Review of Literature
Chapter 2

REVIEW OF LITERATURE

A comprehensive review of literature forms an integral part of any scientific enquiry. Therefore it is mandatory on the part of any researcher to go in depth of the earlier studies conducted in the field of investigation which gives the comprehensive knowledge about the work done and findings obtained in the part. It gives an immense help and provides an insight to the researcher to plan and execute the study. Further review of literature helps in according unintentional duplication of work and also keeps apart with recent developments of field.

The present chapter deals with literature survey of the existing volume of similar or related subject that helped in shaping the theoretical position subject that helped in shaping the theoretical position of this research project. The studies of the present work undertaken by the investigator are categorized in to following heads:

**Thomas J. Berndt (1995) Reported that** adolescents may be influenced both by their friends' behaviors and by the features of their friendships. To examine both types of influence, seventh and eighth graders (N = 297) were asked in the fall of a school year to report their involvement and disruption at school. The students also described the positive and negative features of their best friendships. Teachers reported on the students' involvement, disruption, and grades. These assessments were repeated in the following spring. Students whose friends in the fall described them as more disruptive increased in self-reported disruption during the year. Girls' self-reported disruption was more influenced by that of their very best friend than was boys'. Students who are very best friendships had more positive features increased in their self-reported involvement during the year. Students whose friendships had more negative features increased in their self-reported disruption, but only if their friendships also had many positive features. The theoretical and practical implications of these findings, and the adequacy of different methods for estimating friends' influence, were discussed.

**M. Lee & R. W. Larson (1996)** conducted a study with Korean high school seniors (n=385) five month before university entrance exams found that over half the
students reported feeling ‘extremely stressed’, and that mean levels of depression and physical symptoms were much higher compared to high school seniors in the united states.

Field & Prinz (1997) synthesized 10 years of empirical data and included the variables of control in the relationship between stress and coping. They defined control as being primary, secondary and released. Respectively they surmised that as children mature into adolescence they start using a properly of coping strategies their reference for approach avoidance or problem/emotion coping strategies becomes less extreme eg. They use a mixture of problem and emotion focused strategies. They demonstrate reflective development using both a cognitive and behavioral repertoire of coping strategies. This transformation of the choice of coping strategies comes from a more sophisticated understanding of their stressors, hence a greater controllability of stressful events.

Melodie wenz-Gross et al. (1997) examined middle school stress, social supports and adjustment of 482 sixth, seventh and eighth-grade adolescents. Multiple regression analyses were used to relate differing types of stress and social support to students ‘self-concept, feelings of depression and liking of school. Results showed that higher academic stress and less emotional support from the family were related to lower academic self-concept, and higher peer stress and less companionship support from the family moderated the influence of peer stress on feeling of depression. problem-solving support from adults outside the family moderated the effects of teacher/rules stress on adolescents’ liking of school.

Korte (1998) explored congruent perceptions between mothers and their adolescents regarding stress and coping and whether this congruence contributed to the adaptive nature of adolescents when faced with health problems. The results were not significant. However, when excluding the mothers the sample size increased thus revealing that adolescent boys demonstrated that they have higher self esteem in regard to their bodies, better self image, and fewer health problems than girls.

Spears (1999) Anxiety disorder were among the most common mental, emotional and behavioral problem to occur during childhood and adolescence. About 13 of every 100 children and adolescence, age 9 to 17 experiences some kind of
anxiety disorder. Girls are affected more than boys. About half of children and adolescents with anxiety disorder have a second anxiety disorder or other mental or behavior disorder, such as depressions.

Pomerantz, Saxon & Oishi’s (2000) measure for each of four care subjects (language arts, math’s, science and social studies in the united states language arts, math, biology, and English in china) they indicated (1=nutal all important, 7= very important) how important it was for them to do well (eg. how important it was for them to do well) (eg. How important is it to you to do well in math”?), avoid doing poorly (eg. how important is it to you to avoid doing poorly in language arts?) The eight items were combined with higher numbers reflecting greater investment (xs=.91to.94 in the United States and .88 to .91 in China).

Seiffge Krenke (2000) traced 20 coping strategies in eight possible problematic domains studying, teachers, parents, peers, loving relationships, self-activity time and the future at 15 years adolescents begin using adaptive and efficient coping strategies, however female adolescents seen to reaction to stress by internalized symptoms whereas meal adolescents react with externalized symptom. Adolescents report school stress in a homogeneous way; whereas family stress is perceived as more complex and stressful. Different models were developed: a secure internal model (positive towards self and others), a destructive model (negative towards others) or a preoccupied model (constantly subjected to high stress).

Merry lee & Reed Larson (2000) examined a study to compare high school seniors in Korea (n=56) and the united states (n = 62), five months prior to university entrance exams, founded that Korean students had significantly higher depression scores and were more than twice as likely to score in the range for clinical depression than their American counterparts.

K Sarala devi & S. N. Devraj (2001) explored the influence of examination stress on cholesterol level of 10, 12, M.sc and vocational group students. Samples comprised of 25 students from each stream students cholesterol was estimated by the parek and jung method and examination stress questionnaire was used. Results revealed that cholesterol levels were significantly higher in the students from all
classes just before the examination as compared to relaxed state and examination stress influence cholesterol levels of students.

**Deisy Sharma (2001)** conducted study to identify the parental and peer attachment influencing identifies formation and adjustment during adolescence. The sample included 600 adolescents from various schools and college of Jalandher. The results showed differences in the pattern of relationship of foreclosure with attachment across age. Results also proved the meditational role of attachment (parents and peers) in the identify status (identify achievement, moratorium, foreclosure and diffusion) and adjustment of adolescent.

**K. Saraladevi & S. N. Devaraj (2001)** examined the influence of examination stress on cholesterol level of X, XII, M.SC. and vocational Group students. Samples comprised of 25 students from each stream. Students’ cholesterol was estimated by the Parke and Jung method and examination stress questionnaire was used. Results revealed that cholesterol level were significantly higher in the students from all classes just before the examination as compared to relaxed state and examination stress influence cholesterol levels of students.

**Hess & Copeland (2001)** Predicted that adolescents who drop out of school would report higher levels of stress and would more frequently use dysfunctional coping strategies. stress was measured by the number of life events characterized by change and body weight using the adolescent life change event scale (ALCES) and the adolescent coping orientation for problems experiences (A-COPE) they concluded that adolescents who seek professional support and who dedicate themselves to non-academic social activities are more susceptible to dropout. Whereas, those who seek out family interactions remain in school.

**Suman Verma et al. (2002)** examined the influence of school demands on the daily times use and subjective states of Indian young people. One hundred urban, middle-classes, 8th grad students carried alarm watches for one week and provided 4764 reports on their activities and subjective states at random times, following the procedures of the Experience sampling method. These adolescents were found to spend one third of their waking time in school-related activities, with girls spending
more time than boys. Schoolwork generated negative subjective states as reflected in low affect state, below-average activation levels, lower feeling of choice, and higher social anxiety. These negative states were most frequent during homework. The trade-off faced by Indian adolescents was evident in the findings that those who spent more time doing homework experienced lower average emotional states and more internalizing problems, while those who spent more time in leisure experienced more favorable states but also reported higher academic anxiety and lower scholastic achievement.

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Doyle et al. (2003) this study examined whether positive events mitigated the relation between negative events and maladjustment in samples of children and adolescents experiencing family transitions. The study examined this relation in two samples, used multiple reporters of maladjustment, and employed "tailor-made" checklists to measure events. The first sample included 86 stepfamilies with adolescents 10 to 17 years of age. The second sample included 171 divorced families with children 8 to 15 years of age. Evidence that positive events are protective for children and adolescents experiencing high levels of negative events was found across the 2 samples and across mother and child report of adjustment. These findings have implications for theory and intervention development.
Elgar et al. (2003) studied the differences between rural and urban adolescents and gender differences related to stress levels, coping strategies and behavioral problems. Four major results were found. First, they found no differences between rural and urban adolescents in terms of stress levels and behavioral problems, but urban adolescent boys reported more conflictual problems than did girls and urban boys reported having more external problems than did rural boys and girls. Second, rural adolescents were more affected by higher unemployment, poverty and emigration but did not differ significantly from urban adolescents in terms of stress levels or coping strategies. Third, even though conflict levels and behavior problems seemed to be similar between rural and urban adolescents, rural adolescents seemed to have a closer relationship between these two variables as well as between conflict and coping strategy in this same group. Fourth, the approach strategy did not act as a moderator in the relationship between stress and behavioral problems.

Hashim & Ismail Hussein (2003) tested the universal nature of stress and coping behavior among overseas college student in China and provided basic information toward understanding the problems that resulted from stress and coping which could best be defined in cultural terms. Results indicated that academic and interpersonal sources of stress were the most common.

Masih & Gulrez (2004) studied age gender difference on stress”. Samples consisted of 346 students (177 youths and 169 adolescents). Student stress inventory (SSI) was used. Results revealed that there was no significant difference in terms of age as far as students stress was concerned.

Miri Shanchan & Modi Lahad (2004) examined “stress reaction and coping resources mobilized by children under shelling and evacuation. The sample consisted of 102 children evacuated from their shelled town having 37 the boys and 65 girls in the age range between 7-19 year. Structured individual interviews with open ended question devised by researcher and ‘BASIC PH’ coping resiliency model were used. The results revealed that the bell shaped phenomenon existed with the correlation between age and emotional, physiological and behavioral stress reaction that was in the age group 6-9 there was a low level of physiological stress reactions, which increased at the 9-12 age group and decreased at adolescence. No correlation was found between children’s age and mobilization of coping resources.
Brusaer & Van Houtte (2004) identified perceived social support mechanisms through which the gender composition of the school may influence pupils stress responses using data from 68 academically oriented Flemish secondary schools in Belgium of these schools. 25 were co-ed schools and 43 were single-sex schools. (21 Girls school and 22 Boys schools). Respondents (3,370 Girls and 3,057 Boys) were third year students ages 11 and 15. A multilevel analysis (Hierarchical linear modeling) was performed. Adjusting for parental socioeconomic status (SES) parental support academic performance curriculum enrolment schools mean SES. Sense of belonging in school and quality of teacher pupil relationships. Results showed that early adolescent girl in single sex schools experience lower level of stress than do girls in coeducational schools and that this effect is largely accounted for by sense of belonging.

Connor-smith & Joser (2004), two processes one automatic the other controlled, characterize stress responses and distinguish themselves by engagement or disengagement when faced by sources of stress of stress and one's own reactions to stress. The automatic processes include physiological arousal, emotional arousal, and intensive thoughts. Automatically based attention, impulsive responses and involuntary behavior of avoidance. Controlled processes are reflected in coping strategies. Defined by voluntary and conscious effects to regulate emotion, cognition behavior, physiology and environment in response to stressful events of circumstances. Coping strategies involving engagement responses are distinguished by primary or active control (problem solving, expression of emotions, emotional modulation and secondary control or accommodation acceptance, cognitive restructuration, positive thanking, and distraction). Disengagement strategies include avoidance, denial and wishful thinking.

Yeh & Lempers (2004) studied reciprocal directions of effect or the possibility that youth’s emotional adjustment may impact their sibling conflict over time. This direction of effect has generally been understudies, however one longitudinal study of 374 families.

Pedro F. Casanova et al. (2005) compared the distribution parental educational styles and the scores reported both by parents and students for various
family characteristics and socio demographic factors. The results indicated differences in the distribution group of adolescents with normal academic achievement, socio-demographic variables better predicted achievement; for students with low achievement, family variables plied a more important role in predicting achievement.

**M. Guszkowska (2005)** studied on physical fitness as a resource in coping with stress. The sample consisted of 253 high school students (82 the boys and 171 the girls; mean age =15.4) the international physical fitness test, profiles of mood states and questionnaire, self-assessed psychological well-being and physical health were used. The result revealed significant interactions between physical fitness and gender for both sexes. The girls not only less favorably assessed their health, experienced more somatic complaints but also manifested more marked negative mood states.

**Suraksha Pal (2005)** conducted the study to assess the psychological stress among science students at senior secondary level was conducted to ascertain as to how this stress affects the achievement of boys and girls studying in differently managed institutions respectively. A sample of 117 senior secondary science students (65 boys, 52 girls) was randomly selected.

**M. Kadapatti & P.B. Khadi (2006)** conducted a study on factors influencing for academic stress among pre-university students. Samples consisted of 360 PU students of both the boys and the girls from Dharwad. Stress event test, socio-economic status scale, aspiration scale, study habits schedule, and study problems schedule were used together data. Findings suggested that high aspiration, poor study habits, more study problems, change in the medium of instruction and low socio-economic conditions were the factors that significantly influenced academic stress.

**G. S. Pastey & V. N. Aminbhavi (2006)** conducted a study on impact of emotional maturity on stress and self confidence of adolescents. Sample of the study consisted of 105 adolescents studying in 11 and 12 class from Dharwad. Emotional maturity, self confidence inventory and students stress scale were administered. The finding revealed that the adolescent the boy tend to have significantly higher stress than the girls and the girls tend to have significantly higher self-confidence.
G. Vijayalakshmi & P. Lavanya (2006) conducted a study on relationship between stress and mathematics achievement among intermediated students. A sample of 180 intermediate students was selected by stratified random sampling procedure and survey method was adapted to carry on the investigation. The findings showed that senior intermediate students were more stressed than junior.

Swadsworth & Berger (2006) examined adolescents’ family stress related to poverty in order to predict psychological symptoms. Coping strategies related to primary and secondary control predicted a reduction of aggressive and anxious/depressive behavior, whereas those based on disengagement had the inverse effect which was verified for anxiety and depression but not for aggression. Family stress linked with poverty interfered with coping strategies by interfering with adolescents’ abilities to use primary and secondary control strategies to help them avoid using disengagement strategies.

Wadsworth & Berger (2006) examined adolescents' family stress related to poverty in order to predict psychological symptoms. Coping strategies related to primary and secondary control predicted a reduction of aggressive and anxious/depressive behavior, where as those based on disengagement had the inverse effect which was verified for anxiety and depression but not for aggression. Family stress linked with poverty interfered with coping strategies to help them avoid using disengagement strategies: this stress predicted anxious/depressive and aggressive behaviors. It was the same for the interaction between involuntary reactivity to stress and these coping strategies-primary and secondary control strategies were associated with charges in psychological symptoms with initial symptoms and low involuntary reactivity to stress. The interaction between coping strategies based on primary and secondary control and psychological symptoms predicted a reduction of these symptoms in those who have these initial symptoms. This was verified by internalized symptoms but not externalized symptoms.

Hampel & Peterman (2006) found that adolescent girls perceived more interpersonal stress, used more maladaptive coping strategies, and had more internalized problems than did adolescent boys. They did not differ from boys in regard to externalized problems, which was rather surprising. Interpersonal stress was
also related to angry management problems and emotional distress in female adolescents the authors confirmed that adaptive coping strategies are inversely related to adjustment problems and maladaptive strategies. Problem focused coping are less associated with poor adjustment problems. This supports the notion that active strategies or approach strategies are a protective factor relative to internal disorders. Emotional coping strategies are related to less anxiety/depression and aggression problems. Maladaptive coping strategies constitute a risk factor. Adolescent girls react strongly to interpersonal stressors and make more efforts to adapt to social stressors than boys do.

B. Mathew (2006) examined Parent disciplinary practices on academic stress and mental health among adolescent children". The sample consisted of 55 boys and 55 girls of age group 12-15 years from Kerala. Mohsin parent children inventory, PGI general well being and students academic stress scale were used. Results suggested that parent disciplinary practice was not significantly related to academic stress in both the boys and the girls, whereas it was related to mental health of the girls but not of the boys. The girls experienced significantly more academic stress than the boys.

B. Mathew & Jayan (2006) studies on Academic stress and coping styles among plus two students. The sample consisted of 50 boys and 50 girls of age group 15-17 years. Student academic stress scale and AECOM coping scale were used for data collection. The results revealed that both the boys and the girls were experiencing the same kind of academic stress but there were no significant differences between them and they were using similar types of coping mechanism to deal with their academic stress.

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Grour et al. (2007) examined adolescent stress and coping a longitudinal study. The data was collected from 167 subjects through adolescents life change event scale (ALCES) and open ended questionnaire for ways of coping were used. The results revealed that the girls generally reported more life events associated with interpersonal and family relationships. Both the girls and the boys reported coping with stress mostly through active distraction techniques such as exercise.

Byrne, Davenpart & Mazenov (2007) sought information on the nature of adolescent stressors building on a previous instrument developed by Byrne to ask adolescents themselves to inform the development of a pool of new items reflecting stressor experience and to advise on the wording of these items to assess that experience comprehensively. This pool of items was then administered as a self-report questionnaire to a large sample of school-age adolescents together with a scale to assess the intensity of distress arising from stressor occurrence. Principle components analysis of the questionnaire yielded 10 internally reliable dimensions of adolescent stress, the nature of which was consistent with the available literature on adolescent stressor experience.

Finklestein, Kubzansky, et. al. (2007) decided to investigate whether psychological resources influenced the association between parent education (PE), a marker of socioeconomic status (SES), and perceived stress. Their cross-sectional analyses were conducted in a sample of 1167 non-Hispanic black and white junior and senior high school students from a Midwestern public school district in 2002–2003. The effects of PE (high school graduate or less), and psychological resources (optimism and coping style) on teens’ perceived stress were examined. They found that relative to adolescents from families with a professionally educated parent, adolescents with lower parent education had higher levels of perceived stress. Both psychological resources were associated with stress: higher optimism and engagement coping were associated with less stress and higher disengagement coping was associated with more stress.

A. M. Nielsen & K. Hansson (2007) examined association between adolescents, health stress and sense of coherence sample consisted of 3258 adolescents. Self-reported illness and symptoms and a questionnaire were used. The results revealed that the girls with a low sense of coherence who were exposed to
stress reported recent. Illness twice as often as unstressed girls did, for the boys, there was no such significant interaction, for both the girls and the boys there were no significant interactions on symptoms.

**Putnik, Bornstein, Hendricks et.al (2008)** assessed whether the stresses associated with parenting a child are indirectly related to adolescent self-concept through parenting behavior. They examined longitudinal association among Mothers and Fathers parenting stress at age 10. Children's perceptions of parenting at age 10 and adolescents self-concept at age 4 in 20 European American families mother's and father's parenting stress was related to children's perceptions of acceptance and psychologically controlling behaviors and lax control for fathers was related to adolescent self-concept, They further examined which domains of parenting stress and perceived parenting behavior were associated with adolescents scholastic competence, social acceptance physical appearance and behavioral conduct. Parenting stress was related to specific domains of self-concept in adolescence. Parenting stress appears to exert its effect on early adolescent self concept indecently through perceived parenting behavior.

**Abha Sudha Rao (2008)** conducted surveys and interviews to assess the prevalence of academic stress and adolescent distress of 12th standard students and to explore their perceptions of the issue and their understanding of the role of parents using scale of depression and anxiety. The sample size was 588 students from the south Indian city of Chennai. The majority of students reported that they were stressed by the coming school year and rates of depression and anxiety were very high in the sample. Further analysis indicated that different group of students appeared to experience distress in different ways and their parents were involved in their education in five ways- they had specific expectations for achievement they put pressure on their children, they put pressure on their children, they compared their child to others they controlled the study environment and they were supportive of their children.

**Akber Hussain, Ashutosh kumar & Abid Husain (2008)** explored the relationship between the academic stress and adjustments. A sample of 100 students of class ix were selected randomly from two different schools out of which 50 were
taken from public and the remaining 50 were taken from government school. Sinha and Singh inventories were used to assess the academic stress and adjustment of school students. Results indicated that magnitude of academic stress was significantly higher among the public school students whereas government school students were significantly better in terms of their level of adjustment. However, inverse but significant relationships between academic stress and adjustment were found for both the group of students and for each type of school.

Rachel Dedeyn (2008) looked at the differences between the levels of academic stress in Australian and international students living in an international dorm in Melbourne, Australia. 85 students from 21 countries were surveyed using Gadzella's student-life Inventory (1994) results indicated that overall there was no significant difference between the amount of academic stress experienced by Australian students and the amount of academic stress experienced by international students. There was a significant difference found in the subcategory of pressure related stress between Australian and international students.

Reena Bhansali & Kunjan Trivedi (2008) conducted a comparative study between boys and girls of 16-18 years to know the academic anxiety prevailing amongst them. Incidental purposive sampling technique was used in the selection of the sample. A total sample of 240 adolescents, 120 boys and 120 girls from different high schools of Jodhpur city were selected. Self-constructed adolescent problem inventory was used. The data was analyzed using t-test; the results revealed that considerable amount of academic anxiety prevailed amongst the sample. It was seen that girls on the whole had more incidences and intensity of academic anxiety in comparison to boys.

Davila, Stroudd et al. (2009) examined their bidirectional association, as well as the role of sexual activity and parent-adolescent stress in their association. Data were collected from 71 early adolescent girls (marriage 13-45 years) and their primary caregiver initially and one year later. Results indicated that adolescents who engaged in more romantic activities experienced increases in depressive symptoms over time. Second greater depressive symptoms predicted romantic involvement and sexual activities, including intercourse come year later. Third dysphonic adolescents who
were experiencing higher parent-adolescent stress were the most likely to engage in subsequent sexual intercourses.

**O’ Connor, Rasmussen & Hawton (2009)** investigated the extent to which perfectionism and acute life stress predict depression, anxiety and self-harm among adolescent school children (n=515) over a 6 month period (time1-time2) socially prescribed perfectionism (SPP) self-oriented perfectionism critical (SOP-critical) and the associated interactions with acute life stress differentially predicted anxiety, depression and self-harm. Acute life stress was an independent predictor of depression, anxiety and self-harm. SPP predicted depression and interacted with acute life stress to predict self-harm. SOP-critical and the SOP-critical by acute life stress interaction predicted anxiety. Self-oriented perfectionism striving (SOP-striving) did not predict any of the time2 measures of distress. The dimensions of perfectionism are differentially associated with psychological distress.

**K. Kumar, S. Kadhiravan (2009),** examined male and female students differ significantly in their stress-coping skills. This study adopted survey method; this study was conducted among 400 college students. To find out the relationship between stress-coping skills and their goal orientation. The finding of the study revealed that the students differ in their coping skills with regard to their gender subject of specialization and parents' level of education are significantly associated with the students' stress-coping skills.

**Nelakshi A. Lavakare (2009)** this study tried to bring out the facture that influence adjustment in adolescents. It examined personal and social adjustment with reference to age, gender and class (9, 10, 11, 12) the sample of 263 students was selected randomly, California test of personality and problem checklist. The results revealed that the personal adjustment status.

**Shilpa Tarager (2009)** conducted study on stressor among the students of high school belonging to 8, 9 and 10 standard living in both rural and urban areas. The samples consisted of 259 boys and 279 girls who were assessed by self constructed stress scale. The results revealed there was no significant relationship between selected demographic variables and stress, the male students experienced more stress.
compared to the female students. The urban students experienced more stress compared to the rural students.

**Chi Hung Leung (2009)** explored the relationship between students’ stress and bullying among 200 days and 140 girls secondary school students using subjective stress scale and bullying checklist. The results showed that girls felt more stressed than boys in the family, and they also exhibited more social bullying than boys did. Both interpersonal and personal stress was factors leading to bullying.

**Ruby R. Brougham, Christy M. Zail, Celeste M. Mendoza & Jamine R. Miller (2009)** examined the sources of stress (academics, financial, family social and daily hassles) and coping strategies (self-help, approach, accommodation, avoidance, and self punishment of 166 college students). The relationships between sex, specific sources of stress, and coping strategies was also investigated. Students completed a stress assessment inventory and a stress coping inventory based on 5-factor revised COPE model. Results found that college woman reported a higher overall level of stress and greater use of emotion-focused coping strategies than college men. College men and woman also reported. Different coping strategies for different stressors; however the use for different stressors; however the use of emotion focused coping strategies dominated problem solving strategies both for men and woman.

**Sibnath Deb (2010)** conducted the study to understand better anxiety among adolescents in Kolkata city India specifically, the study compared anxiety across gender, school type, socio-economic background and mother employment status. The study also examined adolescents' perceptions of quality time with their parents. A group of 460 adolescents (220boys and 240 girls), age 13-17 year were recruited to participate in the study via a multi-stage sampling technique. The data were collected using a self-report semi-structured questionnaire and a standardized psychological test, the state-trait anxiety inventory. Results show that anxiety was prevalent in the sample with 20.1% of boys and 17.9% of girls found to be suffering from high anxiety, more boys were anxious than girls ( p<0.01).

**Sanjiv K Bhasin, Rahul Sharma & N.K. Saini (2010)** studies depression, anxiety and stress (DAS) among adolescent school students belonging to affluent families and the factors associated with high levels of DAS-242 adolescent students
belonging to class 9-12th selected for the study. DASS-21 questionnaire was used for assessing DAS. A significant proportion of the students were found to be having high levels of DAS and several important factors were found to be associated with them.

Josephine H. Shih et al. (2010) conducted a study on Differential exposure and reactivity to interpersonal stress predicts sex differences in adolescent depression. The samples consisted of 414 boys and 402 girls with the mean age of 15 years, 2 mounts, semi structured interview was carried out-findings indicated that adolescent girls experienced higher levels of total and interpersonal episodic stress, where as the boys experienced higher levels of chronic stress.

Fox Halpern, Ryan & Lowe (2010) examined how negative affectivity (NA) and positive affectivity (PA) influence developmental pathways to internalizing problems. Based on models that propose that affectivity shapes how youth react to stress. Their study investigated the relative roles of NA, PA and stressful life events in characterizing and differencing adolescent anxiety and depression. A sample of adolescent girls (n=63), including a sub-sample of adolescent mothers, completed measures of NA, PA, negative life event (NLE) occurrence, anxiety and depression findings supported the tripartite model as a "temperamental reactivity to stress" approach anxious and depressive symptoms were predicted by a combination of high NA and NLE occurrence; however a combination of low PA and high NLE occurrence was uniquely linked to greater depressive symptoms.

Moksnes, Moljord, et.al (2010) investigated whether leisure time physical activity moderated the relationship between stress and psychological functioning (depression anxiety, self-esteem) among Norwegian adolescents 13-18 years old (n=1508). In preliminary analysis, girls reported higher scores of depression and anxiety and boys scored higher on self-esteem. Interaction effects of gender by age were found on all outcome variables. Stress was positively associated with depression and anxiety, and negatively associated with self-esteem. Higher frequency of leisure time physical activity was weakly associated with lower levels of depression and anxiety and higher levels of self-esteem. The primary analyses revealed no support for leisure time physical activity as a moderator of the association between stress and psychological functioning.
Laohawattanakun, Chearskul, et al. (2010) investigated cortical response in Saliva of Thai adolescents taking academic examinations and analyzed the differences of the stress response between musician and control subjects. Also, they observed whether the academic examination-dependent corticosteroid response affected learning and memory in the test subjects, which comprised 30 musician and 30 control students, age ranging from 15 to 17 years. Mathematical examinations were used as the stressor pre and post-academic examination saliva cortical levels were measured as well as self-estimated stress levels.

Results showed that the pre-academic examination saliva cortical concentrations of the musician group were significantly lower than those of the control group. Whereas there was no difference in the stress inventory scores between the two groups. Interestingly, among students with grade point average (GPA) O>3.50, pre-academic examination control group. This study suggests the under an academic examination-induced stress condition, a history of music training is associated with reduced saliva cortical levels.

Chapin, Freiburger et al. (2010) examined salivary cortical, self-reported emotion. Heart rate and blood pressure (BP) response to the tier social stress test (TSST) in 49 prenatally cocaine exposed and other drug exposed and other drug exposed (PCE) and 33 non cocaine-exposed (NCE) adolescents. PCE adolescents had higher cortical levels before and after stress exposure than did NCE adolescents. PCE girls showed an elevated anxiety response to stress (compared to NCE girls) and PCE boys showed a dampened diastolic BP response (compared to NCE boys). Girls showed higher anger response and lower pre-stress systolic BP than boys. Group differences were found controlling for potential confounding variables and were not moderated by caregiver-child relationship quality (although relationship quality predicted anxiety response). The findings suggest that prenatal drug exposure is associated with altered stress response in adolescence somewhat differentially in boys girls.

Halkoia, D'onofrio, et al. (2010) examined whether mothers smoking during pregnancy (SDP) is associated with long-term impairment in offspring stress coping and the causal mechanism behind a possible link. They used a cohort (n = 187) young
men in Sweden (men age 18.2 years), who underwent a semi-structured psychological assessment between 1997 and 2006, including and evaluation of stress coping ability, as part of the compulsory military conscript examination. They compared differentially exposed siblings within nuclear families and cousins in extended families and used multilevel structural equation models to disentangle genetic from environmental contributions to the association between SDP and stress coping. SDP and offspring stress coping was moderately strongly associated when comparing unrelated individuals. In contrast, it disappeared when siblings were compared. This familial confounding appeared to be entirely due to genetic influences.

Lauren Deborah Feld (2011) analyzed three hundred eighty students in grades 9 through 12 from two college preparatory high schools. Student’s life satisfaction scale and school attitude and assessment questionnaires were administered on them. Students reported a high prevalence of harmful physical and psychological correlates of stress, and related unhealthy behaviors such as widespread and chronic sleep deprivation. They relied on peers most often for academic and emotional support students who went to parents often for support reported significantly higher life satisfaction. Main sources of stress included academic workload and external motivators such as pressure for high grades and prestigious college acceptance.

Yangyang Liu & Zuhong Lu (2011) studied a sample of 466 Chinese high school students; the researchers examined the relationships between Chinese high school students' stress in the school and their academic achievements. Regression mixture modeling indentified two different classes of the effects of Chinese high school students' stress on their academic achievements. One class contained 87% of the students. In that class, the students' stress negatively predicted their academic achievements. For the other 13% of the students, their stress did not predict their academic achievements. Furthermore they founded that gender did not moderate the relationships between Chinese high school student’s stress in the school and their academic achievements.

Roemmich, Feda Seelbinder et al (2011) examined the association between cardiovascular activity, and a set of psychological stressors, and carotid artery
intimate-media thickness, a marker of subclinical cardiovascular disease. Healthy adolescents-participants were 25 boys and 23 girls aged 14.2 years who were measured for heart rate (HR), systolic (SBP) and diastolic (DBP) blood pressure activity during mirror-tracing. The use of an aggregate stress reactivity index provides a more reliable reflection of trait SBP reactivity to psychological stress and increases the confidence that youth with greater cardiovascular stress reactivity may indeed have greater progression of subclinical cardiovascular disease.

Nicole Compione-Barr et al. (2012) issue of equality and fairness and invasion of the personal domain, previously identified topic areas of adolescent sibling conflict (N. Compione-Barr and J.G. Smetana, 2010) were examined in 145 dyads (M. First-born=14.97, SD=1.69 years, M second-born=12.20, SD=1.90 years) for their differential effects on youths emotional adjustments over year. The impact of internalizing symptoms on later sibling conflicts also was tested. Invasion of the personal domain conflicts were associated with the higher levels of anxiety and lower self esteem 1 year later, whereas equality and fairness issues were associated with greater depressed mood. Conversely, greater internalizing symptomatology and lower self-esteem predicted more of both types of conflict moderating influences of gender and ordinal position were also examined.

Hasida Ben-Zur and Moshe Zeidner (2012) examined 294 Jewish and 234 Arab student's stress appraisal, coping strategies, and emotional and behavioral reactions to academic stressors perceived stress was positively related to emotion support and advance coping, which in turn, were related to high negative affect and risk taking. The findings suggested interventions among students to aid them to successfully adapt to academic stress.

Suhina Chatterjee (2013) studied the relationship of Arab students' stress and aggression among high schools students of Ranchi. The sample consisted of 320 students out of these 160 were males and 160 were females. The age of the students ranged from 16-19 years. Students stress scale developed by Akhtar and Aggression scale development by Mathur and Bhatnagar were administered to them. Data was analyzed using mean standard deviation 't' value and correlation. The result revealed that male and female students differed significantly in the experience of stress and
aggression but female students experienced more stress and aggression than male students. Result further revealed that stress was positively related with aggression.

M. Lavanya and R. Ganesan (2014) conducted a study to find the comparative analysis on stressors among school students of various standards. The data was collected from high school students using structured questionnaire and was analyzed using statistical package for social sciences (SPSS 17.0). The findings suggested that higher physical stress levels could contribute to anxiety, negative emotions, depression, sleeping disorders and loneliness. High-stakes learning and performance situations could put a counterproductive stress on students. There was a significant difference between the weight gain/loss and their classes. There was a significant relationship between class standards and sadness/depressive behavior.

Markandey Rai (2014) used the technique of randomization to a sample of 100 students (50 from government schools and 50 from private schools) studying in 10th class. Survey method was used to collect the data. Bisht battery of academic stress scale and Bisht battery of home stress scale (Abha Rani, 1987) tools were administered on the subjects. The t-ratio result indicated that the students of private secondary school were having less home stress as compared to the students of government schools. It was also found that boys were having more stress as compared to girls.

K.B. Chothani (2014) examined the level of academic stress and adjustment among Gujarati medium and English Medium School students. For that purpose 60 students belonging to 9th and 10th grades were taken from Gujarati Medium School and English Medium School respectively. Abha Rani Bisht (BBS) Scale and Sinha and Singh adjustment level of stress and adjustment among the students. The analysis of 't' test and ANOVA indicated that level of academic stress was significantly higher among the English Medium School students whereas Gujarati Medium School students were significantly better in terms of their level of adjustment. The medium of mother tongue per both boys and girls adjustment level were high and academic stress level low than other medium of instruction at school level.
M. Manjula (2015) studied was selected from four colleges students of two colleges were taken in the study group (n=163) and students of other two colleges were under the control group (n=12). Pre assessment was carried out at the beginning of the academic year. Four workshops were conducted for the students of study group. The post assessment was carried out after 3-4 months of intervention. Results indicated that majority of the students reported poor time management skills, lack of confidence, distractions meeting standards set by self and others regarding future career as causes of stress.

Melodie Wenz-ross, Gary N. Siperstein et al. (2015) examined in this study were middle school stress, social supports and adjustment of 482 sixth-seventh and eighth-grade adolescents. Multiple regression analyses were used to relate differing types of stress and social support of depression and liking of school. The effects of adolescent characteristics (gender, grade level grade point average and education placement status) also were assessed. Results showed that higher academic stress and less emotional support from the family were related to lower academic self-concept and higher peer stress and less companionship support from peers were associated with lower social self-concept.

2.2 Adolescents Adjustment

Singh and Indrani Banerji (1992) conducted a study of parent –child relationship in relation to adjustment and achievement. A sample of 92 students comprised of both boys and girls was studied. They found that parent-child relationship has no contribution on adjustment and academic achievement of students of secondary level and the correlation between parent child relationship and academic achievement, PCR and adjustment was not significant.

Ann S. Maten. Jennifer Neeman. Sing Andeans (1994) studied life events and adjustment in adolescents; the significance of event independence, desirability and chronicity”. A sample of 176 adolescents was taken. The researcher found that events independent of adolescents’ behavior were expected to have lower correlation with adjustment scores those events that could be influenced by the adolescent or that were overlapping in content with adjustment.
Kukerd Baijnta (1994) studied adjustment of pre-adolescent students of saraswathi vidya mandir convent school and Government junior high school a comparitiv study. A sampale of 360 students was taken. He used adjustment inventory for school students by Sinha and Sing as a tool. The researcher found that in all areas of adjustment, emotional social education as well as total, the pre-adolescent girls studying in SVM were found to have higher mean scores than the girls of C. S. and in comparison to boys ,the girls showed significantly better educational and total adjustment.”

Shobha Lakshmi Sahu (1997) studied ordinal position in relation to adjustment. A sample comprised of 25 first born boys 25 last born boys, 25 first born girls of 17-20 years of age group was studied. The researcher found that there is no significant difference in first born-last born boys’ and girls’ in terms of adjustment, in terms of emotional social, health and educational adjustment.

Suresh Prasad Sing (1997) studied “school adjustment in relation to some parental characteristics”. A sample of 400 school students of 10th reading in different schools located in the town of Gaya was studied. He used school adjustment scale (suman-1989) and Sharma socio-economic scale. The researcher found that students of higher level of parental education are significantly higher on school adjustment than students of lower educational level of parents. And also found urban groups of students are better in school adjustment than rural group of students.

Conger, Conger and Elder (1997) studied, “family Economic Hardship and Adolescent Adjustment”. The sample comprised of 357 adolescents from rural Low and found that females were having higher grades than males. And also found that males reported of having significantly lower GPS’ than the females.

Rama Devi E. (2004) described a study on personality characteristics of 9th class pupils having high and low socio-metric status of Guntur city. A sample of 204 students of 9th classes both boys and girls were randomly selected from 6high school of Guntur city. She used the tool of 1) socio-metric questionnaire 2) personality Inventory. The researcher found that 1) there were no isolates in any of the school studied 2) the accepted student reported more problems in three areas of family life.3) academic and social intelligence were taken as the base for the preference with respect to academic issue.
Arali C and Rathna Prabha C (2004) examined the influence of family environment on emotional competence of adolescents with a sample of 120 adolescents. Family environment scale of Bhatia and Chadda and Emotional competency scale by Bharadwaj and Sharma were used as tool. They found that majority of adolescents’ perceived average cohesion, expressiveness, conflict, acceptance and caring, active recreational organization and emotional competence in general except encouragement of positive emotional competency. The family environment as a whole was found to have significant positive influence on emotional competence of adolescents.

Scholet, Ron et.al (2005) studied adolescent personality types and subtypes and their psychosocial adjustment. A sample of 3,284 Dutch adolescent boys and girls was studied. They found that the personality subtypes were associated with very distinctive adjustment patterns.

Gurubasappa H. D. (2005) studied adjustment and mutual ability as correlates of academic achievement of secondary school students. The total sample comprised of 400 IX grade secondary grade students in Tumkur district of Karnataka state. He has taken the tool of adolescent Adjustment Inventory of N. V. Ready the researcher found that there is a significant difference in the academic achievement of students with different levels of adjustment and mental ability. There is a significant high correlation between academic achievement and adjustment and mental ability and there is a significant difference in the academic achievement of students related to gender, type of school, and medium of instruction, locality and socio-economic status.

Raju M. V. R. and Khaja Rahamtula (2007) conducted study of adjustment problems among school students. The study was conducted on a sample of 461 students (197 boys, 246 girls). A standardized questionnaire developed by Jain was adopted for this study. The researcher showed that the adjustment of school children is primarily dependent on the school variables like the class in which they are studying and the medium of instruction present in the school and the type of management of the school, parental education and occupation of the school children also significantly influenced adjustment.

Ram Singh (2008) a study of extra votive and neuroticism tendencies of popular, neglected and rejected adolescents belonging to different localities. The present study was conducted on the X class students studying in various government
and private co-education institutions located in urban and rural areas. Sample consisted of 1691 students. Hindi version of H.J. Eysenck’s personality Inventory prepared by S. S. Jalota and S. D. Kapoor was used as a tool. The researcher found that the popular students in boys as well as girls groups and in urban as well as rural groups were found more extroversion in their behavior than the neglected and rejected students.

Ramani Gopal C. S. (2008) conducted study on self-esteem and Decision making styles of school teacher”. A sample of 132 teacher (male 82 and female 50) was studied. He used Leon Mann’s decision making questionnaires I and II as tool. Researcher found that a significant positive relationship exists between self-esteem and vigilant style of decision making.

Baruch Fishhoff (2008) assessed adolescent decision making competence. The researcher found that competence varies by individual and by decision, leading to domain-specific policies and intervention, affording teens as much autonomy as they can manage.”

John Louis Manohara. R (2008) studied adjustment of B.Ed. teacher trainees in Pondicherry region: a survey. A sample of 300 B.Ed. trainees was selected from four colleges of education at Pondicherry region. The data was collected by using adjustment Inventory for college students by A. K. Sinha and R.P Singh. The researcher found that the overall adjustment of B.Ed. teacher trainees is average. Gender does not have influence on adjustment of the B.Ed. teacher trainees.

Akhbar Hussain, Ashutosh Kumar and Abid hussain (2008) studied academic stress and adjustment among high school students. A sample of 100 students of 9th class was chosen. He used the tool of Sinha and Sinha for academic stress and Sinha and Singh for adjustment inventory. They found that magnitude of academic stress was significantly higher among the public school students where as government school students were significantly better in terms of their level of adjustment. Significant relationships between academic stress and adjustment were found for both the groups of students and for each type of school.

Surekha (2008) conducted a study on relationship between students’ adjustment and academic achievement. A sample of 115 students (boy 75, girls 40) IX stander of Warangal city was studied. Researcher used the tool of A.K.P and R.P.
singh for adjustment. The researcher found that the students of private school are better adjusted than students of government school. Boys of private schools are better adjusted than boys of government schools. Girls of private schools are better adjusted than girls of government schools. The students of private schools are better than students of government schools in academic achievement. There is a significant negative relationship between the students’ adjustment and academic achievement.

Veerle Germeijs, Karine Verschueren (2009) studied adolescent's career decision-making process, related to quality of attachment to parents.” They found that the association between perceived security with mother and the decision tasks of orientation, broad and in-depth environmental exploration and self exploration was mediated by adolescents ‘career decision-making self-efficiency.

HO. Alice Yee (2009) studied adjustment and achievement of ethnically diverse, urban adolescents across the transition to high school”. A sample of 1,979 adolescents from 7th to 10th grade was studied. The researcher found longitudinal change in ethnic identity, perception of educational barriers and academic achievement across the transition to high school.

Vithya V. And Karunanidhi. S. (2010) studied the influence of certain psychological factors of under achievers and high achiever with a sample of 676 school going adolescents. The sample was exposed to I.Q. assessment, self-esteem questionnaires (Karunanidhi, 1995) the researcher observed that the under achievers were found to have low self-esteem, low achievement motivation, poor family environment and poor school climate than high achievers.

Zareena S. K. and V. M. Vatsala (2011) adjustment problem time management and effect of parents’ socio economic and educational status on students’ achievement. A sample of 80 pupils of 8th standard was taken and adjustment inventory developed by mallika and time management scale of T. P. Kamla were used. The researchers conclude that socioeconomic factors did not have an effect on the achievement of students. Low achievers did not show more adjustment problems than high achievers.

Najama Unnisa (2011) studied “Academic adjustment in schools” and reported that there is a close relationship between adjustment and education. Well adjusted individuals prosper well in educational endeavor.
2.2 Research gap

Review of literature revealed that mainly the researches had been in the area of stress among middle and high school students, relationship between stress and achievement, influence of school, home factors, parents, education during middle and high school etc. These researches did not make any attempt to study stress among 9th to 12th class students. The previous studies also did not focus on finding out association between adjustment and stress. Hence the present study has made an effort to include the above stated aspects which would be helpful in making effective research.