CHAPTER-III

DESCRIPTION OF THE TOOLS
3.1 SCALE OF ACADEMIC STRESS

Scale of Academic Stress developed and standardized from Bisht Battery of Stress Scales developed by Abha Rani (Bisht, 2005), named as (BBSS), was used. The abbreviated name has been used so that the respondent may not decipher the real purpose of the test and fake good. BBSS are used for measurement of thirteen types of stresses. Out of the thirteen BBSS, only scale of academic stress has been used for the research purpose. It is abbreviated as (SAS) i.e. Scale of Academic Stress. It is designed to assess the level of academic stress among adolescents.

Bisht Battery of stress scale comprises of the following stress scales:

(i) Scale of existential stress
(ii) Scale of achievement stress
(iii) Scale of academic stress
(iv) Scale of self concept stress
(v) Scale of self actualization stress
(vi) Scale of physical stress
(vii) Scale of social stress
(viii) Scale of role stress
(ix) Scale of institutional stress
(x) Scale of family stress
(xi) Financial stress scale
(xii) Scale of vocational stress
(xiii) Scale of superstition stress

3.1.1 Description of Scale of Academic Stress (SAS)

Psychological properties of the test

3.1.1.1 Reliability

Reliability of the scale of academic stress was calculated in three ways for knowing
(i)  Dependability i.e. short-term test-retest correlations
(ii) Stability i.e. retest after a longer interval
(iii) Internal consistency i.e. split-half correlation

In case of SAS coefficients of dependability is 0.87, stability is 0.82 and internal consistency is 0.88. The co-relations were significant at .05 level.

3.1.1.2 Validity

The scale appears to be having content validity and item validity. The method of selecting items supports this supposition. In addition, construct validity was estimated for all scales in a two-fold fashion. The first type was tested to see if the construct measured differentiated students on some related construct. For this memory was taken. The second type tested to see if the construct measured by variables for the sample of adolescents of working and non-working mothers separately. All the scales were correlated with each other. Obtained correlations were moderate in magnitude indicating that the scales were measuring one main construct, i.e., stress in general and different type of stresses in particular. Moreover, the items of scale were not concentrating on one kind of situation and can be used across different populations. However, the scale can be used on adolescent and adult students only.

Five-point scale was thought appropriate because it takes into account the average category into account too. So far continua are concerned, two continua are taken. One is of frequency along which items are located in terms of frequency (i.e. always, often, sometime, rarely and never).

Percentile-norms were established for scale of the battery. Normative data were collected from a sample of 300 students of classes IX and X. The age group was 13+ to 17+. The corresponding of high average and low stress in terms of percentile for interpretation is-

<table>
<thead>
<tr>
<th>Stress Level</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>High stress</td>
<td>P70 or above</td>
</tr>
<tr>
<td>Average stress</td>
<td>P69 or P31</td>
</tr>
<tr>
<td>Low stress</td>
<td>P30 or below</td>
</tr>
</tbody>
</table>
3.1.2 Distribution of Items of SAS

Academic stress is conceptualized as having following components:

(a) Frustration  (b) Conflict   (c) Pressure   (d) Anxiety

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Components</th>
<th>Item Number</th>
<th>Total (80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Frustration</td>
<td>2,5,7,15,18,20,22,25,33,39,44,45,48,50,52,55,56,57,62,63,67,68,69,72,75,77</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>Academic Conflict</td>
<td>8,11,16,21,24,28,37,41,42,43,47,54,59,71,79</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Academic Pressure</td>
<td>1, 3, 4, 6, 10, 14, 23, 26, 29, 31, 32, 34, 35, 38, 53, 58, 60, 61, 64, 70, 73, 74, 76, 78</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>Academic Anxiety</td>
<td>9, 12, 13, 17, 19, 27, 30, 36, 40, 48, 49, 51, 65, 66, 80</td>
<td>15</td>
</tr>
</tbody>
</table>

3.1.3 Scoring

The scoring is as follows for positive statements.

<table>
<thead>
<tr>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too much</td>
<td>Much</td>
<td>Average</td>
<td>Less</td>
<td>Not at all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

For negative statements, it is just vice-versa. The total will be separate for frequency and quantity. The grand total will be the sum of frequency score and quantity score. Thus each scale will yield

(a) Frequency of stress score
(b) Quantity of stress score
Total stress score

The stress scores in each scale can be interpreted as:

1. Total frequency of stress.
2. Total quantity of stress.
3. Total amount of stress.

(It will be the sum total of frequency scores and quantity scores).


For interpretation, the scores are to be arranged as given below:

<table>
<thead>
<tr>
<th>Frustration</th>
<th>Conflict</th>
<th>Pressure</th>
<th>Anxiety</th>
<th>Total</th>
<th>Grand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Quantity</td>
<td>Frequency</td>
<td>Quantity</td>
<td>Frequency</td>
<td>Quantity</td>
</tr>
</tbody>
</table>

The total will show the sum of frustration, conflict, pressure, and anxiety scores frequency and quantity-wise. The grand total will be the sum of both frequency and quantity and will show the total amount of stress.

3.1.4 Instruction for administration

The SAS inventory is self-administering in nature. In group administration, the instruction given in text booklet may be read aloud by the researcher to subjects in order to facilitate response. There is no fixed time-limit. Ordinarily an individual takes 50 minutes to complete the inventory. SAS has a total of 80 items. Each and every question had five responses: too much, much, average, less, not at all. The respondent to mark anyone response according to his or her stress level and had to give answer according to the instructions given in the manual. A copy of the scale of academic scale has been appended (Appendix No I).
3.2 MODULES FOR THE THREE COUNSELLING STRATEGIES USED

• Module for Proficiency in Academic Skills (PAS): (Modified version of the module for Proficiency in Academic Skills by Eggsware (2005).
• Module for Building Psychophysical Wellbeing (BPW): (Modified version of the module for Building Psychophysical Wellbeing by Elizabeth Scott, 2008)

3.2.1 Module for Academic Time Management (ATM)

Generally, time management refers to the development of processes and tools that increase efficiency and productivity. Time management may be defined as the discovery and application of the most efficient method(s) of completing assignments of any length in the optimum time and with the highest quality.

Macan et al. (1990) included the following components for Academic Time Management:

1. Formulating goals
2. Making “To-Do” Lists
3. Scheduling one’s day
4. Getting organized
5. Setting priorities

3.2.1.1 Formulating goals

Formulating goals is about taking control of one’s life and creating one’s own real results that are truly fulfilling to him. Most people do not think about their goals in an organized manner. The following process is an important part of setting and achieving goals. Setting goals that are unrealistic sets one up for failure. While it is good to set high goals for oneself, but one needs to be sure not to overdo it. One needs to set goals that are difficult yet reachable. Once the goals are identified, the next time management step is to create plans for how one will accomplish them by breaking the
high-level goal down into bite-sized tasks, such as those that would end up on a daily to-do list.

3.2.1.2 Making “To-do” lists

In good time management, the most important aspect of to-do lists is to have one place where one can list all of the things one needs to do in the near term, such that he can see what he is dealing with all at once. Tasks on the "to do" list consist of (1) that day's commitments transferred from one’s weekly calendar and (2) any items left over from the previous day. Add other items as one thinks of them. Next step is to rank the items on "to do" list by numbering each item in the order of its importance. Next, look for blocks of free time in a day and schedule tasks for specific times. Chances are one won't get to the end of his "to do" list by the end of the day. But if one placed his commitments in the order of importance, then one will finish the most important goals first. Prioritizing does not necessarily eliminate flexibility, and what is a priority today may not be a priority tomorrow. To obtain closure, at the end of the day, update that day's "to do" list, and construct a new list for the next day.

3.2.1.3 Scheduling one’s day

“Perhaps the most valuable result of all education is the ability to make oneself do the things that you have to do, when it ought to be done, whether you like it or not.” said Thomas Huxley. Scheduling and managing time wisely are important for the school student. If one misses important assignments and deadlines he will cause complications to both his academic and social lives. This creates anxiety, frustration, guilt, and other vicious feelings. Prioritizing one’s responsibilities and engagements is very important. Schedule and budget are the basic of time savings and make it work. A more detailed schedule is compulsory for people who need more structure than the flexible list method offers. This kind of schedule allocates time specifically and gives one a clear guideline. If one is successful in managing one’s time, he will automatically get separated from unsuccessful events and distractions. Thus it is important to block off small amounts of time for studying and subdividing larger tasks into smaller ones. Scheduled study breaks are a good thing. A detailed schedule is one good way to help one keep on track and avoid wasting time. It is important to plan each day. One can do this the night before or first thing in the morning. Set out what
one would like to accomplish on the present day and prioritize the items on his “To Do” list. The best tool is a day planner. If one is behind in his school work schedule in time to catch up. The need is to flag start dates for major assignments so they would not be left until the last minute.

3.2.1.4 Getting organized

One has to stay organized; and organization is one of the most effective strategies when it comes to time management for students. One never knows how much time one will lose looking for supplies and books that should be at the ready, so keep track of them. Thus organize the study aids. Include class notes, past quizzes, handouts, and notes from chapter and outside reading assignments. Usually, it is useful to organize all study aids in the sequence of the classroom lectures themselves.

3.2.1.5 Setting priorities

For each big educational project needed to be completed, one should start his planning by breaking it down into small separate segments. Then the amount of work involved seems less overwhelming. It is much easier to complete each stage in the process, and it reduces stress by knowing that one is able to submit a completed project by the final deadline. Prioritizing one’s responsibilities and engagements is very important. Some people do not know how to prioritize and become procrastinators. A "to do list" places items in order of importance. One method is the ABC list. This list is divided into three sections; a, b, or c. The items placed in the A section are those needed to be done that day. The items placed in the B section need completion within the week. The C section items are those things that need to be done within the month. This also helps in deciding the essential points to cover in any written assignment, and one can focus on his work with more confidence, knowing one is not wasting time by getting sidetracked.

3.2.2 Module for Counselling in Proficiency in Academic Skills (PAS)

Module components are adopted from Heather.M.Eggsware (2005) The modules for the Academic skills as a counselling strategy included counselling students about improving their
3.2.2.1 Study habits

“Poor habits of study not only retard school progress but develop frustration, destroy initiative and confidence and make prominent the feeling of worthlessness towards himself and the subject of study whereas effective methods ensure success, happiness and sense of accomplishment” (Smith and Field, 1948). In other words, the quantitative aspect of study is more important than qualitative aspect, that is, if the style of study is good then it may yield better results as compared to the time devoted to it.

It is wise to choose a place where three essential conditions are present:

1. Reasonable Quiet. 2. Adequate Light. 3. A continuous supply of Fresh Air.

Outside noises that disturb students include movement of heavy traffic, honking of car horns, pedestrians walking up and down talking, and hawkers moving along the streets selling their wares. That is why, students, whose homes are situated along a busy street or road, are advised not to sit and study near a window overlooking the road, but to sit somewhere inside, away from the road. Noises inside homes that disturb are TV sets on music systems blasting loud music, the telephone and door bell ringing, people moving around and talking, relatives, guests and neighbours coming to visit and so on. Children should avoid studying in the living room.

3.2.2.1.1 Adequate light: Students also need adequate light to read and study. Tube light gives better light than that of an electric bulb and the light must always come from behind, not from the front.

When concentrating and studying, the brain requires oxygenated or fresh air and therefore students must always sit somewhere where there is either natural ventilation or sufficient windows open to let fresh air in.
Students basically need three things when studying - their books and study material, a table or desk and a comfortable chair. To avoid getting distracted while studying, students should have, out on their table, only the books of the subject they are studying at that time. They need a table or desk to place their books and to write, and they need a comfortable chair that supports their shoulders and the lower part of their back. So the chair must have a backrest, and if they can get one with an armrest as well so much the better. Students must occupy a comfortable posture while studying, but not one that is too comfortable, lying down while studying is not conducive to learning and should be avoided.

3.2.2.1.2 Best studying time: It depends on whether one is an Early Morning ‘Studier’ (EMS) or a Late Night ‘Studier’ (LNS). The former are those who like to study early in the morning, before traffic noises start and family members wake up: but these students cannot stay up late at night. Hence late night studying should he avoided when one has to wake up early the next morning for school or else it will affect the performance in class the next day. One should avoid studying when they are feeling Sick, Hungry, Uncomfortable, Tired or Upset. It is wise to wait until these conditions pass away, before resuming one’s studies.

The first task is to determine the best study time. Some people are most alert and do their best work after midnight; others work best in the morning when they are still fresh. It is important to note study preference, some people like a bit a noise or music; others are distracted by the presence of others. It is one’s responsibility to guard against distractions like cell phone, door bell and computer etc.

3.2.2.1.3 The environment in which one studies can have a big effect on how efficient one can learn. Thus, it is important to minimize distracting noise, besides proper light, comfortable place, and correct kind of chair with well organized items of needs. Good study habits include regularity in attending classes and completing the assignments timely, reviewing the notes regularly rather than last minute preparation for tests. Studying on regular basis at the same hours for the day for the same number
of hours. It is important to find a good place to study. The best place to study is at a table or desk that is clear of other items. There should be as few distractions or interruptions as possible. Lighting and ventilation should be good. In addition, one should have all that is needed right there. It is always good to make a habit of studying in the same place every day.

3.2.2.2 Learning styles

There are many types of learning styles. Often, these types coincide with one's personality style. Each student has a different learning style or combination of styles. Students can have the capacity to use most modes but may also rely on or prefer certain styles. It is important to know one's learning style to help him use to his best advantage for effective learning in the class room. There are three main Learning styles. Auditory, in the case of those who learn by hearing and listening. Visual, in the case of those who learn by seeing, watching and observing, and kinesthetic, in the case of those who learn by activity and by doing things. Some people learn best by reading. They need to see something to remember it.

3.2.2.2.1 Auditory Learners are those who enjoy listening to others as well as listening to music. They learn best by listening. Information sticks once they hear it. They also enjoy talking to others and are friendly out-going people. They cannot do silent reading and tend to whisper when they try to read silently Consequently Auditory learners need to sit in a quiet place when studying. They should listen attentively to the teacher in class, and at examination time they should request someone at home to read their text or notes, while they shut their eyes and listen. This is the best way for them to revise. Above all, Auditory learners should say their answers loudly, when studying.

3.2.2.2.2 Visual Learners are very observant, good in spelling, neat in their handwriting, their dress, appearance and habits. They tend to doodle while they study. They like to use visual aids like diagrams, sketches and pictures while studying. They may forget names, but never faces. Hence, Visual learners are advised to write out their answers, to use visual aids when studying and to highlight with a marker, what they wish to remember.
3.2.2.23 **Kinesthetic Learners** are active learners. They walk up and down while they study; they tend to study loudly and they use their hands while studying. They prefer skill subjects to memory subjects, enjoy games and sports, making projects and doing experiments. They prefer loose, comfortable clothes to tight ones. Kinesthetic boys and girls need to both say their answers loudly and write them out.

It is seen at times learning does not take place because the Learning styles mismatch as - some learn better by listening, others retain information more efficiently if they see the information written out, and still others prefer learning by doing. If there's a mismatch in learning style and classroom, or if a child has a learning disability (especially an undiscovered one), this can obviously lead to a stressful academic experience. If one has a visual style, one may have difficulty with an instructor who believes telling people what to learn and know is enough. Instructors who rely heavily on class discussion will also cause one some anger. Handouts, reading assignments, and writing information on the blackboard are the most helpful techniques. On the other hand, if one has an auditory style, he may be in trouble with an instructor who writes a lot and assigns reading that is not discussed in class. Class discussions and study groups are a better way for him to learn.

3.2.2.3 **Concentration skills**

Concentration while studying is extremely essential. The first important thing to do is to eliminate all physical and mental distractions. Next, they need to set themselves a specific, short-term goal, and a reasonable time frame in which to accomplish it. E.g. deciding to study a particular chapter, within two hours. Should they feel distracted or begin to lose interest in their work, they must strive to focus on the matter in hand.

While revising what they have learnt, they would do well to focus their attention on one single spot like the fan, a clock on the wall or a light in the room. Then, if they have achieved their goal. They must consistently give themselves a reward, to celebrate their achievement.
3.2.2.4 Memory skills

One skill that students lack is the memory skills. As such there is no single memory method that suits all situations thus different memory techniques for different tasks are needed to enhance memory. The art of memorization is referred to as mnemonics. Mnemonics are methods for remembering information that is otherwise quite difficult to recall. Visual learners are most likely to benefit from Mnemonics but an auditory learner can learn to adjust mnemonics to his learning style by substituting auditory cues. The kinesthetic learner can imagine performing actions or using tools as the basis of memory.

3.2.2.5 Examination preparation skills

- Ideally, preparation for tests begins on the first day of class and continues throughout the semester.
- Test preparation depends on many factors:
  - the importance of regular attendance,
  - keeping up with reading assignments,
  - taking notes in class,
  - doing assignments on time.

Study skills necessary for effective writing and to undertake specific written tasks, are recognised by Walmsley (2010), to include the following:

- essays – research skills, writing essay plans, ability to convey messages clearly
- reports – ability to analyse, research, present key data
- projects – planning, research, organising, time management skills
- numerical data – analysis, presentation skills
- dissertations – motivation, organisation, presentation, time management
- exams – ability to write quickly, neatly and plan answers carefully
3.2.3 Module for Training in Building Psychophysical Wellbeing (BPW).

These strategies are helpful to all students, but are critical in order for students with emotional or psychological problems such as depression to experience success at school when they are struggling with concentration and preoccupied with thoughts of failure, self-doubt and hopelessness.

The module developed by (Elizabeth Scott, 2008) for Building Psychophysical Wellbeing comprises of the following components:

1. Deep breathing
2. Progressive muscle relaxation
3. Autogenic relaxation
4. Meditation and yoga
5. Positive Mental Programming

3.2.3.1 Deep breathing

Stress is associated with increased heart rate and respirations. One can slow down his breathing by taking long, slow breaths. Inhaling slowly, and then exhaling slowly. Count to three while inhaling, and then counting slowly to three while exhaling. This process connects one with the "inner self." It releases our negative thoughts and blocked energies from past decisions and thus opens us to experience life more fully. Each Breath session is unique and different. It allows us to become more and to become more aware of the physical and spiritual energy within us. Its dynamic nature cannot be controlled. It is 100 percent safe and goes beyond mental understanding. It releases negative thoughts and blocked energies from past decisions and thus opens one to experience life more fully. During a session there is an increased level of energy experienced in the body. Stress constricts blood flow, reduces oxygen and disrupts mood. Breathing techniques help to regulate and improve oxygen levels, resulting in a calming effect.
3.2.3.2 Progressive muscle relaxation

Progressive muscle relaxation is accomplished by focusing on muscle groups one at a time and tensing them for a few seconds, releasing the tension, and focusing on the resulting feelings of relaxation. This technique involves the voluntary tensing and relaxing of muscles throughout the body. What one does is alternately tensing and relaxing specific groups of muscles. After tension, a muscle will be more relaxed than prior to the tensing. Concentrate on the feel of the muscles, specifically the contrast between tension and relaxation. In time, one will recognize tension in any specific muscle and be able to reduce that tension. Entire sequence is to be done once a day until one feels one is able to control his muscle tensions.

3.2.3.3 Autogenic relaxation technique

This is essentially a psychosomatic exercise involving self-directed talk. Autogenic relaxation is accomplished by focusing on blood flow and tense muscle groups and suggesting to oneself that he or she is becoming more relaxed and warm. Its benefit is to normalize the functioning of bodily processes. A person using autogenic therapy assumes a comfortable position, concentrates on a goal and uses visual imagination and verbal cues to relax the body. Autogenic therapy may involve imagining a peaceful place followed by focusing on different physical sensations, moving from the feet to the head. Autogenic therapy was developed in the 20th century by Johannes Schultz, a psychiatrist and neurologist. Shultz was influenced by the research of Professor Oscar Vogt, a psychiatrist and neurophysiologist, who studied psychosomatic medicine. In the 1940s, Wolfgang Luthe added repetitive therapeutic suggestions to the autogenic technique. These strategies are helpful to all students, but are critical in order for students with emotional or psychological problems such as depression to experience success at school when they are struggling with concentration and preoccupied with thoughts of failure, self-doubt, and hopelessness.
3.2.3.4 Meditation and Yoga

Meditation is the best technique for stress free life. Meditation is not path information but a path of transformation, not the path of knowing but the path becoming. It is said five perversions (lust, anger, greed, attachment and ego) of mind create stress in the body like mental tension, migraine, high blood pressure, heart attack, diabetes, constipation, sleeplessness etc. Meditation develops virtues of chastity rather than lust, forgiveness rather than anger, detachment rather than attachment, generosity rather than greed, humility rather than ego. When the mind is detached from aforesaid five weaknesses, peace of mind automatically surfaces, balance of mind and state of wellbeing are experienced resulting in life free from stress. Meditation is the practice of focusing one’s attention on things beyond the worries of the day. During meditation, one may focus on a single image, sound, mantra (words spoken or sung in a pattern) or one’s own breathing. The idea of meditation is to focus one’s thoughts on one relaxing thing for a sustained period of time. These relax and recuperate and clear away toxins that may have built up through stress. Meditation can wipe away the day’s stress, giving one a clean slate. Meditation produces a deep state of relaxation and a tranquil mind. Meditation can give one a sense of calm, peace and emotional stability. And these effects do not end when meditation session end. Meditation can have lasting effects on one’s psychophysical well-being.

Yoga: A mind-body practice that originated in India more than 4,000 years ago, yoga combines physical postures, deep breathing, and meditation. Research suggests that yoga may act as a stress management technique by dampening or limiting stress-related changes in the body. In order to find the yoga practice that is right for an individual one may want to test out several different types of yoga styles.

3.2.3.5 Positive Mental Programming

A factor which has been found by the stress and depression research to help reduce depression is positive thoughts. Research has shown that negative thoughts increase depression symptoms and positive thoughts decrease depression symptoms during periods of high stress. Meichenbaum and Cameron (1974) urge the use of positive self-statements to reduce the threat of anxiety-provoking situations. Positive thinking is a discipline that trains the human mind to change a perceived reality by repeatedly
making positive mental statements. A person practices positive thinking when they derive a positive sense of well-being, optimism, belonging, meaning and/or purpose from being part of and contributing back to something larger and more permanent than themselves. Positive thinking is a process of choosing positive emotions from stimuli in the environment and applying them to perceptions and beliefs. The objective is to create an outlook that translates into a new or better.

Retraining the messages one gives to oneself and the ones he accepts from others is the foundation of positive mental programming. This kind of psychological shift, at a deep unconscious level, can change someone’s life and help them to find a new level of thinking and achievement. This training helps people believe in themselves.