CHAPTER - 2

REVIEW OF LITERATURE

A literature review is an account of what has been published on a topic by accredited scholars and researchers. It is a piece of discursive prose and a simple summary of the sources (Taylor and Procter, 2005). Comprehensive knowledge of the literature in the field is essential to research papers. The literature relevant to the present research is presented under the following headings:

2.1. Academic performance and resources available among students
2.2. Food preferences of students
2.3. Supportive network accessible to students
2.4. Exam anxiety and stress among students
2.5. Stress symptoms among students
2.6. Stress coping strategies among students

2.1. Academic Performance and Resources Available among Students

The social, personal and academic life of a student plays a major role in his or her personality development. A study conducted by Sansgiry et al. (2006), observed that academic performance is influenced by personal efforts, time management, peer interaction, environment, campus facilities, completion of assignments, class attendance, tutorial services, study groups, and teaching style.

Seetharaman et al. (2015) elucidated that resources are the means to achieve goals. They act as important ingredients in management and are like raw materials which are processed during the management process. The quality of the result is determined by the decisions made during the process of management, which govern the use of these resources.
Varghese et al. (2015) stated that resources are essential for achieving the family goals. They are the material and human attributes that satisfy human wants. The management of resources involves knowing the quantitative and qualitative aspects, the type of resources, their functions and allocation. Resources may be classified as human and non-human. The non-human resources include money, material goods and community facilities. They are more tangible and their importance is more frequently recognized than that of human resources, which are less tangible.

Mullick (2007) pointed out that time is a fixed resource and a unique resource because it is equally available to all. A sense of time is a natural or God given gift that could also be acquired although through perseverance and practice. With respect to time it has three divisions: (1) Work (2) Rest (3) Leisure. A good manager strikes a proper balance amongst all the three by prescribing sufficient time for work, rest, sleep and leisure. A time plan also helps in organizing work and leisure. Making a time plan alone does not assure efficiency. A plan so drawn needs to be controlled and put into action and evaluated from time to time for its success. Peak energy levels can be used to perform work. Students should pick the time of day when they tend to have more energy and try to schedule study sessions at that time. The most difficult or challenging subjects should be studied during these sessions (www.fredonia.edu/counselling).

Goodyear (1954) recalls that for an individual whose days are filled with activity, time usually passes rapidly. Through identification of goals and values an individual will be able to eliminate some of the less significant activities or to increase the skill in the accomplishment of the routine tasks. Goodyear drew the outline that the goals and values responsible for students attending school are varied and numerous as the students themselves. Living exclusively with others of the same age group tempts one to spend hours in informal discussion. Goodyear
also observed that a good time schedule is never rigid nor does it necessarily eliminate impulsive spur-of-the-moment actions. A well-constructed plan based on goals and values usually makes such actions more enjoyable. He suggests guidelines for successful preparation of time schedule such as considering the most important demands in relation to specific goal values sought; setting aside time for fixed charges, including any commitment that has been made to work or play with others; arranging tasks in the sequence best suited to your pattern of work; alternating heavy and light tasks requiring concentration and those of a mechanical nature; overestimating the time needed for specific undertakings; distributing work and recreation to provide for the greatest satisfaction from each; and making a plan flexible by allowing for some free periods or less use and time for interruptions.

McTigue (2010) feels that leisure is better enjoyed when it follows a period of good hard work. Seetharaman et al. (2015) refers to the cited quote from psychological literature that “time is an act of mind, of reason, of perception, of intuition, of sense, of memory, of will, etc”. An important guide to the use of time is to balance. Balance in the use of time has three classic divisions – Work, Rest and Leisure. Balance of time means, that there must be time for work, rest and sleep. Sufficient leisure will keep a person emotionally stable and intellectually alert.

Cheema (2012) pointed to scarcity of time as one major reason of stress in today's life. He further elaborated his view that ‘Time management’ is a myth and that there is a myth as to “Why waste time in planning?” But planning is not a waste of time it is an investment which gets rich dividends by way of drastic reduction in overall time to perform any activity. One can’t manage time as it is not possible to hold the minute or hour hand. However, it is possible to manage oneself with respect to time. Several studies have indicated that the stress factors most frequently reported by adolescents are related to school, such as studying for tests, getting good grades, completing homework, and managing time (Conner et al., 2010 and de Anda et al., 2000). Academic stress factors include the student's perception of the extensive knowledge base required and the perception of an inadequate time to develop it (Carveth et al., 1996). Students report that they
experience academic stress at predictable times resulting from studying for exams, grade competition, and mastering large content in a small amount of time (Abouserie, 1994). This is likely to affect the social relations both within the institution and outside which affects the individual person’s life in terms of commitment to achieving the goals (Fairbrother and Warn, 2003).

Different stress factors such as time management and social activities can all pose their own threat to a student’s academic performance. Hatcher and Prus (1991) in their study took a variety of factors such as academic course load, not getting enough sleep, problem with peer group, finances, class attendance and poor nutrition that can diminish a student’s academic performance. In addition to academic requirements, relations with faculty members and time pressures may also be sources of stress.

McTigue (2010) in his list of suggestions for results to be more productive and less stressed suggests doing one thing at a time and doing it mindfully. Major crisis occurs as deadlines near and students forget what to do and their enthusiasm is supplanted by anxiety and dread. Getting it going early is the best way to do a better job in less time without stress. Whether it is school work or a training programme, overnight cramming and marathon study sessions are less productive. Students should study in shorter, more frequent intervals. It will keep the information fresh in their minds so that they will not waste time in relearning it. As per Gross and Crandall (1973) the problem in deciding when to do the work is inter-woven with time planning. This involves preparation of a time schedule in which light and heavy tasks are organized alternatively. Becoming aware of one’s limitations and the help that can be sought from others are of great importance in energy use planning.

Seetharaman et al. (2015) viewed that, energy is always combined with other resources in its allocation and use. Unlike time, quantitative aspects of this resource vary with individuals. There are certain times of the day when the same individual has more energy than the other times. One’s energy resource is important to one’s time management. Goals are important in energy management because they determine how much and what kind of energy should be mobilized.
and utilized. Nickel and Dorsey (2002) indicated that income includes not only money in cash, but also other resources like knowledge, energy and skills. Simons et al. (2002) inferred a significant correlation between economic well-being and life satisfaction in university students. If students were faced with financial pressures, they reported lower life satisfaction and greater perceived stress. Broadly, social disadvantage is associated with increased stress (Goodman et al., 2005).

Students indicate inadequate resources and financial matters as stress factors. This finding is consistent with earlier studies by Fairbrother and Warn, (2003) and Ornelas and Kleiner (2003). While financial management will help the students to prioritize when making purchases or spending their finances on other services, the students should be encouraged to make use of the career counselling services at the University to help them with courses which they find more difficult. Socioeconomic status has been found to be both related and unrelated to anxiety.

Schneider and Lee (1990) revealed that financial pressure is also one of the major stress factors faced by students. Financial aspects can also cause depression and several studies reflect that there is a negative relationship between financial strain and depression. Researchers have found that many parents make financial and social adjustments to their lifestyle to advance their child’s academic and professional outcomes, or create an environment that promotes academic achievement.

2.2. Food Preferences of Students

Adolescence is a transitional period between childhood and adulthood, which begins from the earliest signs of secondary sexual characteristics development and ends when a person has achieved adult status (WHO, 2005). Cognitive functions occur during adolescence. To achieve optimal growth and development during adolescence, the nutritional requirements are the highest across the life span. Practicing healthy
eating behavior is one of the important factors to meet the nutritional needs of adolescents. The adolescent period is characterized by heavy demands of calories and proteins. The appetite of the adolescents increases and he tends to consume more carbohydrate foods. Intake of vitamin C and vitamin A may be low due to improper habits of eating snacks (Arya and Mishra, 2013). Eating breakfast can help improve mathematics, reading, and standardize test scores. Breakfast helps children pay attention; perform problem-solving tasks, reduce number of mistakes, improve hand-eye coordination and memory (Spencer, 2011). International Food Information Council (IFIC) Review (2008) on breakfast and health also cited that eating breakfast regularly helps children to perform better in school, in both mathematical and creative tasks.

Students’ dietary intake and their ability to learn is an important logical link which also facilitates improving their performance. Eating disorders such as bulimia and anorexia are more likely to occur among students, particularly females. Taras (2005) in his article on ‘Nutrition and Student Performance at school’ quoted those children with iron deficiencies that can cause anemia are at a disadvantage academically, unless they receive iron therapy. Students with mild iron deficiencies and no anemia do not routinely exhibit problems in cognition or academic performance. Food insufficiency is a serious problem affecting children’s ability to learn. School breakfast programmes seem to improve attendance and decrease tiredness. Offering a healthy breakfast is an effective measure to improve academic performance and cognitive functioning among undernourished populations. Eating breakfast, in contrast to fasting, may improve performance. The long-term effects of eating breakfast on the performance of school children who do not have physical signs of severe undernourishment is found to be less certain. To summarize, there appears to be a positive impact of breakfast on various cognitive skills (Cueto, 2001). The above cited reviews showed evidence of health hazards caused by faulty food preferences among students ultimately affecting their health. Therefore, it is understood that proper choice of food is essential for maintenance of high level of student health.
Ready to face the exams?

**TIPS** Appearimg for the Board exams? Here’s how to keep alert and fit

**Breakfast is best**

**STUDY** Eating breakfast helps bust stress

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**EAT SMART**

Food for thought

With exams round the corner, keep an eye on what the kids are eating.

**DR. RITIKA SAMAAR**

It’s almost time for the exams and food tastes are changing on exam day. It’s important to keep students healthy and fit, but the temptation for chocolate is just too hard to resist. Here are some tips to help:

**Bright start**

Exams preparation also requires the right blend of mental and physical strength, which comes from a proper diet. Here are some tips to keep students fit during their exams:

- Adjust to a regular routine.
- Stick to a healthy diet.
- Stay hydrated.
- Take breaks.
- Get enough sleep.

*Good food is a must, but it’s important to ensure they’re well-nourished.*

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**Eat, exercise and excel**

- Don’t avoid breakfast at any cost. This applies even after your exams are over!
- Make the switch to skimmed milk if you’re going to be consuming a lot of milk-based products during this time.
- If you’re feeling hungry between meals, try to snack on healthy foods — fruit salad with custard, hummus and pita bread, low-fat oatmeal cookies, grilled vegetable sandwiches, cucumber and carrot slices with a yoghurt-based dip etc. Avoid snacking on fried items as far as possible.
- If you’ve already got an exercise routine in place — don’t stop!
- However, if you don’t have a routine, now is the time to make good on that resolution to hit the gym. Instead, a short walk and stretching exercises during your breaks will help. Doing simple exercises in yoga and pranayama would be beneficial too.

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**Essential nutrition**

- Protein: lean meat, fish and eggs.
- Vitamin B6: lean meat, lean fish and nuts.
- Carbohydrates: grains, pasta and potatoes.
- Fruits and vegetables: spinach, bell peppers, carrots.
- Essential fatty acids: fish, seeds and nuts.

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**Plate 1**

Newspaper Clippings Emphasizing on Food Preferences of Students Appearing for Board Exam

Plate 1
2.3. Supportive Network Accessible to Students

It is common for students to perform poorly when they experience pressure with their tasks and when they experience high level of anxiety during their studies. Margarita (2008) states that in this modern age, students have more complex problems as compared to the traditional age and are more affected by severe issues like anxiety, depression, stress, sexual assault, drinking habits and thoughts of attempting suicide. Majority of the students feel stressed out, nervous or anxious before appearing in exams.

Due to lack of confidence and communication, students’ struggle and fail to be successful resulting in depression and giving rise to feelings of sadness, fatigue, guilt and hopelessness. “The pressures being borne by students are generating a wide range of academic, emotional and social problems that would require more support for them”. It has been suggested that social support adds a sense of purpose and meaning to life and thus acts as a buffer against stress (Jenkins and Elliot, 2004). Larchick (2002) did a study on the effect of personal life stress factors on the student’s performance. The author found that the students who didn’t have any source of support were less effective in and outside the class room situations.

Jahedi and Soheyla (2012) suggested that students should be encouraged to compare their progress to their personal standards, not to the performance of others (again, a concern in the standardized-test driven educational environment). A teacher has a major responsibility for the training of students and their adequate supervision is mandatory. Peterson (2003) stated that teachers may also be an important part of the support network for students. Beishuizen et al. (2001) elaborated that teachers can establish trusting, close relationships with students, which have been reported as a marker of quality teaching. Anxiety among students is created by insensible teaching or an over
demanding syllabus. Knowing the causes of student stress will make the educational administrator understand how to monitor and control the stress factors that are responsible for the student’s stress.

Bound et al. (2009) expressed the view that competition amongst peers could also affect intrinsic motivation. Adolescents often report that being with friends constitutes the most important aspect of school life (Corsaro and Eder, 1990). A student’s academic achievement appears to benefit from interaction with high-achieving peers, and it has been widely hypothesized that peer groups affect a wide variety of social, emotional, and psychological indicators of well-being. However, research on peer influences has been inhibited by conceptual and methodological problems, and thus the precise relationship between peer-groups and well-being is difficult to isolate (Hanushek, 2002).

Parents also play a compelling role and work hard for the overall development of the child to his or her fullest academic and professional potential. Larson et al. (2000) perceived that Indian parents are known to be deeply involved in their children’s education. Stress and anxiety due to personal or family related problems also leads to a feeling of anxiety (Mayya et al., 2004). Wolfradt et al. (2003) found that perceived parental psychological pressure was positively correlated with anxiety and depersonalization among youth. On the other hand, perceived parental warmth was associated with active coping, and was negatively correlated with anxiety.

Howard and Medway (2004) aimed to establish how attachment to parents influenced adolescent coping with stress. Adolescents’ attachment security was positively related to coping through family communication. Parents’ expectations from their children can have a strong influence on their attitude and their behavior. This need for more parental and academic support further enhances students’ ability, self-efficacy and their interest (Jahedi and Soheyla, 2012).
Call centre to help students, teachers

It will have a toll-free number and will function round-the-clock.

The School Welfare Department will set up a toll-free helpline to help students and teachers deal with their problems. The helpline will be available during office hours and will be manned by trained social workers who will provide guidance and support.

A leader from the Tamil Nadu State government has stated that the helpline will be operational within two weeks.

Parents look out for:
- Normalcy in academic performance.
- Problematic relationships with friends and teachers.
- Frequent withdrawal of parents.
- Changes in eating habits.
-	

What you can do
- Talk to them. If you are non-judgmental, they will open up.
- Ask what makes them think of them differently.
- Help them think of their feelings, without being driven by theirs.
- Help them understand that they are not alone.
- Support their decision to seek professional help.

Parents must do:
- Create a safe environment for their children.
- Seek professional help if needed.
- Provide emotional support.

Plate 2

Newspaper Clippings Emphasizing on Supportive Network Accessible to Students
Thompson and Bhugra (2000) formulated a model (Figure 1) consistent with the literature about parental expectations, restrictions, and pressure discussed above. In this model, factors such as high expectations from parents, student test anxiety, peer pressure, parental restrictions, and poor social relationships contribute to poor self-esteem and self-identity and it in turn leads to student stress.

![Diagram showing factors contributing to student stress]

**Figure 1: Factors Contributing to Student Stress**

Dean (2003) analyzed that large number of stress factors and stress themes across the entire school environment were significantly related to the parents’ role at home. Parental encouragement leads to direct confrontation, social support, rationalization and intellectualization as effective means of dealing with stress. Effect of Parental involvement on causes of student stress is represented in Figure 2.
To minimize the risk for negative health and behavioral development, it is important for families, schools, and programme providers to recognize and help children cope with stress. Social support (in the form of emotional support, advice, assistance, and guidance) can reduce stress and improve coping skills (Hair et al. 2002). Programme providers can offer this support, as well as involve parents, peers, teachers, or other caring adults in the community in providing the needed support. Mentoring relationships (characterized by sustained support, guidance, concern, and encouragement) have been found to promote positive social development (Rhodes et al., 2002) and have been associated with improved attitudes toward school and more positive relationships with parents and friends (Jekielek et al., 2002). Parental-adolescent relationship is a strong bulwark for the adolescents during this delicate period of major changes in their life. Students with parents who are involved in their school tend to have fewer behavioral problems and better academic performance, and are more likely to complete high school than students whose parents are not involved in their school. Figure 3 shows the process of family involvement and adolescent outcomes.
**Figure 3: Process of Family Involvement and Adolescent Outcomes**

Source: Harvard family research project, Harvard graduate school of education, Harvard family research project no. 3 in a series spring 2007 (family involvement makes a difference - evidence that family involvement promotes school success for every child of every age) Source adopted from Rao (2008).

Warm, responsive parenting in adolescence is related to school success and positive social and emotional outcomes (Mandara, 2006). Adolescents with supportive parents exhibit higher rates of self-reliance, identity formation, school performance, and positive career-planning aspirations, as well as lower rates of depression and delinquency. Larson et al. (2000) elucidated that some families, especially those in which the grandparents were themselves educated and members of the professional class, also have an influence the academic expectations of the student. The presence of an educated mother was especially significant for daughters, who reported experiencing a more favorable family climate in terms of status in the family. Since high ability students may be reluctant to seek help when they need it, it is important to ensure that the support system present in these high-achievement environments is available and utilized by
students, and is effective at addressing their unique psychological and emotional needs.

A supportive network accessible to students is one of the important parameters that influence the academic performance of students. The reviews showed that parent involvement was the largest component of the network system and there is a need for academic guidance and support from home and school.

2.4. Exam Anxiety and Stress among Students

Phillips (1993) opined that when striving to understand the effects of stress, it is crucial to also consider factors such as resiliency and invulnerability that serve as protective factors against the harmful effects of stress. He classified the main factors for adolescent resilience against stress into three different categories. The first category includes personality factors, such as competency, positive self-esteem and internal locus of control. The second category Phillips describes as social milieu factors, citing studies which show that good schools can and do exert an important protective effect for adolescents. The third category of protective factors are family factors, since many studies indicate that cleaner, less cluttered household environments with good supervision and well-balanced discipline can help youth successfully adapt to stressful school environments.

Dyck (2001) and Grawitch et al. (2007) have expressed their view that emotional changes include nervousness, anxiety, loss of enthusiasm about things he or she used to enjoy, anger or hostility towards peers, shyness or withdrawal, and feelings of helplessness and hopelessness. The situation gets exacerbated when students try their best, but cannot improve on their previous or current performance coupled with the expectations from parents, family, relatives and friends. The outcomes of these may result in violent behavior, depersonalization, lack of motivation, and displaced aggression. Whenever there is violent behavior
against a fellow student, it creates a ripple effect amongst other students and this negative impact on the academic atmosphere is not conducive for the learning environment.

Fielding (2005) studied the characteristics of school students which affect their perceived level of stress. He found that the highest level of stress was reported in interpersonal situations and the second highest level was reported in new situations. The students' perceived assessment requirements seem to have a strong relation with the approach to learning a student adopts when tackling an academic task.

Auerbach and Grambling (1998) defined stress as an unpleasant state of emotional and physiological arousal that individuals experience in situations that they perceive as dangerous or threatening to their well-being. Some degree of stress is helpful for individuals in meeting the new challenges, but persistently high and unrelieved stress can lead to psychological, physical and behavioral ill health.

Anxiety prevalence rates range from 4.0% to 25.0%, with an average rate of 8.0% (Bernstein and Borchardt, 1991; Boyd et al., 2000). These figures could be underestimated since anxiety among children and adolescents goes undiagnosed owing to the internalized nature of its symptoms (Tomb and Hunter, 2004). McDonald (2001) believed that anxiety interferes more with academic performance during adolescence than during childhood. In a culture that judges an individual's intellectual abilities and ascribes status on academic performance, it is perhaps not surprising that students become more anxious over their academic success and failures as they age. The degree of arousal or anxiety is beneficial to performance across academic subjects such as Maths, English and even in non-scheduled ability test.
Newspaper Clippings Emphasizing on Exam Anxiety

Plate 3
Anxiety is one among the wide variety of emotional and behavioral disorders (Rachel and Chidsey, 2005). There are many reasons that cause test anxiety: The first one is deficiency of training and preparation such as (a) studying only the night before the exam (b) wrong time management, (c) failure in organizing the information and (d) poor study habits. The second one is concerned with worries about (a) past exams and their performance (b) the performance of other students and friends, and (c) failure and its negative effects. In addition, during an exam, physical signs of test anxiety may occur to the student such as an upset stomach, sweat, rapid heartbeat, sweaty palms, headache, and tense muscles (Abed, 2016).

Cognitive, affective, and behavioral are the three major components of test anxiety. From the cognitive view, students who experience test anxiety are worried lacking self-confidence. Negative thoughts may haunt them. They may have doubts about their academic ability and intellectual competence. Furthermore, possible negative results are more likely to be overemphasized and they may feel helpless in the testing situations (Zeidner, 1998). The need to answer every question in the test correctly causes anxiety. Negative thinking must be minimized and controlled. Students with anxiety disorder exhibit a passive attitude in their studies such as lack of interest in learning, poor performance in exams and do poorly in assignments. Adolescence is a critical period when patterns of stress can contribute to long-term health issues. Stress mainly comes from academic tests, interpersonal relations, relationship problems, life changes, and career exploration. Such stress may usually cause psychological, physical, and behavioral problems (Cheng, 2009).

Anxiety and depression are direct expressions of demoralization. Research demonstrates that if an individual endures internal or external stressors that are perceived as severe, then anxiety levels increase. When anxiety levels increase, an individual may feel the situation is uncontrollable, leading to helplessness. If the feeling of helplessness is not attended to, then hopelessness and the inability to
cope will develop (Clarke and Kissane, 2002). Rickelson (2002) suggested that demoralization may be a precursor to anxiety and depression.

Nandamuri and Gowthami (2011) made an exclusive study on sources of academic stress with the objective to explore the components of academic stress among the post graduate management students. Around twelve micro issues have been identified under the curriculum and instruction component while four stress factors were prioritized related to team work; five sub issues regarding assessment and three micro issues under placement components of academic stress.

Rao (2008) focused on a survey among twelfth standard students from Chennai and found that majority of students reported they were stressed by the board exams. Brown (2007) said that test anxiety is "the extent to which learners may worry about themselves and self-efficacy, a person’s belief in his / her ability to accomplish a task". Excessive stress levels may be associated with a variety of negative outcomes, including fatigue, negative thinking, poor academic and work performance, school dropout, burnout, depression, sleep disturbances and addictions (Deckro et al., 2002; Dusselier et al., 2005).

Deb et al. (2010) investigated anxiety amongst high school students in India, with the objective to gain a better understanding of anxiety among adolescents in Kolkata. Results show that anxiety was prevalent in the sample and they were found to be suffering from high anxiety. Adolescents belonging to the middle class (middle socio-economic group) suffered more anxiety than those from both high and low socio-economic groups. Adolescents with working mothers were found to be more anxious. Substantial proportion of the adolescents perceived they did not receive quality time from fathers (32.1%) and mothers (21.3%). Large number of them also did not feel comfortable to share their personal issues with their parents (60.0% for fathers and 40.0% for mothers). Connor et al. (2009) conducted a study on causes and consequences of test anxiety in Key Stage 2 pupils and deleterious effects of Standardized Achievement Tests (SAT). It was found that poorer SAT grades in English, Maths and Science were significantly
associated with higher levels of self-reported test anxiety and lower levels of resilience.

Zeidner and Mathews (2005) referred to test anxiety as a motivational belief component that had negative correlation to all components. This suggests that students who had high test anxiety, were less confident, less motivated to learn and less likely to use cognitive and meta-cognitive (self-regulation) strategies. High test anxiety students study more than their low anxiety peers, and it is shown that the high anxiety group reported highly repetitive and less effective methods of study. Those students are more likely to postpone tests because they do not overvalue their preparation (Cassady and Johnson, 2001).

All people suffer from minimum stress but excessive stress may cause anxiety and it proves harmful for health. Another report suggests that teenagers always face problems in adjusting with various stresses. Teenagers, especially those who are students always face learning problems, career management issues and problems in solving personal and social matters. Students are starting to shift from a life that is dependent on others to a life that needs them to release the dependency and start shouldering their own responsibilities (Sulaiman et al. 2009).

The literature reviewed indicates that a number of researches have been conducted on school students revealing their exam fear. It has been proved that school students have been facing difficulties with more anxiety. The studies that had been reviewed give a clear idea about anxiety of the school students. The above reviews also project the trend of significant increase in the rate of anxiety and stress among students regarding board examinations worldwide. It is understood that increased rate of anxiety is due to the poor coping methods practiced among the students.
2.5. Stress Symptoms among Students

The symptoms of stress identified by Agolla and Ongori (2009) are anxiety, nervousness, indigestion, endless worries, tense, pain in the neck or shoulders and people at home or school. Stress has been associated with the outcomes such as suicides, violent behavior, or even social withdrawals and the need to address issues should be immediate.

Sena et al. (2007) explained that students with a high level of anxiety have a reduced memory span, lose concentration, lack confidence and poor reasoning power. Generally, high level of anxiety was more closely associated with lower performance among low ability students. Albert et al. (2007) highlighted that Indian adolescents reported less anxiety with increasing use of control by their mothers, unlike their German equivalents. That is, maternal control appeared to convey security and acceptance to Indian adolescents whereas for German adolescents this was perceived as overprotection and constraint.

Piekarska (2000) pointed out that the essential factors for the formation of stress are frequent and strong. There is a related connection between the results of stress and psychological and personality characteristics. Some of the negative outcomes of stress include anxiety, depression, poor memory and language skills, and lower academic achievement. Researchers (Malach and Keinan, 2007; Ongori, 2007; Agolla and Ongori, 2008; Agolla, 2009) have long identified stress symptoms as lack of energy, taking over-the-counter medication, high blood pressure, feeling depressed, increase in appetite, trouble concentrating, restlessness, tensions and anxiety among others. An individual experiencing even one of these factors is likely to be a victim of stress.
The test anxious pupil may have difficulty in concentrating during a test, and in reading and understanding test instructions and questions; they may become easily distracted, and experience problems in recalling learnt material (King et al., 1991). The causes for anxiety in students are lack of confidence, inability to understand and comprehend difficulty in concept formation, problem behavior, fear and worry about their health and future, inability to concentrate in their academic and extracurricular activities. Anxiety, depression and low general well-being leads to physiological and psychological reactions such as fatigue, headache, confusion, irritability, pre-occupied mind, tension, worry, anger and irritability.

Mental health professionals in India, however, have identified academic pressure as an acute stress factor that leads to mental distress, and in extreme cases, to suicide. Academic performance and fear of failing are other stress factors that are of concern to the students’ health life. This is consistent to earlier studies conducted by (Polychronopoulou and Divaris, 2005; Topper, 2007) that identified fear of failing or poor performance as stressful. Continuous poor academic performance and expectation from family or friends have been cited as some of the problems that they face in their daily academic life at the campus.

Ruffin (2007) observed that the symptoms of anxiety can be psychological, physical or environmental challenges. He pointed out that, psychological symptoms of anxiety among students include feeling nervous before a tutorial class, panic, going blank during a test, feeling helpless while doing assignments and lack of interest in a difficult subject.

Anxiety is associated with substantial negative effects on children’s social, emotional and academic success (Essau et al., 2000). Specific effects include poor social and coping skills, often leading to avoidance of social interactions, feeling of loneliness, low self-esteem, perceptions of social rejection, and difficulty forming friendships (Bokhorst et al., 2001; Albano et al., 2003; Weeks et al., 2009). Importantly, school avoidance, decreased problem-solving abilities and lower academic achievement have also been noted as consequences (Rapee et al., 2005 and McLoone et al., 2006). Rapee et al. (2005) also described
that clinical and nonclinical studies have identified parental rejection and control as risk factors for the development of high levels of anxiety and anxiety disorders.

Chen et al. (2006) identified issues like teachers often emphasizing the acquisition of knowledge and neglecting the emotional feeling of students during the teaching process, which can cause emotional stress and learning problems for students. Physical symptoms will appear and changes among students include muscle tension, stomach-ache, headaches, fainting, feeling too hot or too cold, trouble sleeping, trouble eating, and lack of energy. Some students have emotional symptoms such as feeling irritable, crying easily, or getting frustrated quickly. The bad effect on thinking ability is the major problem of test anxiety. Students may have thoughts that are difficult to control or it may make them forget easily (McIntosh and Noels, 2004).

Mazumdar et al. (2012) in his research on “A comparative study on stress and its contributing factors among the Graduate and Post-graduate students” found that factors such as physical and mental health, family, job, relationships and social pressures were the main source of stress among the students. Anger, low self-esteem, low satisfaction, depression and anxiety were some of the important psychological factors which were observed among students. There were different psychosomatic factors such as headache, sleep problems, tachycardia, ulcers and high blood pressure. Headache, blood pressure, anxiety, back pain, neck pain, poor appetite and skin rashes were more predominately observed among females. Poor sleeping patterns, hair fall, erratic moods, heart diseases and depressions was found to be more common in males. There were different symptoms regarding psychosomatic factors. Headache was seen in higher percentages as a major stress symptom among the students. Some more problems are also observed such as ulcers, tachycardia, high blood pressure and sleep issues. All these factors lead to stress symptoms which affect all the participants. High blood pressure, headache and sleep problems were mainly observed during exam days. Students were anxious about their studies during exam days which resulted in elevated levels of stress.
Experiencing high levels of stress or chronic stress can undermine physical health, for example, by increasing the likelihood of a weakened immune system, heart disease, obesity, and diabetes (Rosmond, 2005). Selye, a prominent author on stress, said that the top ten killers in the world are no more infectious diseases, but stress-related diseases. Many changes occur in a human body within a few microseconds to protect itself from the extreme danger of stress. These changes in human body are: release of adrenaline, conversion of glycogen into glucose, raised pulse rate, raised blood pressure, rapid breathing or breathlessness, release of sugar into the body system, dilated pupils, digestive imbalance, diversion of blood supply from stomach to other parts of the body, increased body temperature, disturbed fluid balance, hastened clotting, raised body hair, itching, scratching, raised rate of respiration and heartbeat (Selye et al., 2002).

One mechanism, particularly important in the lives of adolescents, is that academic stress may contribute to poor sleep. Several harmful consequences are associated with too little sleep, such as cognitive impairment, interpersonal difficulty and reciprocally, higher stress (Carskadon et al., 2004; McEwen, 2006).

Rangaswamy (1982) found in his study that the effects of academic stress appear to be most severe in students who performed well in school. Compared to a sample of ‘normal’ adolescents, the high-achieving students were found to experience greater adjustment difficulties and emotional disturbances. Cheema (2012) presented certain obvious behavioral symptoms associated with a person under stress. Some of these are eating disorders, too much or too little sleep, isolation from others, neglecting ones’ responsibilities, nervous habits (nail biting, pacing) and teeth grinding or jaw clenching. Behavioral changes include poor eating habits and excessive weight gain/loss over a short period (Romer, 1993).

An evaluation of the related literature shows that many studies have been done on symptoms of stress among students all over the world but only very few studies have been carried out in India, especially on the strategies of exam fear
among higher secondary students. The literature also projected the insufficient awareness on academic stress management practices among the students. It is imperative that exam fear should be handled in a safe manner. There is an urgent need to increase awareness and promote knowledge on effective academic stress management practices to avoid exam fear among students and related consequences in the future. Based on this gap, the present study was conducted at the higher secondary schools in Chennai city and the researcher proposed to design an intervention programme to manage student stress effectively.

2.6. Stress Coping Strategies among Students

At school adolescents’ can be taught how to manage stress and anxiety and can practice skills. As a targeted intervention strategy, there is evidence to suggest that cognitive-behavioral treatment can reduce levels of anxiety among adolescents, for example Hudson et al. (2009) found that cognitive-behavioral skills are more efficacious in the treatment of childhood anxiety than a treatment that includes only nonspecific therapy factors. Literature reviews have indicated that test anxiety rises steadily throughout the early years of schooling, which may be attributable to factors such as the increasing pressure from parents and teachers, cumulative experiences of failure, the increasing complexity of learning materials as well as an age-related increase in the accuracy of reporting anxiety.

Baer (2010) pointed out that relaxation technique also known as relaxation training, help a person to relax and reduce levels of anxiety, stress or anger. It is often employed as a stress management technique to decrease muscle tension, lower the blood pressure and slow heart and breathing rates, among other health benefits. Relaxation techniques such as deep breathing, visualization, progressive muscle relaxation, meditation and yoga help to activate this relaxation
response. When practiced regularly, these activities lead to a reduction in a person’s everyday stress levels and boost the feelings of joy and serenity. Relaxation response is a technique that draws upon the power of the human mind to overcome stress, pain and anxiety.

Coon (2000) recommended that relaxation can be promoted by visualizing peaceful scenes. Stress Inoculation is the use of positive coping statements to control fear and anxiety. Breathing and relaxation techniques, such as deep breathing, yoga, and physical exercises, produce physiological changes (a slower heart rate and more relaxed muscles) that can help people to cope more easily with stress (www.getselfhelp.co.uk/relax.htm Help Guide 2009).

Involving youth in sports, extra-curricular activities, positive pastimes such as music and drama, arts and crafts, and religious activities, can help buffer stress or negative situations experienced in daily life, and aid in positive youth development (Zarrett and Lerner 2008).

Resilient individuals would be those who, despite the odds stacked against them, show positive adaptation by achieving appropriate developmental norms and milestones. A particularly favorable attribute of the concept that has undoubtedly contributed to its widespread appeal, is its emphasis on positive human characteristics and positive outcomes. Programmes aimed at fostering resilience in the lives of children are now being introduced in many schools (Newman and Blackburn, 2002). If an individual employs certain types of coping behaviors, it is important to understand whether these coping strategies are fixed or changing. Carngenie Mellon University (2010) tested some techniques to control Test anxiety, a well-recognized problem among students, effectively. The techniques are,

**Trying to think positively:** Students’ must try consciously to stop thinking negatively. Students can encourage themselves and think of bright things instead of bad ones. For example, students’ can give themselves positive encouragement and those positive thoughts will help the students to feel good and they may say
those thoughts aloud to themselves. Repeated encouraging thoughts, even if the students don’t believe in them at first, will help them in time to gain confidence.

**Dream of success:** a powerful tool for success is Visualization. The student can think of the pages he read and remember them when he is in the exam situation. In this way students can go through the questions confidently and receive a good grade. Expecting that good things are going to happen will help the students to face any problem.

**Divert from anxiety:** When the students feel that there is certain amount of anxiety, they can help and calm themselves by diverting their thinking completely on to something else, which will leave no room for anxious thoughts about the exam.

**Breathing exercises:** To fight nervousness and anxiety, deep-breathing exercises are a well-known technique. In exam situation when students feel their hearts rushing or their foreheads sweating, they can force themselves to slow down and take deep, calm breaths. Students can concentrate on the air flowing in and out of their nose and lungs. They can do this for four or five minutes and they may feel much more relaxed.

**Imagine the worst:** Students can imagine before the exam begins, the worst things that can happen if it goes wrong with them. They can ask themselves the consequences of not passing exams. These things are not the end of the world. Our fears usually are far more troubling than reality. Students can explore their fears to the point of silliness and they’ll seem far less frightening.

**The last minute before the exam is not for studying:** It is found that studying right up until the last minute damages student’ thoughts more than it helps. Anxiety and confusion will trouble the students when they study till the last minute before the exam. They can relax and give themselves a calm, positive message before the exam.

**When the exam is going to begin, enter the classroom:** Brainstorming with others is a good study strategy but it is only good before the day of the exam.
When students enter the classroom before the exam they will overhear other students discussing possible questions and at this point listening to such conversations may weaken their confidence. They do not have to enter the classroom until the exam begins and they may trust their will and knowledge and preparation for the exam no matter how much it differs from others.

**Students must take care of themselves:** Poor eating habits, poor sleep, and deficient exercise are destructive to the students' mind as well as to the body. Students can eat healthy food. Junk foods like foods that have high sugar and fat content make them dull. They may get some exercise by taking a short walk. **Expect setbacks:** Whenever students try to change their behavior, they may experience setbacks. Students can simply try again with a strong resolution to make things better. If they do, things will get better.

Therefore, the reviewed literature suggests the possibilities for managing academic stress and anxiety using appropriate techniques and places a greater emphasis on adopting autosuggestion. Researches on positive therapy have indicated its efficacy in the management of anxiety. Based on the existing literature, it is understood that positive therapy through autosuggestion could bring significant psychological and behavioral benefits. The favorable effect was found to reduce anxiety which would be used as a stress coping technique among students. The above studies indicated the possibility of converting distress into eustress, which may reduce the burden of accumulated fear over exams. The therapy through implementation of autosuggestion programme may also act as holistic method of handling students' exam fear and manage student stress effectively. Proactive steps at the school-level and steps for improved network of support are needed for amelioration of the problem. Therefore, a genuine attempt is made in this study to apply Positive Therapy on school students to help them overcome exam fear and perform better in exams.
Newspaper Clippings Emphasizing on Students to Enjoy Studies

Plate 4