

*Full Length Research Paper*

# **A study of resilience in relation to personality, cognitive styles and decision making style of management students**

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**Resilience is one of the essential ingredients to lead a happy and healthy life. It refers to successful adaptation of an individual despite risk, acute stressors, and chronic adversities. Resilient people are more determined and they can enhance their efforts especially under difficult situation. There is a belief that people are born with resilient attributes; but researches proved that resilience can be improved through effective training and development. Indeed, various theories such as developmental cognitive and psychodynamic stressed on the importance of resilience in individual life. The role of resilience in managerial life is also worth looking in to. Managers need to be more resilient so that they can bounce back from the loads of pressures and adversities they encounter in business. Business requires specific mindset to meet the demands of the work place environment. In this context there is a need to understand the resilient quality of a manager against his/her personality traits and thinking pattern. With this assumption, a research is designed to examine the relationship of personality dispositions, cognitive and decision making styles with resilience of management students. A sample of 130 students was selected randomly between the age group of 20 - 25 years from a management faculty in Tehran. The tests used in the study are resilience inventory, mbti, cognitive style inventory and decision making inventory. Results showed that resilience has a positive association with thinking personality type whereas; it has shown inverse relationship with feeling-personality type. Furthermore, the systematic and intuitive-cognitive styles have shown positive correlation with resilience. Behavioral-decision style has found negative association with resilience. Finally, the systematic-cognitive style has shown significant influence on resilience. The study concludes with the implication of resilience in the business world and approaches to enhance resilience in the management students.**

**Key words:** Decision making, cognitive, personality, management students.

## **INTRODUCTION**

There are individuals who seem to “bounce back” from negative events quite effectively, whereas others are caught in a web. They seem to be unable to get out of their negative streaks. Being able to move on despite the influence of stressors does not demonstrate luck on the part of those successful individuals but demonstrates a concept known as resilience. Psychological resilience refers to effective coping and adaptation although faced with loss, hardship, or adversity. Resilience to certain events has been likened to elasticity in metals (Lazarus, 1993). For example, cast iron is hard, brittle and breaks easily (not resilient), whereas wrought iron is soft, malleable, and bends without breaking (resilient). This

metaphor can be carried over to psychological resilience, which entails a similar resistance to the psychological strain associated with negative experiences.

Zimmerman and Arunkumar (1994) described resiliency as “the ability to spring back from adversity that interpret the trajectory from risk to problem behavior or psychopathology and thereby result in adaptive outcomes even in the presence of challenging and threatening circumstances. According to Masten (1994), resilience refers to successful adaptation of an individual despite risk and adversity. It also refers to a pattern over time, characterized by good eventual adaptation despite developmental risk, acute stressors, or chronic adversities.

Indeed, resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development (Masten, 2001). Resilience is a dynamic process that can be learned at any given point in life by an individual. (Masten, 2001: 228).

Barnard (1994) identified nine individual phenomena that literature repeatedly has shown to correlate with resiliency that is, being perceived as more cuddly and affectionate in infancy and beyond; having no sibling born within 20 - 24 months of one's own birth; a higher level of intelligence; capacity and skills for developing intimate relationships; achievement orientation in and outside of school; the capacity to construct productive meanings for events in their world that enhances their understanding of these events; being able to selectively disengage from the home and engage with those outside, and then to reengage; being internally oriented and having an internal locus of control and the absence of serious illness during adolescence.

## REVIEW OF LITERATURE

Sills et al. (2004) investigated the relationship of resilience to personality traits, coping styles, and psychiatric symptoms in a sample of college students. Results supported the hypotheses regarding the relationship of resilience to personality dimensions and coping styles. Findings showed that resilience was negatively associated with neuroticism and positively related to extraversion and conscientiousness.

Margaret et al. (2001) studied resilience in response to life stress - the effects of coping style and cognitive hardiness. In general, results supported a direct effects model of the relationship between life stress and psychological health. Results indicated that cognitive hardiness, aspects of coping style and negative life events directly impacted on measures of psychological and somatic distress.

Tebes et al. (2004) examined the relationship between cognitive transformation and indicators of resilience among 35 acutely bereaved young adults and a non bereaved comparison group. Individuals often report positive, transformative changes in response to adversity. Findings strongly supported the hypothesis that transformation predicts resilience, and may reduce one's risk trajectory to enhance adaptation.

Scott et al. (2007) investigated the role of negative cognitive style in predicting the occurrence of negative life events. Results showed that the individuals with negative cognitive styles generated more negative life events (dependent events and interpersonal events, but not more independent or achievement-related events) than individuals with more positive cognitive styles. These results appear to be unique to women.

The professional and hectic life of managers has

brought enormous work pressure and personal dilemma while taking decisions. Until and unless managers show certain amount of resilience in their profession, it would become genuinely difficult in sustaining their profession. Harvard Business Review (2002) reported that 'more than experience or training, it is a person's level of resilience in the face of stressful circumstances that will determine whether he succeeds or fails'. Resilience at work gives a person the courage and determination to face stressful problems instead of denying or avoiding them. In brief, from the aforesaid literature and theories it is learnt that personality, cognitive and decision making process play a vital role in influencing resilience. Thus, the present study is designed to explore the plausible relationship between personality, cognition and decision making with resilience in managerial profession.

## Resilient youths

Resilient youths are expected to have two basic sets of skills, inner (intrinsic) and outer (extrinsic). Both skills contribute to the protective factors that keep people with adversity thriving well and towards a life filled with safe risks. Inner components (intrinsic) or self leadership skills include empathy, caring, equity and social justice, safety, restraint and resistance skills (setting boundaries), planning and decision making (goal setting, problem-solving and creativity), self efficacy, self esteem, acceptance, cultural awareness and spirituality. On the other hand, outer components (extrinsic) or relationship, community and social skills include caring family, family communications, family support, high-expectation parents (not expecting perfection but excellence), achievement, family role models, school engagement, parental involvement with school, high expectations school, bonding to school, school boundaries, achievement, caring neighborhood, neighborhood boundaries, community values, adult relationships, positive peer relationships and positive peer influence.

## Theoretical aspects of resilience

### Developmental theories of resilience

According to child-development experts, we all are born with no concept of "self." We construct a self-image first of our bodies, its capacities and limitations through experimentation and then of our essential nature as we gaze into the "mirrors" of our caregivers. A child who generally receives positively reinforcing images of himself as they are reflected in the loving gestures of his primary caregivers soon begins to associate these reflected subliminal messages with his own state of being in the world. In troubled families, however, the mirroring process goes awry and children are at risk of forming an inner self-

representation that feels defective and unwanted (Swinney, 2001). However, developmental theory maintains that occasionally a child will manage to distract himself from distorted images and will be drawn instead to more positively reinforcing image of himself in relation to his environment.

According to Piaget's (1952), stimulus equilibration is the most useful information processing concept. It refers to the overall balancing-act that occurs between existing frames of reference and novel experiences, ideally leading to a sense of coherent equilibrium between the child's subjective inner and objective outer world. This would predict resilient life coping skills from a child possessing an innately adaptive and harmoniously balanced internal frame of reference (Siegler, 1991). Wolin and Wolin (1993) stated that there are "seven resiliencies" often seen in the adaptive survivors of troubled families that is, insight, independence, relationship skills, initiative, creativity, humor and morality.

Piaget explained these traits as by-products of the children's "equilibration" processes and others describe it as "internal locus of control" or "learned optimism" (Seligman, 1968, 1995) and "positive personality characteristics" (Garmezy, 1983). Further, Wilson and Gottman (1995) investigated the concept of self-distraction or attention shuttling as a positive coping mechanism in resilient children.

### **Cognitive theories of resilience**

Cognitive theory has revealed many means by which individuals can develop more resilient ways of processing information. Emotional and spiritual intelligence are gaining equal respect as essential for our individualism. They are fundamental to one's relationships with self, others and universe. Goleman (1996) stated that an individual's brain parts combine their energies in order to synergistically give rise to the new facet that is, resilience. Individuals' intellectual areas of brain always get activated to face the reality of an event or any object. How a person reacts to change in the world order and disorder comes from his/her childhood and those traumas he /she sustained then and afterwards, as well as how he/she learned to grow beyond them. Individual's experiential associations condition his/her present and future responses. They condition the rationality with which the person assess the amount of fear he feels and its relative proportion regarding the risks he is exposed to in his lifestyle choices. It conditions how he responds to chaos.

### **Psychodynamic theories of resilience**

Psychodynamics' includes three inter-related theoretical parts: 1) the classical ego psychology of Freud, 2) the objects relations theory of Klein and others and 3) the self psychology of Sullivan and Kohut. Ego psychology

conceptualizes the intrapsychic world as one of tension between the energy dynamics of the unconscious demands of the "superego," the conscious volition of the "ego," and the instinctual drives of the "id." This conflict produces anxiety, which brings forth a compromise between the needs of the id and the ego in the form of a defense mechanism such as a repression, suppression, denial or projection of the true facts of the situation to a place in the psyche where they no longer have to be consciously dealt with. Object relations theory differs in that it views the conflicts as being generated more within the context of relationships with others rather than strictly within oneself. According to Gabbard (1994), "object relations theory encompasses the transformation of interpersonal relationships into internalized representations of relationships." It is theorized that the individualized perceptions of these relational representations are psychically internalized, or "introjected." Self psychology, on the other hand, focuses more on how the external relationships in one's life help develop and maintain a sense of self-esteem and self-cohesion through interaction with one's inner relationship with oneself. It is more of a "two person," self-object" psychology.

It can be observed from the above said theories that personal and managerial traits play an important role in resilience. The psychodynamic theories have emphasized the importance of ego psychology, object relation and self psychology, the predominant factors that they have emphasized is on individuals' personal disposition that helping them in maintaining resilience. Similarly, cognitive theories have explained the concept of experiential associations and the rational in taking calculated risks in difficult situations in professional life which helps an individual in strengthening their resilience ability. Thus, in the present research personality, cognitive style and decision making have been taken for study.

### **Personality, cognition, and decision making**

Individuals behave differently in similar situations and evaluate conditions differently based on their unique expectations, values, previous experiences and temperament (DeNeve and Copper 1998). Personality types and well-being in relation to stressful life events have been the topics of many investigations. Usually, when reflecting about someone's personality, we think about what makes one person different from another or perhaps even unique and this question refers to individual differences. It is not easy to describe or to explain how individuals develop particular ways of interacting with the world. This is another issue of individual differences (Huffman et al., 1991). Since the 1960s, three different approaches have dominated the investigations of individual differences that is, type theories, trait theories and psychoanalytic theories (Mischel, 1984).

Jung personality type theory was developed in the early 1900s. His theory was based on the belief that individual

behavior affects the way one thinks, perceives and evaluates the world (Jung, 1923). Moreover, Jung's approach to personality typing was derived from theories regarding the way individuals perceive and judge their surroundings (Martin, 1997). In the 1920s, Myers and Briggs developed a "type indicator" theory by relying on Jung theories (Rowe and Mason, 1987). The Myers-Briggs Type Indicator (MBTI) was designed to evaluate psychological types and measure individual preferences (Rowe and Mason, 1987). According to Myers (1998), Jung focused on accurately describing the eight dominant functions he identified, but he also argues that people use the other functions in a kind of hierarchy of preferences. He used four terms to describe the order of use for an individual type viz, the first and the most used mental process- dominant function; the second is preference-auxiliary function; third, tertiary function and the fourth and least preferred-inferior function: Briggs and Myers developed Jung's idea of the auxiliary function and include its role in their concept and descriptions of types. The sixteen types of personality indicated by the MBTI were the result of this development. Early research used the function pairs of sensing-thinking (ST), sensing-feeling (SF), intuitive-thinking (NT) and intuitive-feeling (NF) as a useful framework. According to Killman and Thomas (1975), personality type is predictive of organizational preferences for problem-solving and decision-making. STs prefer an impersonal, realistic, and bureaucratic organization, whereas NFs prefer personal idealism and organic organization. NTs as planners prefer long-range strategic planning, whereas SF managers plan more for the short term with a focus on human relations. Further, according to Cloninger et al. (1993), personality is defined as the way that individuals learn from experience and adapt their feelings, thoughts, and actions. Specifically, personality can be defined as a dynamic organization within an individual of the psychobiological systems that modulate adaptation to a changing environment. This includes system regulation by means of cognitions, emotions and moods, personal impulse control, and social relations.

A movement came into prominence in the 1950s and early 1960s with the idea that styles could provide a bridge between the study of cognition (e.g., how we perceive, learn and think) and the study of personality. A small group of experimental psychologists set out to explore and describe individual differences in cognitive functioning. Collectively, these efforts led to a school of thought in cognitive psychology, designed to look at "stylistic constructs," which were said to be psychologically based, individualistic, and unchanging (Sternburg and Li-Fang, 2001).

Cognitive styles refer to the impact of mental processes on behaviour. Sternberg (2001), states that "A style is a distinctive or characteristic manner, or method of acting or performing" (Webster's, 1967). Further, Allport (1937) states style as a means of identifying distinctive personality types or types of behavior. Sternberg (2001)

finally concluded that the core definition of 'style' is reference to habitual patterns or preferred ways of doing something (e.g., thinking, learning and teaching) that are consistent over long periods of time and across many areas of activity, remains virtually the same. Indeed, the term style was formally introduced by Allport.

According to Rowe and Mason (1987), decision style is primarily a cognitive process that combines the mental activities of perception, information processing or cognition, making a judgment, and coming to closure of the problem. An essential ingredient of high resilience is the belief that one has control over what is transpiring in one's life. To acquire this attitude of ownership, an individual needs opportunities to learn and apply decision-making and problem solving skills.

Other researchers believe that decision making is a more personal experience. Weiss (1983) claims decision making is a function of one's information, ideology, and personal interest. Further, Petrides and Guiney (2002) believe that decision making is an influential process by which one's core values and beliefs are fundamental to the decision making process. These researchers along with others recognize decision making as a cognitive process.

## METHODOLOGY

### Problem of the study

The present research was designed to study the relationship of resilience with personality, cognitive styles and decision making in management students.

### Operational definition

**1) Resilience-** It refers to an individual's ability to cope with adversity. Whether outcomes are successful or not is determined by the presence (and balance) of both risk factors and protective factors over time.

**2) Personality-** It refers to the different facets of individual traits and their unique adjustment with their environment.

**3) Cognitive style-** It refers to the characteristics ways in which an individual conceptually organizes the environment and adapting to either systematic or intuitive approach.

**4) Decision making-** It refers to the way in which an individual perceive and comprehend stimuli and how he choose to respond, pragmatically either through directive, analytical, conceptual or behavioral.

### Objective of the study

On the basis of the review of literature the following main objectives were formulated:

1. To study the plausible relationship between different types of personality, cognitive styles, decision making styles and resilience in the management students.
2. To study the impact of personality types, cognitive styles and decision making styles on resilience in management students.

## Hypotheses

The following specific hypotheses are subjected to test in the present research:

1. There would be a significant relationship between personality types, cognitive styles, decision making styles and resilience in the management students.
2. There would be a significant impact made by personality types, cognitive types and decision making styles together in resilience in management students.

## Variables

### Measured variables

1. Personality
2. Cognitive style
3. Decision making
4. Resilience

### Sampling procedure

Using purposive sampling procedure a total number of 130 Post Graduate students were selected for the research. No students other than those who pursue course in business management have been taken for the present study. The inclusion of the sample was based upon the age group ranging from 20 to 25.

### Tools

In the present study four tests has been used such as resilience inventory, decision style inventory, Myers Briggs type indicator to measure personality type and cognitive style inventory for data collection. The details of the four tests are given below:

#### Resilience inventory

It is a scale developed by Monika Guttman to test an individual's ability to bounce back or to thrive in the face of constant chaos and uncertainty. Resilience Inventory has 14 questions rated on the 5-point Likert scale. These questions assess individual resilience skills. It has a reliability of 0.68 to 0.74 at 0.01 level of significance.

#### Decision style inventory

It was developed by Rowe and Mason in 1987; created in order to test an individual's preferences when approaching various decision situations. The DSI was supported by the basic assumption that individuals, mainly managers, work with others in achieving a desired outcome. Inventory consists of ten questions regarding typical situations that individual faces at a managerial level. It measures four styles of decision making: a) directive style, b) analytical style, c) conceptual style and d) behavioral style. DSI has a 90% face validity and 70% test-retest reliability.

#### Myers-Briggs type indicator (MBTI)

It was developed by Isabel Briggs Myers and Katharine Cook Briggs in 1998. Test has 93 items and it measures a person's preferences, by using four basic scales with opposite poles. The four scales are: extraversion-intraversion, sensing-intuitive, thinking-feeling and judging-perceiver. MBTI has a reliability of 0.84 and

0.86 for internal consistency measures and 0.76 for temporal stability.

#### Cognitive style inventory (CSI)

It was developed by Praveen in 2001. CSI is a self report measure of the ways of thinking, judging, remembering, storing information, decision making and believing in interpersonal relationship. Inventory has 25 items and it measures two dimensions of cognitive styles that is, systematic style and intuitive style. It has a reliability of 0.70 to 0.83 at 0.01 level of significance.

#### Statistical analysis

Measures of central tendency along with standard deviation were used to describe the nature of data. Pearson's product moment correlation coefficient was calculated to find out the relationship between different variables of the study. Subsequently, regression analysis was made to ascertain the causal effect of independent variables upon dependent variable.

## RESULTS AND DISCUSSION

The purpose of the study is to explore the role of personality, cognitive styles and decision making in resilience among management students. Review of literature on resilience suggests that personality traits are important antecedents and are important aspects of resilience. Individuals behave differently in similar situations and evaluate conditions differently based on their unique expectations, values, previous experiences and temperament (DeNeve and Copper, 1998). Another important aspect of resilience is individual's cognitive style or way of processing information and decision making style.

Table 1 shows, mean and standard deviation for resilience, personality, cognitive and decision making styles. Mean score of resilience and cognitive styles falls in the high category that shows distribution is skewed at the higher side of the taken sample. Mean scores of extraversion, sensing, intuitive, thinking and judging personality types falls within the average category which indicate normal distribution in the sample whereas introversion, feeling and perceiver personality types falls in the low the category that shows distribution is skewed at the lower side of the sample. Lastly, mean score of all the decision-making styles are nearly similar and falls in the low category.

Table 2 shows the percentage of students falling at different levels of resilience. Results on the measure of resilience revealed that 62% of the students are in above average category of resilience among which 12% of them falls in the high category of resilience. It reveals that students are flexible, adaptive and confident and possess stronger sense of being in control when faced with uncertainty. Finding indicates that students have good resilience skills; might be having strong social support and they would be more confident and alert to the role of emotions in everyday life. They would be more knowledgeable in making their strategies in solving

**Table 1.** Mean and standard deviation of resilience, personality types, cognitive styles and decision making styles.

Measures	Minimum	Maximum	Mean	Std. deviation
Resilience	34	65	51.37	6.37
Extraversion- personality type	0	21	11.83	5.17
Introversion- personality type	0	20	8.43	4.94
Sensing- personality type	5	22	13.07	3.19
Intuitive- personality type	4	20	12.13	3.33
Thinking- personality type	0	24	14.00	4.87
Feeling- personality type	0	24	9.49	4.75
Judging- personality type	1	22	13.95	4.99
Perceiver-personality type	0	21	7.26	4.70
Systematic-cognitive style	0	98	77.08	10.68
Intuitive-cognitive style	0	88	67.33	8.69
Directive-decision making style	0	7	2.57	1.44
Analytical-decision making style	0	6	2.47	1.44
Conceptual-decision making style	0	7	2.45	1.67
Behavioral-decision making style	0	7	2.46	1.82

**Table 2.** Number of management students at different levels of resilience.

Resilience	Level			
	High	Above average	Adequate	Struggling to cope
No. of students	12%	50%	33%	5%

problems in their day to day activities. Indeed, 38% of students need assistance in building up their resilience ability. These students need to maintain performance and stamina during periods of high demand and should need to think clearly and logically under pressure.

### Hypothesis 1

The first hypothesis states that “there would be a significant relationship between personality types, cognitive styles, decision making styles and resilience in the management students”. Table 3, shows the correlation between measured variables among management students. The findings are partially tuned with the hypothesis. In personality type out of eight dimensions, only two dimensions have found relationship with resilience. Thinking-personality type has shown a significant positive relationship with resilience. It reveals that those students who evaluate things logically and intellectually at the same time give lesser importance to emotions and are able to bounce easily from chaos and uncertainties of life.

Students who possess logical thinking have the capacity to challenge their strength and weaknesses. They grapple with situations as they arise and shape their environment if possible, if not, they adjust to it. Findings can be supported by the Ellis (1962) and Beck (1976) statement that irrational or dysfunctional beliefs can

cause unnecessary emotional distress. Individuals who have irrational beliefs or dysfunctional thinking tend to overreact with strong negative emotions like anger and fear. The way people explain their successes and failures influences whether they will persevere or give up when faced with adversity. These explanations or attributions can become a habitual way of explaining adversity, challenge and success and so develop into a “thinking style” or preferred way of viewing the world. Our thinking style can help or hinder our ability to respond resiliently to inevitable adverse situations. On the other hand, feeling-personality type has shown an inverse relation with resilience; indicating, that students who are more inclined towards feelings are less resilient to stressful situations. Students, who generally manipulate their problems emotionally and evaluate things by ethics of good or bad, can not easily recover from adverse situations. Study conducted by Fiona et al. (2004) found a similar result; they explore managers’ abilities and preferences with the help of psychometric instruments. Results indicated that thinking and feeling dimension correlate strongly with emotional resilience. Feeling preference were negatively correlated with emotional resilience, which again makes sense as the manager who has a feeling preference to thinking will carry the burdens of their team with them and all of their emotional baggage. Sills et al. (2004) also found that emotion-oriented coping was associated with low resilience.

Results further indicate that in cognitive style both

**Table 3.** Correlation between measured variables.

Measured variables	Resilience	Extraversion	Intraversion	Sensing	Intuitive	Thinking	Feeling	Judging	Perceiver	Systematic	Intuitive	Directive	Analytical	Conceptual	Behavioral
Resilience	1.00														
Extraversion	0.018	1.00													
Intraversion	-0.023	-0.91**	1.00												
Sensing	-0.087	-0.043	0.077	1.00											
Intuitive	0.107	0.205*	-0.064	-0.84**	1.00										
Thinking	0.29**	0.129	-0.064	0.147	-0.055	1.00									
Feeling	-0.28**	-0.063	0.087	-0.132	0.144	-0.96**	1.00								
Judging	0.132	0.043	0.090	0.045	0.068	0.45**	-0.37**	1.00							
Perceiver	-0.144	0.086	-0.038	-0.010	0.067	-0.41**	0.42**	-0.89**	1.00						
Systematic	0.37**	0.091	-0.092	-0.092	0.054	0.21	-0.21*	0.22*	-0.23**	1.00					
Intuitive	0.25**	0.181*	-0.187*	-0.147	0.131	0.133	-0.142	0.100	-0.090	0.75**	1.00				
Directive	0.167	0.092	-0.093	0.167	-0.158	0.25**	-0.26**	-0.046	0.036	0.065	0.064	1.00			
Analytical	0.069	-0.002	0.054	-0.108	0.112	0.20*	-0.19*	0.26**	-0.23**	0.21*	0.092	-0.092	1.00		
Conceptual	0.103	0.039	0.020	-0.121	0.195*	0.00	0.002	0.048	0.018	0.092	0.127	-0.32**	-0.33**	1.00	
Behavioral	-0.29**	-0.085	-0.005	0.060	-0.131	0.35**	0.35**	-0.22*	0.145	-0.27**	-0.23**	-0.40**	-0.40**	-0.39**	1.00

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

systematic-cognitive style and intuitive-cognitive style have shown a strong positive relationship with resilience. It reveals that students who uses evaluative approach as well as use their past experiences in solving any problem are much more capable of handling any kind of stressors in their day to day life. It also means that resilient students have good problem-solving skills. According to Lazarus and Folkman (1984), problem solving skills are one of the most significant coping strategies when confronted with stress.

A body of research and investigation has been performed to understand the relationships between

cognitions and emotional responses to stimuli. Emotions are always responses to our perceptions of the eliciting stimuli. For example, Myers (1992) has shown that human’s happiness is obviously to be found not in material goods but rather in one’s cognitive state of mind. The idea that emotional reactions are triggered by cognitive appraisal rather than environment, enables us to take into account that individuals (or even the same person at different times) can have very different emotional responses in the same situation towards a person or an object (Smith 1993).

Further, results of the study indicate that among four styles of decision making, only one that is, behavioral-decision making style has shown inverse relationship with resilience. It may be interpreted, that students who have characteristics of low tolerance for ambiguity and low cognitive complexity cannot cope effectively with stressful situations. Moreover, these students focus on short term problem solving solutions and face difficulty in making tough decisions of life. All these characteristics during time of stress and adversity make them difficult to step back and think about the situation more flexibly and accurately, thus

**Table 4.** Regression of resilience with personality types, cognitive styles and decision making styles.

	<b>R</b>	<b>R Square</b>	<b>Df</b>	<b>F</b>	<b>Sig.</b>
	0.501	0.251	14 and 115	2.74	0.002
	<b>Predictors</b>		<b>Beta</b>		
DMS	Directive		-0.153		
	Analytical		-0.288		
	Conceptual		-0.250		
	Behavioral		-0.423		
CS	Systematic		0.407		
	Intuitive		-0.118		
Personality	Extraversion		-0.867		
	Introversion		-0.788		
	Sensing		0.205		
	Intuitive		0.358		
	Thinking		0.535		
	Feeling		0.329		
	Judging		0.185		
Perceiver		0.212			

promoting less resilient behavior. Therefore, the first hypothesis posed in this study is partially proved.

## Hypothesis 2

The second hypothesis of the research stated that there would be a significant influence of personality types, cognitive styles and decision making style on resilience among management students. The regression analysis of resilience has been shown in Table 4. Result shows that multiple R between the predictor variables and dependent variable is .501. The obtained F-ratio for the significance of multiple R is 2.74. The degree of freedom being 14 and 115, the F is significant at .01 level of significance. The finding clearly indicates that the predictor variables such as personality types, cognitive types and decision making style jointly predict substantial variance in resilience. The square of multiple R ( $R^2$ ) being 0.25 suggests that all the three predictors jointly account for 25 percent of the total variance in resilience. All the measured variables show significant contribution on resilience. Overall, decision making styles have shown negative influence on resilience, whereas, systematic and intuitive cognitive style have shown a positive and negative influence on resilience, respectively. It may be interpreted that cognitive styles can lead students to cling to accurate beliefs about the world and appropriate problem-solving strategies that result in valuable resilience resources. Despite our best efforts we cannot prevent adversity and daily stress, but we can learn to be

more resilient by changing how we think about challenges and adversities. Research has shown that how we think about adversity and opportunity affects our success in school and work, our health and longevity, and our risk for depression. Scott et al. (2007) found that negative cognitive style may account for the stress generation effect often found in depressed individuals, particularly for women. Adequately positive cognitive patterns in treatment or prevention programs may not only effectively reduce depression, but may also reduce the likelihood of experiencing negative life events that often serve as precipitants for depression. Further, in personality types, sensing, intuitive, thinking, feeling, judging and perceiver-personality contributed positively with resilience.

## Conclusions

Productivity of the workforce is the most decisive factor as far as the success of an organization is concerned. The productivity in turn is dependent on the psycho-social well-being of the employee. In an age of highly dynamic and competitive world, managers are exposed to all kinds of stressors that can affect them on all realms of life. The findings of the study suggest that personality, cognitive styles and decision making are playing a decisive role in influencing resilience. The present study also insists that management students who possess logical thinking had better resilience abilities. Ironically the students who were inclined more on emotions and feelings had displayed lesser resilience. Management students had shown step by step approach in solving problems and then make overall plan that would enable them display better resilience. On the other hand some management students had displayed unpredictable approach in handling analytical problems; this would certainly act as a pulling factor in resilience. Finally, the management students who follow behavioral-decision making style had proven to have low resilience skills.

## IMPLICATIONS

The success of a business depends upon the quality of the decisions its manager's makes at each stage of business. It requires high level of logical and intellectual ability, and emotional maturity besides high level of resilience. The intellectual ability and emotional maturity can be enhanced through various training programmes. Similarly resilience can also be learned and further developed through proper behavioral training programmes. Especially, business strategies targets profit, customer satisfaction, and better managerial decision making. The effective decision making involves various types of risks in every stage of decision making and it requires a high level of resilience. However, it is essential for management students to carefully evaluate advantages and

disadvantages of every alternative and looks for an overall solution. Adapting to situations and making decisions accordingly requires enormous amount of understanding of the situation and ability to perform against all types of risks and difficulties. Thus, it is necessary for every management student to learn more about handling difficult situations and overcoming these successfully would further add value to management education.

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