Chapter 2

Review of Literature
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REVIEW OF LITERATURE

Reviewing a literature implies Identifying, Selecting, Analyzing and Reporting of existing information on the topic or material for study. It helps the investigator to develop a deeper insight into the problem and gain information on what has been done before. It provides a basis for future investigation and justifies the need for replication as well as it throws light on the feasibility of the study and constraints of data collection, relates the findings from one study to another to establish a comprehensive body of knowledge in a professional discipline.

Present study review of literature will be involved systematic identification, location, scrutiny and summary of the material and contains information on a research problem. Along with books, journals and research studies, an attempt will be made to review the literature through the Internet, Psychological Abstracts, Journals and MEDLINE Research. The literature review of the present study will be organized under the following headings:

- Academic stress of adolescents in schools.
- Stress levels of adolescents in schools.
- Factors contributing to stress in students and coping strategies used by adolescents.
- Gender differences in coping stress by adolescents.

2.1 Academic Stress in Adolescents

This section reviews the kind of academic stress experienced by adolescents. Russell and John (1991) investigated the factors contributed to academic stress within an adolescent and whether these factors vary across ethnicity, sex and grade. The academic pressure scale for adolescents was administered to 550 high school students. Results show that there are four significant factors that contribute to academic stress: - Peer pressure, Parental pressure, Importance of school and Fear of failure. Peer pressure was found to vary across all variables, whereas the importance of school and fear of failure varied across ethnicity, sex and grade.
Academic stressors also 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 experiencing academic stress at predictable times, each semester with the greatest sources of academic stress resulting from talking and studying for exams, grade competition and to master the large amount of content in a small amount of time (Abouserie, 1994).

When stress is perceived negatively or becomes excessive, students experience physical and psychological impairment. Methods to reduce stress by students often include - Effective Time Management, Social Support, Positive reappraisal and Engage in leisure pursuits (Murphy & Archer, 1996). The pressure to perform well in the examination or test and allocated time makes the academic environment very stressful (Erkutlu & Chafera, 2006). This is likely to affect the social relations both within the institution and within outside which affects the individual person’s life in terms of commitment to achieve the goals (Fairbrother & Warn, 2003). Knowing the causes of student’s stress will make the educational administrator know how to monitor and control the stress factors that are responsible for the student’s stress. Thus, stressors affecting students can be categorized as Academic, Financial, Time or Health related and Self-imposed (Goodman, 1993).

Different stressors such as time management and social activities pose their own threat to a student’s academic performance as if the way that academic performance is measured is through the ordinal scale of grade point average (GPA). A student’s GPA determines many things such as class rank and entrance to graduate school. Much research has been looking at the correlation of many stress factors that college students experience and the effects of stress on their GPA. Studies showed that fear of failure, peer pressure and parental pressure contributed to academic stress and high academic stress affect the health. Academic stress was found to be associated with a decrease in academic performance.

Struthers et al (2000) examined 203 college student’s academic coping style and emotional factors, to measure their academic stress and performance. **Student Coping Instrument (SCOPE) was used to measure student coping style.** The structural
educational analysis showed problem focus coping and motivation to be more effective in reducing academic stress and improving course grades. Students having low course grades had greater academic stress. Thus, results showed problem-focused coping helped students to be motivated and perform better.

Reda (1994) examined the level of stress in relation to focus of control and self esteem among 675 (202 males and 473 females) second year undergraduate students. The Academic Stress Questionnaire (ASQ) and Life Stress Questionnaire (LSQ) were used to access student academic and life stress levels. Locus of control was assessed using the multidimensional Multi-attribution Scale of Causality (MMCS) and the Rosenberg Self Esteem Scale to access student "Self Esteem". Results showed studying for exams as the greatest stress-causing factor among students with 77.6% of students in the moderate stress category and 10.4% in the serious stress category. Differences between male and female students were observed in both academic and life stress with female students reporting higher levels of stress than males. Regardless of gender, a positive correlation was observed in focus of control and academic stress. Students with high self-esteem showed less stress as compared with students having low self-esteem.

Aktekin et al, (2001) also reported that higher stress scores decreased academic performance. Aktekin assessed the psychological change in undergraduate medical students in Antalya, Turkey. Participants were all first year undergraduate students in the areas of medicine, economics and physical education. A detailed self-report questionnaire was given during the first registration term of 1996, followed by a questionnaire the next year. Components of the questionnaire included a 12-item General Health Questionnaire (GHQ), the Spielberger State-Trait Anxiety Inventory (STAI) and the Beck Depression Inventory (BDI). Results showed a significant increase in the “stressful life events” from year 1 to year 2 along with a significant rise in the anxiety level among students from year 1 to year 2. However, the Beck Depression Inventory scores were high for students of year 1, with a decrease of scores in year 2. Findings suggested that students having low self-esteem had difficulties in academic performance and suffered more stress anxiety. Conclusions were that students with low self-esteem and excessive stress utilized maladaptive coping strategies. Analysis of the data showed a relationship between grades and stress measures. Pearson
correlation coefficient values (0.57, 0.74, 0.67, 0.53 and 0.52) for the five assessment periods of the first two years of medical school, suggested that stress and academic performance were correlated (Steward, 1999). The study reported excessive stress to adversely affect the academic performance among students. Students who reported excessive stress showed poor academic performance, as compared to students reporting lower stress.

### 2.2 Stress Levels of Adolescents

There are lots of studies focusing on studying the main sources of stress, experienced in school and college students and coping strategies used by them. The relationship between stresses is likely to be mediated by a variety of variables including the Level of Acculturation, Phases of Acculturation, Nature of larger society, Modes of acculturation and the Degree of similarity between the culture of origin and the new culture (Berry, et al. 1987). Evidences have suggested that stress may have a significant effect on health (Berry & kin, 1988); (Parka, 2009); Lone & Singh, 2011). School and College students are a group, particularly prone to stress (D’Zurilla and Sheedy, 1991) due to the transactional nature of college life (Towbes and Cohen,1996); (Berry et al. 1992). School and College study are very harsh physically, mentally and socially. Fatigue itself has been conceptualized as a warning sign, indicating a harmful accumulation of stress (Watanabe, 2008); (Maghout-Juratli, etal. 2010). Students find it very hectic and stressful with all the clinical and theory assignments, presentations, study pressure, exam stress and many other demands, which the course makes on them. The environment in which students live is quite different. While jobs outside of the university setting involve their own sources of stress, such as evaluation by superiors and striving for goals, the continuous evaluation that school students are subject to such as weekly tests and papers to earn grades and to earn a degree is very high (Hirsch and Ellis,1996). Earning high grades is not the only source of stress for school students. Other potential sources of stress include excessive homework, unclear assignments and uncomfortable classrooms (Kohn and Frazer, 1986). In addition to academic requirements and relation with faculty members and time pressures may also be sources of stress (Sagan-Cohen & Lowental, 1988). Relationships with family members and friends, eating and sleeping
habits and loneliness may affect some students adversely (Wright, 1967). It is important that stress intervention programs should be designed to address stress in School students. However, in order to design an effective intervention, the stressors specific to school and college students must be determined (Wright, 1967).

Identifying individuals who have an increased vulnerability to stress is a useful first step when targeting services seeking to prevent physical and mental health problems among disadvantaged populations. Many empirical studies support the fact that it is clinical or field component education that is one of the most stressful experiences for school students, while some risk factors may be known as sleeping and eating habits that may require screening or assessment. (Sagan-Cohen & Lowental, 1988); (Kohn and Frazer, 1986); (Towbes and Cohen, 1996); (Tarzian, etal. 2010). When asking what causes stress for adolescents at the middle and high school levels, some literature revealed significant information regarding certain environmental factors that contribute to stress. Adolescents encounter a number of stressful issues that include family and relationship conflict, death of a close family member or friend, and educational and social pressures. These pressures may also include peer pressure regarding drugs, alcohol and sex, the media, bullying, fatigue, parental and personal goals and expectations and academic achievement.

It is prone to occur at any age and can be associated with substantial functional impairment. Stress and anxiety are believed to be the part of the clinical picture of many different conditions and may result from or be associated with various medical conditions too. These epidemiological observations clearly reveal the vulnerability of today’s population in general towards maladaptive behavior. This emphasized the need for primary interventions that can act as a buffer against this susceptibility to stress and anxiety. Adolescents have indicated a need for educational programs that teach identification, managing and dealing with stress in positive ways for their everyday lives and school counselors may help promote or present such programs during classroom guidance

2.3 Factors Contributing to Stress in Adolescents

Stress can be caused by many factors, namely: - Environmental Factors, Psychological Factors, Biological Factors and Social Factors. It can be negative or positive to an
individual, depending on the strength and persistence of the stress, the individual’s personality, cognitive appraisal of the stress and social support. According to Chang’s Dictionary of Psychological Terms, stress is “a state of physical or mental tension that causes emotional distress or even feeling of pain to an individual” (Lai, et al., 1996).

Ross, et al. (1999) studied major sources of stress among college students (n=100) using student stress survey. The scale addressed interpersonal, intrapersonal, academic and environmental sources of stress and the items were categorized as either daily hassles or major life events. Overall, daily hassles were reported more than major life events, with interpersonal stress being the most frequently reported sources. **The five most reported sources of stress were - change in sleeping habits, variations/breaks, change in eating habits, increased work load and newer responsibilities.** In another study, Wang and Ko (1999) pointed out that girls feel upset more easily than boys, mainly because of their concerns about physical appearances.

With the progress of human civilization and increasing plurality of our society, people need to play more roles. In the workplace people may be a subordinate, a supervisor, a boss, a colleague to other employees, a member of an organization or a leader. At home a person needs to be the wife or husband, mother or father, daughter or son. Even in our leisure life, we may need to be a friend to others. Therefore, stress is ubiquitous in modern life. Formation of stress is highly associated with the social environment. Stress arises not only in a complicated and competitive environment, but also in a monotonous and stimulus-less one (Feng, 1992).

Chiang (1995) proposed that school is one of the main sources of stress among adolescents. Such stress comes from too much homework, unsatisfactory academic performance, preparation for tests, lack of interest in a particular subject and teacher’s punishment. Generally, parents are very concerned about their children’s academic achievement and moral behaviors. Parents expect their children to not only respect teachers and follow moral norms but to become elite in the future (Liu & Chen, 1994). The educationist Dewey once said, “Education is a pursuit of a perfect life”. However, school teachers and parents in Taiwan usually use academic achievement as the sole criterion for evaluating a student’s performance at school. This criterion causes double
stress on adolescents. Stress from high expectations of teachers, parents and self is usually an agony for students studying in schools (Cheng, 1999).

Most adolescents are urged to develop a relationship with the opposite sex. As there are no absolute ways of making friends with the opposite sex, many of them usually do not know what to do when they face opposite sex. Besides, adolescents often suffer stress induced by “a sense of insecurity” when they are dating someone. They become worried that they may not lose their dates and their parents or friends may not have negative views on their dates. Therefore, developing a heterosexual relationship is a challenge and a stressor for adolescents (Wang and Ko, 1999).

Awasthy et.al (2015) concluded that in the current scenario of societal and educational setup, early adolescents are experiencing stress. Major stressors of early adolescent children were identified from the home and school environment. Stressors that were identified as highly stressful were parenting role of parents, teachers, workload, homework, high expectations of parents, parental conflicts, economic factors etc.

2.4 Gender Differences in Coping, Perceiving and Reporting Stress

The research has shown that there is a gender difference in the experience and reporting of stress and the kind of coping used:

Bhosale (2014), “studied the Academic Stress and Gender Difference on 150 secondary school students in 10th standard. The purposive sampling method was used for the selection of the sample. It was found that there was a significant difference between boys and girls in terms of their academic frustration, academic pressure and academic anxiety level. Boys have high academic frustrated than girls and girls have high academic pressure & an anxiety level as compared to boys. Therefore, gender difference is a vital key in point in academic frustration, academic pressure and academic anxiety level. However, there is no significant difference between boys and girls on academic stress and academic conflict, which shows there is no key point in academic stress and academic conflict. Uma and Manikandan (2013) gave similar results. Whereas according to Lal (2014) there is a significant difference between boys
and girls in relation to academic stress between adolescent in relation to intelligence and demographic factors.

Jones (1993) undertook a study to establish existence of some gender specific differences in the perceived antecedents of academic stress. As a result, some significant gender based differences were obtained and girls reported greater difference than boys did.

Wagner and Compass (1990) examine the role of gender, instrumentality and express it as moderator of the relations between stressful events and psychological symptoms in sample of junior high, senior high and college students. Female students in all three samples reported more overall negative events than did males. However, there were no indications in any of the samples of a stronger relation between negative events and psychological symptoms for adolescent females and males. Finally, stress in junior high school, peer stresses in senior high school and academic stresses in a college sample found to be dominant. The attitude towards help seeking is negative and there is a gender difference in terms of females showing a positive attitude (Boey, 1999). Help seeking was associated with more severe problems and was seen as a lack of self-sufficiency. (Ang et al, 2004); (Eschenbeck et al. 2007) found that in general, girls scored higher in seeking social support and problem solving whereas boys scored higher in avoidant coping. Findings suggested by (Williams et al. 1999).

Many therapeutic interventions have been developed and standardized since their inception in the 19th and 20th century for ameliorating stress with known efficacy. These are - Systematic Desensitization, Cognitive Therapy, Behavioral Therapy, Rational Emotive Therapy and Meditation. Here systematic rational is a cognitive therapy due to its sound socio-cultural and universal acceptance will be poised to play a profound role as the primary intervention for prevention of maladaptive behavior provoking stress.

Reda (1994) observed differences between male and female students in both academic and life stress with female students reporting higher levels of stress than males. Regardless of gender, a positive correlation was observed in locus of control and academic stress. Students with high self-esteem showed less stress as compared with students having low self-esteem. Stewart et al (1999) also confirmed the role of maladaptive coping. He conducted a longitudinal study of stress related measures and
academic performance during the first two years of medical study suggested that stress and academic performance were correlated. Steward, et.al (1999), reported excessive stress to adversely affect the academic performance among students. Students who reported excessive stress showed poor academic performance, as compared to students reporting lower stress.

According to APA (2015), The stress in America survey consistently find that “women report higher stress levels than men and are more likely than men to say they experience symptoms of stress and that they engage in unhealthy and sedentary behaviors to manage their stress”. In fact, it appears that the gap between men and women’s stress levels has grown and women are not far when it comes to stress management.

2.5 Stress Management and Coping

Barker (1987) reported excessive stress as the significant risk factor for various maladaptive coping outcomes among youth. The maladaptive coping may include anger, frustration, abuse related events, peer harassment and chronic victimization (Barker,1987); (Connor-Smith et al, 2002). The harmful effects of stress have been considered to also cause feelings of worthlessness and being overwhelmed (Hill and Saranson, 1966).

Stewart et al, (1999) also confirmed the role of maladaptive coping. Struthers et al, (2000) concluded that problem-focused coping helped students to be motivated and perform better results were given by R. Lo. (2002); Rosenzweig (2003) showed the Mindfulness-Based Stress Reduction (MBSR) course was effective in improving the coping skills and reducing emotional distress in medical students from Jefferson Medical College, Pennsylvania. The results show improvement among students on tension-anxiety, confusion-bewilderment, fatigue inertia and vigor–activity subscales when compared with the baseline total mood disturbance.

Barnes et al, (2003) found transcendental meditation to be effective in a school setting to decrease absenteeism, rule infractions and suspensions rates in these African American adolescents. Whereas along with the stress management techniques, the effect
of aromatherapy on stress reduction was also studied in adolescents by Seo (2008) and results indicate positive effect of aromatherapy on stress reduction in adolescents. Stress management techniques like behavioral and progressive muscle relaxation showed similar effect on stress reduction (Rasid & Parish 1998).

Greater discrepancy between resources and demand therefore causes a greater stressful reaction (Caltabiano et al., 2008). The act of handling this response is referred to as coping. Connor-Smith et al, (2000) suggest, “coping focuses on achieving goals to resolve the stressful situation and minimize emotional reaction”. Similarly, Delahajj et al. (2011) describes coping as a relationship between cognitive and behavioral processes that attempts to lessen the resources/demand discrepancy. Coping strategies are labeled as either of two major types. These include emotion-focused and problem-focused coping (Delahajj et al., 2011); (Dumont & Provost, 1999); (Lohman & Jarvis, 2000). Emotion-focused coping involves regulating emotional response to a stressor and reducing psychological discomfort, whilst problem-focused coping includes altering the situation to minimize or eliminate the source of the stressor (Dumont & Provost, 1999). The type of strategy a young person utilizes depends largely on perceived control (Spirito et al., 1991). Problem-focused strategies are used if a solution to the problem is considered within the individual’s capabilities, whilst emotion-focused strategies are used if the situation is perceived to be out of the individual’s control (Spirito et al., 1991). Despite this distinction, it is important to recognize that coping is a dynamic process that often involves a combination of both strategies, depending on the nature of the stressful circumstances (Caltabiano et al., 2008); (Delahajj et al., 2011); (Lohman & Jarvis, 2000); (Williams & Mc Gillicuddy-De Lisi, 1999); (Yahav & Cohen, 2008).

Stress and coping literature identify an extensive range of coping strategies that young people adopt (De Anda et al., 2000); (Moskowitz et al, 2013); (Williams & McGillicuddy-De Lisi, 1999). Some examples of emotion focused coping include relaxation, distraction, escape, helplessness and withdrawal (Caltabiano et al., 2008); (De Anda et al., 2000). An individual’s ability to handle stress is determined by the relationship between personal attributes such as cognitive, emotional and behavioral development (Delahajj et al., 2011). The highly influential work of Lazarus as cited by
Folkman, Tedlie and Moskowitz (2004), emphasized the role of cognitive interpretation in both stress perception and coping. Folkman et al. (2004) suggests that how an individual appraises a situation determines the level of stress experienced. Williams and McGillicuddy-De Lisi’s (1999) study on stress also focuses on the role of cognitive development in appraisal and coping. Results indicated that due to having a wider coping repertoire, older adolescents utilized more adaptive strategies than those younger (Williams & McGillicuddy-De Lisi, 1999). This suggests that experience with stress prepares adolescents problems, thus allowing the individual to cope adaptively (Williams & McGillicuddy-De Lisi, 1999). It is important to note however that the data was gathered over a short time and from a sample of predominantly white, middle-class students. This allows little room for generalization to the wider population, however effectively demonstrates the role of cognition in stress coping.

During the stressful transition of adolescence, young people are at risk of engaging in dangerous behavior such as alcohol and drug use, as an attempt to deal with increased stress levels. Rose & Bond, (2008), Caltabiano et al. (2008) support this notion and indicate that older adolescents are more likely to engage in these types of maladaptive emotion-focused coping. Rose and Bond (2008) also suggest that adolescents lacking healthy coping skills and exposed to stressful environments are at a higher risk of substance abuse. This study however emphasizes that cognitive appraisal and perception of the stressful situation is what determines the level of risk (Rose & Bond, 2008). Conversely, Fromme & Rivet (1994) contend that an adolescent’s coping repertoire is what determines the likelihood of using destructive behavior to cope. This study argues that young people that lack any form of coping strategies, regardless of maladaptive or adaptive nature, have a greater likelihood of using substance abuse to cope with stress (Fromme & Rivet, 1994). This research emphasizes the importance of promoting healthy coping skills in young people, De Anda et al, (2000) research on adolescents disagrees with Fromme and Rivet (1994) and Rose and Bond (2008).

Stress is considered one of the most important factors that affect the health of people. Excessive stress causes changes like adrenal enlargement, gastrointestinal ulcers and thymicolymphatic shrinkage. Numerous researchers have demonstrated that excessive stress causes physiological and biochemical changes in the body. The coping response
subsequently follows a physiological stress response. Different people cope with stress in different ways. They adopt either positive coping strategies (yoga, meditation, deep breathing, etc) or maladaptive coping strategies (alcohol/drug addiction, cigarette smoking, interpersonal withdrawal, etc). Stress management techniques in a classroom setting have been effective in improving self-esteem motivating students to adopt positive coping strategies and behaviors, there by reducing exam anxiety and stress. (Harjai & Gupta, 2016)

2.6 Summary of Literature Review

Majority of the students experience stress in their day today life and most of that is related to academics and exams. The other areas of stress included problems in relationship with parents, girl/boy friend, fear of rejection by others, financial problems. Females reported more academic and interpersonal stress than the males.

Adolescents use a variety of coping strategies to deal with stress. Coping strategies used by adolescents vary with age and sex. Females use social support, problem solving, ventilation as coping strategies whereas males use avoidance and leisure as coping strategy. Older adolescents use problem solving and reappraisal more often than the younger adolescents do.

Studies conducted on the academic stress experienced by students show that majority of the students experience academic stress. Inability to manage time, lack of adequate rest, heavy workload, pressure to get good grades and lack of interest in studies were major contributors to academic stress. Exams and fear of failure, parental and peer pressure are reported as a source of stress.

2.7 Rationale of the Study

Academic stress faced by them is significantly affecting their academic performance and overall health. Standard 12 is considered as the most crucial class in the academic life in terms of choosing a career, which depends on the performance in the final exam. Students are under immense pressure to get good marks in the finals and clear competitive exam for admission in professional course. The rising cases of suicides
show that adolescents lack the coping skills to deal with academic stress and failure. It also indicates that there is an urgent need to address this issue. However, there is a serious lacuna of programmes that deal with academic stress management. The need was felt to develop stress management guidelines that deal with academic stress. This programme was developed with the aim of providing skills that will help students in dealing not only with academic stress but with day-to-day stressors as well. Thus, the current study is intended to examine the impact of stress management on academic performance. It is assumed that the students experience high stress and anxiety, which adversely affects their academic performance.

Adolescence is a transitional period of major physical and emotional change that can result in significant psychological stress for young people. A combination of situations such as school, academic pressure, anxiety about the future and family/peer relationships play a role in creating angst for adolescents. The type of coping strategies individuals use is highly dependent on cognitive and emotional development. Adaptive coping often leads to emotionally healthy individuals, whereas maladaptive coping can lead to destructive behavior such as substance abuse. The main point emphasized throughout the paper is that how individuals cope with certain life stressors is a dynamic, fluctuating relationship between different components. In order to examine this relationship further, further research focusing on adolescents and stress is encouraged.