CHAPTER 1

INTRODUCTION
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Why do study related pressure, under achievement, poor performance and stress bring a debilitating effect on some students while others are able to deal effectively with such academic failure? The possible explanation to this global concern lies in academic resilience. The term resilience is a capacity for healthy development and successful learning despite challenging or threatening circumstances (Howard & Johnson, 2000). It is an inborn developmental wisdom that naturally motivates individuals to meet their human needs for love, belongingness, respect, identity, power, mastery, challenge and meaning. In general, resiliency refers to those factors and processes that limit negative behaviours associated with stress and result in adaptive outcomes even in the presence of adversities (Garmezy & Masten, 2001). In the academic context, it is defined as student’s ability to deal effectively with academic setbacks, stress and study pressure (Finn & Rock, 1997; Gonzalez & Padilla, 1997; Catterall, 1998; Overstreet & Braun, 1999). Academic or educational resilience is the heightened likelihood of success in school and other life accomplishments despite environmental adversities brought about by traits, conditions and experiences (Wang, Haertal & Walberg, 1994). It deals with high levels of achievement, motivation and performance despite the stressful conditions that place individuals at risk of poor-performance and dropping out of school (Alva, 1991).

Resilient students are highly optimistic, they have the ability to anticipate problems, solve problems logically, and have the ability to foster creative solutions to the problems. These students are high on self-esteem, such students are really eager to learn from the experiences. They are highly durable, flexible and independent (Bernard, 1993). Academic resilience is a dynamic developmental process that involves the student’s internal and external protective factors that contribute to effective adjustment, academic competence and academic success (Luthar, Cicchetti, & Becker, 2000). Internal protective factors focus on the individual characteristics such as skills,
attitudes, beliefs and values. Some of the internal protective factors are cooperation and communication, empathy, strong problem solving skills, aspirations and self-efficacy (Constantive, Bernard, Diaz, 1999; Wested, 2003). These protective factors are related to positive developmental outcomes and psychological well being whereas external protective factors include the environmental support and opportunities available at home, school, community and from peer groups in the form of care, encouragement for participation in school activities (Wested, 2000).

Combinations of aforementioned factors are found to contribute to positive academic, social and health related outcomes (Wested, 2003). McMillian & Reed (1994) described four factors that are related to resiliency (a) personal attributes such as motivation and goal orientation, (b) positive use of time (home-work completion, participation in extra-curricular activities) (c) family life (family support and expectations) and (d) school and classroom learning environment. These factors help to develop and enhance resiliency traits in students and help them in dealing with academic and life problems.

Martin (2001) developed a psychological and engagement dimension model and linked it with Academic Resilience. According to the model motivation is critical to academic success and academic gains. It helps in strengthening Academic resilience among students. As motivation undermines student’s achievement (Martin, 2001; Martin, Marsh & Debus, 2001), it is also important for a student’s ability to deal effectively with academic stressors. A brief introduction of Martin’s student motivation wheel is given below.

**Student Motivation Wheel: An Academic Resilience Model**

The model reflects the thoughts, feelings and behaviours underlying academic engagement at school. It separates motivation into factors that show enhanced motivation and those factors which show reduced motivation. These factors are regarded as adaptive and maladaptive dimensions. Adaptive dimensions comprise of self-efficacy, valuing of
school, mastery orientation, persistence, and planning and study management. Maladaptive dimensions comprise of anxiety, uncertain control, failure avoidance and self-handicapping.

![The Student Motivation Wheel adapted from Martin, A (2003a)](image)

Figure 1: The Student Motivation Wheel adapted from Martin, A (2003a)

The model assesses motivation through following six boosters and four guzzlers:

**Boosters:** Boosters are the factors that are responsible for enhancing the motivation levels of the students within the school setting. The first booster is **self-belief.** It is the confidence in one’s own ability to understand or doing well in work, facing the challenges and to perform to one’s ability. Second is **value of schooling.** It refers to how much students believe what they learn at school and that they lay importance to activities which are relevant to them. Third booster is **learning focus.** It is focused on solving problems and developing skills of students. Fourth booster is **planning.** It is about student’s plan of his school work, assignments and maintaining its progress. Fifth booster is **study management.** It is the way students use their study time and organize their study time table. Sixth booster is **persistence.** It is student’s
ability to keep trying for an answer even though when the problem is
difficult or is challenging.

**Guzzlers:** Guzzlers are the factors which create hindrance or act as
obstacles in achieving success and maintaining appropriate levels of
motivation among school students. There are four guzzlers. The first
guzzler is **self-sabotage.** It is the factor when students involve them in
non-academic things which reduce their chances of success at school.
Second guzzler is **failure-avoidance.** Third guzzler is **anxiety.** It
consists of feeling of nervousness and worrying a lot especially before
exams. When students think about their school work, assignments or
exams, they start feeling anxious. The fourth guzzler is **worrying.** It is
student's fear of not doing well in their school work, assignments or
exams.

For the present study the researcher has identified four factors
that predict academic resilience viz. self-belief, perceived control,
persistence and low levels of anxiety or composure. These four
components of academic resilience are discussed as follows:

**Self-Belief**

Concept of self is highly important and influential as it is related with
person’s behaviour and with their emotional and cognitive outcomes
such as anxiety, academic achievement, suicide and low self-esteem
(Branden, 1994). Shavelson et al. (1976) found that self-concept has
both descriptive aspect where individuals describe themselves (such as
“I am happy”) and evaluative aspect where individuals evaluate
themselves (e.g. I do well in academics). Self-concept has important and
central role in academics (Marsh & Craven, 2006). Brookover & Lezotte
(1979) emphasized on enhancing academic self-concept, self-control
and academic achievement. They further added that academic self-
concept should be the major outcome goal of school curriculum.

Self-belief is the belief and confidence of students in their ability
to understand or to do well in their academic assignments, to meet
challenges they face and to perform to the best of their ability (Martin,
2003a). The students cannot achieve success till they believe that
success is an achievable reality. Emotional barriers and learned helplessness melt away as a student mobilizes his/her belief system to make academic success; they learn to approach challenging tasks with a renewed sense of belief and confidence that ignites the energy they need to be academically successful. Students form their self-belief by comparing their academic ability with the perceived abilities of other students in their peer group. The beliefs that students develop and believe them to be true about themselves play significant role in their academic endeavours. Assessing students self-beliefs can provide significant insight into their academic motivation, behaviours and future choices. Students with low self-belief generally lack confidence in skills they possess. They are, thus, less likely to engage in tasks in which those skills are required. They are also more likely to give up in the face of difficulty (Marsh, 1990). The student who has a strong sense of self-belief is energized to perform. For academic motivation and success it is important to develop a strong self-belief in students. Number of studies have found a strong negative correlation between self-efficacy and academic stress (Giglotti & Huff, 1995; Hacket et al., 1992; Solberg, Hale Villareal, 1997; Torres & Solberg, 2001), academic self-efficacy has been found positively associated with grades in college students (Bong, 2001; Brown, Lent& Larkin, 1989; Heckett, Betzcasa & Rocha , 1992; Multon, Brown, & Lent, 1991). Further Zimmerman & Cleary (2002) found that self-efficacy is highly effective in predicting students motivation and learning. Self-efficacy beliefs have been found to influence factors playing a crucial role in academic motivation. Such factors include choice of activities, level of effort, persistence and emotional reactions. These beliefs have been found to increase persistence both directly and indirectly as it influences student’s skill acquisition (Schunk, 1981). Efficacious students are more persistent, better at monitoring their time and better at solving conceptual problems than inefficacious students with equal ability (Bouffard-Bouchard, Parent & Larivee, 1991). This indicates that perceived self-efficacy influences student’s methods of learning and improves their motivational processes.
Academic self-belief is one of the most critical boosters to develop in students. It is a strong predictor of academic achievement and success (Bandura, 1986, 1997; Marsh, 1990). Developing student’s self-belief involves restructuring their thoughts so as to maximize opportunities for success. 

Student’s self-beliefs can be enhanced with the help of following strategies (Beck, 1995). 

- Changing students’ negative thinking by encouraging them to observe their automatic and spontaneous thoughts when they receive grade or are given home assignment.
- Looking for the appropriate evidence that changes their negative thinking
- And changing their negative thoughts with this evidence.

Persistence

Persistence refers to the extent to which students keep trying to work out for an answer or to understand a problem even when that problem is difficult or is challenging. Bandura (1986) defined persistence as endurance and the capability to refuse to give up especially when faced with difficulty. If a student keeps taking actions for the problem, eventually he/she will get results, and these results can be highly motivating. The importance of persistence is highlighted by the fact that it helps in visualizing the future which is so compelling that one would give her/his best to make it real. Persistence of action comes from persistence of vision, when an individual is clear about what he wants in such a way that his or her vision does not change much, he/she will be consistent in his/her actions which provide result. Persistence in students’ involves promoting a focus on mastery skill (Nicholls, 1989; Qin, Johnson & Johnson, 1995). This can be accomplished by showing students the importance of effort and strategy in school activities and success (Craven et al., 1991; Martin et al., 2001b), encouraging students to set goals and overcome obstacles which they experience in their goal attainment (McInerney, 2000). These strategies encourage
students to focus straight on the task and reduce cognitive dissonance in the form of worry about how they are being evaluated or their performance is compared to other students in the class (Locke & Latham, 2002). It is further suggested that a focus should be on developing student’s self-regulatory skills (Zimmerman, 2002) these skills help in enhancing their capacity to plan, manage their study, and persist in the face of challenge. In a study by Thomas & Pashley (1982) on specific learning difficulties in student’s, the researchers reported lower persistence, lower perceptions of ability and a helpless learning style as rated by parents and teachers. It was seen that experimental training enhanced their task persistence but as such no changes were seen in achievement attribution.

**Perceived Control**

The concept of control has been one of the pervasive and enduring ideas in psychological research and theory. Students with strong sense of perceived control excel in academics than those who do not hold such beliefs. Perceived Control in academics refers to the students’ perception of control over their academic performance (Menec et al., 1994). Students with the strong sense of perceived control do better in academics than those who do not hold such belief. Perceived control is strongly associated with emotional well-being, reduced impact of stressors, enhanced ability to cope up with stress and improved performance (Thompson & Spacapan, 1991). People have a sense of perceived control when they believe their personal actions control outcomes. People who have control over the situation feel less anxious. A strong yet inverse association exists between perceived control and anxiety (Moser & Dracup, 1995; Dracup et al., 2003; Evangelista et al. 2004). This highlights that they remain stable and calm in stressful situations.

Control is defined as the perception or belief that individuals have as a coping response. This coping mechanism can positively influence adverse events or circumstances. Perceived control can be enhanced by
well constructed, reliable and systematic interventions (Moser & Dracup, 2000). According to Rothbaum, Weisz, & Snyder (1982), perceived control is a dual process model. They formulated that perceived control is fostered by proactively changing the environment (primary control) or by persisting and putting effort, or, to psychologically adapt to environment (secondary control). It can be achieved through four processes viz. prediction, illusory correlation, vicarious alignment and interpretation. This model assumes that individuals are motivated to maintain a sense of personal control over their environment and they do so by using the above two types of control related behaviours.

**Anxiety**

Anxiety is the major psychological problem in school-aged children and adolescents worldwide (Costello, Mustillo, Erkauili, Keeler & Angold, 2003). The prevalence rate of anxiety among school students range from 4.0% to 25.0% (Bernstein & Borchardt, 1991; Boyd, Kostanski, Gullone, Ollendick & Shek, 2000). Anxiety is associated and related with negative effects on student’s social, emotional adjustment and academic success (Essau, Conradt & Petermann, 2000). The more specific effects of anxiety include poor social & coping skill which lead to less of social interactions (Albano, Chorpita & Barlow, 2003; Weeks, Coplan & Kingsbury, 2009), loneliness, low self-esteem, and fear of social rejection (Bokhorst, Goosens & De Ruyter, 2001; Weeks et al., 2009). Apart from these all factors school avoidance, poor problem solving skills, and lower academic achievement are also regarded as consequences of anxiety (Mc Loone, Hudson & Rapee, 2006). Anxiety among school students is considered to be a universal phenomenon which exists across cultures (Good & Kleinman, 1985; Guarnaccia, 1997). In India, the main cause of anxiety among school student’s is parent’s high expectations for educational success and pressure for academic achievement (Deb, 2001). Due to pressure from school and parents more than 2320 children (six children per day) committed suicide in a
year because of failure in their board examinations (National Crime Records Bureau, Ministry of Home Affairs, Government of India, 2000). It is necessary for schools to take adequate steps to solve this grave issue. They should focus on overall development rather just getting marks or grades. If the student gets nervous or is anxious it will hamper his school activities. A person who suffers from anxiety may not be able to devote his full energy in the performance of the task. Research has shown that examination can produce anxiety among students, which can lower student’s self-esteem, and increase their fear of failure (Hardy, 2003). Thus they will attribute their failure to internal cause and success to external cause. Test anxiety (Popham, 2003) is characterized as cognitive (worry) and affective (emotionality) responses to the reactions resulting from performance on a test (Deffenbacher, 1980). Students who have fear of exams and from test anxiety have lower academic performance (Everson & Millsap, 1991). High level of anxiety is negatively correlated with concentration and memory, which are regarded as significant for academic success. Undue comparison with other students and pre-occupation with fear of failure can lead a student to loose composure (high anxiety). Parents feel that academic success depends upon student’s ability to adapt to academic settings (Philips & Endler, 1982).

Academic anxiety has four components: **Worry**- Worry are thoughts that prevent a student from focusing on the course work and successfully completing the academic work. e.g. ruminations about failures, self-defeating thoughts or negatively thinking about doing poorly in exams. **Emotionality** – It is regarded as loosing control over the emotions. Symptoms of anxiety include fast heart beat, sweaty palms and tension in muscles. **Task-Generated Interference**- These are behaviours related to the task at hand, these tasks are unproductive in nature and prevents the student to get success e.g. continuously checking the clock during an exam etc. **Study Skills deficits**- It is student’s lack of skills related with methods of learning. Study methods create anxiety in students e.g. last minute cramming before the examination creates lot of anxiety. Many students experience
the aforementioned components of academic anxiety as a result of study skills deficits. A good trainer, study skills instructor and teacher can help a student in dealing with this problem. The main responsibility lies on the shoulder of teachers. It is teacher’s responsibility not only to help students in academics but also to prepare them to be able to respond to different environmental and academic demands that could have impact on their general well being and academic performance (O Kebukola & Jegede, 1989).

The four factors, namely, self-belief, persistence, perceived control and anxiety are influenced by a variety of factors (both internal and external). However, one common factor that underlies all the four components is attribution, i.e., an individual’s explanation for success and failure. Individuals with high self-belief, persistence and perceived control and low anxiety make positive evaluations of self having a sense of confidence in their abilities. This motivates them to keep trying a task at hand even if it is challenging. On the other hand, individuals with negative attributional style doubt the ‘self’. They are more likely to suffer from academic stress.

**Academic stress**

Stress is necessary and unavoidable, which exists concurrently in everyone’s life. It is a person’s way to react to a challenge whether external or internal in nature. A person’s response towards stress depends on whether an even it appraised as a challenge or a threat (Lazarus & Folkman, 1984). Challenging stimulus can lead to positive outcomes such as high motivation and improvement in task performance while negative one’s or distress can result in anxiety, depression and social dysfunction. Even though appropriate stress is a motivation for self-growth, it is also a motivation for students to progress effectively. It not only affects our thoughts and feelings but our behaviour too. On the contrary overstress and overload can cause severe problems and discomfort, which can have serious effects on people. Specifically students face academic stress which can have a
negative impact on their academic performance. The cut throat competition, parental expectations and growing complexity in the educational system are the major factors leading to the stress among students. Stressing academic institutions can have both positive and negative consequences if not well managed (Stevenson & Harper, 2006). According to Zulfifli (1988) students always face problems in school adjustment. They face learning problems, language problems, career problem and also problems in dealing with personal and social matters. These factors aggravate stress in their life. Taking responsibilities on their own makes the student feel the stress and study pressure. Morris (1990) reported that high school student face academic stress in school as they are always in a race to compete with each others to get better grades. Failure to achieve success, inability to do work in school creates stress among school students. Achieving good academic grades, character building, taking responsibilities put enormous pressure on to the students. Other than school related problem, female students face communication and family problems whereas male students feel pressure of getting involved in sports, recreation and also have financial problems. Fariza (2005) conducted a research on stress among high school students and found that these students have to deal with the academic world. Parents and teachers demand and expect good grades and success from them. Mates and Alison (1992) also found that achievement in academics contributes to stress in high school students. There is rapid increase in the prevalence rate of stress among students in India (Gupta & Khan, 1987), so serious and quick efforts should be taken to eliminate stressors. Researchers have identified several stressors in academics. Academic stressors include student’s inability to develop adequate study skills (Carveth et al., 1996), studying for exams grade competition, fear of academic failure (KolKo, 1960), large amount of content to master in each semester in stipulated amount of time predicts academic stress (Abouserie, 1994). The pressure to perform well in the examination and getting good grades make academic environment very stressful (Erkutlu & Chafra, 2006). Different stressors such as time management and social activities can
pose threat to a student’s academic performance. A student’s GPA score determines position of student in class such as class position in school (Hatcher & Prus, 1991). The student feels pressurized to earn good grades (Hirsch & Ellis, 1996). Other important sources of stress include excessive homework, assignments and uncomfortable classrooms (Kohn & Frazer, 1986). Thus, stressors affecting students’ can be academic, health related, time related or self-imposed (Goodman, 1993). When stress is perceived as negatively or becomes excessive, students experience physical and psychological impairment. The school administration can work on the strategies to control these stressors. Knowledge of the students stress will make the educational administration know how to monitor and implement strategies to control stress factors that are responsible for the students stress. Methods to reduce stress include effective time management, social support, positive reappraisal and engagement in leisure pursuits (Murphy & Archer, 1996). As students spend most of their time in school (Rutter et al., 1979), it places huge responsibility on school to promote resilience in youngsters. Schools should provide an environment where they can practice these skills to become resilient, provide a safe environment which can actively buffer against adversity (Glover, Burns, Butler, Patton, 1998; Patton, 2000). Suitable teaching and learning method should be developed so that students should not feel pressurized in academics. Other than that education curriculum and examination criteria should be reevaluated. This overhauling will reduce stress in school.

Thus Academic resilience and Academic stress, though opposite in nature, have significant implications for academic achievement. Along with a role in Academic resilience, Attributions have crucial role in Academic stress. The concept of attribution is discussed as follows.

**Academic Attribution**
Academic attribution is the explanation an individual gives to explain the reasons for his academic performance at school (Weiner, 1984). Weiner (1986) was the first one to apply the concept of attribution in the academic domain. He identified ability, effort, and luck and task difficulty as the four major reasons that students are likely to use in explaining academic successes and failures. Attributions have been seen as powerful determinants of student learning, achievement, self-esteem and success (Borkowski, Chan, & Muthukrishna, 2000; Dweck & Elliot, 1983; Zimmerman, 2000; Zimmerman & Kitsantas, 1999). Research highlighted that secondary students explain their school success in terms of ability and effort. Attributions play important role in males and females. Males and females differ for attributions on ability and effort. Meece et al. (2006), males use more of ability attribution to explain success whereas females tended to use effort to explain success and ability for failure. Female students are more likely to focus on their lack of ability and effort than their male counterparts (Hui, 2000). Some researchers have focused that conceptions of cause and causality might be developmental in nature (Flammer & Schmid, 2003; Folmer et al., 2008). Children tend to relate to more internal, more controllable and less stable causes for the outcomes. They have stronger tendencies to make more internal, stable and global attributions for positive events than for negative events compared to other age groups (Mezulis et al., 2004) whereas adolescents more often use specific abilities and strategies and less often extrinsic motivation to explain their school performance (Flammer & Schmid, 2003). Attributions reflect the values held by an individual which can be shaped by societal values. Cultural differences in academic attribution have been reported in number of studies (Parameswaram & Hom, 2000; Salili, Chiu & Lai, 2001; Mezulis et al., 2004). Asian students are found to have stronger effort attribution (Hess et al., 1987). Hofstede (2007) found marked and striking differences in value system across cultures and observed that cultural values of Asian countries (China, Hong Kong, Taiwan, Japan & Korea) are long term in orientation. This long term orientation means valuing persistence and striving in the adverse circumstances.
Attribution plays a major role in academics and school setting. The way students attribute their performances, their success or failure would predict how resilient they are towards academic stress and anxiety. A student faces a lot of opportunities for success or failure in their academic career. Attribution seeks to understand the role of experiences in shaping an individual’s self-perceptions and his or her response to subsequent tasks. Students make use of different types of attributions for academic success and failure. This pattern of attribution across positive and negative outcome is regarded as an individual’s attributional style. It has been defined as ‘a tendency to make particular kinds of causal inference rather than others across different situations and across time’ (Metalsky & Abramson, 1981). Weiner (1986) postulated three dimensions of attribution (a) locus of control (b) stability (c) controllability. Specific causal patterns of attribution have been seen as contributing to either high or low levels of motivation, persistence and self-esteem among students. Students with high self-esteem and high school achievement tend to attribute success to internal, stable and uncontrollable factors such as ability while they contribute failure to either internal, unstable controllable factors such as effort, or external uncontrollable factors such as task difficulty (Marsh, 1986; Weiner, 1986). Student’s attributing failure to lack of effort results in their greater persistence level. Research done on learned helplessness reported that students with learning disabilities are less likely than non-disabled peers to attribute failure to effort, an unstable and controllable factor and more likely to attribute failure to ability, a stable and uncontrollable factor. Students with learning disabilities are more likely to attribute success to external, uncontrollable factors such as luck, ease of task, or assistance received, rather than to internal factors such as ability or effort (Pintrich, Anderman, & Klobucar, 1994). On the basis of these dimensions, an individual’s attributional style can be functional or dysfunctional. When an individual makes internal, stable, global and uncontrollable attributions (e.g., lack of ability) for failure, he is exhibiting a dysfunctional attributional style. On the contrary, when an individual
makes internal but unstable, specific and controllable attributions (e.g., lack of effort), he is showing a functional attributional style. Attribution training can enable students to develop alternative, more positive role models for understanding and decision making. Fulk and Mastro-Pieri (1990) suggested following components in any strategy-attribution retraining.

1. The first main component is the explanation of the purpose and value of the strategy.
2. The second component is highlighting the importance of attributing outcomes to controllable causes such as effort and use of strategy.
3. Applying various models (successful and unsuccessful) of the strategy.
4. Discussion of the impact of effort ability and appropriate use of strategy on both successful and unsuccessful applications.
5. The next component focus on providing practice on strategy application with opportunities for guided self-talk on causality and attribution (e.g. ‘I can do this’).

Attribution theory is concerned with how individuals interpret events and how this relates to their thinking and behaviour. Attribution theory infers that people try to determine why they and do what they do i.e. attribute causes to behaviour. A three stage process underlies an attribution (a) the person must perceive or observe the behaviour (b) the person must believe that the behaviour was intentionally performed (c) the person must determine if they believe the other person was forced to perform the behaviour or not (Jones & Davis, 1965). Various theories have been proposed to explain the process of attribution. A brief explanation to these theories is as follows.
Attribution: Theoretical Perspectives

Attribution theory (Weiner, 1974)

This theory provides a perspective on how students react to unexpected, negative and important academic outcomes. It incorporates both cognitive theory and self-efficacy theory as it emphasizes that learners’ current self-perceptions will strongly influence the ways in which they will interpret the success or failure of their current efforts and as a result of their future tendency to perform the same behaviours.

This theory aims at analyzing the attributions in terms of following three dimensions:

Locus of causality (Internal vs. External) – success and failure depends on our belief of origin of factors within us (internal), outside us or in environment (external)

Stable vs. unstable – stability establishes the cause as either subject to change over time (unstable) or not (stable). Having belief that cause is stable, outcome is likely to be same. If it is unstable, outcome is likely to be different on another occasion.

Controllability – it distinguishes between the causes which can be controlled (controllable) and those which cannot be controlled (uncontrollable)

In addition to these three dimensions, four factors have been found to influence motivation in education namely ability i.e. internal and stable factor in which learner doesn’t exert much control, task difficulty- external and stable factor which is largely beyond learner’s control, effort-internal and unstable factor over which learner can exercise a great deal of control, luck i.e. external and unstable factor on which learner exerts very little control.

An important assumption of this theory is that people will interpret their environment in such a way as to maintain a positive self-image. A strong relationship exists between self-concept and achievement (Weiner, 1980). Students having high self-esteem and higher academic achievement tend to attribute success to internal, stable and
uncontrollable factors such as ability whereas they contribute failure to external, unstable and controllable factors such as task-difficulty (Weiner, 1974). This theory has been used to explain the difference in motivation between high and low achievers. High achievers approach the tasks related to success rather than avoiding them because such students believe that success is due to high ability and effort which they are quite confident of. On the other hand low achievers avoid success because they are doubtful about their ability and luck and other uncontrollable factors are responsible for success.

This theory has been widely used in education, law, clinical, mental health domain, to reinforce effort attributions among students (Schunk, 1982; 1983), to conduct training programs to promote attributions leading to higher levels of motivation and productivity (Forsterling, 1985; Licht & Kistner, 1986; Zimmerman, 1989).

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Figure 2: Weiner’s (1985) three causal dimensions: Hypothetical attributions for poor academic performance.

**Self-efficacy theory (Bandura, 1993)**

Self-efficacy is the belief in one’s effectiveness in performing specific tasks. Self-efficacy theory is an important component of Bandura’s social cognitive theory which suggests high interrelation between individual’s behaviour, environment and cognitive factors. Bandura’s
social cognitive theory postulates that perceived self-efficacy affects an individual in all aspects of life, including educational experience. Beliefs about one’s competence to successfully performing a task can affect motivation, interest, and achievement (Bandura et al., 1996). The higher the perceived efficacy, the higher the goal aspirations people adopt, the firm their commitment to achieve those goals. Self-efficacy should be inculcated through the use of social interactions in schools. It can help de-emphasize competition and highlight self-comparison of progress to build a sense of self-efficacy and promote academic achievement (Peer & McClendon, 2002).

Self-reflection remains an important feature of social cognitive theory (Bandura, 1986). Through self-reflection, people make sense of their experiences, explore their own cognitions and self-beliefs, engage in self-evaluation and alter their thinking and behaviour accordingly. Self-efficacy beliefs provide the base for human motivation, well being and personal accomplishment (Pajares, 2006). Bandura’s self-efficacy is also a social construct. Bandura believed that a person’s abilities, attitudes and cognitive skills comprise what is known as the self-system, this self-system plays a major role in how an individual perceives situations and behaves in response to different situations. Schools develop collective beliefs about the capability of their students to learn, of their teachers to teach and enhance the lives of their students (Pajares & Schunk, 2001).

Bandura (1994) suggested that there are four major sources of information used by individuals while forming self-efficacy. **Mastery experiences**- the most effective way of developing a strong sense of efficacy. Performing a task successfully strengthens our sense of self-efficacy whereas on the other hand, failing to adequately deal with a task or challenge can undermine and weaken self-efficacy. **Social modelling** which is defined as “seeing people similar to oneself succeed by sustained effort raises observers beliefs that they too posses the capabilities to succeed (Bandura, 1994). Bandura asserted that people could be **persuaded** to belief that they have the skills and capabilities to succeed. Verbal encouragement from others helps people overcome
self-doubt and provides opportunity to cope successfully with specific tasks. Individual’s physiological or emotional states influence self-efficacy judgements with respect to specific tasks. Mood, emotional states, physical reactions and stress level can influence how a person feels about their personal abilities in a particular situation. A person who becomes extremely nervous before speaking in public may develop a sense of self-efficacy in these situations. However, Bandura also notes that it is not sheer intensity of emotional and physical reactions which are important but rather how they are perceived and interpreted is more crucial. By minimizing stress and elevate mood when facing difficult or challenging tasks, people can improve their sense of self-efficacy. Bandura (1982) also believed that people who regard themselves as highly efficacious act, think, and feel differently from those who perceive themselves as ineffectual. They produce their own future, rather than simply foretell it.

**Self-theories (Dweck, 1975, 1999)**

Dweck (1999) emphasized people’s theories about their own intelligence. She believed that people develop beliefs that organize their world and give meaning to their experiences. These beliefs may be called meaning systems, and different people create different meaning systems. The theory also explained how one’s beliefs about intelligence, goal orientation and responses to success and failure influence one’s motivation. People who view their intelligence as a fixed, unchangeable trait (an entity theory) are hypothesized to react to failure very differently than people who view their intelligence as a malleable, changeable.

According to this theory, there are two views of intelligence. People with an entity consider intelligence or ability to be fixed or stable. Students with this view of intelligence may be overly concerned with looking smart whereas people with incremental view believe intelligence to be changeable. Students with this view cultivate their intelligence through effort, task involvement and strategy development.
Entity theorists are also prone to learned helplessness in that they believe that circumstances are beyond their control and give up easily. They may try to avoid challenging activities or also attempt difficult things so that they have an excuse for failure. Research showed that students with long and continuous histories of success can be the most vulnerable for developing learned helplessness because they may accept the entity view of intelligence more readily than students with less success. Dweck’s work is firmly rooted in attribution theory. An entity theorist is likely to attribute academic failure to an internal, stable, whereas an other theories are likely to attribute academic failure to an internal, stable, specific cause (the fact that they have not yet acquired the necessary skills, but can with increased effort).

**Learned Helplessness theory (Seligman and Maier, 1967).**

Seligman and Maier (1967) developed a theory of learned helplessness in animals, the theory emphasized on the debilitating effects of a lack of control over negative outcomes. They conducted studies on dogs that had no control over the situation. This behavior was referred to as learned helplessness.

Learned helplessness can describe a belief in one’s own powerlessness, which makes any attempt to learn futile. This theory can be reformulated in terms of attribution principles (internality, stability and globality). People who attribute negative events to internal stable, global causes will experience learned helplessness, characterized by depression, lower effort and difficulty in learning new things. This theory has focused mostly on individual differences in patterns if attributions and how these differences are correlated with problems such as depression and health. This type of behaviour could be conditioned into a student if they experience continued failure irrespective of any learning behaviours they show. Internal attributions encourage them to try harder in the face of adversity.
**Self-concept models**

**Self-enhancement model vs. Skill development model**

These theoretical frameworks were formulated by Calsyn & Kenny (1977). The self-enhancement model postulates that self-concept and related variables are the primary cause of academic achievement. If academic self-concept is thought to be the cause of achievement then interventions focusing in self-concept would enhance students’ self-conceptions rather than fostering achievement. This explanation serves as a strong base for the self-concept enhancement programs/interventions (Calsyn & Kenny, 1977; Marsh, Hau, & Kong, 2002; Marsh et al., 2005). Skill development model (Calsyn & Kenny, 1977) explains that academic self-concept emerges as a result of academic achievement. This model also assumes that most effective way to enhance self-concept is to develop stronger academic skills (Marsh et al., 2002; Marsh et al., 2005). In consistency with the above explanations self-concept and achievement have proven to be the most popular and effective method to test their competency in longitudinal studies (Marsh, Bryne, Yeung, 1999).

**Reciprocal effect model**

Marsh & Craven (2006) formulated this model which implies that self-concept and academic achievement are reciprocally related and mutually reinforce each other. This means that prior self-concept affects subsequent achievement and prior achievement affects subsequent self-concept (Guay, Marsh, Boivin, 2003). However, despite this, major implication remains that of importance of academic self-concept as a means of facilitating other desirable educational outcomes. If students’ academic self-concepts are improved it results in short term gains.

**Reattribution Training (RAT)**

One solution to ameliorate the severe deficit of motivation i.e. low persistence, lack of control, high on anxiety and low self belief and
performance caused by maladaptive failure attributions is attributional retraining (AR) or Reattributional training (RAT) which is designed to restructure the student’s explanations about the causes of negative events or outcomes in their lives. The main objective of reattribution training is to replace maladaptive self-defeating attributions with more adaptive, self-helping attributions. It tries to bring changes in the attributional thinking of an individual and promotes more adaptive patterns of subsequent cognition, emotion, motivation and behaviour.

RAT attempts to change individual’s attributions for their poor academic performance from pejorative (e.g. low intelligence) to no pejorative (e.g. putting less effort) causes. It is guided by the fundamental principles that thoughts guide behaviour. It follows that a change in thinking should produce change in action. The RAT therapist aims at substituting adaptive causal ascriptions for those that are dysfunctional, with the anticipation that this alteration will produce changes in behaviour. The research done by Forsterling (2001) shows that dysfunctional attribution has greater impact in situation of failure than of success. The most maladaptive causal ascriptions for achievement failure are lack of ability (internal, stable, global, and uncontrollable) cause. Such attributions generate feelings of embarrassment, humiliation and shame. As a part of RAT, lack of ability attribution for failure is substituted by lack of effort attribution. Lack of effort though an internal cause is unstable, specific and controllable in nature. Some RAT therapists also substitute lack of ability attribution of failure with strategy or type of task. According to Weiner affect reactions accompanying these attributions (lack of effort, poor strategy, very difficult task) is guilt. Guilt, which is a positive motivator brings hopes for future success and eliminate feelings of humiliation and shame (Weiner, 1979). RAT for the present research aimed at substituting the lack of ability attributions for failure with lack of effort and strategy attributions.

Individuals with low self-belief, reduced perceived control, less persistence and more anxiety are likely to doubt their capabilities and as a result set lower goals, be less persistent in their academic
endeavors and have lesser control over the academic situations. As a result, in face of failure they may make dysfunctional attributions to internal, stable, global and uncontrollable factors (e.g. lack of ability). In a study by Reither & Dembo (1984), found that self-instructional model of attribution training plays important role in both task persistence and effort attributions for success and failure. They identified ninety low-effort attribution children and administered attributional training on them. Findings revealed that experimental group receiving self-instructional attribution training showed marked differences from the control group in academic task persistence and effort attribution. Attribution training treatment helps to restructure individual’s explanations about the causes of negative events or outcomes in their lives. Thus the main objective of attribution training is to replace maladaptive, self-defeating attributions with more adaptive, self-helping attributions. Through these changes to attributional thinking, RAT is intended to promote more adaptive patterns of subsequent cognition, emotion, motivation and behaviour. Attribution training is also well known by other names such as attribution training, reattribution training, attribution retraining, and reattribution therapy.

Reattributinal training (RAT) IS based on Weiner’s (1985) Attribution theory and is designed to change maladaptive attributions for poor performance to more adaptive ones (Perry, Hall & Ruthig, 2005). Previous researches have shown that attributional retraining enhances achievement motivation and ultimately improves academic performance (Hall, Perry, Ruthig, Hladkyj & Chipperfield, 2006; Hechter, Menec & Weinberg, 1993). Conveying students that the cause of failure is controllable, attributional training enhances their sense of control and self-efficacy and their academic performance (Dweck, 1975; Forsterling, 1985). AR engenders the belief in students that they can get success only if they try hard enough. This belief ultimately would lead to greater effort being manifested in more hours, more attention etc. ultimately leading to increased and better academic achievement. AR as an intervention in treatment was first applied in early 1960’s (Schachter & Singer, 1962; Schachetr & Wheller, 1962) when social psychologists
focused on potential of attributions based treatments to attenuate undesirable behavioural symptoms (Nisbett & Schachter, 1966; Ross et al., 1969).

The present research work aims at enhancing Academic Resilience of students with the help of Reattribution Training (RAT). Making dysfunctional attribution for failure demotivates students which leads to expectation of future failure as well. This has an adverse effect on a student’s affect-state further leading to academic stress. Such students can however be helped to see controllability in the factors affecting academic success and failure. Their attributions can be altered with the help of RAT which can enhance their sense of self-belief, persistence and perceived control and reducing academic anxiety. RAT can further lead to a reduced level of academic stress thus making academic performance better.

**The main objectives of the present study are as follows:**

1. To assess the effect of attribution style on academic resilience (self-belief, perceived control, persistence & anxiety) among adolescents.
2. To assess the effect of attribution style on academic stress among adolescents.
3. To study the effect of Reattribution training on self-belief of adolescents.
4. To study the effect of Reattribution training on perceived control of adolescents.
5. To study the effect of Reattribution training on persistence of adolescents.
6. To study the effect of Reattribution training on anxiety of adolescents.
7. To study the effect of Reattribution training on academic stress of adolescents.
8. To study the effect of Reattribution training on academic attribution style of adolescents.