995); Seiffge-Krenke (1993) observed gender differences in the use of social resources on adolescent samples. Seiffge-Krenke (1993) found that regardless of the type of problem, female adolescents tended to address problem immediately, talk about them frequently with significant others and usually try to solve a problem with the person concerned. According to Shelley Taylor (1998), one might predict that avoidant coping strategies and, possibly, emotional regulation strategies, would be more characteristic as one moves down the SES ladder, because threats from the environment may overwhelm the personal resources of the individual, or the problems created by the environment may be largely uncontrollable; by contrast, the higher one’s position on the SES ladder, the more likely one may be able to exert control over stressful events, thus leading to the deployment of active coping strategies. According to her coping strategies may be moderators of the SES and health relationship. At present, the COPE instrument is judged to be the most appropriate measure of coping strategies due to its wide use, easy administration, and

standardised scoring procedures. Shelley also mentions that only modest information is available regarding the relation of coping strategies to SES.

Extrapolating from this it can be logically argued that the students of different school type may also attach different importance to different coping strategies and thus may differ on coping strategies.

Therefore, a study on differences in coping strategies across gender and different socio-economic strata, and school type might be a significant value addition in the research area of test-anxiety.

Objective 3: To explore how the test-anxiety is related to different coping strategies of the students. To examine how the gender and SES explain these relationships.

Hypotheses:

Hypothesis 6: There will be significant relationship among level of test anxiety, sources of test anxiety and coping strategies of Sr. Secondary students.

Hypothesis 7: The gender and SES will determine the pattern of relationship among test anxiety, sources of test anxiety and coping strategies of Sr. Secondary students.

Rationale:

Examinations may have different importance level across the children of different groups because of difference in socialisation process and values. As discussed already in the earlier chapters test anxiety is a multi dimensional concept and these dimensions are mutually independent and have different sources of origin, it might be possible that these dimensions are related to different coping strategies to different degree. It could also be possible that these relationships differ across gender and SES. Thus there lies a rationale to investigate the relationship of test anxiety with coping strategies across gender and SES.

3.2 Design of the study:

The study was undertaken in two phases. The first phase of the study was an exploratory study in which open-ended questionnaire (enclosed as Appendix 1) was used to collect the information regarding the kind of physiological, social and psychological changes students undergo when their examination was close, during the examination and after the examination. Information was also collected regarding the reasons for experiencing test-anxiety and the coping strategies used by the senior secondary students to overcome test-anxiety. On the basis of the responses generated in the preliminary analysis, the dimensions were identified and three questionnaires were prepared. The cognitive test anxiety scale developed by Cassady, J.C., and Johnson, R.E., (2002) was consulted for formulations of the statements in self worry dimension.

In the second phase of the study these questionnaires were administered on a selected sample of the students. The first questionnaire (Test-Anxiety scale) was used to measure the test-anxiety among the students. The second questionnaire was used to measure the sources of test anxiety and the third questionnaire was used to identify the coping strategies used by the students to overcome test-anxiety. For the development of third questionnaire the scale used by Pal and Singhal (2002) was consulted and some new items were added on the basis of the response generated in the pilot study. These questionnaires were also translated in Hindi so that the data could also be conducted from the Hindi medium students. These questionnaires are enclosed in the appendix as Appendix 2, Appendix 3, Appendix 4, Appendix 5, Appendix 6, and Appendix 7 respectively. Unstructured interviews were also carried out with few students with an objective to reflect more powerfully on the findings and also to bring out the gaps if there are any.

The test-anxiety scale developed consists of four dimensions. These dimensions are: Physical change and Change in daily routine, Social Change and Self-worry. Self-worry dimension is again categorised in to two sub dimensions: (a) Self-worry related to Performance in test and academics and (b) General appraisal of self. The operational definitions of these dimensions are mentioned in section 3.4. To make the scale

comprehensive items were framed related to worry in all three (Before examination, during examination and after examination) situations.

Total number of statements in the test-anxiety scale is 23. The distributions of the statements in different dimensions are as follows:

Table No. 3.1
Test-Anxiety Scale

Dimension	Statement No.	Total No. of Statements
Physical Change and Change in individual behaviour	1, 2, 3, 5, 9,	5
Social Change	4, 6, 11	3
Self Worry:		
<i>(a) Related to Performance in test/Academics</i>	8, 10, 12, 13, 14, 15, 16, 17, 21, 22	10
<i>(b) General appraisal of self</i>	7, 18, 19, 20,23	5

The second questionnaire on Sources of test-anxiety consists of two dimensions: Social components of anxiety and Personal components of anxiety. There are 12 statements in the questionnaire. The operational definitions of these dimensions are mentioned in section 3.4. The distributions of the statements in different dimensions are as follows:

Table No. 3.2
Sources of test anxiety

Dimension	Statement No.	Total No. of Statements
Social Components of worry	1, 3, 5, 7, 8	5
Personal Components of worry	2, 4, 6, 9, 10, 11, 12	7

The third questionnaire on the coping strategies of the student's originally consists of five dimensions and 25 statements. The operational definitions of these dimensions are mentioned in section 3.4. However in the final questionnaire one item (Decide to quit the examination) was rejected, as the response on this item was almost same for each respondent. So, the final inventory consisted of 24 statements. The distributions of the statements in different dimensions are as follows:

Table No. 3.3
Coping Strategies

Dimension	Statement No.	Total No. of Statements
Social Support Strategy	1, 2, 4, 7, 9, 19	6
Physical Coping Strategy	3, 5, 23	3
Problem Focused Strategy	14, 15, 16, 21, 24	5
Non Productive Coping Strategy	8, 10, 11, 12, 13, 17, 20, 22	8
Positive Thinking Strategy	6, 18,	2

After developing these scales, these questionnaires were administered on the small sample of 20 students to check the authenticity of the items and appropriateness of the response pattern. On the basis of these responses some items were rejected and not included in the final questionnaire. For example in the questionnaire regarding coping strategies item "Decide to quit the examination" which was initially included in the "Non-productive Coping Strategies" was rejected as the response on this item was found to be "0" i.e. "Rarely" from most of the students. Some items were also modified. For example, in test-anxiety scale item no. 11 which was originally written, "I feel a lot of pressure to get good marks in the test" was written as "I feel a lot of pressure from my parents and significant others to get good marks in the test" to avoid the ambiguity in the item.

In the second phase of the study these questionnaires were administered on the students of the senior secondary level (Class 11th). Thus an effort was made to map the phenomenon of test-anxiety in terms of its extent and magnitude as well as with the variables like gender, socio-economic status, and school type.

3.3 Operational Definitions:

Test-Anxiety: *Test-anxiety* refers to the extent to which the students perceive the examinations as a threatening situation and apprehension regarding the examination.

1. **Physical Change and Change in Daily Routine:** *Physical Change and Change in daily routine* refers to the extent to which students experience the heightened physiological activity such as disturbance in the sleep, eating behaviour, changes in individual behaviours; not being able to do morning chores properly; and not being able to find time for other interests.
2. **Social Change:** *Social Change* refers to the extent to which the students keeps on bothering about things as how other students are doing; pressure of getting good marks in the examinations from parents and significant others; lack of desire to spend their time with friends and parents when their examination is close.
3. **Self-Worry:** *Self-worry* refers to the worry related to self-concept. This could be categorised into two dimensions:
 - (a). **Related to performance in test/academics:** Self worry related to performance in test/academic refers to the extent to which the students get nervous during the examination which make them do unforced errors, misunderstand the questions asked in the examinations, inability to concentrate on their studies and revise their syllabus when examination is close, feel panic seeing the question paper, and frequently thinking about the

consequences of not doing well in the examination and also about how much of marks they would get in the examination etc.

(b). **General appraisal of Self:** Self worry related to general appraisal of self refers to the extent to which the students are in the self-depreciating ruminations such as they are not too bright; feel defeated even before the examination starts and the thought of not doing well keeps on persistently bothering them.

Sources of Test-Anxiety:

1. **Social Component of Worry:** *Social component of worry* refers to the extent to which the students fear examination due to social pressure such as hurting their parents, loosing image in the eyes of teachers and friends and fear of others laughing and making fun of them if they are not able to perform well in the examination.
2. **Personal Component of Worry:** *Personal component of worry* refers to the extent to which the students fear examination because they think that their preparation is not good; this may hamper their career prospects; doubts about their aptitude, effort etc; not being able to perform well in the examination.

Coping Strategies: *Coping strategies* refer to strategies used by the students to overcome the pressure and worry related to examination.

1. **Social Support Strategy:** *Social support strategy* refers to the extent to which the student seek support from their parents, teachers, friends, pray to god, take counselling from professionals organise groups with other students to provide emotional support and help each other in studies.
2. **Physical Coping Strategy:** *Physical coping strategy* refers to the extent to which the students engage themselves in sports/physical exercise, meditation,

yoga, or relax themselves by doing something of their interest such as reading novels, painting, listening music etc.

3. **Problem Focused Strategy:** *Problem focused coping strategy* refers to the extent to which the students engage themselves in activities that are directly going to help them in performing better in the examination.
4. **Non-Productive Coping Strategy:** *Non-productive coping strategy* refers to the extent to which students engage themselves in activities which in short terms could help them to reduce their anxiety to some extent but not going to help in the long run and enhance their performance in the examination. These include ignoring the problem, hopelessness, avoidance, using unfair means, smoking etc.
5. **Positive Thinking Strategy:** *Positive thinking strategy* refers to the extent to which students keep their morale high by looking at the bright side of the problem and hope for the best and thus to focus on the problem.

3.4 **VARIABLES:**

The following information were collected in the research:

1. **Demographic Information:**
 - a) School
 - b) Gender
 - c) Caste
 - d) Family's Monthly Income (approx)
 - e) Father's Occupation
 - f) Mother's Occupation
 - g) Father's Educational Qualification
 - h) Mother's Educational Qualification
 - i) Place of residence (Rural/Urban)

A new variable SES (socio-economic strata) was computed from the demographic variables- Caste, Family's Monthly Income, Father's Occupation, Mother's Occupation, Father's Educational Qualification, & Mother's Educational Qualification. The coding used for the purpose of the study is mentioned in coding manual, which is enclosed as the Appendix 8.

2. Independent Variables:

a) Gender:

1. Male
2. Female

b) Socio-economic strata:

1. Lower socio-economic strata
2. Middle socio-economic strata
3. Higher socio-economic strata

c) School Type:

1. Convent School
2. Govt. School

3. Dependent Variables:

a) Test Anxiety

b) Different Coping Strategies

1. Social support Strategy
2. Physical coping Strategy
3. Problem focused Strategy
4. Non productive coping Strategy
5. Positive thinking Strategy

The effects of 'sources of test-anxiety' are seen on test-anxiety and coping strategies. The effects of gender, SES, and School type are also seen 'sources of test-

anxiety'. Therefore 'sources of test-anxiety' are used both as independent and dependent variable in the study.

3.5 Sample:

The sample consists of 123 students of senior secondary level (11th class) from four schools in Allahabad. In the first phase of sampling different schools were chosen. The schools chosen for the present study were- Saint Anthony Girl's Convent Inter College, Mary Lucas School and Inter College, Jamuna Christian Inter College and Dwarika Prasad Girls Inter College. Saint Anthony Girl's Convent & Mary Lucas School and Inter Collage are privately funded school, whereas Jamuna Christian & Dwarika Prasad Girls Inter Collage are government aided schools. Saint Anthony Girl's Convent Inter College, is a convent school for girls with medium of instruction being Hindi, Mary Lucas School and Inter College is a convent Co-ed school with medium of instruction being English, Dwarika Prasad Girls Inter-College is a government girls College with medium of instruction being Hindi, and Jamuna Christian College is government school with medium of instruction being both Hindi and English. Because of the paucity of the time, it was not possible to go for the random sampling techniques in these schools. Instead, an incidental sample is selected from these four schools.

The sample consists of 57 male students and 66 female students, out of which 44 students belongs to Saint Anthony Girl's Convent, 34 to Mary Lucas Collage, 34 to Jamuna Christian Inter Collage and 11 to Dwarika Prasad Girls Inter Collage. Seventy-eight students were taken from the convent schools and 45 students were taken from government schools. In a total sample of 123, 58 students were from Hindi medium of instruction and 65 from English medium of instruction. 27 students belonged to rural background and 96 belonged to urban background.

The distribution of sample according to gender and socio-economic status is summarized in the following table:

Table No. 3.4
Distribution of Sample

SES Sex	Lower SES	Middle SES	Higher SES	Total
Male	20	18	19	57
Female	18	24	24	66
Total	38	42	43	123

3.6 Procedure for data collection & administration of questionnaire:

The head mistress and head masters of all selected schools were approached and convinced about the objective of the research. After getting formal permission, the questionnaires developed were administered on the students. The students were given the general instructions about how to provide response on the questionnaire. The instruction given to the students is mentioned in the questionnaire enclosed in the appendix along with the respective questionnaires.

In the questionnaire related to *Test anxiety and Sources of test anxiety* the data were collected on the 5-point scale in which “1” refers to rarely true, “2” refers to occasionally true, “3” refers to sometimes true, “4” refers to frequently true and “5” refers to always true.

In the questionnaire related to the *Coping Strategies* the data were collected on the 4-point scale in which “0” refers to never, “1” refers to occasionally, “2” refers to sometimes and 3 refers to “frequently”. The main reason behind using 4-point scale was that in the pilot study the 5th scale point i.e. “always” was found inappropriate.

Unstructured interviews were also carried out with few students and the narratives provided by these students were content analysed carefully.

3.7 Analysis of data:

The data were analysed using both quantitative and qualitative tools. For the quantitative analysis the data is analysed statistically. The mean and standard deviation of each dimension of the test anxiety and total test-anxiety, sources of test anxiety and different coping strategies were calculated for different gender groups, different schools and socio-economic strata. The socio-economic status was computed by adding codes on Caste, Family's Monthly Income, Father's Occupation, Mother's Occupation, Father's Educational Qualification, & Mother's Educational Qualification. The range for socio-economic status were as follows-

Lower socio-economic strata (below 12)

Middle socio-economic strata (from 13 to 15)

Higher socio-economic strata (above 16)

t-test was calculated on test anxiety, its dimensions, sources of test anxiety (Social and Personal components of anxiety), and different coping strategies for different gender and SES groups and type of school (Convent/Govt.), to find out whether the differences were significant or not. The correlation coefficient was computed to infer the nature of relationship between test-anxiety, sources of test-anxiety and different coping strategies for Sr. Secondary students, Male and Female students and students of different socio-economic status.

In the second section, the narratives of the students collected through unstructured interviews were content analysed.

CHAPTER- 4

ANALYSIS & INTERPRETATION

The present chapter is concerned with analysis of the data collected. The main focus of the study as previously explicated is to find out the magnitude of the test-anxiety, sources of test anxiety, and different coping strategies among senior secondary student, and students of different gender groups, socio-economic status (SES), and school type (Convent/Government). The study also aims to find out the relationship of test anxiety with sources of test anxiety and coping strategies among different gender groups and SES. The analysis of the data has been done in two sections. The first section deals with the analysis of the quantitative data and the second section deals with the analysis of the qualitative data.

Section-1: Quantitative Analysis

Objective 1.1: To find out the magnitude of test-anxiety, its dimensions, and sources of test-anxiety among sr. secondary students.

Objective 2.1: To find out the magnitude of different coping strategies among sr. secondary students.

The mean scores and standard deviations (S.D.) on different dimensions of test-anxiety, sources of test anxiety, and different coping strategies were calculated to discuss the objectives stated above.

Table No. 4.1 describes the average score and dispersion of scores on test-anxiety, its dimensions, sources of test anxiety and different coping strategies among sr. secondary students.

Table No. 4.1:

Mean and S.D. on test-anxiety, its dimensions, sources of test anxiety and different coping strategies among sr. secondary students

Dimension	Mean	S.D.	Min possible score for an individual	Max possible Score for an individual
Dimensions of Test Anxiety:				
Physical Change and Change in Daily Routine	12.26	3.8	5	25
Social Change	10.45	2.69	3	15
Self worry related to Performance in test /Academics	31.02	8.03	10	50
General appraisal of the self	13.95	4.99	5	25
Total Test Anxiety Score	67.67	14.4	23	115
Sources of test anxiety:				
Social Components of worry	17.8	4.71	5	25
Personal Components of worry	23.01	5.99	7	35
Coping Strategies:				
Social Support Strategy	10.68	3.48	0	18
Physical Coping Strategy	3.13	2.15	0	9
Problem Focused Strategy	9.29	3.33	0	15
Non Productive Coping Strategy	9.43	5.12	0	24
Positive Thinking Strategy	5.05	1.27	0	6

The analysis of Table No. 4.1 indicates that among the sr. secondary students test-anxiety was found to be at moderate level ($M=67.67$, $S.D. =14.4$). A higher S.D. indicates high dispersion of responses on test-anxiety among the students. Thus, some students have reported high and some low level of test anxiety.

The scores on the dimensions of test-anxiety among the students indicate moderately low level of Physical change and change in daily routine ($M=12.26$, $S.D.=3.8$) and General appraisal of the self ($M=13.95$, $S.D.=4.99$). They reported moderate level of Self-worry related to performance in test/academics ($M=31.02$, $S.D.=8.03$) and moderately higher level of Social change ($M=10.45$, $S.D.=2.69$). Differences in S.D. on the dimensions of test-anxiety indicate that the dispersion in Self-worry related to performance in test/academics and General appraisal of the self were higher in comparison to the dispersion in Physical change and change in daily routine, and Social change. Thus, it can be said that students have provided more heterogeneous response on Self-worry related to performance in test/academics and General appraisal of self in comparison to Physical change and change in daily routine, and Social change.

Analysis of Sources of test anxiety indicates that both components of test-anxiety - Social ($M=17.8$, $S.D.=4.71$) and Personal components ($M=23.01$, $S.D.=5.99$) - were at moderately higher level among the sr. secondary students. However, a higher S.D. in case of Personal components of worry indicates that some students have high self-doubt regarding their aptitude, efforts etc. whereas some students do not have such high self-doubt. The reasons of test anxiety due to social pressure such as hurting the parents, loosing the image in the eyes of their teachers, friends and significant others etc. were found to be pervasive and homogenous among the students.

Analysis of the Coping strategies revealed that Positive thinking ($M=5.05$, $S.D.=1.27$), was the most preferred coping strategy followed by Problem focused strategy ($M=9.29$, $S.D.=3.33$), Social support strategy ($M=10.68$, $S.D.=3.48$), and Non-productive coping strategy ($M=9.46$, $S.D.=5.12$) respectively. The least preferred coping strategy was found to be the Physical coping strategy ($M=3.13$, $S.D.=2.15$). The value of S.D. indicates high variation among the responses on the Non-productive coping strategy and least variation among the responses on the Positive thinking strategy. However, it is important to mention here that low variation of the responses in the Positive thinking may be due to the less number of items in that dimension.

Objective 1.2: To find out the magnitude of test-anxiety, its dimensions and sources of test-anxiety among the students of different gender groups.

Objective 2.2: To find out the magnitude of different coping strategies among the students of different gender groups.

The mean scores and S.D. on different dimension of test-anxiety, sources of test anxiety, and different coping strategies were calculated to discuss the objectives stated above. The t-test was calculated to see whether the significance of the difference exists among different gender groups or not.

Table No. 4.2 describes the average scores of the students of different gender groups (boys and girls) and dispersion of scores across each group on test-anxiety, its different dimensions, sources of test anxiety and different coping strategies.

The analysis of Table No. 4.2 indicates that test-anxiety was found to be moderately low ($M=63.12$, $S.D. =13.11$) among the boys and at relatively higher among the girls ($M=71.60$ $S.D. =14.39$). The higher S.D. value in case of girls indicates that dispersion of responses on test-anxiety was more among girls than boys. Thus, girls have given more heterogeneous response in comparison to the boys.

Table No. 4.2:

Mean and S.D. on the test-anxiety, its dimensions, sources of test anxiety and different coping strategies among the students of different gender groups (Boys & Girls)

Dimension	Boys (57)		Girls (66)	
	Mean	S.D.	Mean	S.D.
Dimensions of Test Anxiety:				
Physical Change and Change in Daily Routine	11.73	3.54	12.71	3.97
Social Change	10.36	2.76	10.51	2.64
Self worry related to Performance in test /Academics	28.24	7.25	33.40	7.95
General appraisal of the self	12.77	4.84	14.96	4.93
Total Anxiety Score	63.12	13.11	71.60	14.39
Sources of test anxiety:				
Social Components of worry	16.93	4.71	18.55	4.64
Personal Components of worry	22.03	5.90	23.84	5.97
Coping Strategies:				
Social Support Strategy	9.98	3.59	11.28	3.29
Physical Coping Strategy	3.36	2.07	2.92	2.21
Problem Focused Strategy	9.36	3.62	9.22	3.08
Non Productive Coping Strategy	8.73	4.55	10.03	5.51
Positive Thinking Strategy	5.05	1.46	5.05	1.07

The mean and S.D. on different dimensions of test-anxiety indicates moderately low level of anxiety in the Physical change and change in daily routine (M=12.26, S.D. =3.8) and General appraisal of the self (M=12.77, S.D. =4.84) among the boys.

Self-worry related to performance in test/academics ($M=28.24$, $S.D. =7.25$) was found to be at moderate level. Social change ($M= 10.36$, $S.D. =2.76$) was reported at moderately higher level. Whereas, among the girls the anxiety was at moderately low level in Physical change and change in daily routine ($M=12.71$ $S.D. =3.97$) and at moderately higher level on Social change ($M=10.51$, $S.D. =2.67$) and Self-worry related to performance in test/academics ($M=33.40$, $S.D. =7.95$). On the General appraisal of the self ($M=14.96$, $S.D. =4.93$) however, anxiety was found to be at the moderate level among the girls. It was also found that across the dimensions of test-anxiety, girls have reported consistently higher level of anxiety in comparison to the boys. Not much noticeable difference in $S.D.$ among the boys and girls on these dimensions have been found, which indicates that response patterns among the boys and girls do not differ much on these dimensions.

Analysis of Sources of test anxiety revealed that both boys and girls provided similar reasons for experiencing anxieties at the time of examination. The reasons stated were both personal and social and were at moderately higher level in both the groups. On the Social components of anxiety dimension the mean score among the boys was 16.93 and $S.D.$ was 4.71, whereas in case of girls the mean score was 18.55 and $S.D.$ was 4.64. On the Personal components of anxiety dimension the mean score for boys was 22.03 and $S.D.$ was 5.90 and in case of girls the mean scores was 23.84 and $S.D.$ was 5.97. This revealed that even though both the groups experienced higher level of stress due to personal and social reasons, but these factors caused higher level of anxiety among the girls than the boys.

Analysis of the Coping strategies indicate that among the boys, Positive thinking ($M=5.05$, $S.D. =1.46$) was the most preferred coping strategy followed by Problem focused ($M=9.36$, $S.D. =3.62$), Social support ($M=9.98$, $S.D. = 3.59$), and Physical coping strategy ($M=3.36$, $S.D. =2.07$) respectively. The least preferred coping strategy was found to be the Non-productive coping strategy ($M=8.73$, $S.D. =4.55$). Among the girls however most preferred coping strategy was Positive thinking ($M=5.05$, $S.D. =1.07$), followed by Support strategy ($M=11.28$, $S.D. =3.29$), Problem focused strategy ($M=9.22$, $S.D. =3.08$) and Non-productive coping strategy ($M=10.03$,

S.D. =5.51) respectively. The least preferred strategy among the girls was found to be the Physical coping strategy (M=2.92, S.D. =2.21). The value of S.D. scores indicate that variations among the responses were more on the Non-productive coping strategy and least variation of it on the Positive thinking strategy in case of both boys and girls. Thus, it could be concluded that among the students of both the groups, some use Non-productive coping strategy more frequently and some use this strategy rarely, whereas the use of Positive thinking strategy was more homogeneous and pervasive among the students of both the groups. However, one need to be careful in drawing such conclusion as this difference could also be due to the difference in the number of items among these dimensions.

Table No. 4.3 describes the significance of difference across different gender groups (boys and girls) on test-anxiety, its different dimensions, sources of test anxiety and different coping strategies for confidence level of 95%.

Analysis for the significance of mean differences across different gender groups (boys and girls) on test-anxiety indicates that boys and girls differ significantly on test-anxiety ($t = -3.40, p < .01$). Therefore, it could be said that girls experienced more test-anxiety in comparison to the boys.

Analysis for the difference of significance on the dimensions of test-anxiety indicates that significant difference exists among boys and girls on the Self-worry related to performance in test/academics ($t = -3.74, p < .01$) and General appraisal of the self ($t = -2.49, p < .01$). Compared to boys, girls were found to have experienced higher level of stress in the domain of Self-worry related to performance in test/academics and General appraisal of the self.

Table No. 4.3:

t-test for test-anxiety, its dimensions, sources of test-anxiety and different coping strategies among boys and girls

Dimension	t-score	df	Mean difference	SE of Difference	2-tailed Sig. Level
Dimensions of Test Anxiety:					
Physical Change and Change in Daily Routine	-1.43	121	-0.9753	0.684	.157
Social Change	-0.30	121	-0.1467	0.488	.764
Self worry related to Performance in test /Academics	-3.74	121	-5.1635	1.381	.000**
General appraisal of the self	-2.49	121	-2.1978	0.884	.01**
Total Anxiety Score	-3.40	121	-8.4833	2.498	.001**
Sources of test anxiety:					
Social Components of worry	-1.92	121	-1.6156	0.842	.057
Personal Components of worry	-1.69	121	-1.8134	1.075	.094
Coping Strategies:					
Social Support Strategy	-2.10	121	-1.3054	0.621	.038*
Physical Coping Strategy	1.14	121	0.4452	0.389	.256
Problem Focused Strategy	.23	121	.1411	0.605	.816
Non Productive Coping Strategy	-1.40	121	-1.2935	0.921	.163
Positive Thinking Strategy	.03	121	.0072	0.230	.975

*Note- 1- **denote that difference is found significant at .01 level.
2- * denote that difference is found significant at .05 levels.*

The 't' scores on the coping strategies indicate significant difference on the Social support strategy ($t=-2.10$, $p<.05$), which means that the girls are more likely to seek social support at the time of examination in comparison to boys.

Objective 1.3: To find out the magnitude of test-anxiety, its dimensions, and sources of test-anxiety among the students of different socio-economic status.

Objective 2.3: To find out the magnitude of different coping strategies among the students of different socio-economic status.

The mean score and S.D. on different dimensions of test-anxiety, sources of test anxiety, and different coping strategies were calculated in order to study these objectives. The t-test was calculated to find out whether the significance of these differences exists or not among different socio-economic status groups.

Table No. 4.4 describes the average scores and its dispersion among the students of different socio-economic strata (lower, middle and higher SES groups) on test-anxiety, its different dimensions, sources of test anxiety and different coping strategies.

Table No. 4.4 indicate moderate level of test anxiety among the students of Lower (M=68.97, S.D. =12.28), Middle (M=69.76, S.D. =15.09) and Higher (M=64.49, S.D. =15.02) socio-economic status (SES). On the basis of mean scores it could be said that among these groups, middle socio-economic status group experienced higher test anxiety followed by the students of lower and higher socio-economic status.

The students of higher socio-economic status have experienced lower level of test anxiety among the students of different socio-economic status. The higher S.D. among the students of middle and higher socio-economic status indicated higher within group variation among these groups in comparison to the students from lower socio-economic status. This suggests that there could be socio-psychological/contextual variables other than SES, which could be influencing test anxiety in these groups.

Table No. 4.4:

Mean and S.D. on test-anxiety, its dimensions, sources of test anxiety and different coping strategies among the students of different SES

SES Dimension	Lower SES (38)		Middle SES (42)		Higher SES (43)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Dimensions of Test Anxiety:						
Physical Change and Change in Daily Routine	12.37	3.23	12.52	4.17	11.91	3.95
Social Change	10.55	2.23	10.40	3.08	10.40	2.72
Self worry related to Performance in test /Academics	31.68	7.17	32.31	8.60	29.16	8.03
General appraisal of the self	14.37	4.82	14.52	4.61	13.02	5.46
Total Test Anxiety Score	68.97	12.28	69.76	15.09	64.49	15.02
Sources of test anxiety:						
Social Components of worry	18.55	4.70	18.52	4.74	16.42	4.47
Personal Components of worry	24.45	6.32	23.57	5.73	21.19	5.56
Coping Strategies:						
Social Support Strategy	11.39	3.58	10.05	3.06	10.67	3.73
Physical Coping Strategy	3.82	2.23	2.86	2.31	2.79	1.81
Problem Focused Strategy	9.58	2.79	9.24	3.60	9.09	3.56
Non Productive Coping Strategy	10.08	5.82	10.31	5.27	8.00	3.98
Positive Thinking Strategy	5.16	1.98	4.98	0.99	5.02	1.55

The mean scores on different dimensions of test-anxiety indicate that among all the three socio-economic status groups (LSES, MSES & HSES), Physical change and change in daily routine was at moderately lower level (M= 12.37, S.D. =3.23), (M=12.52, S.D.= 4.17), & (M=11.91, S.D.= 3.95). At Social change dimension, it was

at moderately higher level across each group. Students of LSES (M= 31.68, S.D. = 7.17) and MSES (M= 32.31, S.D. = 8.60) have reported moderately high level of Self-worry related to performance in test/academics, and students of HSES have reported moderate level (M= 29.16, S.D. = 8.03) of it. General appraisal of the Self was found to be at moderate level among the LSES (M=14.37, S.D. =4.82) and MSES (M=14.52, S.D. =4.61) students whereas HSES (M=13.02, S.D. =5.46) students have reported moderately low level of it. It was also found that the variation of responses in each group was highest on Self-worry related to performance in test/academics dimension followed by General appraisal of the self and Physical change and change in daily routine respectively. The least variation of responses was found on the Social change dimension.

The mean scores on sources of test anxiety indicate that both Social and Personal components of test-anxiety were at moderately higher level among all socio-economic status groups. Social components of worry were found to be highest among Lower socio-economic status students (M=18.55 S.D. =4.70), followed by Middle socio-economic (M=18.52 S.D. =4.74) and least in higher socio-economic status (M=16.42, S.D. =4.47) students. The Personal components of worry were also found highest among the students of lower socio-economic status (M=24.45, S.D. =6.32) followed by Middle socio-economic status students (M=23.57 S.D. =5.73) and lowest among the high socio-economic status (M=21.19, S.D. =5.56) students. Variations among the responses were found more on Personal components of worry dimension among all the three socio-economic status students. Thus, it could be concluded that in all the three socio-economic status groups, some students doubt more of their aptitude, efforts and abilities and believed that the bad performance in examination would hamper their career prospects than other students. Whereas in case of Social components of anxiety, the response patterns of the students were found comparatively more homogeneous.

The analysis of the table, on the Coping strategies indicates that among the Lower socio-economic status students Positive thinking (M=5.16, S.D. =1.98) was most preferred coping strategy followed by Problem focused (M=9.58, S.D. =2.79),

Social support (M=11.39, S.D. =3.58) and Physical coping strategy (M=3.82, S.D. =2.23) respectively. Least preferred coping strategy among them was Non-productive coping strategy (M=10.08, S.D. =5.82). Among the students of Middle socio-economic status Positive thinking (M=4.98, S.D. =.99) was found to be most preferred coping strategy followed by Problem focused (M=9.24, S.D. =3.6), Social support (M=10.05, S.D. =3.06), and Non productive coping (M=10.31, S.D. =5.27) strategies respectively. Least preferred coping strategy among the students of middle socio-economic status was Physical coping strategy (M=2.86, S.D. =2.31). Among the students of the higher socio-economic status, these patterns were found similar to middle socio-economic status students.

Table No. 4.5 describes the significance of difference across lower SES (38) and Middle SES (42) students on test-anxiety, its different dimensions, sources of test anxiety and different coping strategies for confidence level of 95%.

The analysis of Table No. 4.5 indicate that no significant difference exist on total test anxiety score, its dimensions, sources of test anxiety, and different coping strategies among the students of lower and middle socio-economic status.

Table No. 4.5:

t-test for test-anxiety, its dimensions, sources of test-anxiety and different coping strategies among lower and middle socio-economic status students

Dimension	t-score	df	Mean difference	SE of Difference	2-tailed Sig. Level
Dimensions of Test Anxiety:					
Physical Change and Change in Daily Routine	-.19	78	-.1554	.840	.854
Social Change	.24	78	.1479	.606	.803
Self worry related to Performance in test /Academics	-.35	78	-.6253	1.781	.726
General appraisal of the self	-.15	78	-.1554	1.055	.883
Total Test Anxiety Score	-.25	78	-.7882	3.096	.800
Sources of test anxiety:					
Social Components of worry	.03	78	.0288	1.057	.978
Personal Components of worry	.65	78	.8759	1.348	.518
Coping Strategies:					
Social Support Strategy	1.81	78	1.3471	.743	.074
Physical Coping Strategy	1.88	78	.9586	.509	.063
Problem Focused Strategy	.47	78	.3409	.725	.640
Non Productive Coping Strategy	-.19	78	-.2306	1.240	.853
Positive Thinking Strategy	.74	78	.1817	.246	.462

Table no. 4.6 describes the significance of difference across middle SES (42) and higher SES (43) students on test-anxiety, its dimensions, sources of test anxiety and different coping strategies for confidence level of 95%.

Table No. 4.6:

t-test for test-anxiety, its dimensions, sources of test anxiety and different coping strategies among middle and higher SES students

Dimension	t-score	Df	Mean difference	SE of Difference	2-tailed Sig. Level
Dimensions of Test Anxiety:					
Physical Change and Change in Daily Routine	.70	83	.6168	.881	.486
Social Change	.01	83	.0094	.629	.988
Self worry related to Performance in test /Academics	1.74	83	3.1467	1.804	.085
General appraisal of the self	1.37	83	1.5006	1.097	1.37
Total Test Anxiety Score	1.60	83	5.2735	3.286	.112
Sources of test anxiety:					
Social Components of worry	2.11	83	2.1052	.999	.038*
Personal Components of worry	1.94	83	2.3854	1.229	.05*
Coping Strategies:					
Social Support Strategy	-.85	83	-.6268	.741	.400
Physical Coping Strategy	.15	83	.0664	.449	.883
Problem Focused Strategy	.19	83	.1451	.776	.852
Non Productive Coping Strategy	2.28	83	2.3095	1.011	.025*
Positive Thinking Strategy	-.17	83	-.0471	.284	.868

*Note-1- *denote that difference is found significant at .05 level.*

The analysis of Table No. 4.6 indicates that significant differences exist among the students of middle socio-economic status and higher socio-economic status students on Social components of worry ($t=2.11$, $p < .05$) and Personal components of worry ($t=1.94$, $p < .05$) dimensions. Therefore, it could be said that middle socio-economic students experience higher social demands and pressure in comparison to higher socio-

economic status students. They were less sure about their ability, aptitude, and effort to produce optimum results in the examination, and consider that their poor performance in test or examination would hamper their career prospects. Therefore they also experience more anxiety due to their personal traits and attributes.

Significant difference was found on the Non-productive coping strategy ($t=2.28$, $p<.05$) among the students of middle and higher socio-economic status students. The students of middle socio-economic status use more Non-productive coping strategy such as ignoring the problem, hopelessness, avoidance, using unfair means, smoking etc in comparison to students of the higher socio-economic status.

Table No. 4.7 describes the significance of difference in lower SES (38) and higher SES (43) students on test-anxiety, its dimensions, sources of test anxiety and different coping strategies for confidence level of 95%.

The analysis of Table No. 4.7 indicates that significant differences exist among the students of lower and higher socio-economic status on both Social ($t=2.09$, $p<.05$), and Personal components of worry ($t=2.46$, $p<.05$) dimensions. The lower socio-economic students experience higher Social and Personal components of worry in comparison to higher socio-economic status students.

Significant difference was found on the Non-productive coping strategy ($t=1.90$, $p<.05$) among the students of lower and higher socio-economic status students. The students of lower socio-economic status were found to have used more Non-productive coping strategy in comparison to students of the higher socio-economic status.

Table No. 4.7:

t-test for test-anxiety, its dimensions, sources of test-anxiety and different coping strategies among lower and higher SES students

Dimension	t-score	df	Mean difference	SE of Difference	2-tailed Sig. Level
Dimensions of Test Anxiety:					
Physical Change and Change in Daily Routine	.57	79	.4614	.808	.570
Social Change	.28	79	.1573	.557	.778
Self worry related to Performance in test /Academics	1.48	79	2.5214	1.700	.142
General appraisal of the self	1.17	79	1.3452	1.152	.246
Total Test Anxiety Score	1.45	79	4.4853	3.097	.152
Sources of test anxiety:					
Social Components of worry	2.09	79	2.134	1.019	.040**
Personal Components of worry	2.46	79	3.2613	1.324	.016**
Coping Strategies:					
Social Support Strategy	.88	79	.7203	.816	.380
Physical Coping Strategy	2.28	79	1.0251	.449	.025**
Problem Focused Strategy	.68	79	.4859	.717	.500
Non Productive Coping Strategy	1.90	79	2.0789	1.097	.062
Positive Thinking Strategy	.43	79	.1346	.311	.666

*Note- 1- **denote that difference is found significant at .05 level.*

Objective 1.4: To find out the magnitude of test-anxiety, its dimensions, and sources of test anxiety among the students of different types of schools (Convent and Govt. schools).

Objective 2.4: To find out the magnitude of different coping strategies among the students of different types of schools (Convent and Govt. schools).

The objectives have been studied with reference to the mean score and S.D. on test-anxiety, its dimensions, sources of test anxiety, and different coping strategies. The t-test was calculated to find out whether the significance of these differences exists or not among different socio-economic status.

Table No. 4.8 describes the average score of the students of convent and government schools on test-anxiety, its dimensions, sources of test-anxiety and different coping strategies.

Analysis of Table No. 4.8 indicates that in both type of schools- convent (M=67.51, S.D. =15.27) and government (M=67.96, S.D. =12.92), the test anxiety was at moderate level among the students. The higher value of S.D. among the students of government schools indicate that they have provided a more dispersed response pattern on test anxiety in comparison to the students of convent schools.

Among different dimensions of test-anxiety, the anxiety manifested on Physical change and change in daily routine (M=12.63, S.D. =4.22), and General appraisal of the self (M=13.74, S.D. =4.99) was at moderately low level among the students of convent schools and it was at moderately higher level on Social Change (M=10.12, S.D. =2.905) dimension. It was also found that Self-worry related to performance in test/academics (M=31.03, S.D. =8.58) among the convent school students was almost at the moderate level.

Table No. 4.8:

Mean and S.D. on test-anxiety, its dimensions, sources of test anxiety and different coping strategies among the students of Convent and Govt. schools

Dimensions	Type of School			
	Convent School (78)	Govt. School (45)		
	Mean	S.D.	Mean	S.D.
Dimensions of Test Anxiety:				
Physical Change and Change in Daily Routine	12.63	4.22	11.62	2.84
Social Change	10.12	2.905	11.02	2.18
Self worry related to Performance in test /Academics	31.03	8.58	31.00	7.07
General appraisal of the self	13.74	4.99	14.31	5.04
Total Test Anxiety Score	67.51	15.27	67.96	12.92
Sources of test anxiety:				
Social Components of worry	17.33	4.47	18.60	5.04
Personal Components of worry	22.73	6.06	23.49	5.91
Coping Strategies:				
Social Support Strategy	11.14	3.43	9.89	3.47
Physical Coping Strategy	2.85	2.173	3.60	2.06
Problem Focused Strategy	9.18	3.46	9.49	3.12
Non Productive Coping Strategy	9.46	5.01	9.38	5.34
Positive Thinking Strategy	5.01	1.33	5.11	1.15

Among the government school students the test-anxiety was at moderately low level on Physical change and change in daily routine (M=11.62, S.D. =2.84) and at moderately high level on Social change dimension (M=11.02, S.D. =2.18). The anxiety

was at moderate level on General appraisal of the self ($M=14.31$, $S.D.=5.04$) and Self-worry related to performance in test/academics ($M=31.00$, $S.D.=7.07$) dimension.

Analysis of mean scores on sources of test anxiety indicates that on both the dimensions (social and personal components of worry) the convent and the government school students showed higher scores. The analysis indicates that both Social and Personal components contributed significantly to the experience of test anxieties among the students of government schools ($M=18.60$, $S.D.=5.04$ and $M=23.49$, $S.D.=5.91$ respectively), in comparison to the students of convent schools ($M=17.33$, $S.D.=4.47$ and $M=22.73$, $S.D.=6.06$ respectively for social and personal components). Among the government school students' dispersion was more on the Social components as compared to convent school students, whereas on the Personal components of anxiety dispersion was more among the convent school students in comparison to government school students.

Among the convent school students the most preferred coping strategy was Positive thinking ($M=5.01$, $S.D.=1.33$) followed by Social support ($M=11.14$, $S.D.=3.43$), Problem focused ($M=9.18$, $S.D.=3.46$), and Non-productive coping strategy ($M=9.46$, $S.D.=5.01$) respectively. The least preferred coping strategy among the convent school students was Physical coping strategy ($M=2.85$, $S.D.=2.17$). However, among the government school students the most preferred coping strategy was Positive thinking ($M=5.11$, $S.D.=1.15$), followed by Problem focused ($M=9.49$, $S.D.=3.12$), Social support ($M=9.89$, $S.D.=3.47$), and Physical coping strategies ($M=3.60$, $S.D.=2.06$) respectively. The least preferred coping strategy among the government school students was Non-productive coping strategy ($M=9.38$, $S.D.=5.34$).

It was found that among the different coping strategies, convent school students relied more on Social support strategy and Non-productive coping strategy whereas the government school students relied more on the Physical coping, Problem focused coping and Positive thinking coping strategy.

Table No. 4.9:

t-test for test-anxiety, its dimensions, sources of test anxiety and different coping strategies among the students of convent and government schools

Dimensions	t-score	df	Mean difference	SE of Difference	2-tailed Sig. Level
Dimensions of Test Anxiety:					
Physical Change and Change in Daily Routine	1.42	121	1.006	.708	.158
Social Change	-1.82	121	-.907	.499	.072
Self worry related to Performance in test /Academics	.02	121	.0256	1.51	.986
General appraisal of the self	-.61	121	-.5675	.937	.546
Total Test Anxiety Score	-1.16	121	-.4427	2.707	.870
Sources of test anxiety:					
Social Components of worry	-1.44	121	-1.267	.877	.151
Personal Components of worry	-.67	121	-.7581	1.124	.501
Coping Strategies:					
Social Support Strategy	1.94	121	1.2521	.645	.05*
Physical Coping Strategy	-1.86	121	-.7410	.399	.066
Problem Focused Strategy	-.49	121	-.3094	.626	.622
Non Productive Coping Strategy	.09	121	.0838	.961	.931
Positive Thinking Strategy	-.41	121	-.0983	.238	.680

*Note- 1- * indicate significance of the t-test at .05 levels.*

Table No. 4.9 describes the significance of difference among the students of convent (78) and govt. schools (48) on test-anxiety, its dimensions, sources of test anxiety and different coping strategies for confidence level of 95%.

Analysis of Table No. 4.9 indicates that the significant difference ($t=1.94$, $p<.05$) exists only on the Social support strategy among the students of the convent and government school. Convent school students were found to seek more social support in comparison to government school students.

Correlation Analysis

Objective 3.1: To explore how the test-anxiety is related to the sources of test anxiety and different coping strategies among the sr. secondary students.

Correlation analysis was done to find out the relationships among test anxiety, sources of test anxiety and different coping strategies used by the sr. secondary students.

Table No. 4.10 describes the correlation coefficient matrix among the test-anxiety score, sources of test anxiety (Social and personal components) and different coping strategies among the sr. secondary students.

Table No. 4.10:

Correlation-coefficient matrix among the test-anxiety score, sources of test anxiety and different coping strategies for the sr. secondary students

Dim	TAS	Social Com	Personal Com	Social Support	Physical Coping	Problem Focused	NPC	Positive Thinking
TAS	1.000							
Social Com	.4877 (.000)*	1.000						
Personal Com	.5654 (.000)*	.5780* (.000)	1.000					
Social Supports	-.0083 (.928)	.1665 (.066)	.1435 (.113)	1.000				
Physical Coping	-.1516 (.094)	-.0289 (.751)	-.077 (.397)	.1345 (.138)	1.000			
Problem Focused	.1948 (.031)**	.1350 (.137)	.1806 (.046)**	.2008 (.026)**	.0552 (.544)	1.000		
NPC	.3495 (.000)*	.1497 (.098)	.2308 (.010)*	-.0608 (.504)	.0090 (.921)	.1483 (.102)	1.000	
Positive Thinking	.0166 (.855)	.0622 (.494)	.0226 (.804)	.1299 (.152)	.1539 (.089)	.1422 (.117)	.0166 (.855)	1.000

Note: 1- * denote significance of correlation at .01 levels.

2- ** denote significance of correlation at .05 levels.

In the study, strong positive correlation of test-anxiety was found with Social ($r=.4877$, $p<.01$) and Personal components ($r=.5654$, $p<.01$) of the anxiety for the sr. secondary students. This shows that among the sr. secondary students whenever the personal and social pressures were high, they experienced higher level of anxiety.

Significant positive correlation of test-anxiety was found with Problem focused ($r=.1948$, $p<.05$) coping strategy whereas high positive correlation was found between test anxiety and Non-productive coping strategy ($r=.3495$, $p<.01$). Thus, as the test-anxiety increases the tendency to use Problem focused such as engaging in activities that are directly going to help in performing better in the examination, studying more

rigorously and Non-productive coping strategy such as ignoring the problem, hopelessness, avoidance, using unfair means, smoking etc among the sr. secondary students also increases.

It has also been found that significant positive correlation exists between the Social and Personal components of anxiety ($r=.5780$, $p<.01$). This reveals that when social pressures such as parents and significant others expectations, worry about hurting parents, loosing image in the eyes of significant others etc. are high, students start demanding more from themselves. A consequent of this could be raising doubt about their preparations, aptitude, efforts etc.

The Personal components of anxiety was found to be having significant positive correlation with Problem focused ($r=.1806$, $p<.05$) and Non-productive coping strategy ($r=.2308$, $p<.01$). Thus with increase in the Personal components of anxiety the tendency to use Problem focused and Non-productive coping strategy increases among the senior secondary students.

Significant positive correlation ($r=.2008$, $p<.05$) was also found between the Social support strategy and Problem focused strategy. Thus it could be said those students who seek social support are the one's who focused more on the problem. This could be because as these students communicate with their parents, teachers and peers, they are less anxious about the outcomes.

Objective 3.2: To explore how the test-anxiety is related to sources of test anxiety and different coping strategies among the boys.

Table No. 4.11 describes the correlation coefficient matrix among the test-anxiety score, sources of test anxiety (Social and personal components) and different coping strategies for the boys.

Table No. 4.11:
Correlation-coefficient matrix among the test-anxiety score, sources of test anxiety and different coping strategies for the boys

Dim	TAS	Social Com	Personal Com	Social Support	Physical Coping	Problem Focused	NPC	Positive Thinking
TAS	1.000							
Social Com	.4247 (.001)*	1.000						
Personal Com	.5815 (.000)*	.5010 (.000)*	1.000					
Social Supports	-.1431 (.288)	.2859 (.031)**	.0707 (.601)	1.000				
Physical Coping	-.1715 (.202)	.1076 (.426)	.0368 (.786)	.2283 (.088)	1.000			
Problem Focused	.3364 (.011)**	.3073 (.020)**	.4030 (.002)*	.2021 (.132)	.0291 (.830)	1.000		
NPC	.2383 (.074)	.0528 (.697)	.2543 (.056)	-.3198 (.015)**	-.2142 (.110)	.1552 (.249)	1.000	
Positive Thinking	.0590 (.663)	.0396 (.770)	-.0186 (.890)	.0069 (.959)	.2278 (.088)	.1741 (.195)	-.3313 (.012)**	1.000

Note: 1- * denote significance of correlation at .01 levels.

2- ** denote significance of correlation at .05 levels.

In the correlation analysis between the test-anxiety and sources of test anxiety for the boys, strong positive correlation was found between test anxiety and social components ($r=.4697$, $p<.01$), and between test anxiety and personal components

($r=.5286$, $p<.01$) of worry. This shows that among the boys whenever the personal and social pressures are high, they experience higher levels of test-anxiety.

Significant positive correlation was found between the test-anxiety and Problem focused strategy ($r=.3364$, $p<.05$). Thus to some extent it could be said that, as the test-anxiety increases, the tendency to engage in Problem focused strategy also found to be increasing among the boys.

It has also been found that strong positive correlation exists between the Social and Personal components of anxiety ($r=.5010$, $p<.01$) among the boys. This reveals that when social pressures such as expectations from the parents, worry about hurting parents, losing image in the eyes of significant others etc. are high, boys start demanding more from themselves. Consequently this could be raising doubt about their preparations, aptitude, efforts etc and career in future.

The significant positive correlation of the Social components of anxiety was found with Social support strategy ($r=.2859$) and Problem focused strategy ($r=.3073$) at the significance level of .05. It indicates that when the social pressures are perceived to be high, boys tend to use a combination of Social support and Problem focused strategy.

Strong positive correlation ($r=.4030$) exists between the Personal components of anxiety with the Problem focused strategy which is significant at the .01 level. Thus those boys who question their abilities, efforts and aptitude tend to use problem focused strategy more often.

Significant negative correlation ($r= -.3198$, $p<.05$) was found between Social support and Non-productive coping strategy. Thus, as the Social support increases boys tend to use less of the Non productive coping strategy. Significant negative correlation ($r= -.3313$, $p<.05$) was also found between the Non productive coping strategy and Positive thinking. Therefore, those boys who think positively use less Non-productive coping strategy.

Objective 3.3: To explore how the test-anxiety is related to sources of test anxiety and different coping strategies among the girls.

Table No. 4.12 describes the correlation coefficient matrix among the test-anxiety score, sources of test anxiety (Social and personal components) and different coping strategies for the girl students.

In the correlation analysis between the test-anxiety, different components of anxiety and coping strategy for girl students, strong positive correlation was found of test-anxiety with Social ($r=.4697$) and Personal components ($r=.5286$) of anxiety at .01 level of significance. This shows that among the girl students whenever the Personal and Social pressures were high, they experienced higher level of anxiety.

Strong positive correlation was found between the test-anxiety and Non-productive coping strategy ($r=.3891$, $p<.01$). Therefore, it could be said that as the test-anxiety increases the tendency to use the Non-productive coping strategy also increases among the girls.

The strong positive correlation were found between the Personal and Social components of anxiety ($r=.6234$, $p<.01$). It implies that those girls who perceived high social pressure have questioned themselves on their abilities, efforts, and aptitude more often.

Table No. 4.12:

Correlation-coefficient matrix among the test-anxiety score, sources of test anxiety and different coping strategies for the girls

Dim	TAS	Social Com	Personal Com	Social Support	Physical Coping	Problem Focused	NPC	Positive Thinking
TAS	1.000							
Social Com	.4697 (.000)	1.000						
Personal Com	.5286 (.000)	.6234 (.000)	1.000					
Social Supports	-.0037 (.976)	-.0004 (.998)	.1633 (.190)	1.000				
Physical Coping	-.0951 (.448)	-.1083 (.387)	-.1417 (.257)	.0958 (.444)	1.000			
Problem Focused	.0976 (.436)	-.0281 (.823)	-.0298 (.812)	.2158 (.082)	.0768 (.540)	1.000		
NPC	.3891 (.001)	.1881 (.130)	.1902 (.126)	.0926 (.459)	.1803 (.147)	.1541 (.217)	1.000	
Positive Thinking	-.0247 (.844)	.0938 (.454)	.0731 (.560)	.2965 (.016)	.0792 (.527)	.0990 (.429)	.0751 (.549)	1.000

Note: 1- * denote significance of correlation at .01 levels.

2- ** denote significance of correlation at .05 levels.

Significant positive correlation ($r=.2965$, $p<.05$) was found between the Social support and the Positive thinking strategy. Therefore, it could be said that those girls who have high Social support tend to engage in Positive thinking more often.

Objective 3.4: To explore how the test-anxiety is related to sources of test anxiety and different coping strategies among the students of low SES.

Table No. 4.13 describes the correlation coefficient matrix among the test-anxiety score, different components of anxiety (Social and personal components) and different coping strategies for the low socio-economic students.

The result showed strong positive correlation ($r=.5536$, $p<.01$) between test-anxiety and Personal component of anxiety. Thus as the students of lower SES starts raising doubts about their efforts, aptitude, abilities and career prospects the tendency to experience more test anxiety increases among them.

The strong positive correlation ($r=.5338$, $p<.01$) was found between the Personal and Social components of anxiety. Thus, with the increase in the Social components of anxiety, the Personal components of anxiety also increase for the students of lower socio-economic strata.

Table No. 4.13:

Correlation-coefficient matrix among the test-anxiety score, sources of test-anxiety and different coping strategies for the low socio-economic status students (LSES)

Dim	TAS	Social Com	Personal Com	Social Support	Physical Coping	Problem Focused	NPC	Positive Thinking
TAS	1.000							
Social Com	.2887 (.079)	1.000						
Personal Com	.5536 (.000)*	.5338 (.001)*	1.000					
Social Supports	-.1588 (.341)	.2451 (.138)	.0254 (.880)	1.000				
Physical Coping	-.3153 (.054)	.0100 (.953)	.0521 (.756)	.2903 (.077)	1.000			
Problem Focused	.2335 (.158)	.1689 (.311)	.2643 (.109)	.1579 (.344)	.0133 (.937)	1.000		
NPC	.2678 (.104)	.0616 (.713)	.2195 (.185)	-.0819 (.625)	.1012 (.545)	.2505 (.129)	1.000	
Positive Thinking	.2999 (.067)	.0849 (.612)	.2476 (.134)	.0229 (.892)	.2847 (.083)	.2554 (.122)	.0563 (.737)	1.000

Note: 1- * denote significance of correlation at .01 levels.

2- ** denote significance of correlation at .05 levels.

Objective 3.4: To explore how the test-anxiety is related to sources of test anxiety and different coping strategies among the students of middle SES.

Table No. 4.14 describes the correlation coefficient matrix among the test-anxiety score, different components of anxiety (Social and personal components) and different coping strategies for the middle socio-economic status students.

Table No. 4.14:
Correlation-coefficient matrix among the test-anxiety score, sources of test-anxiety and different coping strategies for the middle socio-economic status students (MSES)

Dim	TAS	Social Com	Personal Com	Social Support	Physical Coping	Problem Focused	NPC	Positive Thinking
TAS	1.000							
Social Com	.6609 (.000)*	1.000						
Personal Com	.4873 (.001)*	.5650 (.000)*	1.000					
Social Supports	.1540 (.330)	.0975 (.539)	.2278 (.147)	1.000				
Physical Coping	.0528 (.740)	.0782 (.622)	-.0986 (.535)	.0665 (.676)	1.000			
Problem Focused	.2870 (.065)	.1026 (.518)	.0310 (.845)	.0432 (.786)	.1858 (.239)	1.000		
NPC	.2555 (.102)	.0324 (.839)	-.0152 (.921)	-.0584 (.713)	.1018 (.521)	-.0911 (.566)	1.000	
Positive Thinking	-.0246 (.877)	-.1209 (.446)	-.1124 (.478)	.2635 (.092)	.1884 (.232)	-.0797 (.616)	-.2717 (.082)	1.000

Note: 1- * denote significance of correlation at .01 levels.

2- ** denote significance of correlation at .05 levels.

Strong positive correlation was found of test-anxiety with Social ($r=.6609$) and Personal components ($r=.4873$) of anxiety at .01 level of significance. This shows that

among the students of middle SES, whenever the Personal and Social pressures were high, they experienced higher level of anxiety.

The strong positive correlation between the Personal and Social components of anxiety ($r=.5650$, $p<.01$) revealed that with the increase in the Social components of anxiety students of middle SES tend to demand more from themselves.

Objective 3.5: To explore how the test-anxiety is related to sources of test anxiety and different coping strategies among the students of high SES.

Table No. 4.15 describes the correlation coefficient matrix among the test-anxiety score, different components of anxiety (Social and personal components) and different coping strategies for the high socio-economic students.

In the analysis, high positive correlation ($r=.4168$, $p<.01$) and ($r=.6327$, $p<.01$) was found between the test anxiety and Social and Personal components of anxiety. This shows that among the high SES students, whenever the personal and social pressures were high, they experienced higher level of anxiety. Strong positive correlation ($r=.5101$, $p<.01$) was found between test-anxiety and Non-productive coping strategy. Thus, as the test-anxiety increases the tendency to use Non-productive coping strategy also increase significantly.

Significant negative correlation ($r= -.3133$, $p<.05$) was found between the test-anxiety and Physical coping strategy. Thus, when the test-anxiety increases the tendency to use Physical coping strategy decreases to some extent. This indicates that among the high SES students, high stressed students tend to have cut down their physical exercises, yoga, meditation etc.

Table No. 4.15:

Correlation-coefficient matrix among the test-anxiety score, sources of test-anxiety and different coping strategies for the high socio-economic status students (HSES)

Dim	TAS	Social Com	Personal Com	Social Support	Physical Coping	Problem Focused	NPC	Positive Thinking
TAS	1.000							
Social Com	.4168 (.005)*	1.000						
Personal Com	.6327 (.000)*	.5759 (.000)*	1.000					
Social Supports	-.0269 (.864)	.1725 (.269)	.1774 (.255)	1.000				
Physical Coping	-.3351 (.028)**	-.3133 (.041)**	-.3588 (.018)**	-.0280 (.859)	1.000			
Problem Focused	.0744 (.635)	.1293 (.409)	.2527 (.102)	.3537 (.020)**	-.1080 (.491)	1.000		
NPC	.5101 (.000)*	.2868 (.062)	.4442 (.003)*	-.0401 (.798)	-.3811 (.012)**	.1178 (.452)	1.000	
Positive Thinking	-.1146 (.464)	.1670 (.285)	-.0774 (.622)	.1165 (.457)	.0103 (.948)	.2240 (.149)	-.2047 (.188)	1.000

Note: 1- * denote significance of correlation at .01 levels.

2- ** denote significance of correlation at .05 levels.

The strong positive correlation ($r=.5759$, $p<.01$) between the Personal and Social components of anxiety revealed that with the increase in the social components of anxiety, students of high SES tend to demand more from themselves.

Significant negative correlation ($r= -.3133$, $p<.05$) was found between Social components of anxiety and Physical coping strategy. Thus when social pressures were evidently high, the HSES students used less Physical coping strategy.

Negative correlation ($r = -.3588, p < .05$) was also found between the Personal components of anxiety and Physical coping strategy. Thus, with the increase in the Personal components of anxiety, the decision to use Physical coping strategy decreases. Whereas, high positive correlation ($r = .4442, p < .01$) was found between Personal components of anxiety and Non-productive coping strategy. This indicates that as the Personal components of anxiety increases, the use of Non-productive coping strategy also increase among the students of high socio-economic strata.

A significant positive correlation ($r = .3537, p < .05$) exists between Social support and Problem focused strategy which indicates that when social support increases problem focused behaviour increases to some extent.

Negative correlation ($r = -.3811, p < .05$) exists between Physical coping and Non productive coping strategy. Thus, among the students of high socio-economic strata, with increase in Physical coping behaviour the Non-productive coping behaviour decreases.

Thus, it could be said that among the students of HSES, students who are seeking Social support (communicating with their parents and significant others), they are encouraged to use Physical coping strategy more often. But those students who place high demands on themselves and perceived doubt about their abilities, efforts, and aptitude tend to use Non-productive coping strategy more often.

Section -2: Qualitative Analysis

Although the causal factors have been identified from the data obtained during the preliminary investigation carried out using structured questionnaires, detailed unstructured interviews were also carried out with few students with an objective to reflect more powerfully on the findings and also to bridge the gaps if there are any.

In order to study this objective, the narratives provided by these students were carefully content analysed. This helped in identifying the reasons of test anxiety and kind of coping strategies students adopted to deal with test anxiety.

Few responses of the students on why they experience test anxiety and how they feel prior to, during and after the examination:

Statement 1- “I feel very anxious about the exams, as if, I do not clear the exam, I have to study in the same class with my juniors and everybody will laugh at me”.

Statement 2- “Examinations in itself do not produce much tension. But from the very first day of the class especially in the year of writing the board examination, the teachers talk about, ‘how it will affect the school reputation and each student individually’. The more they talk about it, the more stress it puts on me”.

Statement 3- “If I am not able to do well and get good marks, I will have a bad reputation among my classmates and friends”.

Statement 4- “Prior to exam, I feel my preparation for it is very good, I have read every thing and covered the whole syllabus. But sometimes I am not able to understand the questions asked in the examination. This makes me feel worried about the exam and I keep on wondering as what would be asked, whether this time I will be able to understand the questions properly or not”.

Statement 5- “After the exam I often feel that if I would have read more and prepared well, I would have done better in the examination”.

Statement 6- “I feel that if I will fail in the exam, it would make my parents’ head down (Mere mata-pita ka sar neecha ho jayega), and they will feel very sad. It would give an opportunity to my uncle and aunt to taunt and scold me (Mere chacha, chachi

ko bolne ka mauka mil jayega). I will loose my best friend Pooja (who is coincidently very bright) and she will not like to talk to me”.

“After not getting good marks, I feel inferior and this affects my behaviour. At times I do not behave well with others and feel irritated with everyone. I want to be alone and do nothing”.

Statement 7- “If I am not able to get good marks, my parents would force me to quit studies”.

Statement 8- “I feel anxious about the exam because if I am not able to perform well, *Mein dusro ki ankho se gir jaungi*”.

Statement 9- “Absence of the encouragement from my parents, other members of the family and relatives become important source of my anxiety in the examination”.

Statement 10- “Some times the thought comes to my mind that I would never be able to get good marks and make progress in the life. It is there in my destiny”.

Statement 11- “When my examinations are close, it seems to be the major problem in my family. Everybody is concerned about how much marks I will get in the examination. When I go home after writing my exam, my parents check my question paper, ask me about what answers I have given to the questions, why I have not written that point, why I have made that silly mistake, etc. All this creates so much tension”.

Statement 12- “If I am not able to get good marks, it will ruin the expectations of my parents”.

Statement 13- “The marking procedure in the board examination is ambiguous and unclear. Thus, I do not know how many marks I would get in the examination. Therefore I keep on thinking about the marks I would get in the examination. This puts pressure and affects my performance in the examination”.

Statement 14- “My parents are spending lot of money on my education and they have a dream to see me a successful man. If I do not get good marks, I may not be able to fulfil their wish. This creates pressure on me to do better than other students”.

Statement 15- “I feel like committing suicide when people use harsh words (*katu shabd*) about not doing well in the examination. It seems everybody is torturing and laughing at me”.

Statement 16- “I feel anxious about the examination because I keep in mind the condition of my family, the expectations my parents have about me, the hard labour my elder sister has put in teaching me, and the fee my parents have given for my studies. If I will get low marks or fail in even one subject, it would ruin every thing”.

Statement 17- A girl said, “My parents never considered me a girl. They considered me as their son; they want me to glorify their name and fame. They want to see me successful and earn all the comforts in the life. They want me to become an I.A.S. (Indian Administrative Service) officer. I do not feel like letting them down. I therefore feel very anxious”.

The content analysis of the above responses indicates that in most of the cases the parent’s expectations, the fear of letting them down, the thought of their becoming sad and the social reasons like how their close relatives would feel, what they would say, the taunts and sarcastic remarks made by them, the fear of juniors and friends laughing at them, the guilt related to spoiling the efforts of the elder brothers and sisters in teaching and guiding etc. seems to be the most prominent reasons for why the students feel anxious about the examinations.

Too much and too frequent discussions on how important examination is and getting good marks in the examination from the career point of view by teachers and media (news papers, T.V., magazines etc.) especially during board examinations create pressures and anxieties among the students. Some students also mentioned that they feel anxious because they do not understand the evaluation procedure, thus they are

worried about how much marks they would get in examination. Most of the students said that they only get marks and teachers never discuss with them why they get bad marks, how to improve and overcome their weaknesses. It was also found that in most of the cases the students try to compare their performance with their friends. If they achieve marks less than their friends, they feel inferior and experience guilt and shame.

A number of physical symptoms such as tremor in the hands and legs, headache, stomach cramps etc. occurs during the examination. Students also reduce their times in other activities like spending time with friends, spending time in other areas of interest etc. Thus, in a nutshell, it could be said that social factors play a very significant role in the experience of test anxiety among students.

Few responses of the students on how do they cope up with their test anxiety:

Statement 1- “When I feel anxious, I go to temple and pray to god. I have a strong faith in god. I don’t think anything in this world will happen without god’s wish”.

Statement 2- “If I am not able to understand something, I work hard. If still I am not able to understand, then I pray to god. If even then I am not able to understand, then I turn off the light and go to sleep”.

Statement 3- “When I feel anxious, I go to my friends and talk to them. It helps a lot to overcome the problem of fear of anxiety”.

Statement 4- “After getting low marks, I feel like crying and run away from the home”.

Statement 5- “I try to concentrate totally on my studies and do not waste my time in thinking about other things. My parents have always thought about my well-being, so I always abide by their sayings. I try to console myself by thinking that since I have worked hard throughout the year, nothing bad is going to happen”.

Statement 6- “I do not feel much anxiety about examination and during my studies, try to concentrate on it. During the oral examination, I some time feel anxious. At that time, I remember my parents and god; it gives me the strength and peace to perform well”.

Statement 7- “If I feel anxious, I close my eyes and remember the god and parents”.

Statement 8- “When I feel anxious, I often drink water, and rotate my pencils. Some times I eat snacks and roam outside. I talk to my school friend on some other topics to divert my attention from the tension”.

The content analysis of the responses on how the students cope with the test anxiety indicate that taking spiritual support by praying god, going to temple and seeking parental support play a very significant role in coping with test anxiety. It is found that most of the students across gender and SES believes in ‘*Just World Hypothesis*’. The analysis also revealed that student also tries to divert their attention from the examination by engaging themselves in gossips and talks with their friends. It is also found that students take shelter of some non-productive coping like avoiding the problem at hand etc. Some students also try to keep and/or enhance their morale by thinking positively that nothing bad is going to happen to them. However, one important observation came during the study that in spite of being aware of the benefits of the physical coping strategy such as yoga, meditation, physical exercise etc., there is very little tendency to engage in such practices among the students. It was also found that none of the student has taken help of professional counsellors in overcoming test anxiety, though they admitted that it might help them in overcoming their anxiety. This might be due to the non-availability of good professional counsellors and the lack of desire on the part of schools to invite their services.

CHAPTER- 5
DISCUSSION

The objectives and hypotheses mentioned in chapter-3 (methodology) are discussed in this chapter in the light of the results obtained (refer chapter-4) in this study.

Objective 1: To measure test-anxiety and sources of test anxiety among the senior secondary students. To find out the difference in test-anxiety and sources of test anxiety across different gender groups, SES and school type.

Hypothesis 1- The senior secondary students will experience high level of anxiety at the time of examination. The sources of stress will be both personal and social factors.

The computation of Mean and standard deviations (refer table-4.1, chapter 4) revealed that test anxiety was at moderate level among the senior secondary students. Anxiety manifested in physical change and change in daily routine and general appraisal of the self was found to be at moderately low level. It was reported at moderately higher level on social change dimension. In other words, the stress was found to be manifested more in the form of social changes.

The individuals prefer to have a stable and positive self image about themselves, even when there are doubts at the personal level. The uncertainties tend to place more demands on the maintenance of positive social identities. As mentioned by Festinger, there is strong desire to maintain one's self-image. If one experiences conflicts with one's self-image, then that sets up dissonance. The individual deal with that in two possible ways: i) by adjusting their self-image ii) by reinterpreting the experience itself. He mentioned that there is plenty of evidence that people often go for the second option. They try hard to maintain their self-image. Thus, they may not be inclined to reappraise their self too often by engaging in the thoughts and cognition, which are self depreciating. Cognitions such as "I may not be too bright" or "thought of not doing well" may be too threatening for the individual to accept and thus they may want to avoid such thoughts and appraise their self-concept too frequently. Such appraisal takes place only if the students find themselves consistently performing

poorly in the examination. This may be the reason why senior secondary students' general appraisal of the self was less affected.

Table – 4.1 also revealed that the students have reported social pressure as the one of the major source for experiencing test anxiety. The higher level of social pressure could be due to the unrealistically high expectations from the parents and significant others, fear of others laughing and making fun of them in the event of not performing well in the examination. Few narratives collected by the students during the interview are mentioned below which substantiate this argument:

Student 1- "I feel very anxious about the exams because if I am not able to clear the exam, I have to study in the same class with my juniors and everybody will laugh at me".

Student 2- "I feel that if I will fail in the exam then it would make my parents head down (Mere mata pita ka sar neecha ho jayega), and they will feel very sad. It would give an opportunity to my uncle and aunt to taunt and scold me (Mere chacha, chachi ko bolne ka mauka mil jayega). I will loose my best friend Pooja (who is coincidently very bright) and she will not like to talk to me".

Student 3- "When my examinations are close, it seems to be the major problem in my family. Everybody is concerned about how much marks I will get in the examination. When I go home after writing my exam, my parents check my question paper, ask me about what answers I have given to the questions, why I have not written that point, why I have made that silly mistake, etc. This creates so much tension".

Student 4- "I feel anxious about the examination because I keep in mind the condition of my family, the expectations my parents have about me, the hard labour my elder sister has put in teaching me, and the fee my parents have given for my study. If I will get low marks or fail in even one subject, it would ruin every thing".

On the basis of above narratives it could be contended that societal pressures are important sources of experiencing test anxiety among the students. Higher social pressure and the need to make favourable impressions on others may lead to higher

level of social changes such as keep on bothering about things as how other students are doing; pressure of getting good marks in the examinations from parents and significant others; lack of desire to spend their time with friends and parents when their examination is close.

High self (social) maintenance need is manifested in the findings that even at the time of stress when self doubts become apparent, the student's general appraisal of self are less affected. This could be because the students also experienced the higher level of personal pressure. This could be also due to the unrealistic demands students put on themselves coupled with doubts about their aptitude, efforts and future career prospects. In the wake of growing cut-throat competition where examinations have become a mean and end in itself, such pressures are likely to happen. The analysis of narratives revealed that personal doubts about aptitude and efforts and career prospects may be due to the lack of adequate feedback mechanism on their performances. After the examination they are simply told how many marks they have got in the examination. The finer details regarding why they have not secured good marks, shortcomings of their answers, and how to overcome this are not generally discussed with the students. Thus students remain sceptic about their performance and it creates anxiety and worry in them. The students' doubts about their performance, efforts and aptitude are reflected in the narratives collected during the interview. During the interview when students were asked why they experience test anxiety, a girl responded:

"Prior to exam, I feel my preparation for it is very good, I have read every thing and covered the whole syllabus. But sometimes I am not able to understand the questions asked in the examination. This make me feel worried about the exam and I keep on wondering as what would be asked, whether this time I will be able to understand the questions properly or not".

Another boy said:

"After the exam I often feel that if I would have read more and prepared well, I would have done better in the examination".

Thus in nutshell, it can be concluded that the social and personal pressures are two important sources of test anxiety among the students.

Hypothesis 2: Male and Female students will experience different levels of test anxiety.

Analysis of test anxiety across different gender groups (refer table no. 4.2 and 4.3 in chapter-4) had indicated that girls report more test anxiety in comparison to boys. Similar results have also been found in other studies as well (Chang, 1997, Daly, K. & Rogharr, 1994, Felson and Trudeau, 1999, Onwuegbuzie, Bailey, & Daley, 1997, Hembree, 1988, and Everson et. al. 1994). The reason could be the wrong study habits among girl students. Studies have found gender to be a significant variate of time management behaviour (Mackenzi, 1976). In various research studies it is found that males managed their time more effectively even in study related activities. Their traditional roles of 'bread earner' continued to make them perceive the world as more competitive, and therefore, they prefer to work in a time stringent schedule. Secondly male's priorities are found to be distinctly different from females. Their education is a passport to job market and their identities depend to a large extent on their activities in education. They prioritize their activities more meaningfully and thus effectively manage their time. Females on the other hand show indulgence in diverse and sometimes meaningless activities (from the study point of view), high socializing, confused priorities, unrealistic time estimates and indecision (Mackenzi, 1976) and thus show less effective time management behaviour. Rothblum, Soloman and Murakami (1986), also mentions women as high procrastinators. These could be resulting poor study habits in females in comparison to males. As a number of research studies have found poor study habit (which is characterised by lack of time management, unstrategic study, lack of priorities etc.) to be significantly related with higher test anxiety (Kliejin et. al. 1994; Culler and Holahan, 1980; Hembree 1988; Naveh-Benjamin, Mc Keachie and Lin, 1987), it seems logical to argue that girls will experience higher test anxiety. Second important reason could be attributed to the higher expectations from the girls in the changing scenario. This has been evidenced in the following narrative provided by a girl during the interview:

“My parents never considered me a girl. They considered me their son; they want me to glorify their name and fame. They want to see me successful and earn all the comforts in the life. They want me to become an I.A.S. (Indian Administrative Service) officer. I do not feel like letting them down, thus, I feel anxious”.

This rise in the expectations of parents and society could be putting more pressure on the girls to perform better and live up to their expectations and do not let them down. The girls also have more stakes to prove their self worth in the education. The education of girls in traditional society is not given as much importance as compared to the education of boys. In the wake of failure or poor performance they may have to quit their study. A girl mentioned this concern during the interview, when she was asked, “why does she experience test anxiety?” Quoting the girl student:

“If I am not able to get good marks, my parents would force me to quit the study”.

Thus the girls consistently have to put pressure on themselves to perform better in the examination and to prove their worth. This could be resulting in experience of higher level of test anxiety.

The girls have also reported more Self-worry related to performance in the test/academics and General appraisal of the self in comparison to the boys. As it has been already mentioned that researchers have found that girls have poor study habit, and there are more self implied pressure on girls; they may feel that their preparation is not up to the mark. They may be less sure about what would be asked in the examination and how to write better answers. Therefore, they may be worried more about their performance in the test. The various cognitions that are involved in worry, related to performance in the test/academics create doubt in their mind regarding their self-concept and these significantly affect their general appraisal about self. Thus, it can be concluded that girls experience more self-worry related to performance in the test/academics and their general appraisal of the self gets more affected than boys.

Hypothesis 3- The socio-economic status and school type will determine the magnitude and the nature of the test anxiety among the students.

The computation of the Mean, S.D. and t-test (refer table no. 4.4) across the students of different socio-economic status has revealed that not much difference exists among different SES groups in test anxiety. However, LSES and MSES students were found to experience higher social demands and pressure and were less sure about their ability, aptitude, and efforts to produce optimum result in the examination in comparison to HSES students.

Mackenzie (1971) revealed that there could be profound effect of one's early socialisation experiences, discipline training, values emphasised, emotional and financial securities, parental education and occupation etc. on anxiety. HSES parents due to their good educational background are in a better position to understand their children's study related problems and may be more realistic about their children's performance. They may also help them in their studies, prioritising their career and study accordingly. Due to financial and other securities, it is possible for the HSES students to prepare better for the examinations by taking tuitions, having access to the good books and teachers and better environment for the study. The students of LSES and MSES on the other hand lack goal clarity and adequate environment for the study, due to their parent's inability to guide them and financial problems. As, reported by Sircar (1990) also, rich parents even though gave less time to their children, they helped them enormously in their study, in choosing a career, in coping with increasing demands of the study and peer groups, in handling conflicting goals and ideas etc. This support helps the HSES student to become more confident and thus experience less personal and social pressure.

These differences can also be explained on the basis of social and personal identity theories. As research studies have mentioned that people making self-evaluations need to compare their performance with similar others, whereas people attempting self-improvement compared with better off others (Wills, 1981). The students of LSES and MSES may be having higher need for self-improvement due to

their emotional and financial insecurities. In order to improve their status and financial securities they engage in upward comparison more often and experience greater inequity in comparison to HSES students. The parents of the LSES and MSES students also encourage their children to involve in comparison with better offs. This may be putting more social and personal pressure on them. In the wake of changes coming in the scenario, this possibility could not be ruled out. Whereas, the students of HSES, having more financial and emotional securities are more concerned with self-evaluation need and thus compare their performance with similar others. The parents of the HSES may be encouraging them to compare their performance with similar others. Thus, they may be putting less pressure on their children.

Among the students of both convent and government schools, the (refer table no. 4.8, chapter-4) anxiety manifested in physical change and change in daily routine was at moderately low level. Whereas, this was manifested at moderately higher level in social change. On the general appraisal of the self dimension, government school students were found to be higher than the convent school students. It was also found that students of government schools experienced more social and personal pressure than the convent school students.

The reason could be traced in the culture and environment of the schools. The convent schools emphasised more on the punctuality. The classes are more regular. The student/teacher ratio is also better in the convent schools, which helps the students to interact more frequently and discuss their problems with their teachers. Thus, the communication gap between the teachers and students are minimal in the convent schools. Due to pressure from the parents, teachers also provide more attention to the students. On the other hand, the government schools have high student/teacher ratio. The communication gap between the teachers and students are more, and there is limited interaction between them. In the convent schools parent-teacher meetings are almost regularly organised, whereas this phenomenon was absent almost entirely in government schools. Thus, on the over all level, there is better communication between parents, teachers and students in the convent schools. This difference at the interaction and communication level in the convent and government schools could be important in

the sense that it helps the students from convent schools to be realistic and understand the expectations of the parents and significant others like teachers, etc. better and to negotiate their expectations from them accordingly. Another reason could be that since most of the convent school students come from well to do families they are not so much insecure regarding their jobs and career prospects. They do not see degree to be only passport for the better job. This could be the reason why convent school students experienced less social pressure than the government school students.

In the convent schools the teachers are also concerned with overall personality development of the students. The frequent tests prepare the students better to face the examination. Due to these factors, the students of convent school feel more confident, better prepared and are clear about their strengths and limitations. Therefore, they feel less personal pressure and anxiety at the time of the examinations.

Objective 2: To explore how the students cope with test-anxiety. Do gender, socio-economic status and school type mediate and determine the coping strategies of the students.

Analysis of the data indicate that among the students of all the groups irrespective of gender, SES, school type, Positive thinking was found to be the most preferred coping strategy. Most of the people seem to believe that if they have not committed anything wrong and done their *karma* (duty) properly, the result will always be good. This belief system invariably helps one to keep his/her morale high and cope up with the anxiety or fear. A high faith in spirituality and god may again strengthen their belief in believing just world hypothesis and to engage in positive thinking. The tendency of seeking spiritual support at the time of adversity is perhaps strongly rooted in the belief system of the traditional and religious societies (Pal and Singhal, 2001). This has also been evidenced in the narrative provided by the students during the interview. For example, a girl said,

“When I feel anxious, I go to temple and pray to god. I have a strong faith in god. I don't think anything in this world will happen without god's wish”.

This findings regarding Positive thinking is supported by a number of other studies as well. Other studies have also found that the frequency of using optimistic coping strategy to be the same for all students, as the optimism was inversely related to distress at each point, even when controlling for prior distress (Carver, Pozo, Harris, Noreiga, Scheier, Robinson, Kitcham, Nofstaff and Clark, 1993). Some other studies have also showed the use and usefulness of optimistic coping strategy. According to Cousins (1976) and Peale, (1956) positive thinking has for long been touted as a possible resource in helping people overcome personal hardships and adversity.

Among senior secondary students preference for the coping strategies (refer table no. 4.1, chapter-4) were: Positive thinking followed by Problem focused, Social support and Non productive coping strategy respectively. The least preferred coping strategy was found to be the Physical coping strategies. The least preference for the

Physical coping strategy (Yoga, Physical exercise, Meditation) was surprising from the fact that in the interview most of the students have admitted that it could be very significant in reducing stress. The reason for this could be that Physical coping strategy is useful only in long terms as it takes time, effort and energy and it does not provide immediate relief. Thus the students could be reluctant to use this coping strategy.

Hypothesis 4- Male and Female Sr. Secondary students will adopt different strategies to cope with test anxiety.

Analysis of the data on gender differences (refer table no. 4.3, chapter-4) in coping strategies have revealed that, girl students are found to seek more social support in comparison to the boys. A number of other studies have also supported the difference in coping strategies among males and Females (Keogh and Herdenfeldt, 2002; Kavsek, 1992; Kavsek, Tismer and Hanselmann, 1995; Seiffge-Krenke, 1993). The finding regarding social support strategy is similar to what Seiffge-Krenke (1993) have found. According to Seiffge-Krenke, regardless of the type of problem, female adolescents tended to talk about the problem much more frequently with significant others and usually try to solve a problem with the person concerned. They worry a lot about the problem, think about possible solutions, and expect negative consequences much more frequently than do boys.

Analysis indicates that among the boys least preferred coping strategy was Non-productive coping strategy and among the girls it was Physical coping strategy. Differences in the use of Non-productive coping strategy and Physical coping strategy among different gender groups may be due to the differences in the socialisation of the boys and girls. As mentioned by Deaux and Lewis (1984), that in many cultures, males are assumed to possess such desirable traits as decisiveness, forcefulness, confidence, ambition, assertiveness and rationality. In contrast, assumptions about females include less desirable traits such as passivity, submissiveness, indecisiveness, emotionality and dependence. Since males are thought to be assertive and the physical exercise is thought to be more masculine activity, it seems logical that the boy use less Non-

productive coping strategy (such as avoidance, ignoring problems etc.) in comparison to girls; and girls use less of physical exercise in comparison to boys.

Hypothesis 5- Socio-economic status and School type will determine the coping behaviour of the Sr. secondary students.

In the study it was found that students of LSES and MSES use more non-productive coping strategy in comparison to students of HSES. Other research studies have also found differences in coping strategy across different SES (Taylor, 1998, Guney, 1992). The finding of the study is congruent with the finding of Taylor (1998). As she point out that one might predict that avoidant coping strategies and, possibly, emotional regulation strategies, would be more characteristic as one moves down the SES ladder, because threats from the environment may overwhelm the personal resources of the individual, or the problems created by the environment may be largely uncontrollable; by contrast, the higher one's position on the SES ladder, the more likely one may be able to exert control over stressful events, thus leading to the deployment of active coping strategies.

Analysis of coping strategies among the students of different school type (refer table no. 4.9, chapter-4) has revealed that convent school students seek more Social support than government school students. This difference could be attributed to the difference in the culture of the convent and government schools. In the Convent schools emphasis is given on the teacher-parents meeting etc. whereas in the government schools such meetings are rare. In the convent schools more frequent interactions of the students and teachers are emphasised. The teachers are also concerned with the overall personality development of the children because of the pressure from the parents and environment. Whereas, in the government schools mostly the interactions between teachers and students are limited to classroom only. The teachers of the convent schools were also found to use better pedagogical methods for teaching (Clarke, 2001). They ask more thought provoking questions such as "how" and "why". On the contrary, in the government schools the students were rarely asked the questions in the class. The

questions asked by the students usually involve clarifications. The reasons for this may vary, but most students attributed it to the teacher's strictness as one student said, "he (the teacher) is too strict, it is better to sit quietly rather than to ask questions". Better interaction and communication with teachers and parents encourages the convent school students to seek their support. The less strength in the classrooms may also be the reason behind more effective communication between the students with their teachers and peers. Another reason could be that in convent schools most of the students come from the high SES background and their parents and significant others may be in a better position to provide necessary support to their children. According to Sircar (1990), rich parents even though gave less time to their children, they helped them enormously in their study, choosing a career, in coping with increasing demands of the study and peer groups and in handling conflicting goals and ideas etc.

Objective 3- To explore how the test-anxiety is related to different coping strategies of the students. To examine how the gender and SES explain these relationships.

Hypothesis 6: There will be significant relationship among level of test anxiety, sources of experiencing test anxiety and coping strategies of Sr. Secondary students.

Analysis of the results of the data (refer table no. 4.10 in chapter-4) on how test anxiety, sources of experiencing test anxiety and coping strategies are related revealed that whenever personal and social pressures are high, the students experience higher level of anxiety across all the groups. Thus it could be said that both personal and social pressures are significant factors in the experience of the test anxiety among the students. A positive correlation between social and personal component of anxiety was also found. The reason behind this could be that whenever social pressures such as parents' expectations, worry about hurting the parents, losing image in the eyes of the significant others etc. are high, students across each group start demanding more from themselves. These result in feeling unsure and inadequate about their own preparation, aptitude, and efforts etc. This in turn results in experiencing high personal pressure.

The results have revealed significant correlations among some coping strategies as well. This makes it evident that the students use more than one coping strategies at a time or shift between different coping strategies to reduce their anxiety. This finding seems to support the findings of the field researches by Cohen (1987), Folkman and Lazarus (1985), which demonstrated that most of the individuals exhibit a flexible way of coping. They either tend to use more than one strategy in a given situation or change their coping behaviour in response to changing situational demands. Thus people do not approach each coping context a new, but rather brought to bear a preferred set of coping strategies that remain relatively fixed across time and circumstances. Coping is a dynamic process. It shifts from stage to stage and individual to individual in a stressful transaction.

Analysis revealed that as test anxiety increases the tendency to use problem focused and non-productive coping strategy among the students also increases. This finding may apparently seem contradictory but when one goes into deeper analysis it seems logical. This seems to be due to the fact that when test anxiety increases, the student tries to overcome it by engaging themselves in activities that are directly going to help them in performing better in the examination such as studying more rigorously, using practice sets and model question papers, taking tutorial help etc. But sometimes, before the exam, the students may fear that these strategies may fail. In such a situation, they may feel helpless and may start using non-productive coping strategies such as ignoring the problem at hand, using unfair means, fantasy, smoking etc. This in short terms help them reduce their anxiety to some extent but they are at the same time aware that this is not going to help in the long run and enhance their performance in the examination. Therefore, they could be engaging in two kinds of thinking successively even though they appear to be contradictory.

The relationship between Personal components of anxiety with Problem focused and Non productive coping indicates that the tendency to use Problem focused and Non productive coping strategy simultaneously is high among those students who are less confident and have self doubt regarding their efforts, aptitude and preparation. When

students have self doubt regarding their efforts, aptitude and preparation they first try to resolve it by engaging themselves in activities that are directly going to help them in performing better in the examination. But when these efforts fail, they start ignoring the problem, look for unfair means or some other means to reduce their anxiety. A positive correlation between social support and problem focused strategy suggests that social support such as seeking advice and guidance from the parents, teachers, friends, seniors, brothers and sisters etc. help the students to concentrate more on the problem and use problem focused strategies. This finding supports the finding of Parasons et al. (1996). According to Parasons et al., even over-achiever secondary students commonly use the coping strategies of problem solving and social support. During the interview when students were asked 'how they cope up with their examination anxiety' one student answered:

"If I am not able to understand something, I work hard. If still I am not able to understand, then I pray to god. If even then I am not able to understand, then I turn off the light and go to sleep".

Thus, it seems that students use a set of coping strategies such as Problem focused, Social support and Non-productive coping strategies in order to reduce their anxieties related to examination. They may use it simultaneously or may shift among these strategies depending on the context and situations.

Summarising this it could be said that high social and personal pressures create test anxiety that leads to self related doubts. When self doubts are high, students use either problem focused or non-productive coping strategy or both simultaneously. If they get social support the tendency to use problem focused strategy increases and if they succeed they may not use non-productive coping strategy. However, if they do not succeed in reducing their anxiety by employing problem focused strategy they might go for non-productive coping strategy.

Hypothesis 7: The gender and SES will determine the pattern of relationship among test anxiety, sources of test anxiety and coping strategies of Sr. Secondary students.

Analysis of the relationship of coping strategies among different gender groups (refer table no. 4.11 and 4.12, chapter-4) have revealed that, when the social pressures are perceived high among the boys, they use a combination of social support and problem focused strategy. Boys who get social support and think positively were also found to use less non-productive coping strategy. Thus it can be contended that when social pressures are high, the use of social support strategy helps the boys to be more clear on the issues such as expectations of the significant others (parents, teachers, peers etc.) and to think positively. These reduce their stress and help them to focus more on the problem and use problem-focused strategies. This also reduces their tendency to indulge in or use non productive coping strategies such as ignoring the problem, hopelessness, avoidance, using unfair means, smoking etc.

It is found that as the test anxiety increases, the tendency to use non-productive coping strategy increases among the girls also. Girls who have high social support tend to engage themselves in positive thinking more often. Thus the higher test anxiety may elicit non-productive coping behaviour among the girls but when social supports such as advice and guidance are available from the parents and relevant others, the girls think positively and sustain their morale.

No significant correlation among the coping strategies was found for the students of LSES and MSES (refer table no. 4.13 & 4.14, chapter-4). Thus it can be concluded that there is no indication of using a particular set of coping strategies among the students of LSES and MSES, whereas this tendency is observed among the HSES students.

Correlation analysis among the test anxiety, sources of experiencing test anxiety and coping strategies (refer table no. 4.15, chapter-4) have revealed negative correlation of the test anxiety with Physical coping strategy and positive correlation with non-

productive coping strategies among the students of HSES. Thus at high anxious state, the tendency of ignoring the problem, hopelessness, avoidance, using unfair means etc. are found to increase, whereas tendency to engage in sports/physical exercise, meditation, yoga, or to relax by doing something of interest such as reading novels, painting, listening music etc is found to decrease among the HSES students.

Physical coping strategy is found to be negatively correlated with social and personal component of anxiety. A positive correlation is found between the problem focused and social support strategy. The finding suggests that when the personal and social pressures are apparently high among the students of HSES, they cut down their exercises, Yoga, Meditation and other activities to relax themselves. But when social support is available, the tendency to engage in activities that is directly going to help them perform better in the examination increases among the students of HSES.

Positive correlation between social support and problem focused strategy indicates that with the increase in social support the tendency to focus more on the problem engaging in activities that are directly going to help them in performing better in the examination increases. The evidence of this relationship could easily be observed in day to day life.

Non-productive coping strategy is found to be positively correlated with personal components of test anxiety and negatively correlated with physical coping. Thus, as the personal pressure like doubts about one's effort, aptitude, and career prospects increase the tendency to ignore the problem, hopelessness, avoidance etc. increases. But the physical coping strategy such as yoga, meditation, physical exercise etc. helps one to relax thus to overcome this negative tendency.

This may be due to the fact that the parents and significant others of the HSES, encourages them to use more of the physical exercise, yoga, meditation etc. and focus more on problem and use problem focused behaviour, (as they themselves may be aware of potential benefits of these strategies) whenever they find them experiencing

stress. The more emphasis on the problem focused behaviour in case of HSES may also be possible due to well off social, economical and educational background as they take tuition, take parents' and teachers' help to understand topic which they are not able to understand themselves.

CHAPTER- 6

SUMMARY & CONCLUSION

6.1 The Study:

The present study attempts to assess the test-anxiety and coping strategies among senior secondary students from Psycho-sociological perspective. The present study explores how the psycho-social factors such as expectations of parents, teachers and significant others influence the test-anxiety and coping behaviour of the students. The study also aims to find out the differences in test-anxiety and coping strategies across gender, socio-economic status and school type and relationship between test anxiety and coping strategies across these groups.

6.2 Objectives:

The objectives of the study were as follows:

1. To measure the test anxiety and sources of test anxiety among senior secondary students. To find out the difference in test anxiety and sources of test anxiety across gender, SES and school type.
2. To explore how the students cope with test anxiety. Do gender, SES and school types mediate and determine the coping strategies of the students.
3. To explore how test anxiety is related to coping strategies of the students. To examine the differences in such relationships across gender and SES.

Hypotheses:

1. The senior secondary students will experience high level of anxiety at the time of examination. The sources of stress will be both personal and social factors.
2. Male and Female students will experience different levels of test anxiety.
3. The socio-economic status and school type will determine the magnitude and the nature of the test anxiety among the students.

4. Male and Female senior secondary students will adopt different strategies to cope with test anxiety.
5. Socio-economic status and School type will determine the coping behaviour of the senior secondary students.
6. There will be significant relationship among level of test anxiety, sources of test anxiety and coping strategies of senior secondary students.
7. The gender and SES will determine the pattern of relationship among test anxiety, sources of test anxiety and coping strategies of senior secondary students.

6.3 Research Design:

In order to study the above stated hypotheses, both exploratory and descriptive research designs were used. In the first phase of the study data was collected through open-ended questionnaire and interview to find out the dimensions of the test anxiety, sources of test anxiety, and coping strategies. In the second phase of the study scales were developed and the data were collected to analyse the differences in test anxiety and coping strategies across different groups.

6.4 Theoretical Framework:

Socio-cultural, learning theory, and existential perspectives were used to develop the theoretical framework for the study.

6.5 Sample:

An incidental sample was selected from four different schools in Allahabad. The sample consisted of 123 students from the XIth class. Out of these 123 students, 57 were male and 66 were female students. Seventy-eight students were taken from the convent schools and 45 students were taken from government schools.

6.6 Variables:

A- Independent Variables

1. Gender: Male and Female
2. SES: LSES, MSES and HSES
3. School type: Convent and Government School

B- Dependent Variables

1. Test anxiety
2. Coping strategies

Sources of test-anxiety are used both as dependent and independent variable.

6.7 Tools:

In the initial phase data were collected through open-ended questionnaire and unstructured interviews. On the basis of this, dimensions were identified and the questionnaires for final data collection were developed.

Three scales were developed and used:

1. Test anxiety scale
2. Sources of test anxiety
3. Coping strategies

6.8 Data Analysis:

Data were analysed using both quantitative and qualitative tools. Descriptive statistics such as Mean, S.D., t-test and Pearson's correlation (r) analysis and content

analysis were used in the study. Beside this the responses obtained during unstructured interviews were content analysed.

6.9 Findings:

On the basis of the analysis and discussion carried out in Chapter 4 and 5, following findings and conclusions are enumerated:

- Test anxiety was at moderate level among the senior secondary students. Anxiety was manifested at low level in Physical change and change in daily routine and General appraisal of the self. It was at higher level on Social change dimension. Self-worry related to performance in test/academics was found to be at moderate level.
- Both Personal and Social aspects contributed at higher level in the experience of test anxiety among all senior secondary students irrespective of gender, SES, school type.
- Among all the students Positive thinking was found to be the most preferred coping strategy irrespective of the gender, SES and School type.
- Among senior secondary students preferences of the coping strategies were: Positive thinking followed by Problem focused, Social support and Non-productive coping strategy. The least preferred coping strategy was found to be the Physical coping strategy.
- Girls reported to have experienced more test anxiety than male students. They reported more Self-worry related to performance in the test/academics and their General appraisal of the self gets affected more in a test situation in comparison to the boys.
- Among the boys least preferred coping strategy was found to be Non productive coping strategy and among the females it was Physical coping strategy. Girls were found to seek more Social support in comparison to boys during examinations.

- Students of LSES and MSES were not found to differ much on any of the dimensions of test-anxiety and sources of experiencing test anxiety. LSES and MSES students were found to experience higher social demands and pressure and less sure about their ability, aptitude, and efforts to produce optimum result in the examination in comparison to HSES students.
- It was found that students of LSES and MSES use Non-productive coping strategy more frequently than the students of HSES. Among the students of the LSES, Non-productive coping strategy was least preferred coping strategy, whereas among MSES and HSES, Physical coping strategy was least preferred.
- Among both government and convent school students, the anxiety manifested in physical change and daily routine was at low level and higher level on social change. The government school students' general appraisal of the self gets affected more in comparison to convent school students. It was found that students of government schools experienced high social and personal pressures than the convent school students at the time of examination.
- Convent school students sought more Social support in comparison to their counterparts before their examination.
- Analysis also indicated that test anxiety increases the tendency to use Problem focused and Non-productive coping strategy among the senior secondary students.
- It was found that whenever social pressures such as parents expectations, worry about hurting the parents, loosing image in the eyes of the significant others etc. were high, students across each groups started demanding more from themselves. This many times resulted in developing doubts about their preparation, aptitude, efforts etc.
- Those whose sources of anxiety were internal tended to use Problem focused and Non-productive coping strategy more often among senior secondary students.

- Students who seek social supports were the one's who were found to focus more on the problem.
- Among the boys when the social pressures were perceived to be higher, they tended to use a combination of social support and problem focused strategy. Boys who questioned their abilities, aptitude and efforts were found to use the problem focused strategy more often.
- Boys who sought social support were found to think positively and used less Non productive coping strategy.
- As the test anxiety increases, the tendency to use Non-productive coping strategy also increases among the girl. It was found that the girls who had high social support tend to engage in positive thinking more often.
- Among the HSES students as the test anxiety increases, the tendency to use Non-productive coping strategy also increases. They were found to cut down on their Exercises, Yoga, and Meditation etc whenever test anxiety increased. Those HSES students who experienced stress because of their abilities, aptitudes, efforts etc. used more Non productive coping strategy. Whereas, those who experienced high social pressures used problem focused strategies.

6.10 Implications of the study:

The present study is an attempt to study the test anxiety from the psycho-social perspective. Thus the study helps to understand test anxiety and coping more comprehensively and holistically. The study provides an insight into the world of the senior secondary students and helps to understand nature of test anxiety, sources of anxiety and coping strategies in Indian context.

The study identified the differences in test anxiety, sources of experiencing test anxiety and coping strategies across different gender, SES and School type. Thus the study could be of significant value for designing interventions across these groups to over come test anxiety among adolescents. As the differences were found to exist in

test anxiety, sources of test anxiety and coping strategies across these groups the study could help to design more specific and target oriented interventions in order to help the students cope with the anxiety.

The finding that social pressures explained larger amount of variance in test anxiety, reveals that various social agents like parents, teachers, peer groups, cousins, neighbours, who play significant role in students' life, need to be made aware of the possible negative impact of their high and unreasonable expectations from the students. The study could be helpful for the parents and other agents of the socialisation to understand about this and help them to deal more effectively with the problem of anxiety related to the examinations among the students. This could be done through greater parent, teacher interaction in areas like student's progress, their ability level and performance in test and what could be the realistic expectations. The media also need to be sensitised to publish or propagate authentic research findings, which help them match their expectations with student's ability level.

It was found that the girls who sought more social support used less of Non productive coping strategies. They focused more on the problems and used problem-focused strategies more often, whereas the girls who got poor social support used more non-productive coping strategies. This being a significant finding could be shared with teachers and principals in the schools. Girls being at a socially disadvantaged position needed more encouragement from the schools as well as from the home. Therefore the teachers as well as parents may be advised to create an environment in which the girls feel encouraged to express some of their negative feelings and worries.

The girls in this study reported to have more self-worry related to performance in test/academics, which affected their general appraisal of self in a test situation. This clearly cautions the parents and the teachers to avoid the nagging behaviour and employ positive motivation strategies in case of girl students. Some studies have also found girls to be lacking in adequate time management and role clarity (Mackenzi, 1976, Rothblum, Soloman and Murakami, 1986). Therefore the girls may be counselled in these two areas in the schools as well as at home.

In most of the groups the physical coping strategy was less preferred. As the study reveals that it is negatively correlated with social and personal components of worry in groups experiencing comparatively low anxiety (HSES), it could be suggested that students especially girls and other disadvantaged groups should be encouraged to use more physical coping strategies. The parents, teachers and other agents of socialisation could tell the students explicitly regarding how it helps to reduce anxiety. Arrangements could be made in the school to provide them training in yoga, meditation and other relaxation techniques. They may also encourage the students to develop their interests in other fields such as music, literature, sports etc. This would not only help the students to develop their overall personality but also to relax and reduce their anxiety level.

The study indicates that differences exist among the students of different socio-economic status, and the disadvantaged groups. The LSES and MSES students experience higher level of social pressure and personal inadequacy. Study has also found that LSES and MSES students use Non-productive coping strategies more often in comparison to the students of HSES. This could be because of high level of social insecurities, low parental support in both academic and non-academic (lack of encouragement, conflicting messages received both at home and school, poor training in time and study management etc.). However this needs to be researched further to suggest anything concretely. A two pronged research needs to be conducted at family level and at the level of school and classroom to identify the specific micro level stressors that affect children from MSES and LSES families.

The study revealed that there may be some contextual variables in the culture and environment of the schools itself which may cause anxiety and affect the coping process. The present study identifies some of these potential causes. The students could be given elaborate feedback on their performance in the examination. They could be encouraged to interact more with their parents, teachers and significant others to seek their help and guidance and negotiate with them regarding their expectations, ascertain their strengths and weaknesses and have a more realistic target for themselves. As in

the study it was also found that in most of the schools there is no proper mechanism for the counselling, the schools could set up regular counselling system to help their students regarding their study habits, choosing careers etc. The schools may also take the services of professional counsellors to help their students in role clarity, inculcating good study habits, time management etc. The stress management techniques like relaxation training, Yoga and meditation can be included in the institutional set up for the students.

The study is also important from the theoretical perspective, as it attempts to addresses some basic issues about which literature is scant in differences in test anxiety and coping strategy across various groups of students (gender, SES, and School type).

6.11 Limitations of the study & suggestions for further research:

The present study has not used random sampling and is conducted on a small sample. Sample is selected from a single city. Thus the findings of the study could not be generalised on the whole population. A larger sample by taking random sampling design would have allowed to generalise the findings for the larger population. Multi-centric studies could be conducted in different regions to achieve more comprehensive understanding.

Due to the lack of time and resources, it was not possible to address some issues like how the test anxiety is psycho-sociologically constructed in depth, in different groups of this country. Future studies could examine the culture of the school and home and segregate variance contributed by them as well as in inducing stress among students. Grades being linked to future academic career as well as employment prospects could be one of the major source of examination stress among students. How much variance this variable alone contributes to examination stress needs to be studied as well. How school culture is different in English medium and Hindi medium schools both in rural and urban areas so far as the examination stress is concerned. A high reliance on the quantitative data made it difficult to unveil much of the socio-

psychological functioning of the students under stress. A further research in this area could be conducted putting more emphasis on the qualitative methods, which may help us arrive at more comprehensive and holistic understanding. A study by using ethnographic method could be done to reveal cultural and sociological nuances critical in the area.

Had the sample been large, a three way ANOVA could have been carried out to see the interaction effects of gender and SES, and school types on test anxiety, sources of test anxiety and coping strategies among the students.

The explanations of the obtained results were tentative, which if translated into empirical language may provide some vantage points to the future research. The future researches could be carried to test further the psychometric properties of the scales developed and used in the present study, as these scales are not standardised scales.

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APPENDICES

Open-ended Questionnaire

- According to you what are the typical experiences of the students when examination is close?
- What are the reasons behind the student's experience of anxiety about the test?
- What are the important physiological changes at the time of examination?
- What are the important changes in the social aspects of the individual at the time of examination?
- What are the changes in the behaviour, mood pattern and thinking processes of the individual at the time of examination?
- How do you cope with anxiety experienced at the time of examination?

Test-Anxiety Scale

Name:..... Name of School:.....
Sex: Male/Female Caste:.....
Medium of Education: Hindi/English Family's Monthly Income (approx):.....
Father's Edu. Qualification:..... Mother's Educational Qualification:
Father's Occupation:..... Mother's Occupation:.....
Family Background: Rural/Urban

INSTRUCTION

Examination has been the deep-rooted feature of our education system. When examination is close, students undergo various kinds of change which include change in Physiological, Psychological and Social behaviour. Statements given below describe some such aspects. Read the statements carefully and indicate your preference against each statement as it may be applicable in your case.

There is no right or wrong answer as the situation may vary from person to person. The correct answer is one which is true in your case. The responses would be kept confidential and used for the research purpose only. So, please feel free to express your preferences as it is true in your case. There is no time limit to complete the questionnaire.

Write "1" if you think the statement is rarely true in your case.

Write "2" if you think the statement is occasionally true in your case.

Write "3" if you think the statement is sometimes true in your case.

Write "4" if you think the statement is frequently true in your case.

Write "5" if you think the statement is most likely to be true in your case.

Statements:

When my examination is close,

- 1. I lose my sleep over worrying about examination.
- 2. I do not feel like eating.
- 3. I am not able to do my morning chores (taking bath, brushing teeth etc.) properly.
- 4. I do not want to entertain or go anywhere with my friends or family members.
- 5. My other interests (playing, painting, listening music, reading novels and stories or watching T.V. etc.) remain neglected.
- 6. I find myself wondering whether the other students are doing better than I am.
- 7. I am not able to concentrate on the study and the thought of not doing well in the examination persistently keeps on bothering me.
- 8. I find it difficult to revise my syllabus as my mind goes blank.
- 9. My physical condition gets worse as I often feel head ache, stomach cramps, vomiting, feeling giddy, etc.
- 10. I find it difficult to understand what I read.
- 11. I feel a lot of pressure from my parents and significant others to get good marks in the test.

During the examination,

- 12. I often get so nervous that I forget the facts I really know.
- 13. My nervousness causes me to make unforced errors.
- 14. At the beginning of the test, I am so nervous that I often can not think of anything.
- 15. The unexpected questions in the paper cause me to panic.
- 16. I often misunderstand the questions asked in the examination.
- 17. I find myself thinking of the consequences of not being able to perform better in the examination.
- 18. Thoughts frequently occur to me that I may not be too bright.
- 19. I have the feeling that I am not doing well.
- 20. While I am taking a test that is difficult, I feel defeated before I even start.

After the examination,

- 21. I feel I could have done much better than I actually did.
- 22. I persistently keep on wondering how many marks I will get in the examination.
- 23. I have a feeling that I am a poor test taker in the sense that my performance on a test does not show how much I really know about a topic.

Sources of test-anxiety

INSTRUCTION

There are different reasons why the students worry about the examination. Given below are such some reasons.

Write "1" if you think the statement is rarely true in your case.

Write "2" if you think the statement is occasionally true in your case.

Write "3" if you think the statement is sometimes true in your case.

Write "4" if you think the statement is frequently true in your case.

Write "5" if you think the statement is most likely to be true in your case.

Statements

I worry about the examination because-

- 1. If I am not able to secure good marks, my parents would feel bad and hurt.
- 2. If I am not able perform well in the examination, it raises doubt about my efforts, aptitude and intelligence.
- 3. If I am not able to secure good marks, people around me would laugh at me.
- 4. If I am not able to perform well, my career prospects would be hampered.
- 5. If I am not able to secure good marks, I would loose my image in the eyes of my friends.
- 6. My parents set a very high target and I fear I would not be able to achieve it.
- 7. If I am not able to perform well, it would create bad impression about me among my teachers.

- 8. My friends could get better marks than me in the examination.
- 9. I often feel that my preparation is not well enough though I have studied hard.
- 10. I think that my aptitude is not good enough to perform well in the examination.
- 11. I think I may not be able to meet the target, I have set for myself.
- 12. I often hear the consequences of not performing well in the examination.

Coping Strategies**INSTRUCTION**

When the examinations are close, the phenomena of worry and tension are commonly seen among the students. They respond to this in different ways. Given below are some of such responses. You have to provide your response, as it is true in your case. Please,

Mark (√) "3" if you frequently use this.

Mark (√) "2" if you sometime use this.

Mark (√) "1" if you occasionally use this.

Mark (√) "0" if you never or rarely use this.

	<u>Statement</u>	<u>Response</u>			
		<u>Never</u>	<u>Occasionally</u>	<u>Some time</u>	<u>Frequently</u>
1.	Talk & consult with parents about problems related to examination.	0	1	2	3
2.	Pray to God.	0	1	2	3
3.	Engage myself in Play/Sport/Physical exercise.	0	1	2	3
4.	Talk and consult with my teachers about problems related to examination.	0	1	2	3
5.	Find a way to relax (Read Novels, Stories, Poetry, Do Paintings, Listen Music, Watch T.V. etc.)	0	1	2	3
6.	Hope for the best.	0	1	2	3

7.	Seek professional help/Counselling.	0	1	2	3
8.	There is nothing I can do about the problem and thus do nothing.	0	1	2	3
9.	Talk and consult with friends, brothers and sisters or seniors about my problems related to examination.	0	1	2	3
10	Make myself feel better by taking Cigarettes, Chewing Tobacco, etc.	0	1	2	3
11	Do not let others know how I am feeling.	0	1	2	3
12	Ignore the problem.	0	1	2	3
13	Keep thinking about getting good marks but do nothing.	0	1	2	3
14	Study more rigorously.	0	1	2	3
15	Use Practice sets and solve Model question papers to overcome my worry.	0	1	2	3
16	Take tuition/ tutorial help.	0	1	2	3
17	Prepare for means other than study such as preparing chits, trying to get question paper in advance, etc. to secure good marks.	0	1	2	3
18	Look on the bright side of things and think of all that is good.	0	1	2	3

19	Organize a group to deal with the concerns such as providing emotional support, help in preparing for the examination etc.	0	1	2	3
20	Think that even though I have not prepared very well, so is the case with others.	0	1	2	3
21	Prepare the timetable for the study.	0	1	2	3
22	Keep assuring myself for doing better next time.	0	1	2	3
23	Do Meditation/Yoga.	0	1	2	3
24	Lowering my expectation about the marks.	0	1	2	3

प्रश्नावली

नाम..... विद्यालय का नाम.....

लिंग : पुरुष/महिला जाति.....

अध्ययन का माध्यम: हिन्दी/अंग्रेजी परिवार की मासिक आय (अनुमानित).....

भाई बहनों की संख्या..... जन्मक्रम.....

पिता की शैक्षणिक योग्यता.....

माता की शैक्षणिक योग्यता.....

पिता का व्यवसाय..... माता का व्यवसाय.....

परिवारिक पृष्ठभूमि : ग्रामीण/शहरी

निर्देश

परीक्षा हमारे शिक्षा प्रणाली का अभिन्न अंग है। जब परीक्षाएँ निकट होती हैं तो विद्यार्थियों में विभिन्न प्रकार के शारीरिक, मानसिक और सामाजिक व्यवहार संबंधी बदलाव दृष्टिगोचर होते हैं। नीचे दिये गये कथनों में इस तरह के कुछ आशयों का उल्लेख किया गया है। कृपया प्रत्येक कथन को ध्यानपूर्वक पढ़ें और उसके सम्मुख अपनी राय व्यक्त करें। कोई भी उत्तर सही या गलत नहीं है, क्योंकि प्रत्येक व्यक्ति के संदर्भ में परिस्थितियाँ अलग-अलग हो सकती हैं। अतः सही उत्तर वही है जो आपके संदर्भ में सत्य हो।

आपके उत्तरों को गोपनीय रखा जायेगा और उनका उपयोग केवल शोध हेतु ही किया जायेगा। इस प्रश्नावली को पूरा करने के लिए कोई निश्चित समय सीमा नहीं है।

- लिखें "1" यदि कथन आपके संदर्भ में पूरी तरह असत्य हो,
- लिखें "2" यदि कथन आपके संदर्भ में यदा-कदा सत्य हो,
- लिखें "3" यदि कथन आपके संदर्भ में कभी-कभी सत्य हो,
- लिखें "4" यदि कथन आपके संदर्भ में अक्सर सत्य हो,
- लिखें "5" यदि कथन आपके संदर्भ में हमेशा सत्य हो,

कथन

जब मेरी परीक्षा निकट होती है तो,

- ___ 1. परीक्षा के बारे में सोचकर मुझे नींद नहीं आती है।
- ___ 2. मुझे कुछ भी खाने-पीने की इच्छा नहीं होती है।
- ___ 3. मैं अपनी प्रातःकालीन दिनचर्या (स्नान, दाँत माँजना इत्यादि) ठीक प्रकार से नहीं कर पाता/पाती हूँ।
- ___ 4. मुझे अपने मित्रों या परिजनों के साथ समय व्यतीत करना या कहीं आने जाने की इच्छा नहीं होती है।
- ___ 5. मुझे स्वयं की रूचि के अन्य कार्यों (खेलना, संगीत सुनना, उपन्यास या कहानी पढ़ना, चित्राकारी, टी०वी० देखना इत्यादि) के लिए समय नहीं मिल पाता।
- ___ 6. मैं अक्सर इस बारे में सोचता रहता/सोचती रहती हूँ कि अन्य छात्रा परीक्षा के लिए मुझसे बेहतर तैयारी कर रहे हैं।
- ___ 7. मैं अपने अध्ययन पर एकाग्रचित नही हो पाता/पाती हूँ और परीक्षा में बेहतर प्रदर्शन न कर पाने की सोच मुझे लगातार व्यथित करती रहती है।
- ___ 8. मुझे अपना पाठ दोहराने में दिक्कत महसूस होती है, क्योंकि मुझे कुछ सुझाई नहीं देता है।
- ___ 9. मेरी शारीरिक दशायें (जैसे-सिरदर्द, पेट में मरोड़, चक्कर आना इत्यादि) बिगड़ जाती है।
- ___ 10. मैं जो भी पढ़ता/पढ़ती हूँ उसे समझने में दिक्कत होती है।
- ___ 11. मुझे घर वालों के तरफ से परीक्षा में अच्छे अंक लाने का अत्यधिक दबाव महसूस होता है।

परीक्षा के दौरान -

- ___ 12. मैं अक्सर इतना नर्वस हो जाता/जाती हूँ कि उन तथ्यों को भी भूल जाता/जाती हूँ जो वास्तव में मुझे पता होते हैं।
- ___ 13. परीक्षा की शुरूआत में मैं इतना नर्वस हो जाता/जाती हूँ कि कुछ भी सोच नहीं पाता/पाती हूँ।
- ___ 14. नर्वस होने के कारण मुझसे बिलावजह की गलतियाँ होती हैं।
- ___ 15. प्रश्न-पत्रों में आये असंभावित प्रश्न मुझमें अत्यधिक भय उत्पन्न करते हैं।
- ___ 16. परीक्षा में पूछे गये प्रश्नों को समझने में अक्सर भूल हो जाती है।
- ___ 17. मैं अक्सर परीक्षा में अच्छे प्रदर्शन न कर पाने पर उसके कटु परिणामों के बारे में सोचता रहता/रहती हूँ।
- ___ 18. मुझे अक्सर यह विचार आते हैं कि मैं प्रतिभावान नहीं हूँ।
- ___ 19. मुझे अक्सर लगता है कि मैं अच्छा प्रदर्शन नहीं कर रहा/रही हूँ।
- ___ 20. कठिन परीक्षा देते समय मैं प्रश्न पत्रा हल करना शुरू करने से पहले ही स्वयं को पराजित महसूस करता/करती हूँ।

परीक्षा के बाद -

- ___ 21. मुझे अक्सर लगता है कि मैं परीक्षा में किये गये प्रदर्शन से बेहतर प्रदर्शन कर सकता/सकती थी।
- ___ 22. मैं लगातार इस बारे में सोचता/सोचती हूँ कि मुझे परीक्षा में कितने अंक प्राप्त होंगे।
- ___ 23. मुझे अक्सर लगता है कि मैं एक अच्छा परीक्षार्थी नहीं हूँ क्योंकि परीक्षा में मेरा प्रदर्शन विषय के मेरे ज्ञान को परिलक्षित नहीं करता है।

निर्देश

विद्यार्थियों में परीक्षाओं को लेकर विभिन्न कारणों से चिन्ता होती है। नीचे दिये गये कथनों में ऐसे कुछ कारण उल्लिखित हैं।

लिखे	"1"	यदि कथन आपके संदर्भ में पूरी बिल्कुल भी सत्य हो,
लिखे	"2"	यदि कथन आपके संदर्भ में यदा-कदा सत्य हो,
लिखे	"3"	यदि कथन आपके संदर्भ में कभी-कभी सत्य हो,
लिखे	"4"	यदि कथन आपके संदर्भ में अक्सर सत्य हो,
लिखे	"5"	यदि कथन आपके संदर्भ में हमेशा सत्य हो,

कथन

मुझे परीक्षा के बारे में चिन्ता होती है क्योंकि-

1. यदि मैं परीक्षा में अच्छे अंक नहीं प्राप्त कर सका/सकी तो मेरे माता-पिता को दुःख होगा।
2. यदि मैं परीक्षा में अच्छा प्रदर्शन नहीं कर सका/सकी तो इससे मेरे प्रयास, बुद्धि और क्षमता के बारे में प्रश्न चिन्ह लग जायेगा।
3. यदि मैं परीक्षा में अच्छे अंक नहीं प्राप्त कर सका/सकी तो मेरे आस-पास के लोग मुझ पर हँसेंगे।
4. यदि मैं परीक्षा में अच्छा प्रदर्शन नहीं कर सका/सकी तो इससे कैरियर पर बुरा प्रभाव पड़ेगा।
5. यदि मैं परीक्षा में अच्छे अंक नहीं प्राप्त कर सका/सकी तो मेरे मित्रों के बीच मेरी छवि खराब होगी।
6. मेरे माता-पिता मुझसे अत्यधिक आकांक्षा रखते हैं और मुझे लगता है कि मैं उन्हें पूरा नहीं कर पाऊँगा/ पाऊँगी।
7. यदि मैं परीक्षा में अच्छा, प्रदर्शन नहीं कर सका/सकी तो इससे मेरे अध्यापकगणों के बीच मेरी छवि को धक्का लगेगा।
8. मुझे लगता है कि परीक्षा में मेरे मित्रों मुझसे अधिक अंक प्राप्त कर सकते हैं।

9. मुझे अक्सर लगता है कि परीक्षा हेतु मेरी तैयारी पूर्ण नहीं है यद्यपि मैं कठिन परिश्रम करता/करती हूँ।
10. मुझे लगता है कि मुझमें परीक्षा में अच्छे प्रदर्शन की क्षमता नहीं है।
11. मुझे लगता है कि मैं अपने निश्चित लक्ष्य को प्राप्त नहीं कर पाऊँगा/पाऊँगी।
12. मुझे परीक्षा में अच्छा प्रदर्शन न कर पाने की स्थिति में कटु परिणामों के बारे में सुनकर अक्सर डर लगता है।

निर्देश

जब परीक्षायें निकट होती हैं तो प्रायः विद्यार्थियों में चिन्ता व तनाव दृष्टिगोचर होता है और वे उससे उबरने हेतु उसके प्रति भिन्न-२ रूप में प्रतिक्रिया व्यक्त करते हैं। नीचे के कथनों में इस प्रकार की कुछ प्रतिक्रियाएं उल्लिखित हैं। आपको अपने उत्तर में उस प्रतिक्रिया को व्यक्त करना है जो आपके संदर्भ में सत्य हो। कृपया

- "3" पर (√) लगाये यदि आप अक्सर वह प्रतिक्रिया व्यक्त करते हैं।
- "2" पर (√) लगाये यदि कभी-कभी वह प्रतिक्रिया व्यक्त करते हैं।
- "1" पर (√) लगाये यदि आप यदा-कदा वह प्रतिक्रिया व्यक्त करते हैं।
- "0" पर (√) लगाये यदि कभी-भी वह प्रतिक्रिया व्यक्त नहीं करते हैं।

	कथन	कभी-नहीं	यदा-कदा	कभी-कभी	अक्सर
(1)	अपने माता-पिता से परीक्षा को लेकर अपनी समस्याओं के बारे में बातचीत व परामर्श करता/करती हूँ।	0	1	2	3
(2)	भगवान से प्रार्थना करता/करती हूँ।	0	1	2	3
(3)	स्वयं को खेलकूद /शारीरिक व्यायाम आदि में व्यस्त रखता/रखती	0	1	2	3

	हूँ।				
(4)	अपने शिक्षकों से परीक्षा को लेकर अपनी समस्याओं के बारे में बातचीत व परामर्श करता/करती हूँ।	0	1	2	3
(5)	उपन्यास या कहानी पढ़कर, संगीत सुनकर, चित्रकारी, टी०वी० देखकर इत्यादि की सहायता से तनाव रहित होने की कोशिश करता/करती हूँ।	0	1	2	3
(6)	अच्छे की कामना करता/करती हूँ।	0	1	2	3
(7)	विशेषज्ञ की सहायता/परामर्श लेता/लेती हूँ	0	1	2	3
(8)	समस्या के बारे में कुछ नहीं किया जा सकता, यह सोचकर कुछ भी नहीं करता/करती।	0	1	2	3
(9)	अपने बड़े भाई-बहनों और सीनियर्स इत्यादि से परीक्षा को लेकर अपनी समस्याओं के बारे में बातचीत व परामर्श करता/करती हूँ।	0	1	2	3
(10)	सिगरेट, तम्बाकू या गुटखा इत्यादि के सेवन से खुद को तनाव मुक्त व बेहतर महसूस करता/करती हूँ।	0	1	2	3
(11)	दूसरों को यह पता नहीं लगने देता हूँ कि मैं कैसा महसूस कर	0	1	2	3

	रहा/रही हूँ।				
(12)	समस्याओं को नजर अंदाज कर देता/देती हूँ।	0	1	2	3
(13)	अच्छे प्राप्तांक के बारे में सोचता रहता/रहती हूँ, परन्तु वास्तव में इस हेतु कोई प्रयास नहीं करता/करती हूँ।	0	1	2	3
(14)	गहन अध्ययन करता/करती हूँ।	0	1	2	3
(15)	अपनी चिन्ताओं से मुक्ति हेतु Practice set/ Model प्रश्न पत्रों को हल करता/करती हूँ।	0	1	2	3
(16)	ट्यूशन लेता/लेती हूँ।	0	1	2	3
(17)	अध्ययन के अतिरिक्त अन्य साधनों जैसे चिट बनाना, प्रश्न-पत्रों को हासिल करने इत्यादि का प्रबंध करता/करती हूँ। जिससे परीक्षा में अच्छे अंक सुनिश्चित हो सकें।	0	1	2	3
(18)	समस्या के उज्ज्वल पहलुओं के बारे में सोचता/सोचती हूँ।	0	1	2	3
(19)	ऐसे समूहों का संगठन करता/करती हूँ जो परीक्षा के समय एक-दूसरे को भावनात्मक सहयोग व परीक्षा की तैयारी में एक-दूसरे की मदद कर सकें।	0	1	2	3

(20)	यह सोचता/सोचती हूँ कि यद्यपि मेरी तैयारी बहुत अच्छी नहीं हैं, परन्तु ऐसा दूसरों के साथ भी है।	0	1	2	3
(21)	अध्ययन के लिए टाइमटेबल बनाता/बनाती हूँ।	0	1	2	3
(22)	यह सोचकर खुद को आश्वस्त करता/करती हूँ कि अगली बार बेहतर प्रदर्शन करूँगा/करूँगी।	0	1	2	3
(23)	योग/ध्यान करता/करती हूँ।	0	1	2	3
(24)	परीक्षा में प्राप्त होने वाले अंकों को लेकर अपनी आकांक्षाओं को कम करता/करती हूँ।	0	1	2	3

Coding Manual

Item No.	Variable Name.	Column No.	Variable Label	Code
1	Id	1-3	Identification number	-
2	Sid	4	School Identification number	1=Saint Anthony Girl's Convent Collage 2=Mary Lucus Inter Collage 3=Jamuna Christian Inter Collage 4=D.P. Girls Inter Collage
3	Sex	5	Sex	1=Male, 2=Female
4	Caste	6	Caste	1=SC/ST, 2=OBC, 3=General
5	Medu	7	Medium of education	1=Hindi, 2=English
6	Fmi	8-12	Family's Monthly Income	Actual
7	Fedu	13	Father's Education	1=Matriculation, 2=Intermediate 3=Graduation/Post Graduation 4=Ph.D./Professional Course
8	Medu	14	Mother's Education	1=Matriculation 2=Intermediate 3=Graduation/Post Graduation 4=Ph.D./Professional Course
9	Foccup	15	Father's Occupation	1=Business/Agriculture, 2=Govt. Service, 3=Administrative Service/Professionals

10	Moccup	16	Mother's Occupation	1=Business/Agriculture, 2=Govt. Service, 3=Administrative Service/Professionals
11	Fbac	17	Family Background	1=Rural, 2=Urban
12	Phy1	18	Statement 1 of questionnaire 1	1=Rarely, 2=Occasionally, 3=Some-times, 4=Frequently, 5=Always
13	Phy2	19	Statement 2 of questionnaire 1	-do-
14	Phy3	20	Statement 3 of questionnaire 1	-do-
15	SCh1	21	Statement 4 of questionnaire 1	-do-
16	Phy4	22	Statement 5 of questionnaire 1	-do-
17	SCh2	23	Statement 6 of questionnaire 1	-do-
18	GAS1	24	Statement 7 of questionnaire 1	-do-
19	SWP1	25	Statement 8 of questionnaire 1	-do-
20	Phy5	26	Statement 9 of questionnaire 1	-do-
21	SWP2	27	Statement 10 of questionnaire 1	-do-
22	SCh3	28	Statement 11 of questionnaire 1	-do-

23	SWP3	29	Statement 12 of questionnaire 1	-do-
24	SWP4	30	Statement 13 of questionnaire 1	-do-
25	SWP5	31	Statement 14 of questionnaire 1	-do-
26	SWP6	32	Statement 15 of questionnaire 1	-do-
27	SWP7	33	Statement 16 of questionnaire 1	-do-
28	SWP8	34	Statement 17 of questionnaire 1	-do-
29	GAS2	35	Statement 18 of questionnaire 1	-do-
30	GAS3	36	Statement 19 of questionnaire 1	-do-
31	GAS4	37	Statement 20 of questionnaire 1	-do-
32	SWP9	38	Statement 21 of questionnaire 1	-do-
33	SWP10	39	Statement 22 of questionnaire 1	-do-
34	GAS5	40	Statement 23 of questionnaire 2	-do-
35	Scom1	41	Statement 1 of questionnaire 2	-do-
36	Pcom1	42	Statement 2 of questionnaire 2	-do-
37	Scom2	43	Statement 3 of questionnaire 2	-do-

38	Pcom2	44	Statement 4 of questionnaire 2	-do-
39	Scom3	45	Statement 5 of questionnaire 2	-do-
40	Pcom3	46	Statement 6 of questionnaire 2	-do-
41	Scom4	47	Statement 7 of questionnaire 2	-do-
42	Scom5	48	Statement 8 of questionnaire 2	-do-
43	Pcom4	49	Statement 9 of questionnaire 2	-do-
44	Pcom5	50	Statement 10 of questionnaire 2	-do-
45	Pcom6	51	Statement 11 of questionnaire 2	-do-
46	Pcom7	52	Statement 12 of questionnaire 2	-do-
47	Ss1	53	Statement 1 of questionnaire 3	0=Never, 1=Occasionally, 2=Some-times, 4=Frequently
48	Ss2	54	Statement 2 of questionnaire 3	-do-
49	Pc1	55	Statement 3 of questionnaire 3	-do-
50	Ss3	56	Statement 4 of questionnaire 3	-do-
51	Pc2	57	Statement 5 of questionnaire 3	-do-
52	Pt1	58	Statement 6 of questionnaire 3	-do-

53	Ss4	59	Statement 7 of questionnaire 3	-do-
54	Npc1	60	Statement 8 of questionnaire 3	-do-
55	Ss5	61	Statement 9 of questionnaire 3	-do-
56	Npc2	62	Statement 10 of questionnaire 3	-do-
57	Npc3	63	Statement 11 of questionnaire 3	-do-
58	Npc4	64	Statement 12 of questionnaire 3	-do-
59	Npc5	65	Statement 13 of questionnaire 3	-do-
60	Pf1	66	Statement 14 of questionnaire 3	-do-
61	Pf2	67	Statement 15 of questionnaire 3	-do-
62	Pf3	68	Statement 16 of questionnaire 3	-do-
63	Npc6	69	Statement 17 of questionnaire 3	-do-
64	Pt2	70	Statement 18 of questionnaire 3	-do-
65	Ss6	71	Statement 19 of questionnaire 3	-do-
66	Npc7	72	Statement 20 of questionnaire 3	-do-
67	Pf4	73	Statement 21 of questionnaire 3	-do-
68	Npc8	74	Statement 22 of questionnaire 3	-do-

69	Pc3	75	Statement 23 of questionnaire 3	-do-
70	Pf5	76	Statement 24 of questionnaire 3	-do-

