Adolescence is a period of great joy, excitement and optimism during which the delights of autonomy, intimacy & the future are fresh and possibilities are created for happiness, success and psychological growth throughout the remainder of life. Adolescence is an age bubbling with energy and it is in this transitional phase, that youth’s energies have to be channelized towards positive emotions in order to equip the youth with positive life skills to lead a well functioning adult life. Yet, it is considered to be the most turbulent, challenging, stressful and uncertain of all phases of life, both for youth themselves as well as for their parents, teachers and health professionals. (Mohan, 2002a)

The term ‘adolescence’ has an origin from the Latin word ‘adolescere’ which means ‘to grow’ and ‘to emerge’. Hall (1904) was the first psychologist to advance a psychology of adolescence in its own right and to use scientific methods to study them. He defined this period to begin at puberty at about 12 or 13 years, and end late, between 22 years to 25 years of age. Hall also described adolescence as a period of "Sturm und Drang,"— "Storm and Stress." He described adolescence as a new birth for the higher and more completely human traits are now born" He described the emotional life of the adolescent as an oscillation between contradictory tendencies. Energy, exultation, and supernatural activity are followed by indifference, lethargy, and loathing. Exuberant gaiety, laughter, and euphoria make place for dysphoria, depressive gloom, and melancholy. Egoism, vanity, and conceit are just as characteristic of this period of life as are abasement, humiliation, and bashfulness. He believed that adolescent characteristics contained both the remnants of an uninhibited childish selfishness and an increasing idealistic altruism. The adolescent also moves between the exhibition of several personality traits including exquisite sensitivity and tenderness at some points in time to callousness and cruelty at other times. The display of apathy and inertia also vacillate with enthusiastic curiosity, along with the urge to discover and explore. During
this stage of development, there is also a yearning for idols and authority that does not exclude a revolutionary radicalism directed against any kind of authority.

Freud (1925) shared a common idea with that of Hall's evolutionary theory, that the period of adolescence could be seen as phylogenetic. Freud maintained that the individual goes through the earlier experiences of mankind in his psychosexual development. Freud believed that adolescence was a universal phenomenon and included behavioral, social and emotional changes. He also stated that the physiological changes are related to emotional changes, especially an increase in negative emotions, such as moodiness, anxiety, loathing, tension and other forms of adolescent behavior.

Freud (1948) assigned greater importance to puberty as a critical factor in character formation. She also placed much emphasis on the relationship between the id, the ego and the superego. She believed that the physiological process of sexual maturation, beginning with the functioning of the sexual glands, plays a critical role in influencing the psychological realm. This interaction results in the instinctual reawakening of the libidinal forces, which, in turn, can bring about psychological disequilibrium.

Adolescence is described by Erikson as the period during which the individual must establish a sense of personal identity and avoid the dangers of role diffusion and identity confusion (Erikson, 1950). The implication was that the individual has to make an assessment of his or her assets and liabilities and how they want to use them. If the adolescent fails in his search for an identity, he will experience self-doubt, role diffusion, and role confusion; and the adolescent may indulge in self-destructive one-sided preoccupation or activity. Such an adolescent may continue to be morbidly preoccupied with what others think of them, or may withdraw and no longer care about themselves and others. This leads to ego diffusion, personality confusion and can be found in the delinquent and in psychotic personality disorganization. (Muuss, 1975)
Adolescence is considered to be a developmental stage characterized by changes in virtually every aspect of an individual's life, and thus has a calling for new psychological adaptations (Byrne, Davenport and Mazanov, 2007). Though the adolescence has been the most studied phase of human development yet has been the least understood and till date there has been no universally accepted definition for the concept of 'adolescence'. However, W.H.O. (1997) defines adolescence both in terms of age (spanning the ages between 10 and 19 years) and in terms of a phase of life marked by special attributes.

The adolescence occurs between the ages of 11 and 19 years, with early adolescence between 11 and 14 years, middle adolescence between 15 and 17 years, and late adolescence after 17 years of age. However, these ages are not definitive as in modern society there are large differences in “individual timetables” of puberty and cultural signs of adulthood have changed over time (Kroger, 2007). Some of such key attributes of this stage are the rapid physical growth and development along with the physio-psycho-social maturity including the sexual maturity.

Adolescence is viewed in terms of shifts in “dependency to autonomy, social responses to physical maturity, the management of sexuality, acquisition of skills, and changes in peer groupings” One of the primary concerns for the adolescents is the development of a sense of self-understanding through a basic sense of security and self-esteem. In this process of understanding self, the adolescent learns through the family, the friends and the prevalent beliefs. The adolescent begins to challenge some of the ideals taught in childhood. The development of sense of identity distinct from parents, the attainment of self worth, the exploration of new relationships with peers and opposite sex etc are the major psychological developmental tasks set for this age group. It is a stage of exploration with self and the outside world. Adolescence is a time when a teen enhances his/her skills of self-responsibility, conflict resolution, and problem solving. (Mohan, 2002c)
At same time adolescence is also considered as an inevitably turbulent process which is often accompanied by negative mood, problem relationship with parents and high risk behavior like substance abuse. Of course there are enough biological, emotional and social interactions partly explaining the adolescent behavior. From a biological perspective, the mood states of the adolescent are thought to be the direct effects of changes in the levels of behavior activating hormones. Although there still exists a debate about their actual impact. (Walsh, 2000; Steinberg, 2002). Another biological explanation can be the late maturation of the prefrontal cortex (PFC), the brain part that is responsible for the regulation of emotions, planning, reasoning and self-control. Furthermore, drastic changes in the neurotransmitters dopamine and serotonin which are responsible for emotional stimuli in the limbic system of the brain occur during adolescence.

Looking at the adolescent behavior from cognitive perspective it is probably the ‘ego-centrism’ of adolescent which intensifies the emotional reactions to stimuli from environment. According to Elkind (1967) egocentrism results from the fact that adolescents develop the ability to consider the ideas and conditions of others, but at the same time still lack the capacity to distinguish between what they think and what others think. Finally, as a social perspective it is the ‘maturity gap’, a gap between the biological age and the social position which might be responsible for adolescent behavioral deregulation. (Moffit, 1993)

There is enough theoretical as well as empirical evidence to accept the idea of adolescence being a period of ‘stress and storm’ as introduced by Hall (1904) and supported by Freud (1925) and Erickson (1950). The level of stress experienced by adolescents is well reported in literature. The adolescents derive the stress from both the normative as well as non normative events. While the normative experiences of development leading to stress include the challenges like puberty, school transitions and increased academic demands, the non normative experiences are related to unique family events like moving to new place or parental separation and other daily hassles.
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like group pressure. The cognitive differences, immature coping mechanisms and lack of experience in dealing with stress intensify the stressful events experienced by the adolescents.

Though the above mentioned theoretical perspectives do provide enough logical explanation for adolescent being a period of rapid and tumultuous transition, yet, with the advances in positive psychology, there has been a paradigm shift in understanding adolescent development with a novel approach. This novel approach has led to the beginning of a new era which involves understanding the science and anatomy of happiness, positive experiences, hope, optimism and altruism. (Mohan, 2012a). This new approach regards the adolescent as a quite well adapted individual with little psychological perils. Today, the professionals and for that matter even the lay public have changed their view of adolescence as a time of inherent stress to the one of limitless opportunities for growth and development. (Compas, Hinden and Gerhardt, 1995). Positive psychology specifically emphasizes building a good life by identifying individual strengths and fostering them. (Mohan, 2012a) There has also been a change in terms of searching for universal description being replaced by recognition of wide variability that characterizes psychological development in adolescence. These factors have contributed to interest in individual differences in paths and trajectories of personal development.

It is seen that many adolescents who are exposed to stressors develop various behavioral and emotional problems, but some of them tend to defy this expectation by becoming well adapted individuals. Such groups of adolescents who develop this psychosocial functioning in face of adversity are referred as ‘Resilient’. While it is important to understand what makes people break, it is equally important to understand what contribute to positive adaptational outcomes. (Tschann, Kaiser, Chesney, Alkon and Boyce, 1996) The research on resilience and processes leading to resilience has challenged the conventional wisdom that adversity thwarts the development. In fact, it is
seen that some individuals who are challenged by adversity emerge stronger with
distinct and unique capacities which they otherwise may not have developed.

The literature suggests that resilience is grounded in a diverse array of genetic,
(Morgan et al., 2002; Caspi et al., 2003) biological (Charney, 2004; Campbell- Sills
and Stein, 2007), psychological factors. (Tugade and Fredrickson, 2004; Campbell-
Sills, Cohan and Stein, 2006), and environmental (King, King, Fairbank, Keane and
Adams, 1998; Haskett, Nears, Ward, and McPherson, 2006) Resilience can also be
understood in relation to the classic diathesis–stress model, in which “stress activates a
diathesis, transforming the potential of predisposition into the presence of
psychopathology” (Monroe and Simons, 1991). From a resilience perspective, the
diathesis–stress model fails to capture the presence or absence of protective factors.
Thus, from a resilience perspective, an individual can use internal and external
protective factors to reduce the impact of stresses (Egeland, Carlson and Sroufe,
1993).

Since the individual’s resilience is seen as an interaction between the nature and
nurture, encouraged by supportive relationship. Therefore, the resilience research also
takes into account various interactive factors in the environment. The initial studies of
resilience were based on the risk model while the later ones focus upon the strength
model. Werner and Smith (1992) worked upon the strength model and coined the term
‘stress resistant persons’ which referred to people who could withstand and overcome
adversity. The main focus of their work was the understanding of the protective factors
rather than the risk factors. And hence they are credited to have brought about a major
shift in understanding of resilience as a psychological construct. This was a shift to view
resilience as a source of strength rather than a risk being emphasized detrimental to
functioning. Nevertheless such theoretical as well as empirical propositions were not
enough to simplify the complexities involved in understanding the process of
development of resilience. A lens on resilience shifts the focus of attention – from efforts
to appraise risk or vulnerability, towards concerted efforts to enhance strength or
capability. It also shifts the focus of analysis – from asking relatively limited questions regarding health outcomes, such as what are the linkages between risk exposures and functional deficits, to asking more complex questions regarding wellbeing, such as when, how, why and for whom do resources truly matter. **(Brick and Leckman, 2013)**

The central construct of current study is Resilience which makes it imperative to have an in depth understanding of the concept, its evolution and explanatory models.

**Definitions of Resilience**

There are various definitions of resilience, many of them are theoretically grounded and others linked with the empirical studies.

According to **Rutter (1990)**, resilience refers to the positive adaptation in the face of stress or trauma. Resilience is inherent in the way human beings deal with life changes and other complex life situations

**Linquanti (1990)** described resilience as “A quality in children who, though exposed to significant stress and adversity in their lives, do not succumb to the school failure, substance abuse, mental health, and juvenile delinquency problems they are at greater risk of experiencing.”

**Masten, Best and Garmezy (1990)** defined resilience as “the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances.

**Benard (1991)** defined resilience as a set of protective mechanism that caused successful adaptation despite the presence of risk factors during the course of development.

**Walsh (1998)** defined resilience as capacity to rebound from adversity strengthened and more resourceful, the qualities of resilience enable people to heal
from traumatic wounds, take charge of their lives, and to live fully and love well. It is forged through openness to experiences and interdependence with others.

Luthar and Cicchetti (2000) defined resilience as a relatively good outcome even though an individual may experience situations that have been shown to carry significant risk for developing psychopathology.

Ungar (2004) defined resilience as “the outcome from negotiations between individuals and their environments for the resources to define themselves as healthy amidst conditions collectively viewed as adverse”

All these definitions convey various aspects of resilience. While some of them focus upon the personal factors promoting resilience, others on the processes and mechanisms involved in resilience and there are others who see resilience in terms of the outcome. The diversity and complexity of definitions, concepts and approaches used by researchers in the field of resilience renders the task of identifying a precise definition of resilience very difficult. This basic conceptualization of resilience as adaptation despite adversity is broadly evident; however resilience is contextual in many ways. Resilience is best understood as multidimensional and variable across time and circumstance. One reason for a lack of consensus on one definition of resilience may perhaps be the many different psychological disciplines that resilience straddles. Despite the breadth and depth of definitions, the basic conceptualization of resilience as adaptation and bounce back despite adversity is considered a good starting point for the purpose of a common frame of reference.

**EVOLUTION OF CONCEPT OF RESILIENCE**

Resilience research has its origin in the disciplines of psychiatry and developmental psychology. It focuses on within-person factors, rather than considering the eco-systemic context of adaptation. The study of resilience emerged from the study of risk. The early writings on resilience were theoretical in nature and included musings
as to the nature of healthy personality and development as compared to pathology. (Maginess, 2007).

In 70's and 80's the resilience was explored indirectly within the context of chronic stress like extreme poverty. That was a phase of animal studies identifying individual differences under varying conditions of stress. This was followed by a phase in resilience research wherein the focus moved on to the development of psychopathology in the light of adverse conditions. Those studies indentified the contributory factors to development of psychopathology and while doing so the qualities of children who were resilient to stress became evident. (Luthar and Cicchetti, 2000)

In examining the lives of "at-risk" children, pioneering investigators recognized that youngsters thrive in the midst of adversity and become healthy adults (Murphy and Moriarty, 1976; Anthony, Garmezy, 1985, 1987; Rutter, 1990; Werner and Smith, 1992). Over the past two decades, a recurring theme in resilience research is that most individuals who face adversity have more positive outcomes than one might predict based on the risk factors in their lives (Luthar and Zigler, 1991). In fact, Wolin and Wolin (1995) reported that about two-thirds of "at-risk" children survive risk experiences without major developmental disruptions. This led to the conception of the idea of invulnerability and invincibility.

These resilient children were variously termed "hardy," "invulnerable," "super kids," or "stress resistant" (Anthony, 1987). This emphasis on individual invulnerability was problematic in several ways. First, the idea of individual invulnerability is "antithetical to the human condition" No one is either resilient or vulnerable all of the time. Second, focusing exclusively on within-person factors obscures the eco-systemic context of resilience (Bronfenbrenner, 1986). The implication is that "resilient persons grew themselves up, they either had the 'right stuff all along, or acquired it by pulling themselves up by their bootstraps" (Walsh, 1998). Dannefer (1984) referred to this as the "ontogenetic fallacy in developmental psychology i.e. the conception of human development as a process of individual maturational unfolding" rather than an outcome of the reciprocal interaction between the individual and the environment.
A third problem with the idea of intrinsic "hardiness" is that it spawns a contemptuous view of individuals, families, and communities as "deficient, weak, and blameworthy when they can't surmount their problems on their own" (Walsh, 1998). Ryan (1971) labeled this tendency to pathologize suffering as "blaming the victim," and pointed out how it has been used to portray the social problems of ethnic minorities as their own fault, rather than recognizing society's responsibility in the formation and maintenance of social problems. Thus the notion of invulnerability was challenged and it turned obsolete.

Over time, research in the area of resilience has essentially unfolded in five different directions, including resilience as an aspect of child development and response to adverse conditions, resilience as a theoretical construct of personality, the biological basis to resilience, resilience as a feature of positive coping in response to life stresses, and resilience in terms of enhanced coping following trauma. Each field of research has retained its own unique perspective on the nature of resilience and this has led to each of the five fields developing their own take on the construct of resilience with specific approaches to research and infrequent cross referencing. The result of this divergence is that each field seems disconnected from the others despite a significant convergence in recent years as to what is understood to be integral to the construct. (Maginess, 2007)

THEORETICAL MODELS OF RESILIENCE

Earlier models explaining resilience within the child development field aimed to identify specific factors associated with resilient functioning at times of stress or adversity. With time, and the insight that external factors mediated many coping responses, the models began to explore interactive processes between personal attributes and stress, and associated variables. There are variety of resilience models that have support in literature as well. However majority of such models have incorporated the concept of risk factors and protective factors and their processing resulting in a positive outcome which is considered to be the generic model of
resilience. Masten, however, stands out in the field in terms of lucidity and she has effectively summarized the different theoretical models underlying the research on resilience into two groups. The two groups identified by Masten are: Variable-focused models and Person-focused models (Masten and Reed, 2002).

**Variable focused approaches**

These approaches attempt to find out what accounts for positive outcomes through linkages between the individual, environment and different experiences. This method is well suited to identifying protective factors by drawing on the power of the whole sample from a risk group, and the use of multivariate statistics. Models based within this approach include additive models, interactive models and indirect models (Masten and Reed, 2002). The additive model is the simplest model in that it assesses how the various risks and assets contribute independently to the outcome variable. Assets can theoretically compensate for risks, and interventions attempt to boost assets whilst diminishing risks for the children at risk (Masten and Reed, 2002). Interactive models on the other hand identify moderating effects in which one variable is identified to alter the impact of the risk variable, and these are generally referred to as vulnerability or protective factors. Indirect models of resilience are based on the power of the mediating effect of a variable, such as the quality of parenting, and it assumes that the mediator can offer protection and have a positive impact on the child’s life (Masten and Reed, 2002).

**Person Focused Approaches**

These approaches try to identify the resilient individual and then understand what makes that person more resilient than the next.

**PATHWAY MODELS OF RESILIENCE**

A third group of models has been recently promoted and gaining increasing standing through the recognition that complex developmental processes unfold
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throughout the life span (Masten, 2001; Masten and Reed, 2002). Pathway models within the field of resilience examine patterns of behavior over time in more dynamic and explicit ways (Masten and Reed, 2002). Three resilient pathways have been identified by Masten and Reed (2002). The first reflects a child in a high risk group who functions well in life, the second is a child who is doing well but has been diverted by adversity then recovers, and the third reflects a “late bloomer” such as a child in a high risk group who was not doing well recovering with input and positive opportunities.

Fergus and Zimmerman (2005) described the six models of resilience that tend to explain how promotive factors operate to alter the trajectory from risk exposure to negative outcome.

The models are as follows

THE COMPENSATORY MODEL

When a promotive factor counteracts or operates in an opposite direction of a risk factor, it is referred as compensatory model. A compensatory model therefore involves a direct effect of a promotive factor on an outcome. This effect is independent of the effect of a risk factor. (Model 1, Figure A) depicts how compensatory factors operate to influence outcomes. The compensatory model is a simple additive one, wherein stressors tend to lower levels of competence, whereas various personal attributes help to improve adjustment levels. The operative mechanism, therefore, is a simple counteractive one. (Zimmerman and Arunkumar, 1994) Youth living in poverty, for example, are more likely to commit violent behavior than are youth not living in poverty, but adult monitoring of behavior may help compensate for the negative effects of poverty. This model can be examined using a number of statistical and methodological approaches but is typically tested by examining unique, direct effects in a multiple regression analysis or with structural equation modeling. (Luthar and Ziggler, 1991)
THE PROTECTIVE MODEL

In this model, assets or resources moderate or reduce the effects of a risk on a negative outcome. (Zimmerman and Kumar, 1994) There is an interactive relationship between stress and personal attributes that predict the adjustment. A protective function is implied if, for example, individuals with high levels of a trait are relatively unaffected by increasing stress, whereas those low on the trait show declines in competence with increasing stress levels. Conversely, in a vulnerability process, individuals with high levels of a certain attribute are more susceptible to increasing stress than are those low on the attribute. (Luthar and Ziggler, 1991) For example the youth afflicted with poverty but gifted with good parental support will have less chance to indulge in violent behavior. In this example, parental support operates as a protective factor because it moderates the effects of poverty on violent behavior. (Model 2 in Figure A) shows how a protective factor may influence the relationship between a risk and an outcome.

THE PROTECTIVE STABILIZING MODEL

The protective factors interact in different ways with the risk factors predicting different outcomes and adaptations. In the protective stabilizing model the, depicted in Model 3 in Figure A, the presence of a protective factor neutralizes the impact of risk factor. Thus the higher level of risk would be associated with higher level of negative outcome in the absence of protective factors whereas; there would be no association between the two in the presence of protective factors. (Luthar, Cicchetti and Becker, 2000). Among youth whose parents do not provide adequate support or monitoring (risk factors), for example, those without an adult mentor (a protective resource) may exhibit delinquent behaviors (an outcome), whereas those with a non parental adult mentor may not.
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THE PROTECTIVE REACTIVE MODEL

In this model the protective factors minimize or diminish the impact of risk factor on the negative outcome. Thus the correlation between the risk factor and the negative outcome is stronger in the absence of the protective factor as depicted in Model 4, Figure A. For example the youth taking drugs (risk factor) is very likely to indulge in high risk sexual behavior (negative outcome) but this likelihood can be diminished if that youth is given comprehensive sexuality education.

THE PROTECTIVE –PROTECTIVE MODEL

In this model, a protective factor potentiates or enhances the effect of another promotive factor in producing the outcome. For example, the parental support may enhance the positive effect of academic competence for producing more positive academic outcomes than for either factor alone. (Brook, Jordon, Whiteman, Cohan, 1986; Brook, Whiteman, Jordon, Cohan, 1989). Since the resilience requires the presence of risk, so the protective – protective model may not be a resilience model as such, unless the protective factors are studied in a population defined to be a risk for a particular negative outcome (Zimmerman, Ramirez, Washienko, Walter and Dyer, 1995)

THE CHALLENGING MODEL

This model hypothesizes the curvilinear relationship between the risk and the outcome as depicted in Model 5, Figure A. It implies that the exposure to the low levels as well as the high levels is associated with the negative outcome whereas the exposure to the moderate levels is related to the less negative or less positive outcomes. The model can be explained as that the adolescents exposed to moderate level of risk are confronted with enough risk that they learn coping but they aren’t exposed to that much of risk that coping becomes impossible. The integral point in challenge model is that low level exposure turns beneficial as it provides the opportunity
to learn the practical skills to deal and enhance competence to mobilize the assets and resources. The word challenging refers to the quality of the risk i.e. it must be challenging enough to elicit a response. In this model the risk factor and the protective factor are the same variable. It is the level of exposure that decides which factors acts as what. Too little family conflict, for example, may not prepare youth with an opportunity to learn how to cope with or solve interpersonal conflicts outside of the home. Yet, too much conflict may be debilitating and lead youth to feel hopeless and distressed. A moderate amount of conflict, however, may provide youth with enough exposure to learn from the development and resolution of the conflict. They essentially learn through modeling or vicarious experience. (Fergus and Zimmerman, 2005). The risk factor and the protective factors are not dichotomous by nature. This means a risk factor can act as a protective factor when it is able to elicit a coping response by developing new competencies. Moreover the same circumstances may constitute a risk in one situation, and protection in another.

THE INOCULATION MODEL

The challenge model can be taken as the inoculation model if the developmental or longitudinal focus is taken in account. As depicted in Model 6, Figure A, the continued or repeated exposure to low levels of a risk factor helps inoculate adolescents so they are prepared to overcome more significant risks in the future. Yates et al have explained resilience as an ongoing developmental process, in which the children learn to mobilize assets and resources as they are exposed to adversity. So with increasing age and maturity the capacity to thrive risk also increases due to repeated exposure to adversity. In this way, compensatory, protective, or challenge models can operate within a framework of inoculation, as repeated exposures to compensatory, protective, and/or challenge processes prepare adolescents for dealing with adversities in the future.
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Risk
- Protective factor absent
- Protective factor present

Model 5: Challenging

Model 6: Inoculation

MULTIPLE RESILIENCE CONSTRUCTS FRAMEWORK

Kumpfer (1999) developed a resilience framework based upon both process and outcome constructs. He specified six major constructs in this framework. Out of these six, four are domains of influence and two are transactional points between two domains. The four influence domains are: the acute stressor or challenge, the environmental context, the individual characteristics, and the outcome.

1. Stressors or Challenges: These incoming stimuli activate the resilience process and create a disequilibrium or disruption in homeostasis in the individual or organizational unit (e.g., family, group, community) being studied. The degree of stress perceived by the individual depends on perception, cognitive appraisal and interpretation of the stressor as threatening or aversive.

2. The External Environmental Context: It includes the balance and interaction of salient risk and protective factors and processes in the individual child's external environment in critical domains of influence (i.e., family, community, culture, school, peer group). These change with age and are specific to culture, geographic location, and historical period.

3. Person-Environment Interactional Processes: These include transactional processes between the child and his or her environment as the or caring others either passively or actively attempt to perceive, interpret and surmount threats, challenges or difficult environments to construct more protective environments.

4. Internal Self Characteristics: It includes internal individual spiritual, cognitive, social/behavioral, physical and emotional/affective competencies or strengths needed to be successful in different developmental tasks, different cultures, and different personal environments.

5. Resilience Processes: These include unique short-term or long-term resilience or stress/coping processes learned by the individual through gradual exposure to increasing challenges and stressors that help the individual to bounce-back with resilient reintegration (Richardson, Neiger, Jensen, and Kumpfer, 1990).

6. Positive Outcomes or successful life adaptation: The positive outcome in specific developmental tasks which are supportive of later positive adaptation in specific new developmental tasks culminating in a higher likelihood of reaching a
global designation in adulthood as a “resilient child or adult”. While this is an outcome, in a dynamic model, a positive outcome suggesting resilience is also predictive of later resilient reintegration after disruption or stress.

Organizing resilience research by these six areas has helped to clarify the differences between environmental stimuli, transactional environment buffering processes, internal mediating self factors, resilience processes used to bounce-back after a challenge, and the final developmental outcomes of resilient children.

RESILIENCE PROCESS MODEL

When a person does fail, but develops as a stronger person in the process, some type of resiliency process is occurring. Richardson et al. (1990) proposed the Resilience Process Model (Figure B) to explain this process. According to resilience process model, stressors or life challenges have a potential to create imbalances in homeostasis or disruption (Flach, 1988) provided such stressors or life challenges are not balanced by external envirosocial protective processes or biopsychospiritual resiliency factors within the individual. Such envirosocial supportive processes have a potential to reintegrate the homeostasis and balance. This model also proposes several different levels of reintegration can occur based on envirosocial reintegrating processes:

1. Resilient reintegration, or a higher state of resiliency and strength
2. Homeostatic reintegration or the same state before the stressor.
3. Maladaptive reintegration or a lower state of reintegration.
4. Dysfunctional reintegration or a major reduction in positive reintegration.

This model proposes that the positiveness of the level of homeostasis does change over time. Some individuals appear to grow from the experience and look on the positive nature of the disruption, whereas others decompensate into depression and negativism. Looking at the model from preventive approach, it proposes four different intervention points in the resiliency process:

1. Envirosocial protective processes
2. Envirosocial enhancing processes
3. Envirosocial supportive processes
4. Envirosocial reintegrating processes support resilient integration
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FACTORS AFFECTING ADOLESCENT RESILIENCE

Resilience has been referred as positive adaptation despite negative ecological influences. The research on resilience has focus on factors that enable individuals to adapt successfully to the environment, despite challenging or threatening circumstances. Thus, the two essential elements required for the development of resilience include exposure to risk factors and the presence of protective factors (Rutter, 1993). While the risk factors tend to increase the likelihood of psychopathology in an individual, the protective factors enable the individual to counter the effects of risk factors. Seifer, Sameroff, Baldwin, and Baldwin (1992) suggested that since risk factors are more likely to be cumulative, and related to certain adjustment outcomes. Therefore, the more the protective factors present in a child’s life, the more likely they are to display resilience. In addition, these internal and external assets appear to transcend ethnic, social class, geographical and historical boundaries. Thus the protective factors are the influences that modify, ameliorate or alter a person’s response to environmental hazard that predisposes to a maladaptive outcome and hence promotes individual resilience.

Risk Factors: It includes all those “factors that either singly or in combination have been shown to render children’s failure to thrive more likely” (Howard, Dryden and Johnson, 1999). These are the events or factors that are large enough to have the potential to derail normal development. The risk processes of adolescent resilience can operate at individual, family and community level.

The individual risk factors are the following:

- Difficult Temperament
  Temperament describes “an infant’s style, how he or she responds. It is assessed in terms of reactivity, attention regulation and emotional regulation. A difficult temperament is considered as a risk factor or vulnerability. (Sanson and Smart, 2001; Olsson, Bond, Burns, Vella-Brodrick and Sawyer, 2003). The process by which temperamentally difficult children are placed at risk for
developing adjustment problems appears to involve negative interactions with their parents as children with difficult temperaments can be treated more harshly by caregivers, tend to seek out more risky environments, are more reactive to stressors, and utilize less productive styles of coping than children with easy temperaments (Hetherington, Bridges and Insabella, 1998). In stressful circumstances, children with difficult temperaments are more likely than easy children to be targets of negative responses from their parents (Rutter and Quinton, 1984).

Maziade et al. (1990) found that children with extremely difficult temperaments at age of seven years were more likely to have a psychiatric disorder diagnosed in adolescence, compared with children with easy temperament.

- **Low intelligence**
  
  Another frequently cited risk factor in resilience research is low intelligence. In a longitudinal study over 60 years, high IQ before the age of 20 predicted three more years of schooling; whereas participants with low IQ were three times more likely to reject school, ten times more likely to repeat a year, and six times more likely to be a unskilled laborer or in a low paying occupation (Vaillant and Davis, 2000). While low intelligence is linked to poorer outcomes, there appears to be other processes that may mediate this effect, including age, contextual processes, and the type of risk. Nevertheless intelligence may have a greater impact on outcomes in the early stages of development and may diminish in importance over the long term as people develop relationships and skills in vocational areas. These other processes may be of higher importance to well-being as people move through life.

The family risk factors are following:

- **Parental psychopathology**
  
  Children of parents with psychopathology consistently have more negative outcomes than other children (Rutter, 1993; Tebes, Kaufman, Adnopoz and
Racusin, 2001; Kakkar, 2014). In a study of 346 adult children of parents with psychopathology, one third did not finish high school, one third experienced psychological problems and while over a third were parents, only one ninth were in committed relationships. Mowbray, Bybee, Oyserman, MacFarlane and Bowersox (2006) conducted a study with children of depressed parents experiencing depression, and children of co-morbid parents experiencing depression and antisocial tendencies similar to their parents. This association of parent psychopathology and childhood risk is based on the assumption that parental psychopathology disrupts the parent child attachment. In view of Siefer (2003) when the parents experience psychopathology, they are frequently emotionally unresponsive to their children, and this can lead to an ambivalent attachment.

• Maltreatment

Child maltreatment, or abuse, are acts or an act that puts his/her development, emotional health, or physical health in danger. Maltreatment can include physical abuse (e.g., hitting, kicking, burning), emotional or psychological abuse (e.g., rejection, isolation, ignoring), sexual abuse, or neglect (e.g., physical or medical needs) (Price-Robertson and Bromfield, 2004). Maltreatment is a serious risk for adolescents as it can affect their academic, emotional, psychological, and behavioral outcomes (Flores, Cicchetti, and Rogosch, 2005).

Bolger and Paterson (2003) conducted a longitudinal study on negative effects of maltreatment on adolescents. Maltreated adolescents had more internalizing and externalizing problems, significantly lower self-esteem, were more rejected by peers, had more problems in peer relationships, and were less likely to have a reciprocal friendship than non-maltreated adolescents.

• Parental Separation

Parental divorce is frequently cited as a risk to healthy child development, as children from divorced families tend to rate lower in well-being, achievement and adjustment than children in intact families (Amato, 2001; Kelly and Emery, 2003; Greeff and Merwe, 2004). The negative outcomes for adolescents after a
family transition may be due to a prior vulnerability of the child, diminished parenting, the loss of important relationships, parental distress (strain, depression), socioeconomic disadvantage, or negative family processes (e.g., conflict, display of negative affect) (Hetherington et al., 1998; Amato, 2001; Kelly and Emery, 2003). The negative effects of divorce were evident in a study by Watt, Moorehead-Slaughter, Japzon, and Keller (1992) of fifty adolescents whose parents had divorced. These adolescents experienced more conflict, were lonelier, sadder, and less motivated than adolescents who had not experienced divorce. They also felt less competent about their schoolwork and were performing lower academically than other adolescents. Furthermore, they perceived they had fewer friends even though they had the same number as others, were less popular, less well adjusted, and less cheerful. Thus, divorce can affect emotional, social, and academic aspects of the child’s life.

The community is significant as it provides a context which either promotes protective processes or increases risk.

The community level risk factors include:

- **Low Socioeconomic Status**

  A well-established risk factor that can be present in an entire community is low socioeconomic status (SES). Children and adolescents who come from low SES communities are frequently identified as being more at-risk (Kim-Cohen, Moffit, Caspi, and Taylor, 2004; Orthner, Jones-Sanpei and Williamson, 2004), and risks associated with low SES include reduced cognitive development, higher antisocial behaviour, and lower self-esteem and sense of mastery (Myers and Taylor, 1998; Conger and Conger, 2002; Kim-Cohen et al., 2004). Low SES can affect many areas of a young person’s life, including their well-being and the interactions between family members.

  Looking at the variable risk factors identified in resilience research, it can be postulated that risk factors may stem from multiple stressful life events, a single...
traumatic event, or cumulative stress from a variety of personal and environmental factors. The vulnerability is considered as a complex interaction of biological, external, social, individual adversities along with the time, gender, culture and other factors. (Manjula, Singhal and Herbert, 2014)

**Protective factors of adolescent resilience**

Protective factors ameliorate or decrease the negative influences of being at risk. These factors may also operate independent of risk. When stresses or risk factors are greater than protective factors, individuals who have been resilient in the past may be overwhelmed (Garmezy, 1991). It is theorized that protective factors of resilience also function at three levels: individual, familial, and societal (Garmezy, 1985; Rutter, 1987; Luthar and Zigler, 1991). These elements may work together to protect an individual from the impact of negative environmental circumstances (Rutter, 1987). To a large extent, the lack of these elements makes a person vulnerable to negative outcomes. For example, a child who feels alienated by teachers and peers may be susceptible to the acting out in class, which contributes to self-destructive behavior and dropping out.

The individual level protective factors include the Creativity, Helpfulness , Strong sense of self efficacy , Trust (Benard, 1991), Social competence (Luthar, 1991), Feeling of control over one’s life (Luthar and Zigler, 1992), Increased intrinsic motivation, Cognitive skills (Werner, 1993), High Academic performance (Conrad and Hammen, 1993), Problem-solving abilities (Garmezy, 1993), Positive self-esteem, Planning for future events (Werner, 1993), Optimism (Wyman, Cowen, Work and Parker, 1993) and easy temperament (Rende and Plomin, 1991)

The protective factor at family level includes the Parental expectations of a positive future for the child (Wyman et al., 1993) a strong extended family network positive parent-child attachment and interactions rules and responsibilities within the household (Baldwin, et al., 1993)
The community level protective factors include the responsibilities outside the home \cite{Rutter1990}, positive school experiences \cite{Egeland1993}, participation in extracurricular activities \cite{Werner1993}, opening of opportunities \cite{Egeland1993}, a positive event before or after a stressor \cite{Rutter1990} an Positive relationships with other adults \cite{ConradHammen1993}.

It is important to note that individual level processes are affected by, interact with, and influence the environment in which the young person lives. Therefore, some of the positive outcomes attributed to individual level processes may be due to other family and community level processes. For example, competence is recognized as a protective process at the individual level. However, competence may be the result of a positive home environment or community involvement rather than the key protective process for the resilient young person. Therefore, the effects of individual level protective processes need to be understood within the context of other processes that may be occurring for the young person. Adding more to the attributes of resilient adolescents, \cite{Johnson1986} indicated that a resilient person is one who is “responsible, positive, self-reliant, committed, and socially skillful”

According to \cite{Bernard1993}, resilient adolescents usually have four attributes in common which includes:

\begin{itemize}
\item[a)] \textbf{Social competence} (the ability to elicit positive responses from others, thus establishing positive relationships with both adults and peers)
\item[b)] \textbf{Problem-solving skills} (planning that facilitates seeing oneself in control and resourcefulness in seeking help from others)
\item[c)] \textbf{Autonomy} (a sense of one’s own identity and an ability to act independently and exert some control over one’s environment)
\item[d)] \textbf{A sense of purpose and future} (goals, educational aspirations, persistence, hopefulness and a sense of a bright future).
\end{itemize}
**McMillan and Reed (1994)** have offered a profile of the resilient student stating that resilient at-risk adolescents have a set of personality traits, temperament, and beliefs that promote success. They have self-discipline, healthy internal attributes, took personal responsibility for their successes and failures and they have a strong sense of self efficacy. Resilient adolescents also feel that they are successful because they opted to be successful and because they worked hard to accomplish their aims. In addition, these adolescents feel good about their ability and their future prospects. **Bernard (1993)** found that resilient children “work well, love well, and expect well. They develop coherence, which is a basic belief that life made sense and that they can control their lives. This sense of control allows them to maintain order and structure in their life. These adolescents have strong systems of support and encouragement. They are achievement oriented and bear the capacity to construct productive meanings for events in their world. They also carry the ability to selectively disengage from home and engage with outside world and then re engage with home. They are actively involved in positive activities that promote a sense of success, support, and recognition. Activities, such as hobbies, give them reasons to feel proud. They also provide a solace when other aspects of their lives are troubling. Thus, their involvement in academic and extracurricular activities helps them to maintain positive engagement in school. Resilient adolescents have a close bond with a caregiver or significant adult with whom they develop a trusting relationship. These adults hold high expectations for them. They also provide firmness, support, and encouragement. In return, these adolescents highly esteem these adults because they genuinely care about their well being.

**Kumpher (1999)** developed a resilience framework based upon the review of various studies on traits of resilient adolescents. These internal personality or cognitive capabilities have been organized according to the resilience framework for self factors into five major cluster variables (**depicted in figure C**).
Introduction

Environmental Context

Process-Environmental Transactional Process

Resiliency

Resilient Reintegration

Maladaptive Reintegration

Figure: C

Adaptation

The internal resilience factors were categorized as:

1. Spiritual or Motivational Characteristics.
2. Cognitive Competencies.
5. Physical Well-Being and Physical Competencies.

These traits are discussed briefly below:

I. Spiritual and Motivational Characteristics

1. Ability to dream

The spiritual or motivational cluster of resiliency characteristics includes primarily cognitive capabilities or belief systems which serve to motivate the individual and create a direction for their efforts. Success depends on direction or focus. One of the prime capabilities under this is the ability to dream and create goals. It is posited that resilient adolescents create plausible fantasies for themselves and to develop a mission or purpose for their lives (Richardson et al., 1990; Bernard, 1991; Quinton, Pickeles, Maughan and Rutter, 1993). The resilient youth often develop a sense of uniqueness or specialness and spiritual belief that they are here for some cosmic purpose.

2. Purpose in life

The second cognitive capability of resilient adolescents is related to the existential meaning. The resilient adolescents are able to endure the hardships, because they believe they must survive to complete their mission. Creating a perceived purpose for their pain and suffering (Beardslee, 1989) and healing through helping or caring for others (Segal, 1986; Werner, 1986) helps individuals to regain environmental mastery and perceived control (Taylor, 1983) which has been found critical to maintaining hope in adverse life threatening situations. Neiger (1991) confirmed in a structural equations modeling study of college students in South Carolina that resiliency was the final pathway to positive life...
adaptation. The most predictive variable in his multi-factorial resiliency cluster was life purpose, next was problem solving, followed by self-efficacy.

**Nygren, Alex, Jonsen, Gustafson, Norberg and Lundman (2005)** explored the strengths that contribute to a person’s ability to meet and handle adversities, and keep or regain health. The findings showed significant correlations between scores on the Resilience Scale, the Sense of Coherence Scale, the Purpose in Life Test, and the Self-Transcendence Scale.

3. **Spirituality**

The spirituality is considered to be another aspect in lives of resilient people. **Masten (1994)** concluded that an important individual resilience factor is religious faith or affiliation. Qualitative, retrospective studies of successful adult from very high risk environments frequently mention the importance of a strong religious belief system in positive life adaptation. **Dunn (1994)** used structural equation to confirm that “spirituality” (including life purpose) was a major predictor of resilience and later positive life adaptation. According to **Gordon and Song (1994)**, “A belief system seems to provide anchorage and stability in the face of faith-challenging experiences”.

**Smith, Webber and DeFrain (2013)** explored the relationship between the spiritual well being and resilience in young people. The abductive analysis process revealed that spiritual well being and resilience are highly correlated and ecologically bound. As per the study subjects, the spiritual well being and more importantly the relationship with God, drove the behaviors and connections that act as protective factors leading to enhanced resilience. The researchers also developed a spirituality and resilience framework.

4. **Belief in Uniqueness or in Oneself**

**Cameron-Bandler (1986)** found that the critical variable for resilient children of alcoholics was their “sense of a compelling future”, which helps these high-risk youth to “subordinate immediate gratification for a more fulfilling later
gratification, or to save ourselves from some intensely unpleasant future experience.”

5. Independence

Success against the odds is also found to be related to an autonomous, self-directedness in resilient subjects.

6. Internal Locus of Control, Hopefulness, and Optimism

Resilient individuals have more internal locus of control (Campbell, Converse and Rodgers, 1976; Parker, Cowen, Work and Wyman, 1990; Luthar and Ziglar, 1991; Werner and Smith, 1992) and are more hopeful about their ability to create positive outcomes for themselves and others. Possibly, one of the most powerful predictors of positive life adaptation against environmental odds is a sense of powerfulness and an ability to modify one’s negative life circumstances through direct actions or soliciting help from others. Past successes lead to increased hopefulness and optimism, versus hopefulness. Therefore, increasing opportunities for youth to demonstrate self-direction and to be successful is important in prevention programming.

7. Determination and perseverance

In order to be successful in their chosen mission or direction, resilient youth are described as being perseverant (Bandura, 1989) and determined (Werner, 1985) in their cognitive style.

II. Cognitive capacities

There is a cluster of individual resiliency characteristics include cognitive abilities that help a person to achieve their dreams or goals. In general, cognitive resilience describes the capacity to overcome the negative effects of setbacks and associated stress on cognitive function or performance. As such, cognitive resilience can be understood to manifest as a continuum of functionality or behavioral outcome. On one end of the continuum, cognitive processes are overwhelmed by stress and consequently might be ineffective. On the other end
of the continuum, there are few or no negative effects of stress on cognitive performance. Within and between these two extremes, individual differences may interact to enhance or diminish resilience to the effects of stress on various specific cognitive processes under different conditions, settings, and levels of demand. The cognition itself can influence or moderate adverse effects of stress on other types of behavior (Gilbertson et al., 2006).

These include the following

1. **Intelligence**

   Many studies have found more resilient children generally have higher intellectual and academic abilities than less resilient children (Garmezy, 1985; Werner, 1985; Masten et al., 1988).

2. **Moral Reasoning**

   A product of higher intellectual thought is the higher moral reasoning levels, these children are capable of attaining and demonstrating. Jacobs and Wolin (1991) suggest that resilient children separate themselves from the value systems of their families by becoming their own moral guardians.

3. **Insight and interpersonal reflecting skills**

   Insight is the mental habit of asking penetrating questions of oneself and subsequently, providing honest answers. Resilient children from dysfunctional parents often are aware very early in life that they are different from and stronger than their sick parent. While empathetic and caring, they develop “adaptive distancing” to protect their sense of healthy separation from the parent’s maladaptive coping skills and life patterns. This failure to identify with their dysfunctional parent and to find more successful role models is adaptive for these children (Beardslee and Podorefsky, 1988). Analyzing one’s psychological and physical strengths and compare them to others takes a certain level of intrapersonal and interpersonal reflective skill which is uniquely present only in resilient individuals.
Introduction

4. Self-esteem and ability to restore self-esteem.

Resilient youth have higher self-esteem associated with an accurate appraisal of their increased strengths and capabilities. They have resilient self-efficacy and the ability to restore self-esteem (Flach, 1988) after failure or disruption in homeostasis.

5. Planning Ability

Another cognitive skill probably related to intelligence is planning ability, which has been found related to resilience in high risk youth (Rutter and Quinton, 1984; Anthony, 1987). Ability to foresee consequences of choices and to plan a bright future are characteristics of individuals who successfully overcome negative environments.

III. Behavioral and Social Competencies

Social and behavioral competence or effective functioning within different environments, sometimes called “street smarts” (Garmezy and Masten, 1986) has been found to be associated with resilience. A number of behavioral skills or life skills are related to resilience, including problems solving skills, communication skills, and peer resistance skills and empathy.

IV. Emotional Stability and Emotional Management

There are certain skills of resilient individuals in the emotion domain as well.

1. Happiness
   Resilient individuals are characterized as reasonably happy people.

2. Emotional Management Skills
   A primary characteristic of resilient children is their optimism and positiveness about life. Resilient individuals recognize feelings and can control undesirable feelings such as fear, anger and depression.

3. Humor
   Many clinical and research descriptions of resilient individuals mention them as happy, energetic people who frequently use humor as a coping strategy.
V. Physical well being and competencies

Studies have demonstrated that good physical status is predictive of resiliency. These include the good health, health maintenance skills, Physical talent development and physical attractiveness.

1. Physical Health and Health maintenance skills

Children with few physical problems, good sleep patterns, and physical strength may internalize this physical strength and interpret themselves as "strong" psychologically as well.

2. Physical talent development and physical attractiveness.

Physical attractiveness has been found related to positive life adaptation, particularly if associated with charm and social skills (Kaufman and Zigler, 1989). The physical outlook of an individual goes deep into the personality, emotionality and success in coping with stress and turning hassles into uplifts. (Mohan, 2012) The mechanism for this effect is not difficult to predict. Children who are more attractive are generally more liked and valued by patents or find it easier to attract caring others. A study (Eider, Caspi, and Nguyen, 1986), fathers were more supportive and less harsh with more attractive daughters.

With such background, the present study was undertaken to study adolescent Resilience in relation to various individual and family related factors.

STATEMENT OF THE PROBLEM

The aim of the present investigation was to study adolescent Resilience in relation to Emotional Intelligence, Negative life Events, Coping styles, Parental Bonding, Eysenckian Personality Dimensions and Interpersonal Reactivity. The study also aimed to investigate gender differences in Adolescent Resilience, Emotional Intelligence, Negative Life Events, Coping Styles, Parental Bonding, Eysenckian Personality Dimensions and Interpersonal Reactivity.