Chapter-II

SURVEY OF LITERATURE

Within the domain of any scientific research plans, a review of literature in the research field seems to be one of the most essential steps. Such a review is expected to reveal the nature and extent of verification of different variables in the field and available amount of knowledge. To probe in to the problem of present selected area the existing knowledge of the concept and the conditions of research in them are very much needed. To fulfil this purpose of the present study a review literature has been done.

Today the phenomena of stress are as inescapable as death and taxes. In simple words, no one’s life is free of stress. It is seen that some group of people are well survived inspite of their high stress (Resilient) but others are breaking down. The people who are well survived mostly depend on their inner strength to deal competently and successfully day after day with the challenges and demands they encounter. This capacity to cope and feel competent is referred to as resilience. The Resilience embraces the ability of a child to deal more effectively with stress and pressure, to cope with everyday challenges, to bounce back from disappointments, adversity and trauma to develop clear and realistic goals to solve problems, to relate comfortably to others and to treat oneself and others with respect.

Out of many stressors academic stress has very strong negative influences on youth population. But resilience explains why some overcome overwhelming obstacles, sometimes clawing and scraping their way to successful adulthood while others become victims of their early experiences and environments. Resilience is a life event phenomenon that buffers against circumstances that normally overwhelm a person’s coping capacity. It is linked with “coherence”, or the ability to handle stress-related problems.

Building own resilience against stress is a way of dealing with stressful situations. Resilience is the ability to rebound after a stressful event. Not how fast they recover,
but the ability to recover. Resilient individuals find that they quickly become unaffected by new experiences and that when they are put in a stressful situation they are able to bounce back and relax.

Numerous scientific studies of youth facing adversity in their lives have supported the importance of resilience as a powerful insulating force.

STRESS

Though there are no dearth of studies on ‘resilience’ as a factor of stress but very few studies have addressed all the important or powerful aspects of stress.

Brian (2004), from his study, opined that stress arising from academic performance affects some physiological variables of a person (students) besides his/her academic performance. He conducted a research which comprised three brief experiments investigating different aspects of students’ samples. In experiment 1, students’ academic fear of failure was found to be negatively correlated with systolic blood pressure. In experiment 2, student’s blood pressure was found to be significantly elevated 2 weeks before college examinations, compared with post examination levels. Finally in experiment 3, he found that lower performance in examination was positively correlated with pre examination cardiovascular reactivity. The resilience of all the subjects were assessed and finally research indicate that those who are resilient showed normal blood pressure, greater performance levels in comparison to their non resilience counterpart. So, the result that experience of stress affect a person physiologically was further supported by the study of Chan et al who (2006) revealed that physiological stress can affect some psychological components as well. The study worked with clinical group (patients suffering from coronary heart disease) in response to an 8 week rehabilitation programmed. Result indicated that coronary heart disease patients high in personal resilience achieved better outcomes than those low in personal resilience. Both of the above studies had taken the components ‘performance’, ‘achievement’ in a very personal and/or qualitative level inspite of scientific measurement. Moreover, the size of sample was too short (57 only) to utter a concluding remark when no experiment had conducted but only one testing session was followed.
Besides physiological variables the effect of academic stress on psychological variable and its relation with resilience was studied by the researcher. Solomon *et al.* (2003) conducted a study to compare the test performance of highly stressed second and third grade urban school children, with stress resilient (SR) and stress affected (SA) students. Research found out that SRs exceeded SAs on several dimensions of self-rated adjustments and perceived competence, empathy, social problem solving etc. Similar studies with psychological consequences of other relational and environmental stress and its relation with resilience also found by the research. Beside academic stress Solomon *et al.* (2003) assessed the psychological consequences of body handling in the after math of terror attacks on 87 ZACA volunteers and the implications of coping in attenuating the detrimental effects of prolonged exposure to terror. This study was conducted on resilient group. Result indicated that subjects, i.e., the resilient group, reported low sense of danger and considerable self-efficacy.

*On the contrary, Bonanno et al.* (2007), in their research indicated that many people faced with highly aversive events suffer only minor, transient disruption in functioning and retain a capacity for positive affect and experiences. They conducted two studies that replicate among bereaved parents, spouses, and caregivers of chronically life partner. The study was based on the self report and objective measure of the adjustment. Resilience was evidenced in half of each bereaved sample when compared with matched non-bereaved counterparts. Moreover it was revealed that resilient individuals were not distinguished by the quality of their relationship with spouse or caregiver burden but were rated more positively and as better adjusted by close friends. Here, the finding of evidence of resilience in ‘half of each bereaved group’ was not clear. Moreover, the explanation of the opposite finding of resilient people of ‘not distinguished by the quality, but ‘better adjusted by close friend’ was not scientific and satisfactory.

**Further the effect of resilience on behavioural control as revealed through the habit of substance use was studied by Wang et al.* (1994).** They have conducted a research study to identify the developmental trajectories of behavioural control and resiliency from early childhood to adolescence and their effect on early onset of substance used were examined. It was revealed that behavioural control is the tendency
to express one’s impulses and behaviours. Resiliency is the ability to adapt flexibility of one’s characteristic level of control in response to the environment. Study participants were 514 children of alcoholics and matched controls from a longitudinal community sample (time 1 age in years: M=4.32, SD= 0.89) Result indicated that children with slower rates of increase in behavioural control more likely to use alcohol and other drugs in adolescence. Children with higher initial levels of resiliency were less likely to begin using alcohol. So, indirectly, impulsive behaviour was addressed as the consequence of resilience. Critical review showed that the reason of alcohol habit may not be always impulsive act where resilience can be directly addressed. In the study other environmental factors, if any, were not considered.

Research studies also emphasized on the impact of resilience on psychiatric manifestation. Hjemdal et al. (2006) were conducted a study on patients population. The purpose of this study was to explore the resilience scale for adults (RSA) as a predictor for developing psychiatric symptoms when exposed to stressful life events. The sample of the study was 159 individuals. Result indicated that the RSA acted as an important protective factors that buffer the development of psychiatric symptoms when individuals encounter stressful live events.

Brian et al. (2008) conducted a study aimed at formulating and testing a theory-based model integrating both traditional resilience paradigms and non-traditional factors including existential beliefs about life, motherhood and religion. Study hypotheses addressed prediction of depression, stress and resilience, and the confounding influence of negative affectivity (neuroticism). Results indicated that sixteen percent scored in the major depression range (EPDS > 12), and 14% in the minor depression range. Depression was associated with stress, neuroticism, purpose/meaning, mother's distress and (marginally) religious belief, but not with self-esteem, mother's ambivalence, age, parity or social class. Although neuroticism was strongly associated with depression, and also overlapped with most psycho-social variables, nonetheless stress, purpose/meaning, and mother's distress maintained significant relationships with depression after neuroticism was statistically controlled. Stress was associated in part with the perception of losing one's freedom in the motherhood role (neuroticism controlled). When resilience was defined as high stress coupled with low depression, it
was associated with low levels of neuroticism and mother’s distress. When resilience was defined in terms of high levels of maternal satisfaction, it was associated with high purpose and low ambivalence.

Chan et al. (2005) conducted a study to find out stressors and coping strategies of runaway youths. Participants were male and female runaway adolescents (N=53) living in a runaway shelter in Austin, Texas. Concept mapping a mixed method approach was used to collect data through quantitative techniques. Research revealed that female adolescents were very much affected by stressors than male adolescents. Female adolescents were used escaping, avoidance, denial coping strategies where as male adolescents used social support, problem solving methods to deal with their stressful situation.

The effect of resilience also studied on military population also.

Brian et al. (2008) conducted a study on Military service involves exposure to multiple sources of chronic, acute, and potentially traumatic stress, especially during deployment and combat. The effects of stress can be subtle to severe, immediate or delayed. Result indicated that severe stress impaired individual’s and group readiness, negatively affect their operational performance, which affect ultimately their survival. Resilience to Stress identifies biological, physiological, and genetic factors, psychosocial aspects of resilience, and "community capacity" variables that influence psychological responses to stressful events. In this study those who are identified as resilient were not affected by stress as previous group.

Most of the above mentioned studies dealt with direct effect of stress and resilience. In some studies, the assumption was drawn on a very casual manner where it is written that ‘RSA acted as an important protective factors that buffer the development of psychiatric symptoms when individuals encounter stressful live events’ (Hjemdal et al. 2006). Moreover, the contamination effect of smaller N (as small as 53 even) and limited number of variables and observation pave the way of further study.

To summarized, it can be said that more wholesome study is needed to address most of the factors of resilience scientifically.
COPING STRATEGY

Coping is a conscious intentional response to stress. Coping is often invoked to represent competence and resilience. However, these three terms have distinct meanings. Where coping refers to adaptive responses to stress, competence refers to the characteristics that are needed for successful adaptation and resilience is reflected in outcomes where competence and coping have been displayed (Buckhalt 2005).

A range of different types of coping behaviours has been identified. Lazarus and Folkman (1984) distinguish between problem-focused coping and emotion-focused coping. Problem-focused coping involves confronting a problem to reduce the effect of a stressor or set of stressors, while emotion-focused coping involves dealing with the emotional distress occasioned by the stressor or stressors.

There are several empirical researches that focus on the association between coping behaviour in children and adolescents and psychological adjustment, social and academic proficiency and symptoms of pathology.

Coping has been shown to be significantly associated with the psychological adjustment of children (Buckhalt 2005). Different coping strategies can be functional or dysfunctional. Problem-focused coping and engagement coping have been found to be associated with greater adjustment in children and adolescents, while emotion-focused and disengagement coping have been found to be associated with lesser adjustment (Compas et al. 2001).

Hernandez (1993) has conducted a longitudinal study from childhood to adolescence on their developmental processes of coping strategy. He found developmental increase in emotion focused coping and stability in problem focused coping while they dealt with stressful situation. He also found that social support may be an important coping strategy in the academic domain for ethnically diverse youth. On the contrary, the research findings of Snyder et al. (2006) revealed that active problem solving in the face of stress was positively linked with resilience whereas simply responding emotionally to stress was negatively linked. The study of Chotard et al. (2004) on corporate sector (employee of Motorola corporation) revealed that employees who
perceived their jobs as full of stress were the least resilient employees. Employees who use problem-focused coping in their constantly changing work environment were the most resilient. Lincoln et al. (1985) conducted a longitudinal study on the relationship between life satisfaction among medical students and a basic model of personality, stress and coping. This longitudinal, nationwide questionnaire study examined the course of life satisfaction during medical school, compared the level of satisfaction of medical students with that of other university students, and identified resilience factors. Medical students who sustained high levels of life satisfaction perceived medical school as interfering less with their social and personal life, and were less likely to use emotion focused coping. Joyce et al. (2006) studied on a sample of 404 young women high school athletes. Negative life events and coping strategies were assessed preseason, and daily illness data were collected during the course of the season. Among athletes with high levels of exposure to negative life events, resilient (no illness time loss) and non resilient (upper third of time loss distribution) groups were compared on 6 scales of the Ways of Coping Checklist. Coping profiles of the groups differed significantly, with resilient athletes favouring Problem-focused Coping and Seeking Social Support, and non resilient athletes reporting greater use of Avoidance and Blaming Others. Correlations among Problem-focused Coping, Seeking Social Support, and Minimize Threat were higher in the resilient group. Results suggest that certain coping strategies may contribute to illness-resistance in the face of high life stress.

Folkman (2001) proposed a contradictory study of positive affect and other side of coping on youth. Experimental evidence suggests that when people transgressed, they often react by experiencing unforgiveness. Unforgiveness is conceptualized as a stress reaction. Forgiveness is one (of many) ways people reduce unforgiveness. Forgiveness is conceptualized as an emotional juxtaposition of positive emotions (i.e., empathy, sympathy, compassion, or love) against the negative emotions of unforgiveness. Forgiveness can thus be used as an emotion-focused coping strategy to reduce a stressful reaction to a transgression. Direct empirical research suggests that forgiveness is related to health outcomes and to mediating physiological processes in such a way as to support the conceptualization that forgiveness is an emotion-focused coping strategy:
Lazarus presented in 1984 the original model showed a sequence of activities following an event: Appraisal, Coping, Outcome, Emotion. The model had two pathways from a harmful or threatening event. The first led simply to favourable resolution and positive emotion. The second pathway, led to an unfavourable resolution and distress, with a loop back to the appraisal process labelled negative emotion. In the revised model, the favourable resolution pathway is the same, but the unfavourable resolution pathway has been extended to include the impacts of positive emotion as people deal with unfavourable outcomes. Positive emotion affects the way people reappraise the event, the energy and the resources they have available for coping, and the meaning they derive from unfavourable outcomes.

Most of the above studies have taken the component ‘resilience’ according to their own way of operation. For example some considered ‘resilience’ as ‘no illness time loss’ or some as ‘perception of academic enviroment ( medical school) as less interfering with their social and personal life and lastly, ‘forgiveness’. So, the proper assessment or labelling and levelling is essential to reach a conclusive remark.

Sharon (2006) investigated the relationship of resilience and coping styles in a sample of college students. Measures included the Connor–Davidson Resilience Scale and Coping Inventory for Stressful Situations. Result reported that task-oriented coping was positively related to resilience, and mediated the relationship between conscientiousness and resilience whereas emotion-oriented coping was associated with low resilience.

Above result indicated that perceived job stress, emotion focused coping and symptoms of illness were negatively associated with resilience. On the other hand Problem focused coping, social supports, co-worker cohesion and supervisor support were positively correlated with resilience.

But on the other hand, there are studies which showed a very positive effect of emotion focused coping strategy and social support to deal with stress for example...

Lazarus & Folkman (1984) research suggested that the content of reactive coping strategies involved cognitive efforts to change the meaning one attached to the

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situation, and therefore served an emotion-focused coping function. It is proposed that emotion-focused coping will be effective in situations that are perceived as uncontrollable.

Jacobi (1991) conducted a research study on college students. Research report revealed that supportive relationship (social support) prevents and reduce the harmful effect of stress and enhance individual ability to cope effectively with stress in specific social settings. Similarly, Myers (2004) also found that two years community college persisters examined significantly greater encouragement from parents than dropouts.

Nicholls et al. (2005) conducted a study of effect of gender differences of coping strategy on adolescents. This study revealed that men often prefer problem-focused coping, whereas women can often tend towards an emotion-focused response. It is also found that Problem-focused coping mechanisms may allow an individual greater perceived control over their problem, while emotion-focused coping may more often lead to a reduction in perceived control. This study indicates that problem-focused mechanisms represent a more effective means of coping.

So no conclusive remark can be made from the literature by which the efficacy of any one type of coping strategy can be identified. So it can be said that many other factors are to be considered to declare one type as best and others not.

PERSONALITY AND OTHER RELATED VARIABLES

Developing a comprehensive understanding of resilience across the lifespan is potentially important for mental health promotion, yet resilience has been vastly understudied compared to disease and vulnerability.

Smith et al. (2008) conducted a study based on the relationship of resilience to personality traits associated with psychological distress. A sample of 132 undergraduate students took part in the study. Most participants were female (72%) and the average age was 18-19 years. Resilience was assessed using a scale designed to measure peoples’ ability to cope with stress and adversity. Personality traits (i.e. neuroticism, extraversion, openness, agreeableness, and conscientiousness) were
measured using an instrument widely accepted and extensively utilized within psychological research and participants completed a questionnaire about the incidence of emotional and physical symptoms associated with psychological distress during the previous week. The results demonstrated that resilience is significantly associated with well-established personality constructs. Resilience was negatively associated with neuroticism (i.e. poor coping skills, difficulty controlling impulses, and the tendency to experience negative emotions). People with low neuroticism scores are generally considered to be well adjusted, emotionally stable, and less vulnerable to emotional distress therefore it is not surprising that highly neurotic individuals are less resilient. Whereas resilience was positively associated with extraversion and conscientiousness, extraversion reflects positive emotional style, high levels of social interaction and activity, and the capacity for interpersonal closeness. Similar study with personality factors done by Sharon (2006), Willson et al. (2006) who investigated the relationship between resilience and personality traits in a sample of college students by Connor–Davidson Resilience Scale and NEO Five Factor Inventory, supported hypotheses regarding the relationship of resilience to personality dimensions. Resilience was negatively associated with neuroticism, and positively related to extraversion and conscientiousness in both of the studies. In addition, to extraversion and conscientiousness, William et al showed a highly significant positive relationship between resilience and both openness and agreeableness which were considered as ‘adaptive personality’ by Wentzel (1996).

All of the above studies have restricted on some particular aspects of personality, viz., extraversion and conscientiousness openness and agreeableness some of which (viz., openness and agreeableness) were conceived as ‘adaptive personality’. But there are some other important components (e.g., like impulse control etc.) of ‘adaptive personality’ besides openness and agreeableness which are not considered here to describe ‘adaptive personality’. Moreover, the sample size of most of the studies was too small to reach a conclusive remark. Further, in the study of Smith et al, a biased gender group was taken (75% female and other male) can contaminates the result by not having equal or random or controlled gender group. These pitfalls may pave the way of further study.
Another interacting study on industrial position and resilience and coping strategy conducted by Murray (2009) suggested that personality has a great deal to do with being a successful entrepreneur. A statistical method known as meta-analysis was used which allows research studies to be combined in a way that yields overall trends within a field of research. The twenty-three studies included in the meta-analysis compared entrepreneurs to a group of managers on the five factor personality (FFM) traits. Statistical differences between entrepreneurs and managers were found on four out of the five personality traits. Entrepreneurs scored significantly higher than managers on the scales of Openness to Experience and Conscientiousness. In general, entrepreneurs can be characterized as more creative, more innovative, and more likely to embrace new ideas than their manager counterparts (Openness to Experience). Second, the results indicated that entrepreneurs were higher than managers on Conscientiousness (i.e., drive and work ethic). The second key set of results showed entrepreneurs to be significantly lower than managers on Neuroticism and Agreeableness. In general, entrepreneurs appear to be more self-confident, resilient, and stress-tolerant than non-entrepreneurial managers. These results are logical given the highly stressful, demanding, and changing work environments which entrepreneurs usually find themselves. Entrepreneurs are able to tolerate a greater amount of stress without anxiety, tension and psychological distress. This may help entrepreneurs handle ambiguity, take risks and feel greater comfort with failure. With regard to lower scores on Agreeableness, entrepreneurs were found to be tougher, more demanding, and more likely to use more negotiation and influence skills than managers. Finally, no significant differences were found between the two groups on Extroversion. Therefore, entrepreneurs were no more or less outgoing than the managers.

But the main conclusion of the study – “more stress leads to more resilience” may not be true in all situation. To contradict, the study of Murray (2009) and the study of Wallander (2006) showed just the opposite findings that increased life stress was associated with worse quality of life which was associated with maladjustment. So generalization was not possible.

Arehart et al. (1990) studied diverse assessment strategies including Q-sort and questionnaires completed by parents, teachers, and professionals yield strong evidence
supporting the existence of these five factors in children. Agreeableness and conscientiousness were selected for this study based on research finding that these factors are most consistently linked to measures of adjustment in children. Agreeableness has been labelled social adaptability, likeability, friendly compliance, social conformity, and empathy. The conscientiousness factor has been labelled dependability, task interest, will to achieve, impulse control, constraint, control, and work (Digman et al. 1981). Result revealed that Agreeable and conscientious children’s were found to respond to interpersonal conflict more constructively.

Weick (1979) conducted a study to examine the relationship between personality traits and successful careers. The study compared the personality traits between under graduate students. Result indicates that business majors had significantly higher scores than non business majors for conscientiousness, extraversion but low score on agreeableness and openness. If business major are considered as ‘successful’, then it can be said that above result indicates that successful persons are conscientious and extravert but not ‘agreeable’ and ‘open’ which is highly contradictory to the theory of achievement as well as industry. So, further study is needed with more variables and with much control.

Sung et al (2008) in his study compared three different types of primary care giver in divorced families and aimed to compare adolescents’ perception of their level of adjustment and family resilience as well as to identify the family resilience predictor of adolescents’ adjustment. The study failed to demonstrate any influence of family pattern on adolescents’ adjustment, regardless of the type of primary care givers, a common significant predictor for adolescent adjustments of their positive believe about parental divorce. So here ‘believe’ of person rather than environmental condition (here living with divorce parent) proved as primary predictor of resilience.

On the other hand Masten et al. (2006) emphasised on environment which contains many physical, social and cultural variables as the promoting, protective, additive, mediating or moderating factor of resilience.

The study of Masten (2006) also supported by the study of Henderson (2006) who accepted environment as promoting and protective factor of resilience. But conjoining
above studies Henderson also focuses on the integration of prevention research and neuroscience in the context of intervention that promote resilience by improving the executive functions viz inhibitory control, planning, problem solving skill, emotional regulation and attentional capacities. So the controversy lies on the fact that whether in-build personality and other subjective factors or environmental factors playing primary role on the persons resilience. **Masten (2006)** again opined that environmental protective factors are dormant until needed, analogues to an air bag in an automobile or antibodies in the human immune system. So, the quality resilience with all its characteristics quality resilience is not the steady component of human being but can do or can’t do anything according to the demand of the environment. It can be said that the above description pushes the novel quality of resilience toward a shallow one which was contradicted by many researcher like **Yuk et al. (2008); Johnson (2009), Rutter (1999)** and others.

**Johnson et al.** revealed that individual differences in personality are routed in temperament which include conscientiousness, agreeableness and ego resiliency which act as promoting factor of resilience. Also **Rutter (1999)** stressed on temperament, level of self esteem, optimistic attribution style, believe system and high level of intellectual ability as correlates of resilience.

In a relatively research study **Henderson (2006)** tries to bridge between two general factors i.e., internal and external as associated with resilience. **Henderson (2006)** and **Durlack et al. (1997)** emphasised on impulse control capacities as internal factor associated with resilience.

So, it can be said that to be resilient or not depends not mere one or two factors but a sophisticated embroidery of factors ranging from physical stress, environmental stress to finer psychological traits like impulse control, temperament and others.

The present study is a humble attempt to throw light only on academic stress of students and its correlated factors to be resilient.