# **CHAPTER-I**

# Introduction

## **1.0 Concept of Resilience**

The term Resilience came into existence in 1970s when a group of developmental scientists began their studies in relation to the children who succeeded in life despite of severe challenges (Snyder & Lopez, 2007). C.S. Holling, the theoretical ecologist in 1973 introduced the word resilience (as cited in Gunderson, 2000). Ungar (2011) put forth four concepts to assist better describe and operationalize resilience in order to further build this social ecological view of positive development that isdecentrality, complexity, atypicality, and cultural relativity. When taken as a whole, these four ideas help to define resilience as aided growth in the face of contextual uncertainty. On the basis of these ideas, he have provided an ecological definition of resilience that reflects the four principles that is- "in the context of exposure to significant adversity, whether psychological, environmental, or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community and culture to provide these health resources and experiences in culturally meaningful ways" (Ungar, 2008). In 1980 Resilience become an active area of research (Breen & Anderies, 2011). Resilience was originally a reaction to the term 'stability' concept in ecology; it is also used in conjunction with terms like-'vulnerability' which is used as its antonym, 'adaptation' and 'adaptive capacity' which refers to the capability to effectively cope with shocks, 'transformability' which refers to the capability to reorganise into a new system when it no longer cope with the existing form and 'robustness' which refers to the capacity to continue to function inspite of external shocks (Breen & Anderies, 2011). Gafoor and Kottalil (2011) stated that the concept of resilience has both positive and negative characteristics; there are phrases like "successful adaptation", "positive adaptation" and "recover" to indicate its favourable qualities, whereas words like "risk", "challenge", "adversity" and "depression" indicate its unfavourable features. They also reported that earlier the term 'Invulnerability' was used to denote successful adaptation despite adversity which was later replaced by the term 'Resilience'. Research in resilience has advanced in four major waves- The first wave of research produced useful descriptions of the resilience phenomenon, as well as

fundamental ideas and approaches, and it concentrated on the person. The second wave created a more dynamic accounting of resilience that focused on the interactions between people and the many systems that influence how they develop. This second wave adopted a developmental systems approach to theory and research on successful adaptation to risk or adversity. The third wave concentrated on intervention-based resilience building. With a stronger emphasis on epigenetic and neurobiological processes, brain development, and the ways that systems interact to affect development, the fourth wave is focused with understanding and integrating resilience across various levels of study (Wright, Masten & Narayan 2013).

Breen and Anderies (2011) have stated that in developmental psychology the definitions of Resilience have historically been operational mainly based on the outcome being measured and different risk factors. They have defined Resilience as an ongoing process of continual positive adaptive changes to adversity, which changes enable future positive adaptive changes. It also implies bouncing back faster after stress, enduring greater stresses, and being disturbed less by a given amount of stress. Masten, Best and Garmezy (1990) stated Resilience as the action, capacity, or result of successful adaptation in the face of difficult or dangerous conditions. Resilient individuals engage in a dynamic process of constructive adaptation and fruitful adjustment despite experiences of significant adversity, challenges, and trauma thus withstand or recover from disturbance (Bala, 2018; Luthar & Cicchetti, 2000; Sharma, 2014; Wright, Masten & Narayan, 2013). It can also be described as a group of phenomena that exhibit successful patterns of adaptation to adversity (Masten & Reed, 2002) which transforms hardship into challenge, failure into success, helplessness into power, and victim into survivors (Reivich & Shatte, 2002) thus an individual overcome difficult and challenging life circumstances and risk factors (Bryan, 2005). Oxford English Dictionary defines Resilience as the act of rebounding or springing back and elasticity; the power of resuming the original shape or position after compression, bending etc. (Green & Humphrey, 2012). It is also a psycho-social process of coping with life adversity in such a way that the development and functioning of an individual maintain normal or even surpass general expectations (Novotny & Kremenkova, 2016). Oliva and Lazzeretti (2017) argued resilience as the capacity to restructure, rejuvenate, and change in the face of pressure from outside sources; able to bounce back from hardships and move on in life (Zarina & Julius, 2017) and achieve positive growth and development (Ursu & Mairean,

2022). Ungar (2018) identified seven common principles they are- resilience occurs in contexts of adversity, resilience is a systemic process which include persistence, resistance, recovery, adaptation and transformation, there are trade-offs between system is open, dynamic and complex, a resilient system promotes connectivity, a resilient system demonstrates experimentation and learning and a resilient system includes diversity, redundancy and participation.

Resilience is a broad concept which covers various aspects related to an individual. It has great relevance in individual's life at the present time. With the various developments that are taking place in every sector people are progressing in their life, achieving the goals, fulfilling the targets and the demand of a so called happy life is rising day by day. Without much realisation people are leading towards a future which is becoming more of complicated due to the competition, pressure, challenges, etc., which is prevalent in every field. The number of young people confronting difficulties and the variety of challenges they faced seem to be growing with the technological complexity (Goldstein & Brooks, 2013). This has ultimately made many frustrated, unhappy and has developed an attitude of giving up. This has accelerated a stronger feeling of urgency of Resilience research in every field (Goldstein & Brooks, 2013). Goldstein and Brooks stated that every child who can cultivate a resilient mindset will be able to better handle pressure and stress, deal with everyday difficulties, recover from setbacks, trauma, set clear and attainable goals, solve problems, get along with others, and treat others and themselves with respect. From this the importance of resilience in every aspect related to an individual could be understood as it is a significant predictor of subjective well-being among young and middle aged individuals (Lowe, 2014). And one of the important aspects of resilience that need to focus at present time is Academic Resilience and its development among the students (Beale, 2020).

### 1.1 What is Academic Resilience?

The term Academic Resilience emerged during 1990s and it replaced the term Invulnerability to denote successful adaptation despite adversity (Gafoor & Kottalil, 2015). The definition of Academic Resilience restricts it to academic situations needing a high degree of resilience. Wang, Haertel and Walberg (1993) defines Educational resilience is the increased chance of success in school along with other endeavours despite environmental challenges brought on by early characteristics, circumstances, and experiences. Academic resilience entails pupils overcoming challenges to achieve successful academic results (Hart & Coombe, 2020). Students frequently encounter various academic problems throughout their daily lives that call for a certain level of what may be referred to as "resilience". For instance, a lot of students receive grades that fall short of expectations and constructive criticism for their work; many students switch institutions throughout their time in school, some even more than once; some students are forced to change their future goals and plans in response to their academic performance and experiences; apart from these there may be various disadvantaged situations that may occur in the life of students such as natural disasters, pandemic like Covid-19, etc., which have totally changed the scenario of education. These all call for resilience, which is the word used to define flexibility in the face of adversity, which can occasionally take the shape of adaptation in the face of scholastic challenges. (Beale, 2020).

Academic Resilience is the students' ability to effectively deal with overwhelming odds, challenge, setbacks and pressure in the academic setting and succeed (Bala, 2018; Martin, 2013; Martin & Marsh, 2006; Zarine & Julius, 2017). It is also the capacity to engage oneself in the learning process inspite of all the other circumstances that potentially could hold one back (McMahon, 2015) that is to maintain academic performance in the face of life (Mallick & Kaur, 2016). It is a state in which a child from at-risk group achieves much higher educational goals than the common average output of the child's group (Novotny & Kremenkova, 2016). An academically resilient child can positively adapt in the context of adversity or risk (Sharma & Mathur, 2016), has the inner strength to deal effectively with academic setbacks despite daily academic challenges (Raj & AHM, 2017).

Academic resilience is the capacity of students to exert efforts for success in spite of unfavourable circumstances, either through altering existing behaviours or developing new ones, such as discipline, routine, or plan. In an academic setting, resilience is characterized by those students who show a capacity for turning around academic setbacks and succeeding, whereas others keep performing poorly and failing (Martin & Marsh, 2006). How the Programme of International Student Assessment (PISA) defines academic resilience although some students may have access to emotional and social supports that are necessary, others experience prolonged adverse circumstances (Roffey, 2015; Roffey, 2016) that unavoidably impact the learning and

wellbeing of these students, and eventually, their futures (Bradley & Corwyn, 2002; Faraha et al., 2006; Mani, Mullainathan, Shafir & Zhao, 2013). Despite students being relatively socially disadvantaged, students with academic resilience are able to achieve national standards for academic achievement, as well as show stronger social and emotional adaptation.

## 1.2 Academic Resilience- what it comprises?

The term resilience incorporates the idea of risk factors and protective factors (Sharma, 2014). Zarina and Julius (2017) also stated that resilience-related factors include both risk and protective factors. Ye, Strietholt and Blomeke (2021) stated that resilience is based on two core concepts that is- adversity and positive adaptation. The term adversity can be referred to the risk factor and the term positive adaptation can be referred to the protective factors that help a student to achieve high educational outcome. According to Fallon (2010) the first requirement for the concept of resilience is exposure to risk or adversity, and the second is successful adaptation to that exposure. Competent but not resilient people are those who succeed but did not have to overcome obstacles or difficulties to do so.

### **1.2.1 Risk factors**

Risk factors are the occurrences or elements that are significant enough to have the capability of preventing normal development (Sharma, 2014). Risk factors are undesirable aspects of the person's surroundings or temperament that raise the possibility of a negative outcome (Fallon, 2010). A student is said to be in an at-risk situation if they encounter obstacles that prevent them from operating normally. The four domains of within-child, family, school, and community are where risk factors are dispersed. The strong connections between the risk factors in the many areas create a risk network, which impedes students' personal and academic pursuits. These students are referred to as students at risk because they lack supportive living and learning environments. (Kottalil & Gafoor, 2012; Sharma, 2014). Gafoor and Kottalil (2011) reported that a person may be at risk for a number of things, including poverty, abuse, violence, drug addiction, family legal issues, and psychiatric issues in the past, family conflict, a lack of social support, a lack of positive personal traits, and academic failure. They also said that a student is put at risk when they have scholastic challenges brought on by personal, familial, and educational issues. Zarina and Julius (2017) stated that risk factors might result from a single traumatic incident, several life stressors, or cumulative stress from numerous human and environmental factors. It was also stated that risk factors expose the person to situations where unfavourable outcomes are more likely to occur and make an individual vulnerable.

## **1.2.2 Protective factors**

Kottalil and Gafoor (2012) stated that the true sources of resilience are protective factors. Protective factors are those that alter, mitigate, or change a person's response to an environmental risk and increase the likelihood of a maladaptive result and foster resilience. (Sharma, 2014). Protective factors reduce the risk of a negative outcome (Fallon, 2010). Protective factors are those that aid in overcoming risk and displaying excellence in a certain profession. Within-child, family, school, and community are some of the numerous domains where protective factors can be found. Such students will become more resilient in the classroom if the protective factors in these areas build a strong protective network. (Kottalil & Gafoor, 2012). Protective factors act as a shield that protects an individual from harm (Zarina & Julius, 2017). Jowkar, Kojuri, Kohoulat and Hayat (2014) stated about internal and external protective factors. They stated that social supports and possibilities present in home, school, community, peer groups, in the form of- loving relationships, expectations, and encouragement for engagement in worthwhile activities, constitute external protective factors; individual traits and attributes such as- abilities, attitudes, beliefs, values, cooperation and communication, empathy, powerful problem-solving abilities, well defined objectives and aspirations are internal protective factors. Zarina and Julius (2017) stated that internal factors include psychological and biological aspects like one's physical condition, genetic makeup, and environment, gender and temperament; the home environment, parenting philosophy, peer relationships, and other variables are examples of external factors.

Although an individual's likelihood of developing psychopathology is generally increased by risk factors, protective factors give the individual the ability to mitigate the consequences of risk factors (Sharma, 2014). Zarina and Julius (2017) stated that each person has the potential to be resilient, but how resilient they actually are depends on how they interact with their environment as a whole. It was also stated that a person is more likely to have a particular problem than others if they have risk factors; risk and protective factors must be balanced in a dynamic manner. Such as a child having strong

social and emotional skills (a protective factor) is more likely to have companions and experience less social isolation (risk factor). Zarina also stated that factors including family and school assistance can help in child's academic success and mitigate the negative impacts and boost resilience. These are the protective factors that work to lessen the impact of risk factors. According to Fallon (2010) to overcome many risk factors, a combination of protective factors or supports is needed.

### **1.3 Protective Factors of Academic Resilience**

Zarina and Julius (2017) stated that resilient people may have symptoms in the physical, psychological, behavioural, or educational domains when stress or risk factors exceeds the number of protective factors. The presence or absence of a protective factor, as well as different combinations of risk and protective variables, might lessen the likelihood of experiencing a mental health issue, particularly in adolescence and young adulthood.

Gafoor and Kottalil (2011) stated that the word protection itself gives people a sense of security. Protective factors are those elements that enable the vulnerable person to show resilience. A child who receives appropriate care and safeguards from others will be in excellent physical, mental, emotional, and social health. The person themselves, as well as others in the family, the classroom, and the community, can serve as a safeguard for the person's healthy growth. A protective network is made up of PFs in the four systems that is- the child, family, school, and community. The risk for the child is very minimal or nonexistent if this network is significantly stronger. It is a picture of extreme resiliency.

Studies over years have found different protective factors under the domain of within child, family, school and community. The present study has focused on some protective factors as identified by Gafoor and Kottalil (2011); Kottalil and Gafoor (2012) under the domain of within child are discussed below-

Within Child Protective Factors				
Socio-emotional	Motivation	Cognitive	Meta-cognitive	Self-belief

#### 1.3.1 Socio-emotional skills

Socio-emotional skills refer to the ability to understand and manage one's own emotions in a constructive way, to uphold healthy relationships with others, and to adapt to any situation without running into any problems. A person had to deal with a variety of experiences throughout their life, both good and bad. And this causes them to experience a range of emotions. He or she must be able to manage or redirect it healthily so that it doesn't adversely impact one's mental health. In a similar vein, it's critical to understand how to maintain relationships so that they don't later have an impact on a person. And this is feasible if the person makes an effort to improve their socioemotional ability. Socio-Emotional skills build the resilience needed to deal with adversity. Several studies found that acquiring social-emotional skills led to improvements in student's social adjustment, attitudes, and academic achievement, as well as reduced disruptive behaviours. There is a substantial evidence base about the effectiveness of school-based interventions for the cultivation of social-emotional skills in students (e.g., emotion management, positive goal setting and achievement, compassion, maintaining and building positive relationships, and making responsible decisions), which may result in improvements across a broad range of student outcomes, including positive social and emotional development, mental health, and academic performance (Cristóvão, Candeias, & Verdasca, 2020; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; EducationLinks, 2020; Yap et al., 2022). Students with stronger social and emotional skills form more positive relationships, are more successful in school, and experience improved mental health. Socio-emotional skills refer to the abilities of regulating one's thoughts, emotions and behaviour. These skills help in determining how well people adjust in their environment and how much they achieve in their lives (OECD, 2020). Socio-emotional skills help an individual to face the unexpected, cope with multiple demands, control impulses and work effectively with others (OECD, 2015). Martin and Marsh (2009) suggested that students could be taught to become more academically resilient by developing an emotional and behavioural orientation toward school and academic life.

In the process of the development of socio-emotional skills focus should be on the enhancement of Communication, Adjustment, Empathy, Interpersonal skill and managing emotions among students which are considered as the protective factors of academic resilience. Downey (2008) stated that communication skills and interpersonal skills are the transferable life skills which are important for students at risk of academic failure. Sharma and J (2015) found Adjustment as significant predictor of resilience in adolescents. Empathy is considered as an important protective factor of resilience (Hart & Coombe, 2020; Jalala, Latifoglu & Uzunboylu, 2020). Academically resilient students were found to possess good interpersonal skills (Borman & Overman, 2004; Garmezy, 1993; Hart & Coombe, 2020; McMillan & Reed, 1993; McMillan & Reed 1994). Devi and S (2020) found managing emotions as one of the factors of resilience. Managing emotions help an individual to recover from stressful events (Bergeman, Bisconti & Wallaca, 2006; Cicchetti, 2010; Habib & Ansari, 2017; Sharma, 2014).

### 1.3.2 Motivation

The foundation of any learning process is motivation. It energises and motivates a person to fight through the ups and down to accomplish a goal. Needs and motives are the primary factors that basically keep a person motivated over time. Every person has specific needs, wants, desires in life. These requirements could be biological or socio-psychological. A specific need gives rise to an energising force that can be referred as motive that prompts a person to act in a specific manner at a specific time in order to satisfy that need. One's motivation is the key to success. A motivated person can overcome any obstacle in the way of achieving their objective. Martin (2002) stated Motivation as students' energy and desire to learn, work efficiently and achieve to their potential at school and the behaviours that results from this energy and desire. Resilient students maintain high standards of achievement motivation and performance despite of different setbacks (Jowkar, Kojuri, Kohoulat & Hayat, 2014). Mostafa and Lim (2020) found that a high level of internal motivation is related with high levels of resilience. Thus, Motivation is a crucial factor for resilience (Yang & Wang, 2022).

In the process of the development of motivation focus should be on the enhancement achievement motivation, optimism, curiosity and persistence among students which are considered as the protective factors of academic resilience.

Students with resilience maintain higher levels of achievement motivation and achievement, even when there are difficult events and conditions that put them at risk failing to do well in school and eventually leaving (Kavathekar & S. 2019; Martin,

2002). Resilience and optimism are highly predictive for positive future life outcome (OECD, 2020). Sharma and Mathur (2016) stated that optimism promotes motivation. Positive thinking is one of the factors that act as an internal strength for the child at the time of difficult situation (Jalala, Latifoglu & Uzunboylu, 2020). Singh and Vidhu (2013) stated that resilient students are highly optimistic. Fallon (2010) found academic optimism as significant predictor of academic resilience. George (2014) stated the need for programmes that promote students adjustment by focusing on student's level of positive and negative thinking. Curiosity is one of the fundamental life skills which need to be adopted to enhance academic resilience (Kutlu, Yavuj & Bulut, 2016). Rutter (1987) defined Resilience as persistence in the face of change. Persistence is staying intact to one's work inspite of challenges (Singh & Vidhu, 2013). Reasonable persistence is an important characteristic of a resilient child (Nadge, 2005). Turner, Scott-Young and Holdsworth (2017) found that resilience is favourably linked with academic persistence, engagement and achievement. It is an important protective factor under academic resilience (Morales, 2010; Ungar, 2018).

# **1.3.3 Cognition**

Cognition describes the way in which we learn and understand things intellectually by using our senses and life experiences. Cognitive skills include the capacity for thinking logically and critically, solving problem and making decision, etc. All of these processes are crucial in daily life to encounter positive and negative events that are out of our control. The best part is to handle them intellectually and moving forward. Parsons, Kruijt and Fox (2016) stated that Cognitive functions are important in the resilience process. Cognitive processes have a great impact on students' adjustment in life (George, 2014). Martin and Marsh (2009) had already suggested that students could be taught to become academically resilient by developing a positive cognitive orientation toward school and academic life. Students with high IQ are academically resilient (Hart & Coombe, 2020).

In the process of the development of cognitive level focus should be on the enhancement of decision making, creativity, problem solving and critical thinking among students which are considered as the protective factors of academic resilience.

Chuen (2018) stated that decision-making skills should be taught to adolescents at a young age because making decisions has a significant impact on whether or not they engage in risky behaviours in daily life. Kavathekar and S (2019) found self- goal identification as one of the characteristics of educationally resilient students. Kamali and Fahim (2011) found a significant relationship between critical thinking and resilience; thus is a protective factor of resilience (Benitez & Canales, 2013). Singh and Vidhu (2013) stated that resilient students have the ability to foster creative solution to the problems. Arif and Mirza (2017) found creativity as one of the predictor of academic resilience. Downey (2008) stated that Problem based learning approaches helps in enhancing academic resilience among students. Problem solving is considered as one of the important factor of cognitive skills training in the enhancement of resilience (Annalakshmi, 2019; Ellis, Bianchi, Griskevicius & Frankenhuis, 2017; Hart & Coombe, 2020; Jalala, Latifoglu & Uzunboylu, 2020; Singh & Mohan, 2013).

#### **1.3.4 Meta-cognition**

The term Meta-cognition was coined by John Flavell. He was regarded as the foundation researcher in meta-cognition. Meta-cognitive knowledge is a segment of an individual's stored world knowledge concerned with their various cognitive activities, goals, behaviours, and experiences (Flavell, 1979). He gave importance on two aspects of Meta-cognition that is meta-cognitive knowledge and meta-cognitive regulation. Development of meta-cognition in students makes them aware about their learning process along with regulating it in a right way for effective learning (Livingston, 2003). Meta-cognition is one of the most fundamental skills for lifelong learning along with the ability to adjust with the changing requirements and settings (OECD, 2020). Students gain confidence and become more independent learners as they grow more competent at employing meta-cognitive techniques (Malamed, 2017). Children taught meta-cognitive strategies at an early age are more resilient and successful. Teaching children to be more meta-cognitive helps them shift from mindset that allow for few opportunities for variation, to ones that foster self-awareness and resilience (Jacobson, 2021). When students practice meta-cognition, the act of reflecting on their thoughts helps them to gain more meaning out of life experiences and begin achieving at higher levels. Metacognition actually changes the brains structure, making it more flexible and open to even greater learning (Price-Mitchell, 2022). Higher-order thinking skills are fostered when students learn how to acknowledge their cognitive growth. If children become aware of the difficulties and advantages that they may be experiencing in the process of learning, they would learn about learning meta-cognition and realize how to cope with difficulties

while making better use of advantages. Guiding children in becoming self-aware of their own learning processes, and thus developing meta-cognitive skills, would be of immense benefit to them, and the society. Therefore it is considered as one of the important dimensions of Academic Resilience.

In the process of the development of meta-cognitive level focus should be on the enhancement of self-regulation, reflective thinking, positive coping strategies and internal locus of control among students which are considered as the protective factors of academic resilience.

Self-regulation is a self-directed process through which an individual monitor their behaviour and try to self-reflect on its effectiveness which ultimately helps them to succeed in academics (Zimmerman, 2002). Thus is considered an important protective factor of academic resilience (Holbrook, 2016; McTigue, Washburn & Liew, 2009; Zarine & Julius, 2017). It is essential for the healthy psychosocial adaptation and was found to be the significant predictor of resilience during adolescence (Annalakshmi, 2019). Reflective thinking in unfamiliar situations is a protective factor of Academic Resilience (Gafoor & Kottalil, 2011). Positive coping strategies are protective factors that assist pupils to be academically resilient (Hart & Coombe, 2020). Internal locus of control refers to the power that lies within an individual of controlling one's actions, behaviour, etc. The reason of one's success and failure is totally dependent on the individual himself/herself. Internal locus of control is another protective factor of academic resilience (Hart & Coombe, 2020; Holbrook, 2016; Morales, 2010)

### 1.3.5 Self-belief

Self-belief is simply believing in or having confidence in oneself. It is ones confidence that gives the drive to move forward in life and accomplish ones objectives despite any obstacles that may arise. It helps to understand the significance of giving oneself the value and worth one deserve. Thus helps in becoming the better version of oneself. Self-belief is the underlying beliefs about oneself. The belief that students develop about themselves plays a significant role in their academics (Singh & Mohan, 2013). Students with self-belief are more resilient in the face of challenges (McTigue, Washburn & Liew, 2009).Studies found that self-belief with respect to academic performance is positively related to academic resilience, meaning those students that showed higher levels of self-belief also showed higher levels of academic resilience. Students who had lower levels of self-belief were likely less resilient and able to adjust to changes in such teaching and learning, meaning this may have had more of an effect on their academic performance (Cassidy, 2015; Fernandez-Castillo, Chacon-Lopez, & Fernandez-Prados, 2022; Wulandari & Istiani, 2021). Self-efficacy and higher sense of self-worth assist students to be academically resilient (Hart & Coombe, 2020).

For the process of the development of Self-belief among the students focus should be on the enhancement of Self-concept and Self-esteem which are considered as the protective factors of academic resilience.

The self differentiates each person as a unique individual and separates us from one another. It lies at the core of who we are. It is who we are as individuals, what makes us unique and who we believe ourselves to be. Believe in self can only make an individual bounce back towards the normal state inspite of the adversities. And this is possible only when we have self-concept and self-esteem. Self-concept is considered as an internal strength factor for a child (Arif & Mirza, 2017; Jalala, Latifoglu & Uzunboylu, 2020; Narayan, 2015). Early life foundations (2019) stated that Self-concept is developed from one's self-esteem which is related to belief in oneself and self-competence which is related to understanding one's strength and challenges. Nadge (2005) stated that a resilient child has a sense of self-esteem which helps him/her to cope with the challenges successfully. Self-esteem is considered as one of the internal factor in the enhancement of resilience (Annalakshmi, 2019; Cicchetti, 2010; Karatas and Cakar, 2011; Morales, 2010; Singh and Mohan, 2013).

# 1.4 Can Academic Resilience be enhanced?

Studies have reported the relationship between academic resilience and academic achievement (Fallon, 2010), suggesting the importance of interventions to foster resilience (Gardynik, 2008) and reported its positive effects (Martin & Marsh, 2008). Martin and Marsh further propose that this may be most effective by increasing the individual's exposure to enabling factors. Studies have reported the enhancement of academic resilience which depends on various factors. Downey (2008) provided 12 specific recommendations for classroom practices, which were grouped into four categories: teacher-student relationship, classroom culture, instructional tactics, and student skills. This will encourage academic resilience and promote the academic success of pupils who are at risk of underachieving. Mcleod, Heriot and Hunt (2008)

stated that the enhancement of resilience is critically dependent on children's intellectual growth. Stein (2008) stated that providing students from disadvantaged family background with better care, more stability, holistic preparation, a positive sense of identity, support with their education, and opportunities for more gradual transitions out of care that are less accelerated and compressed and more similar to normative transitions will promote resilience among them. According to Singh, and Vidhu, (2013) Reattribution training is effective in enhancing academic resilience among adolescents. Downey (2014) identified eight factors that promote educational resilience such asintelligence, feelings, behaviour, home environment, family assistance, school support, community connections, and organized programs. Mampane (2014) stated a few factors contributing to the resilience of the adolescents are- confidence, internal locus of control, ability to identify and utilise social support, being tough, committed and achievement oriented. Cassidy (2015) found self-efficacy as a significant predictor of academic resilience. Gafoor (2015) discovered 126 protective variables and are classified in 19 categories under the four areas-self, family, school, and community-from which the students derives strength to overcome challenges. Sharma (2015) Academic success, self-efficacy, problem-solving, and adjustment are discovered to be important determinants of resilience in adolescents. Academic success, intellectual growth, high self-esteem, emotional self-regulation, good coping skills, good problem-solving skills, and involvement in two or more of the following contexts-school, with peers, in athletics, employment, religion, and culture-are among the protective factors that enhance resilience (Zarina & Julius, 2017). Devi (2020) referred meta-cognition as determinant of Academic Resilience.

Academically resilient people can succeed despite risk due to certain factors; these factors are known as protective factors. Analysis of protective factors is crucial because of this (Kutlu & Yavuz & Bulut, 2016). Mwangi, Ireri, and Mwaniki (2017) determined that when internal and external protective factors are combined, academic resilience in students is improved. Protective characteristics that help students achieve academically and in other areas frequently emerge from adversity (Holbrook, 2016). According to Gafoor and Kotallil (2011) protective factors are those elements that enable the vulnerable person to show resilience. A protective network is made up of protective factors in these four systems: the child, family, school, and community. The risk for the child is very minimal or non-existent if this network is significantly stronger. It is a

picture of extreme resiliency. The true sources of resilience are the protective factors. These factors play significant role in the healthy development of the students especially those at-risk (Kottalil & Gafoor, 2012). LeMoine and Labelle (2014) stated the factors at three level that is- individual level, family level and community level. At individual level the factors are- social, emotional or personal competence, self-esteem and self-efficacy. Factors at family level are- strong emotional ties, a dependable relationship with a parental figure, effective parenting education, family management, and parent-child interactions. Building social capital, service learning, and coordinated community youth activities are factors at the community level. Mwangi, Ireri, and Mwaniki (2017) stated about internal and external protective factors under which internal refers to the individual factors and external refers to the family, community, school, etc.

Increasing Academic Resilience can boost student's well-being and increase their chances of academic success. Academic resilience goes beyond simply helping weak students who come from disadvantaged circumstances. Anyone can experience hardship at any time in their lives and may or may not be able to handle it well. Academically gifted students may begin to lag behind as a result of additional demands or dangers they encounter during their school careers, many may face problems such as: Poverty, family instability, exposed to negative life experiences such as domestic violence, drug abuse in family, etc. Academic resilience takes into account how to support all students in a school, giving those coping mechanisms and abilities (Hart & Coombe, 2020). Additionally, it can aid in preparing students to deal with and recover from challenges such as Covid-19 pandemic, natural disasters, and other disadvantaged situations like yearly based flood, etc., that might otherwise hinder their academic progress (Beale, 2020).

# 1.5 Significance of developing Academic Resilience among Students in Indian Schools

India, the second most populated country after China has the biggest educational system in the world, serving more than 260 million young people every year (Anderson & Ligthfoot, 2019). As a developed country it comprises of students from different status based on their economic, social, geographical, disadvantaged groups, etc. which act as a great challenge for quality education in Indian schools. Kottalil and Gafoor (2012) stated that at-risk children are present in every classroom in India, such as students with

learning challenges, aggression, homelessness, physical and psychological impairments, etc. There are students who are financially, socially, geographically vulnerable struggling to deal with the competitive environment of today. Khandelwal and Gupta, (2019) stated that Rural residents have a lower literacy rate (68%) than the general population. There are cases that students from disadvantaged backgrounds experience hardship significantly in both their academic and personal lives. These differences that exist in Indian educational system has resulted in school dropouts, hence in order to include these groups, Academic resilience is essential (Monika & Sikha, 2020). There are number of factors including pandemics and natural disasters that have negatively affected the education system. One of the recent examples is the Covid-19 pandemic that have totally misbalanced the formal education system in India and acted as a threat to the development of students. In reference to all these Martin and Marsh (2008) stated the importance of minimization of student background effects on educational outcomes is a central theme in the pursuit of educational equity, knowledge of academic resilience could assist policymakers and educators to assist students from underserved backgrounds to increase their performance. Consistent with this broad definition, academic resilience is student's ability to succeed academically in spite of their disadvantaged background (OECD, 2011), or, more specifically, an increased probability of academic success in spite of the environmental disadvantages caused by early traits, conditions, and experiences (Wang, Haertal & Walberg, 1993). Therefore in order to teach the policymakers about how to reduce risks and help students develop academic resilience in the face of threats to their development, an integrated and global science of resilience supported by evidence-based research is very important. Academic resilience is the ability of a youngster to preserve their wellbeing in their studies and other academicrelated areas. (Radhamani & Kalaivani, 2021). Developing of Academic Resilience among students will make them continue to perform well in school even when faced with challenging situations that increase the likelihood of receiving poor grades.

# **1.6** Secondary level of Education: an important stage of developing Academic Resilience among the Students

The secondary level of education is an important stage in an individual's life. The board exams are considered crucial determining factors for pupils' future careers and education paths. This stage is considered crucial where students are expected to study more diligently. They have a lot of pressure to achieve well in their exam. Anderson and Lightfoot (2019) in their report also stated that placements at prestigious institutions depend on student's performance for which the school leaving certificate's outcome is of major importance. This has led to lot of competitions in the academic field among the students from the childhood period onwards. There is a lot of pressure and expectations from the family and society from the students which have led them to a stage where they feel lot of stress and anxiety. If these students possess Academic Resilience they will be able to handle stress and pressure in academic setting (Monika & Sikha, 2020). Studies have also stated the problem of dropouts and found fewer students are enrolled in secondary level from disadvantaged backgrounds (Anderson & Ligthfoot, 2019).

The Secondary level Students also comes under the Adolescence period which is a crucial stage of one's life. It is a period of transition between childhood and adulthood in terms of both physical and psychological development, according to WHO. Researchers have found that adolescents who lack resilience may experience psychosocial maladaptation and psychopathology in adulthood (Banerjee, Dasgupta, Burman, Paul, Bandyopadhyay & Suman, 2018). Stanley Hall saw adolescence as essentially a time of emotional instability and anguish facing difficulty to adapt to their novel responsibilities in life. Mala (2018) stated that adolescent students may experience "disorders," which include emotional, mental, behavioural, and adjustment issues. When the psychological and physical prerequisites are met, an individual feels fulfilled but if it is not met, it leaves them feeling disappointed and down. Depression, stress, anxiety, hazardous sexual behaviour, aggression, violence, and disobedience are among the behavioural issues that affect adolescent students. These issues significantly affect how well adolescent students succeed academically in school. Sharma (2014) highlights the requirement for mechanisms wherein Adolescents create a hopeful future picture by utilising a novel method of coping strategy in which they view demands and hazards as opportunities instead of obstacles. Kaur and Kaur (2017) reported that adolescents' resilience and life satisfaction showed a substantial and favourable association. Academic resilience determines how well adolescents can handle certain societal obligations, particularly those related to education (Raj & AHM, 2017). To ensure that today's youth become tomorrow's resources, it is necessary to increase the adolescent's ability to be resilient. A society's future well-being depends on paying close attention to the psychological wellbeing of its young people. (Rao & Krishnamuthy, 2018)

# 1.7 Need of developing Academic Resilience among Secondary level Students from Flood affected Area

Flood is basically a natural event of overflowing of water on land which is usually dry due to high rate of rainfall and other water systems causing hazardous effect on people, their properties, livestock etc. Mwape (2009) stated that flood is the most costly and wide reaching of all natural hazards affecting almost 75 million people on average and responsible for upto 50,000 deaths worldwide every year. The study also predicts the substantial increase of flood risk in coming years as a result of climate change which can be considered to be true. PV and Subudhi (2020) stated that Floods in particular have a devastating effect on many aspects of life, including psychological, social, and educational aspects, and if appropriate action is not taken, these impacts could last a lifetime. Philip and Veeramani (2022) stated that Flooding and other weather-related disasters are on the rise worldwide, endangering the mental and physical health of impressionable young people. He also stated that the effects of frequent disasters on India's adolescent population are vital to consider in the light of the global increase in natural disasters, particularly in a country with a high population density and disaster susceptibility like India.

The Indian state of Assam has been severely affected by floods in the monsoon with steady rainfall throughout much of July and August. Assam, with its extensive river network, is susceptible to natural hazards such as flooding and erosion, with negative impacts on the state's overall development. Assam which lies in the middle of the Brahmaputra and Barak basin is a flood prone zone with many areas being affected by flood on yearly basis. Among the areas Majuli which is a world's largest River Island is a flood prone area which at one time covered an area of 1,226 square kilometres, has shrunk to just 576 square kilometres in just under three decades (ACTED, 2012). It has been under serious attack by the mighty Brahmaputra. Loss of land mass on account of erosion of Brahmaputra river right bank has been regular feature for Majuli Island. The Majuli River island of Assam is inundated each year in the monsoon. Majuli is among the worst-hit out of the 31 districts in Assam affected by flooding. Inspite of the construction of embankments breaches in it have made the situation worse (Sharma, 2014). The haphazard building of embankments on upper riparian areas of the powerful Brahmaputra River has altered the rivers natural flow, and unmonitored floodwater flows resulted in widespread erosion on Majuli. Monsoon flooding on the mighty Brahmaputra also has increased the numbers of internally displaced people (IDPs) in the area (Mishra, 2018). The relentless rainfall across parts of Assam and Arunachal Pradesh, where water levels in Brahmaputra and tributaries have surged beyond a dangerous mark at several places, submerging 64 villages in Ujani Majuli and Majuli Revenue Circles (Nath, 2021). Flood and erosion are two recurrent natural calamities in Majuli leading to huge loss in all the sectors including education and making the community highly vulnerable and less resilient (District Disaster Preparedness and Response Plan, 2019).

The destruction of education because of flooding is a widespread problem around the world. Flooding leaves a path of devastation, potentially leading to a Childs education reaching a point at which it cannot be saved. The surveys under consideration sought to determine the impacts of the disasters on the education sector, and results revealed that floods are among the factors disrupting learning programme completion, and therefore impacting on quality of ongoing education, especially in flood-prone provinces, where schools are not built with adequate flood-resilience (Munsaka & Mutasa, 2020). Studies showed that students exposed to climate shocks demonstrated lower educational success and lower levels of education. Basit, Rahman, Ibrahim, and Jumani, (2011) discovered that flood affected students under the ages of 11 and 18 had a high distress level and faced several obstacles in their quest to continue their education. Akello, (2014) stated flooding is dangerous because it destroys everything, endangering the students' lives. Chaudhary and Timsina, (2017) concluded that floods have a direct impact on students' performance, especially secondary school students. PV and Subudhi (2020) reported that after the flood, poor concentration and other psychological disorder symptoms were found among the children; had lost possessions, notebooks, uniforms, family members, close friends, and pets, damaged school buildings, and their family background where the majority of parents are working in the informal sector and are struggling to reconstruct their homes; lack of psychological counselling had an impact on absenteeism in schools after they reopened. Resilience education and training has become very important in which students gain new knowledge and skills on how to prepare for and respond to disasters in order to modify behaviours, manage risks, and decrease vulnerability to hazards like floods, earthquakes, and violence, thus building resilience (Cooke, 2017; Williams and McEwen, 2021). Philip and Veeramani (2022) from his study found that adolescent mental health and resilience were significantly impacted due to flood, and there were problems such as mental health concerns,

challenges with one's livelihood, troubles with one's education, as well as a lack of awareness and disaster preparedness; in addition, anxiety, difficulties with one's job, and issues with education were discovered. Philip also reported the necessity to offer adolescents psychological support services and training related to psychological readiness. According to the report, there is an urgent need to include policymaking in order to lessen the psychological impact that disasters have on adolescents.

### 1.8 How can Academic Resilience be stimulated?

Studies on resilience and academic resilience have been undertaken over time in relation to different context and have point out different ways of stimulating Academic Resilience among students. Some of the studies with different perspective in relation to stimulation of Academic Resilience are discussed as follows-

According to Mallick and Kaur (2016), Academic resilience is a dynamic developmental process that involves a variety of protective factors, such as personal, parental, institutional, or socio-environmental factors. These elements support the development of resilience in the child. Every child has the potential to be a resilient child, but this can only happen if they receive the right care. The first institution that fosters a child's development of resilience is their home or family. After home it is the school where the child spends a lot of time and hence plays a significant role in their development of resilience. Schools have a significant impact on how resilient pupils become and help the pupils to grow not only intellectually but also ethically and socially.

Ismael-Lennon (2010) highlighted the part that social institutions like schools can play in promoting resilience have drawn a lot of attention. The institutions that make up the third pillar of the positive psychology movement include schools as a crucial component. The third pillar discusses how institutions like schools may help create circumstances that are conducive to children's growth.

Zarina and Julius (2017) stated that when intervention is delivered in a timely manner, it can stop students from becoming discouraged and learning to be helpless as a result of failure. Further decline, such as a breakdown in functioning or personality dysfunction, could stop. Temperament, learning styles, self-perception, emotions, and modes of thought, adaptive abilities, and social skills are examples of individual factors. Resilience is influenced by a variety of personal characteristics as well as knowledge acquired via interactions with, and opportunities provided by, family, school, and community members. It also depends on how successfully developmental transitions are handled.

According to Agasisti, Avvisati, Borgonovi and Longobardi (2018) in schools that offer a large number of extracurricular activities and have the resources to do so, disadvantaged students are more likely to be resilient.

Holbrook (2016) conducted a qualitative study on rural Appalachian students and reported that their triumphs in both their academic and personal lives are inspiring. These students discovered they had it in them to become resilient and succeed academically. These ten community college students from rural Appalachia share their personal success stories through their lived experiences which can be articulated and shared with other children to develop their own resilience despite being categorised as atrisk pupils.

Kottalil and Gafoor (2012) conducted a study to help at-risk secondary school pupils develop their academic resilience. The results of the experimental and survey phases shed light on the importance of protective factors for the healthy development of all children, especially those who are at risk. At-risk students can display academic resilience and make efficient use of their within protective factors with the help of teachers, parents, and the community.

Fallon (2010) stated that students who excel academically generally exhibit a variety of personal traits that are also present in students who are resilient in other areas of their lives. Key traits of academically resilient children are optimism, a high feeling of self-efficacy, and an internal locus of control. Along with this schools may help students develop their feeling of self-worth and self-efficacy; can offer a variety of extracurricular activities, mentoring programmes, and tutoring alternatives to give children the chance to develop skills and participate in prosocial activities.

# **1.9** How does Intervention Program matter for fostering Academic Resilience among Students?

Intervention refers to a programme facilitated by the experimenter to change the relative position of the participants in relation to academic resilience (Kottalil & Gafoor, 2012). Baca (2010) stated that programs to promote academic resilience have been quite

successful in raising student achievement. Yuan (2021) reported that mindfulness training boosted the students' emotional intelligence and resilience. School is considered as the ideal place to enhance the Academic Resilience of the students (Hart & Coombe, 2020). Many studies have reported the success of the intervention programme developed on academic resilience. (Arif & Mirza, 2017; Kaur, 2018; Karpagavalli & Subhashini, 2019; Mailanchi & Kumar, 2019; Raj & Vijayalaxmi, 2017).

From the review it is found that over the years many models, programmes, factors were developed in relation to resilience. The main purpose behind these is to understand the ways of enhancing resilience among individuals to cope with risk and develop intervention program for their training. No two individuals are same therefore their abilities. Many people are not even aware of their abilities till they face any risk or challenge in their life. But as a human being one's focus should always be on strengthening oneself both mentally and physically to deal with any risk, problems, challenges, and adversities and bounce back to the normal state. For this it is very important to develop various resilience programmes from school onwards for classroom interventions. Seligman, Ernst, Gillham, Reivich and Linkins (2009) stated that these programmes will promote skills and strengths required, produce measureable changes in student behaviour and well-being that support students' participation in learning and success. Narayan (2015) stated the importance of policy that includes resilience building programmes in schools as mandatory extracurricular programmes. The benefits of academic resilience are shown in studies reporting that there is positive relationships between academic resilience and educational success (Fallon, 2010), suggesting a potential to promote greater resilience via interventions (Gardynik, 2008), and reporting the favourable outcomes of education interventions incorporating elements of academic resilience (Martin & Marsh, 2009). Yan and Gai (2022) reported that subsequent intervention studies with disadvantaged students can increase their likelihood of developing resilience by enhancing their understanding of the value of education, boosting their drive for success, raising their expectations for their future academic careers, and fostering positive academic emotions and positive teacher-student relationships.

Various models, programmes, factors in relation to resilience are as follows-

Luthar, Cicchetti and Becker (2000) have stated about three models of resilience. That is Protective stabilizing, Protective enhancing and Protective but reactive. When a quality confers competence stability despite rising danger, it is said to be protective stabilising. When a youngster is permitted to experience stress so that their competence is enhanced with rising risk, this is referred to as protective enhancing. When a trait is protective but reactive, it generally gives benefits, but less so when stress levels are high than low.

Masten and Reed (2002) have talked about three models of Resilience. They are-Variable focused, Person focused model and Pathway model. Variable focused model give emphasis on the variables such as characteristics of individuals, environment, experiences that determine the individuals adaptation in the face of adversity. Whereas Person focused model give emphasis on the individuals who have been able to do well inspite of adversities and how they are different from the one that are not able to do well in the face of adversity. Pathway model describes about three resilient pathways in life. They are- Path A, Path B and Path C. Path A describes about an individual who is able to do well in life inspite of adversities. Path B describes about an individual who does well initially but is diverted by sudden adversity/shock in life and is able to recover later. Path C describes about an individual with high risk who is not able to do well initially but with improvement of the situations is able to do well in life.

Fergus and Zimmerman (2005) have discussed about three models of Resilience. They are Compensatory model, Protective model and Challenge model. In compensatory model a promotive factor works in opposition to or as a counterbalance to a risk factor. As a result, the promotive factor has a direct impact on the result. In Protective factor model assets or resources moderate the effect of risk on an adverse result. In Challenge model the relationship between a risk factor and a result is curvilinear. It means exposure to moderate level of risk is associated with positive outcome than that of low and high risk.

Martin and Marsh (2006) proposed the 5-C model of academic resilience. They are Confidence, coordination, control, composure and commitment. These are considered to be the important predictors for enhancing academic resilience among students. Martin and Marsh (2009) refer to their strategy for helping students deal with academic adversity is an intrinsically asset-oriented, strength-based, and aspirational.

Ungar (2006) in their project- International Resilience Project (IRP) stated "Resilience as both an individual's role in nurturing and sustaining his or her well-being and the relational, social and cultural factors that must be available and accessible to individuals who face multiple risks". In IRP four aspects of resilience of individual's life are given importance on that is- individual traits, relationship factor, community context, and cultural factors.

Seligman, Ernst, Gillham, Reivich and Linkins (2009) have stated about two programmes. They are Penn Resiliency Program (PRP) and Strath Haven Positive Psychology Curriculum. PRP focuses on enhancing the ability of the students to deal with problems that are common at the adolescence period. The main findings of the PRP were- it reduces and prevents depression, anxiety, hopelessness, behavioural problems, etc. Positive Psychology Programme focuses on helping the students to find their strengths and use them in daily affairs. It was the first scientific investigation of a positive psychology curriculum for adolescents. It helps in improving the social skills of an individual. Apart from this they have stated about combining both the programmes for increasing the effectiveness and also emphasized on more intensive interventions.

Gafoor and Kottalil (2011) Kottalil and Gafoor (2012) stated four programmes or factors for fostering Academic resilience. They are- within child protective factors, within family protective factors, within school protective factors and within community protective factors which are considered as the real sources of resilience. These protective factors act as a protective shield for the child and can become resilient at the time of risk; stay healthy physically, intellectually, emotionally and socially.

Habib and Ansari (2017) have stated about strength based approach which focus on strength and resources that may enable adaptive functioning and positive outcome.

# **1.10** Rationale behind the selection of the Intervention Program for the Present Study

Brooks and Goldstein (2001) have point out the term "Resilient mindset" among youth which is closely related to the idea that pressure is present in our modern, fastpaced, stressful environment, which we have constructed to help youngsters develop into useful adults. Even children who are lucky enough to not endure significant trauma or adversity or to not experience extreme stress or anxiety, still feel the pressures of their environment and the expectations placed on them. Therefore focus should be on finding the determinants of resiliency in the face of adversity and providing intervention based on those factors to the students.

After detail review on various models, programmes, factors the researcher gave emphasis on one programme or factor for preparing the intervention program- the Academic Resilience Module. The programme or factor that was selected is the "Within Child Protective Factors" under which come the five dimensions that is- Socioemotional, Motivation, Cognitive, Meta-cognitive and Self-belief as identified by Gafoor and Kottalil (2011); Kottalil and Gafoor (2012). Under Social factors they have included social competence, positive responsiveness to others, cohesion, positive and negative social behaviours, responsibility, communication skills, highly adaptive temperament, ability to approach new situations, loving and trusting relationships, and behavioural skills. Emotional factors include strong deep commitment to relationships; empathy, affectional ties with family, satisfaction, less friction, and love has demonstrated their own influence on the development of resilience. Motivational factors include student commitment, involvement, achievement motivation, and motivation, dispositional attributes of the individual, positive disposition, academic and individual aspiration, task orientation, and academic motivation and resourcefulness that enhance protection against academic risk in students who belong to the within-child domain. Cognitive factors include cognitive skills, problem-solving abilities, plans for post-secondary education, problem-solving strategy, intelligence, and above average vocabulary growth. Metacognitive factors include Internal and realistic sense of control, self-regulation, and internal locus of control, sense of purpose, Positive coping strategies, and reflectiveness in novel settings that are positively correlated with Academic Resilience. Self-beliefs factors include self-esteem, autonomy, self-understanding, self-efficacy, and sense of efficacy, belief in oneself, academic self-concept, and students' belief in their overall ability. According to them the presence of Within Child Protective factors varies among individuals. It's not necessary to have every single Protective factor to describe someone as resilient. A person might be granted the resilience attribute if they perform very well in one category while performing averagely in others.

The rationale behind selection of this programme or factor is that- In the study of Gafoor and Kottalil (2011) Kottalil and Gafoor (2012) 82 studies on Academic Resilience were reviewed and a clear depiction is given on the protective factors that comes under the four programmes or factors that is- within child protective factors, within family protective factors, within school protective factors and within community protective factors for fostering Academic Resilience. Apart from this the other models and programs were not based on Indian context. Therefore this programme was thought to be of great importance in providing a direction for the preparation of an intervention program on Academic Resilience for the secondary level students. The various protective factors under the dimension- Socio-emotional, Motivation, Cognition, Meta-cognition and Self-belief were selected based on its relevance in reference to Academic Resilience so that all the dimensions are covered well at the stipulated time. In the process of the development of socio-emotional skills focus was on the following protective factors-Communication, Adjustment, Empathy, Interpersonal skill and managing emotions for the enhancement of academic resilience. In the process of the development of motivation focus was on the following protective factors- achievement motivation, optimism, curiosity and persistence for the enhancement of academic resilience. In the process of the development of cognitive level focus was on the following protective factorsdecision making, creativity, problem solving and critical thinking for the enhancement of academic resilience. In the process of the development of meta-cognitive level focus was on the following protective factors- Self-regulation, Reflective thinking, Positive coping strategies and internal locus of control for the enhancement of academic resilience. For the process of the development of Self-belief among the students focus was on the following protective factors- Self-concept and Self-esteem for the enhancement of academic resilience. The protective factors mentioned are also in relation with the Martin and Marsh model of academic resilience that is- self-efficacy, planning, control, low anxiety and persistence.

### 1.11 Rationale of the Study

Each and every person has to face so many problems throughout their life but the thing that counts is bouncing back to the normal state after solving it and hence proceeding towards ones goal. And this is not an easy task without having high level of resilience. From psychological point of view without resilience people respond to difficult situations by becoming stressed which leads to various other problems like psychological, emotional and physical symptoms that can be dangerous to health. Ahmed and Julius (2015) stated that students with limited resilience are vulnerable to adverse psychological outcomes including depression. Resilience is a part of an individual's

personality and it is something that develops through experience and with change in time and experience people develop a greater ability to recover them from any kind of problems and those who fails to end up with their life. This study focuses on one aspect of Resilience that is Academics which is needed to be confronted by everyone inspite of the adversities one had to face to hold a position to lead a peaceful life. Academically Resilient person is the one who excels in their life inspite of the difficulties they had to face. To be academically resilient is not a easy task as various internal and external factors such as self-esteem, decisiveness, curiosity and family support, qualified teachers, and peer relations has a major role to play to overcome the various risk factors like poverty, and negative environmental conditions (Kutlu, Yavuz & Bulut, 2016). When we discuss on Academic Resilience the first thing that comes to our mind is the students who are pursuing various course under an institution inspite of various disparity and this study is focusing on secondary level students who comes under the Adolescence period which is recognised as a time of stress and storm, as coined by G. Stanley Hall. In this period various biological changes takes place as a result they are over sensitive which may lead to various problems in their adjustment. This may affect positively or negatively in their academics. Basit, Rahman, Ibrahim and Jumani (2011) stated that students of under the age group 11-18 years possess high level of distress and had to face lot of problems in order to continue future education.

Apart from this the study also focuses on one more difficult situation that is Flood which is a major problem in many areas of Assam. From the interaction with the native people of Majuli district, Assam the researcher has understood that at the time of flood the schools remain closed for maximum one month and it takes time to come to the normal state depending on its level which is a major threat to the education system. Because if the number of working days become less the educational objectives are not fully achieved which may lead to pressure on both the teachers and students in completion of the syllabus. To manage the situation some of the teachers used to take extra classes but it is only possible if students attend it as in many cases students doesn't like to study or go to school hence may not attend the extra classes. This ultimately affect in course completion. Flood not only leads to closing of schools but also destroy infrastructure, make roads inaccessible, displace families and increase disease outbreak. In similar line Akello (2014) reported that flood has a great effect on earning ones livelihood and families are unable to send their students to schools and many parents do not want to endanger the lives of their children thus leading to low enrolment; yearly basis flood prevent millions of students from attending full year of school leading to delay in study programmes which has a great effect in the students life. Mwape (2009) stated that the impact of flood is in almost every aspect such as agriculture, health, education, housing, water, sanitation and property. Problems also occur regarding high dropout rate inspite of the implementation of RTE, 2010. Thus, these secondary level students from flood affected area had to go through so many conflicts in their life and it is not possible to handle all these problems if they are not resilient enough.

No two individuals are equal in this world and they may differ biologically, sociologically or psychologically and it is inevitable that each and every individual had to go through certain hardships and difficulties in their life inspite of which many succeed and these individuals who overcome this phase of risk are referred as 'Resilient' which simply means 'bouncing back'. Similarly in case of academics some excels and some fails to due to various adversities in their life and those who are able to cope with the situation inspite of the difficulties are called as academically resilient individuals (Morales & Trotman, 2011). Thus, resilience is a complex phenomenon which enables an individual to succeed despite adverse conditions or outcomes. Though Resilience is innate in individual, many are not able to demonstrate it in the right time (Gafoor, 2015). Therefore, the researcher is interested to foster academic resilience among secondary level students through an intervention program in spite of the difficulties they had to face on yearly basis due to flood in Assam. The researcher is focusing on Flood affected area because in Assam there are various flood prone area and the inhabitants had to face it on yearly basis which has a great affect mentally and physically and may create negative results in an individual's academic life, they can also damage their progress in many fields and may have a different impact on each individual (Little, Axford, & Morpeth, 2004). It is understood as the possible risk to the development of children in academic (Syukrowardi, Wichaikull, & Bormann, 2017). Due to which many students are not able to cope up with their studies and had an unsatisfactory result. So the researcher got an interest to provide an intervention program through a self-prepared module on academic resilience to secondary level students. At this level, students face lot of pressure from their family and society as they have to appear in the Board exam which result is considered to be the most important for their career. As Bala (2018) have stated that the education sector has become more challenging. Turner, Scott-Young and Holdsworth (2017) stated that resilient is an antecedent of student well-being. At present in this competitive world the meaning of success has largely widened and changed and is based on pupils' ability to effectively manage their cognitive capacities, personal control, and self-sufficiency skills (Schunk & Zimmerman, 2007). The factors that mainly help in depiction of high Resilience inspite of adversities are within child protective factors, within family protective factors, within school protective factors and within community protective factors which are considered as the real sources of resilience (Gafoor, 2015). Mc Millan and Reed (1994) defined Protective Factors "as a measurable characteristic in a group of individuals or their situation that predicts positive outcome in the context of adversity". It is not something that eliminates risks but helps an individual to deal with risks effectively. Sharma and Mathur (2016) called protective factors as assets or resources that reduce the harmful effect of risk. Different studies have given importance on various protective factors related to Resilience. But in the present study emphasis is given on one factor while preparing the Intervention program that is- "Within Child Protective Factors" under which comes- Motivation, Self-beliefs, Cognitive, Metacognitive and Socio-emotional skills as found in the study of Gafoor, 2015 who have reviewed 82 studies on Academic Resilience in accordance to factors fostering Academic Resilience. Narayan (2015) stated that interventions focusing on individual factor can help enhance resilience in the adolescents.

One of the important purposes of undertaking this study is an effort to develop the capacity of the students through an intervention program which will help in their Academic Resilience so that inspite of the adversities they had to face due to flood in every year they could cope up with it and do well in their academics. This study will help the educational planners to understand the situation of students in flood affected area and the effectiveness of intervention program in developing Academic Resilience. So that they could develop many in future in accordance to the situation and need of these students and make provisions according to their requirement. This will also help the students to cope up with other students in different areas. The goal of education in the twenty-first century is to provide students with not just an immense quantity of knowledge and information, but also to train students to be efficient, independent learners, with self-regulated skills and the ability to attain success academically, just as they attain success in life.

# **1.12 Statement of the Problem**

The study's problem can be titled as: Effectiveness of Intervention Program in Fostering Academic Resilience among Secondary Level Students of Flood Affected Areas of Majuli District in Assam.

### 1.13 Operational definition of the terms used

1. <u>Academic Resilience</u>: Academic Resilience is the capacity of the secondary level students to overcome with the adversities faced on yearly basis due to flood and do well in Academics with reference to their Socio-emotional skill, motivation level, cognitive level, meta-cognitive level and self-belief level.

2. <u>Intervention Program</u>: By Intervention Program the researcher means the three month long capacity building program based on self-developed Academic Resilience Module.

## 1.14 Objectives of the Study

- 1. To design an Intervention Program for fostering Academic Resilience among Secondary Level Students in Flood Affected Areas of Majuli district in Assam.
- To study the overall Effectiveness of Intervention Program for fostering Academic Resilience among Secondary Level Students in Flood Affected Areas of Majuli district in Assam.
- To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Socio-emotional skill.
- To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Motivation level.
- To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Cognitive level.
- 6. To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Meta-cognitive level.

 To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Self-belief level.

# 1.15 Hypotheses of the Study

**Ho1.** There is no significant difference between the overall mean Academic Resilience score of Students of Control and Experimental group at the pre-test and post-test level.

**Ho2.** There is no significant difference between the mean Academic Resilience score of Students of Control group and Experimental group at the pre-test and posttest level with reference to their Socio-emotional skill.

**Ho3.** There is no significant difference between the mean Academic Resilience score of Students of Control group and Experimental group at the pre-test and posttest level with reference to their Motivation level.

**Ho4.** There is no significant difference between the mean Academic Resilience score of Students of Control group and Experimental group at the pre-test and posttest level with reference to their Cognitive level.

**Ho5.** There is no significant difference between the mean Academic Resilience score of Students of Control group and Experimental group at the pre-test and posttest level with reference to their Meta-cognitive level.

**Ho6.** There is no significant difference between the mean Academic Resilience score of Students of Control group and Experimental group at the pre-test and post-test level with reference to their Self-belief level.

**Ho7.** There is no significant difference between the overall mean Academic Resilience score of students of Control group and Experimental group at the posttest and delayed post-test level.

**Ho8.** There is no significant difference between the overall mean Academic Resilience score of students of Control group and Experimental group at the posttest and delayed post-test level with reference to their Socio-emotional skill.

**Ho9.** There is no significant difference between the overall mean Academic Resilience score of students of Control group and Experimental group at the posttest and delayed post-test level with reference to their Motivation level.

**Ho10.** There is no significant difference between the overall mean Academic Resilience score of students of Control group and Experimental group at the posttest and delayed post-test level with reference to their Cognitive level.

**Ho11.** There is no significant difference between the overall mean Academic Resilience score of students of Control group and Experimental group at the posttest and delayed post-test level with reference to their Meta-cognitive level.

**Ho12.** There is no significant difference between the overall mean Academic Resilience score of students of Control group and Experimental group at the posttest and delayed post-test level with reference to their Self-belief level.

**Ho13.** There is no significant difference in the mean Academic Resilience score of students of Control group at the post-test and delayed post-test level.

**Ho14.** There is no significant difference in the mean Academic Resilience score of students of Experimental group at the post-test and delayed post-test level.

### **1.16 Delimitations of the Study**

- 1. The study is delimited to IX standard students of Provincialized High School.
- 2. The study is delimited to Co-Ed High School.
- 3. The study is delimited to two of the Schools in flood prone zone of Majuli district, Assam.
- 4. The study is delimited to the effect of the Intervention program (Academic Resilience module) on the Secondary level students of flood affected area.