

Module-12

Stress

We might come across situations when life event becomes demanding enough to the extent that one feels difficult to handle. Such situations exert heavy demand on the physical, psychological, and emotional resources available to the individual concerned. Due to the nature and intensity of demand they put on the available resources, such situations act as stressors. Stressful situations can have positive as well as negative corollaries. Hans Selye used the terms stress to represent a condition stressor to characterize internal reaction causing the condition in 1930s. Later, he divided such conditions as eustress and distress. Stressful conditions yielding positive functions were termed eustress whereas conditions putting high demand on coping and leading to negative state were termed distress. The difference between eustress and distress depends on the real or imagined experiences as well as expectations of the individual.

Biochemical regulation of stress

In the web course *Biological bases of behaviour* the relationship between hormone and behaviour has been discussed at length, even with respect to stress. Stimulation of amygdala stimulates the hypothalamus to release corticotrophin-releasing hormone (CRH). CRH controls the activity of the pituitary-adrenocortical system. It mediates behavioural and autonomous responses to anxiety and stress. Perception of a stressful stimulus activates hypothalamus to release CRH which, in turn, stimulates the

anterior pituitary to release adrenocorticotrophic hormone (ACTH). When ACTH reaches the adrenal cortex it makes the outer layer of adrenal gland to release cortisol. Amygdala is involved in the regulation of emotion. It stimulates dopaminergic inputs to the medial prefrontal cortex whereas CRH also stimulates the cortex. Cortisol triggers the negative feedback channel thus inhibiting the hypothalamus, pituitary, and hippocampus activities. Suppression of the LHPA axis restores the baseline cortisol level. This helps contain the stress response thus establishing homeostasis. The peak cortisol response occurs 20-40 minutes after the onset of acute stressor and return to baseline levels happens 40-60 minutes after it ends (Dickerson & Kemeny, 2002).

Three bodily chemicals needs mention here—serotonin, noradrenalin and cortisol. Serotonin acts as an impulse modulator. Normal level of serotonin is essential for a clear thinking, which finally affects one's social success. Low level of serotonin severely affects adaptation to threatening environment making the individual impulsive and aggressive. An overwhelming threat leads to high serotonin level. The high level induces fearfulness, anxiety and obsessive-compulsive behaviour.

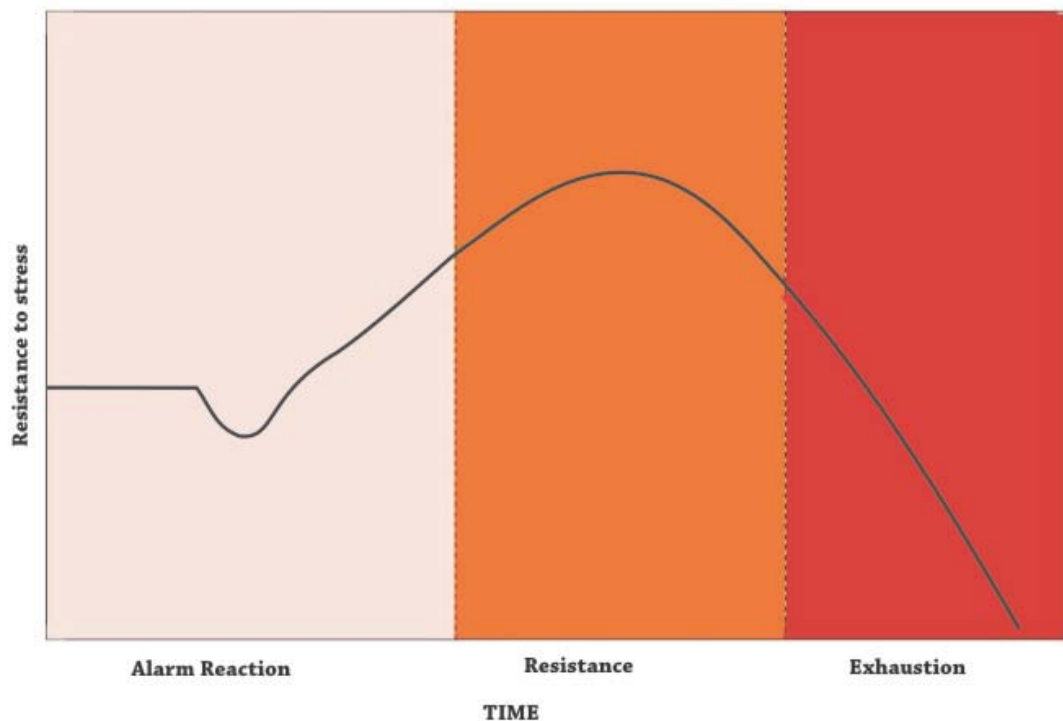
Noradrenalin is called the alarm hormone. High level of noradrenalin results into over-arousal. It also induces impulsive hot blooded acts of violence. On the contrary, low level of noradrenalin activates cold blooded acts. Cortisol produces anxiety and impairs selective attention and thinking behaviour. It kills neurons and hence leads to the reduction of synapses. In the long run it can result into shrinking of hippocampus.

Neuropsychological evidence indicates extra blood flow in the ventral right prefrontal cortex during moderately stressful conditions. MRI scans show increased

blood flow in those with high stress. This part of the brain is also associated with the negative emotions. Studies also confirm persistent change in blood flow in the prefrontal cortex as an aftereffect of stress.

General Adaptation Syndrome (GAS)

A dominant way of looking at stress is physiology dependent. Based on this physiological approach, Hans Selye proposed the General Adaptation Syndrome (GAS). The figure given below illustrates the three stages of GAS— alarm reaction, resistance or adaptation and exhaustion.



First Stage

As you see in the figure above, the first stage in combating the stressor is an alarm reaction. This stage is characterized by release of adrenaline and other psychological means to combat the stress in order to regain control. One adopts either a fight or a flight response in the given situation. The resistance level of the individual drops down temporarily, thus making him/ her experience the shock. The body responds by increasing the heart beat, breathing, perspiration and eye dilation. The muscles also become tense and one might experience compression of the stomach muscles. Some activation of the HPA axis is also evident; hence cortisol is also produced.

Second stage

The second stage, according to GAS, is characterized by attempts for long-term defense. This is the stage of resistance or adaptation. The endocrine glands secrete hormones in order to increase the level of blood sugar in order to sustain the energy level. Adrenal cortex releases corticosteroids. However, the body cannot sustain all this for long as the resources deplete with the passage of time. Ultimately, overuse of the bodily mechanism harms the physical well-being.

Third stage

Exhaustion is the third and final stage that is characterized by depletion of body's resources. The body experiences "adrenal exhaustion" resulting into decrease in the blood sugar level. The individual experiences mental and physical exhaustion and decreased tolerance to stress. The initial ANS (autonomic nervous system) activities such as

increased heart rate, breathing, perspiration, etc. reappear. As the body runs out of energy and immunity, the extension of this stage might impair body functions. The outcome includes illnesses such as ulcers, other digestion related problems and cardiovascular problems. It has obvious mental ramifications such as depression and other mental illnesses.

Research endorses stress as a primary contributor to poor health. There has been phenomenal rise in the compensation and/ or reimbursement claims for stress-related disorders. The rising costs of healthcare and the pressure on health insurance system has forced the industry to think of alternatives. Recognizing the level of severity many organizations have introduced comprehensive health check-up along with stress assessment for their employees. The stress management programmes have also incorporated stress relief programme involving professional counsellors. For example, few industries have adopted Behavioral Wellness Program (BWP) which has helped lessen money spent on health benefits, accidents, employee turnover, and stress damage claims. The Corporate Stress Report (CSR) has guided a targeted systemic stress action plan which has saved millions of dollars annual.

Symptoms of stress

Physical symptoms	Manifested behaviour	Psychological reactions
Muscle tension	Decreased concentration	Increased anger
Change in eating habits (loss of appetite or sleep disturbance	Decreased sleep duration or	Increased anxiety, fear, confusion, and worry

overeating)			
Bowel upset	Decreased memory		Tearfulness
Headaches	Increased clumsiness		Frequent emotional outbursts
Backaches	Increased use of cigarettes, alcohol, or drugs		Ruminative thoughts
Restlessness	Withdrawal from usual activities	Decreased self-confidence	
Fatigue	Irritability		

Few individuals develop anxiety, dissociation and other symptoms as a response to traumatic event. This could be an indicator of acute stress disorder. The table given below describes the diagnostic criteria for acute stress disorder.

Diagnostic criteria for Acute Stress Disorder*	
A.	The person has been exposed to a traumatic event in which both of the following were present:
	1. the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
	2. the person's response involved intense fear, helplessness, or horror
B.	Either while experiencing or after experiencing the distressing event, the individual has three (or more) of the following dissociative symptoms:

	1. a subjective sense of numbing, detachment, or absence of emotional responsiveness
	2. a reduction in awareness of his or her surroundings
	3. derealization
	4. depersonalization
	5. dissociative amnesia
C.	The traumatic event is persistently reexperienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience; or distress on exposure to reminders of the traumatic event.
D.	Marked avoidance of stimuli that arouse recollections of the trauma.
E.	Marked symptoms of anxiety or increased arousal.
F.	The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or impairs the individual's ability to pursue some necessary task, such as obtaining necessary assistance or mobilizing personal resources by telling family members about the traumatic experience.
G.	The disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event.
H.	The disturbance is not due to the direct physiological effects of a substance or a general medical condition, is not better accounted for by Brief Psychotic Disorder, and is not merely an exacerbation of a preexisting Axis I or Axis II disorder.

* Source- Diagnostic and statistical manual of mental disorders (4th edition), American Psychiatric Association.

Burnout Stress Syndrome (BOSS)

Maslach et al. (1970) coined the term burnout to represent the state of emotional exhaustion with diminished sense of personal accomplishment. Burnout represents the state of long-term emotional exhaustion and reduced interest that reflects failure of the individual's defense at the personal as well as work place. ICD-10 (International Classification of Diseases) has defined it as "problems related to life-management difficulty".

Burnout is reportedly a consequence of work. As it has to do with emotional exhaustion, individuals with burnout symptoms are likely to feel overworked and undervalued. The other emotional characteristics include sense of failure, helplessness, lack of motivation, isolation and lower satisfaction level. Cognitive abilities also get adversely affected. The individual shows low operational capability with memory slips, especially related to short-time memory.

Stress and burnout differ in terms of their inherent characteristics. For instance, one shows over engagement in stress whereas in burnout one shows disengagement. Stress also involves certain degree of hyperactivity whereas burnout produces hopelessness.

Causes of burnout

Similar to stress, burnout could be due to work-related issues such as lack of or losing control over the task, lack of recognition, work environment full of expectations and pressure. The work environment characteristics worsen due to lifestyle and functioning of the individual. It is important for strike balance in life and in order to

achieve it one has to prioritize things in life as well as set certain boundaries. In the state of burnout the individual lacks these abilities and is neither able to prioritize nor to set boundaries. As a result there is a lack of balance in life. Type-A personality and those with perfectionist tendency are more susceptible to it. Further, if indulges in taking too many responsibilities and does not know how to delegate responsibilities to others become prone to it.

Indicators and phases of burnout

The physical and behavioural indicators of burnout are listed below. The emotional characteristics have already been discussed above.

Physical indicators	Behavioural indicators
Mostly tired and drained	Withdrawal from responsibilities
Frequent illness	Omitting work
Frequent head and back aches	Taking longer time to do things
Change in food habits	Isolation
Change in sleep habits	Reflecting frustration on others

Freudenberger and North have proposed 12 phases* of burnout. They are given below.

-
- | | |
|------------------------|---------------|
| 1. Compulsion to prove | 7. Withdrawal |
|------------------------|---------------|
-

2. Hard work	8. Obvious behavioural changes
3. Neglecting needs	9. Depersonalization
4. Displacement of conflicts	10. Inner emptiness
5. Revision of values	11. Depression
6. Denial of emerging problems	12. Burnout syndrome

*The phases need not follow sequence.

Some self-help stress management strategies

Stress management is a thriving area of work for many professionals. You can find several thematic workshops and programme. Here we shall briefly look at behavioural strategies that does not need any training and supervision but are extremely helpful.

The demands of the modern world have forced time-compressed lifestyle on many people. Maintaining certain practices related to our physiological system such as consistent sleep pattern, eating, and exercise is very helpful. Yoga and meditation have been proven effective in combating stress. Researchers at the Jefferson Medical College examined the blood samples of 16 beginners of yoga classes and found reduction in cortisol levels. Examining the long-term effect of meditation, Davidson et al. (2003) studied the Buddhist monks of *Dharamsala*. The MRI scans showed their prefrontal lobes lit even when not meditating. This proves the long lasting effect of meditation. This area of the brain is responsible for positive emotions.

Human beings are social creatures and hence involvement in community affairs is a big stress buster. Besides having good friends one also develops support system for himself/ herself. Religious commitments have also been proven to be of great help. In terms of behavioural reactions, self-expression is a big source of relief. Hence, one should talk to family and friends. If need be, seeking help of a professional counsellor is recommended. It is always good to extend one's special interests. It could be games and sports, literature, music, dance, or any such thing. It is also advisable to spend less time with those who add to your distress. Spending some time with oneself could also prove very effective. Balance between work and recreation is an art and one should learn to master it. Even if one is not able to have vacation, one can attempt enjoying mind vacation, i.e., mentally imagine and derive contentment. Incorporating humor into life might be a tool to expand the way you look at life and interpret them. This might also help you develop the ability to giving away.

Posttraumatic Stress Disorder

Historically, Posttraumatic Stress Disorder (PTSD) is associated to the “post-Vietnam syndrome” (Young, 1995) and was included in DSM-III (Diagnostic and Statistical Manual of Mental Disorders). Although, the diagnostic symptoms of PTSD constitute three clusters of symptoms— re-experiencing, numbing and miscellaneous symptoms, a qualifying stressor is a must for diagnosis. Re-experience includes recurrent intrusive thoughts, nightmares, and flashbacks whereas numbing comprise of sense of detachment, loss of interest, and constricted affect. Miscellaneous symptoms consist of sleep disturbance, exaggerated startle response, memory impairment, and trouble concentrating. The table given below states the diagnostic criteria for PTSD.

Diagnostic criteria for Posttraumatic Stress Disorder*	
A.	The person has been exposed to a traumatic event in which both of the following were present:
	1. the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
	2. the person’s response involved intense fear, helplessness, or horror. (In children, this may be expressed instead by disorganized or agitated behaviour.)
B.	The traumatic event is persistently reexperienced in one (or more) of the following ways:
	1. recurrent and intrusive distressing recollections of the event, including

images, thoughts, or perceptions.

(In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.)

2. recurrent distressing dreams of the event.

(In children, there may be frightening dreams without recognizable content.)

3. acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated.)

(In young children, trauma-specific reenactment may occur.)

4. intense psychological distress at exposure to internal or external cues that symbolizes or resemble an aspect of the traumatic event.

5. physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

1. efforts to avoid thoughts, feelings, or conversations associated with the trauma.

2. efforts to avoid activities, places, or people that arouse recollections of the trauma.

3. inability to recall an important aspect of the trauma.

4. markedly diminished interest or participation in significant activities.

5. feeling of detachment or estrangement from others

	6. restricted range of affect (such as unable to have loving feelings)
	7. sense of a foreshortened future (such as, does not expect to have a career, marriage, children, or a normal life-span)
D.	Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
	1. difficulty falling or staying asleep
	2. irritability or outbursts of anger
	3. difficulty concentrating
	4. hypervigilance
	5. exaggerated startle response
E.	Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
F.	The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

* Source- Diagnostic and statistical manual of mental disorders (4th edition), American Psychiatric Association.

PTSD is classified as acute if the duration of the symptoms is less than 3 months. In case the symptoms are present even after **3 months** time, it is classified as chronic. However, few researchers (Bhushan & Kumar, 2007, 2009) have argued that instead of labeling posttraumatic stress as disorder it should be considered as “normal reactions experienced by people in response to stressful and traumatic situations, indicative of need for cognitive-emotional processing, rather than an abnormal state of mind” (Joseph &

Williams, 2005, p. 426). Epidemiological studies suggest that the prevalence rate of PTSD depends on the nature of trauma. For instance, 55% victims of rape, 35% victims of childhood sexual or physical abuse, 17% of those experiencing physical and armed assaults, and 7% survivors of severe accidents develop PTSD. However, an increasing numbers of studies have questioned the undue focus on the negative aftereffects of trauma. The findings suggest that many survivors experience positive change in life in addition to experiencing the symptoms of posttraumatic stress. This positive psychological change has been termed as posttraumatic growth (PTG).

Posttraumatic Growth

The term ‘posttraumatic growth’ was formally introduced by Tedeschi and Calhoun in 1995. They defined posttraumatic growth as “the positive psychological change experienced as a result of the struggle with highly challenging life circumstances”.

Folklores, stories often narrated in societies and shared life experiences of people are full of description of transmuting traumatic experiences leading to wisdom, personal growth, and positive changes in life. Different researchers have used different words for it and succeeding studies have interchangeably used those terms. They are enlisted below.

Heightened existential awareness	Yalom & Lieberman (1991)
Positive changes in outlook	Joseph, William & Yule (1993)
Quantum change	Miller & C’deBaca (1994)
Transformational coping	Aldwin (1994)
Posttraumatic growth	Tedeschi & Calhoun (1995)

Stress related growth	Park, Cohen & Murch (1996)
Construing benefits	Affleck & Tennen (1996)
Thriving	Abraido-Lanza, Guier & Colon (1998)
Perceived benefits	MacMillen & Fisher (1998)
Flourishing	Ryff & Singer (1998)
Positive byproducts	Mc Millen & Cook (2003)

PTG might sound similar to concepts like resilience, hardiness, optimism and sense of coherence. Psychologists establish distinction between them. As defined by Garnezy (1994), resilience is the “the skills, abilities, knowledge, and insights that accumulate over time as the individual struggles to surmount adversity and meet challenges”. It represents “the ability to restore balance following a difficult experience and integrate it into the backup of one’s total life experiences” (Langer, 2004). Thus, it is the best utilization of internal and external resources for positive coping amidst various constraints. Hardiness is the susceptibility to commitment, control, and challenge in the wake of various life incidences. People high on hardiness have curiosity, self-motivation and reliance on own ability. Optimism echo positive expectations from an event. Unlike these apparently analogous concepts, PTG is the qualitative transformation that goes beyond one’s ability to resist. Such transformation safeguards the individual to suffer psychological scratches by highly stressful circumstances (Tedeschi & Calhoun, 1995).

According to Tedeschi, Park and Calhoun (1998) 30% - 90% of the survivors report some positive changes following a traumatic experience. It is argued that an

inclusive explanation of a reaction to traumatic event needs to consider positive as well as negative changes that human beings experience.

Domains of Posttraumatic Growth

Studies (Joseph & Linley, 2005; Tedeschi & Calhoun, 2004) suggest that the survivors report PTG across three broad spheres- interpersonal relationship, self-perception, and life philosophy. The survivor starts valuing friends and family members much more. There is also increase in self disclosure, kindness, altruism and general openness. Self-perception also gets modified in a number of ways such as augmentation of resiliency, wisdom, strength and acceptance of limitations. Overall there is change in the philosophy of life with added wisdom.

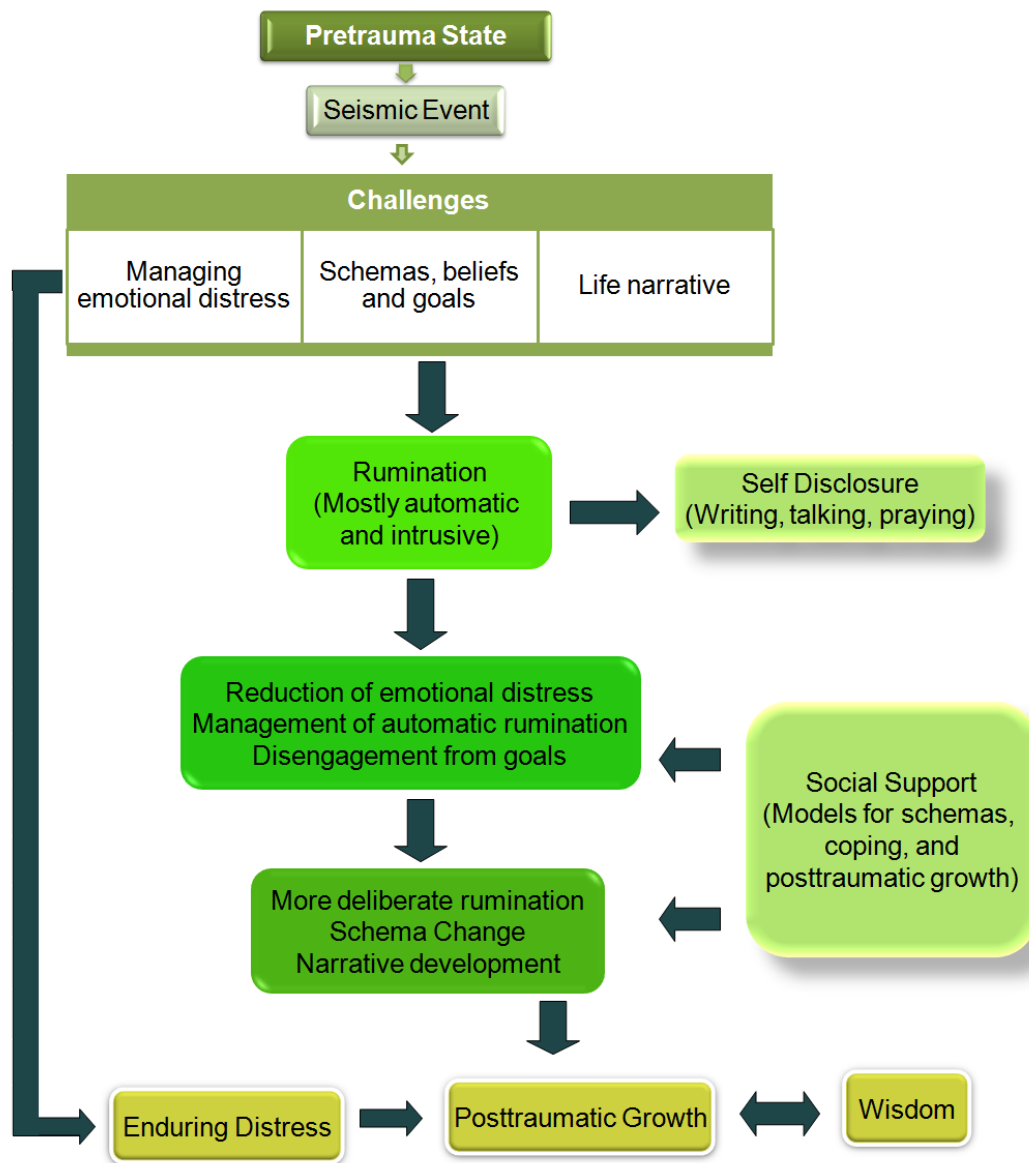
Models of Posttraumatic Growth

Two theoretical models have attempted to explain the process of PTG— the functional descriptive model (Tedeschi & Calhoun, 1995, 2004) and the organismic valuing theory (Joseph & Linley, 2005).

Functional descriptive model

Tedeschi and Calhoun (1995, 1998, 1999, 2004) have described the process of PTG using earthquake as a metaphor. According to this model traumatic event serve as “psychologically seismic event” that “severely shake, threaten or reduce to rubble many of the schematic structures that have guided understanding, decision making, and

meaningfulness. ...The seismic set of circumstances severely challenges, contradicts, or may even nullify the way the individual understands why things happen, in terms of proximate causes and reasons, and in terms of more abstract notions involving the general purpose and meaning of the person's existence" (p. 5). The risk to the person's assumptive world augments the level of psychological distress. The figure given below illustrates the functional descriptive model.

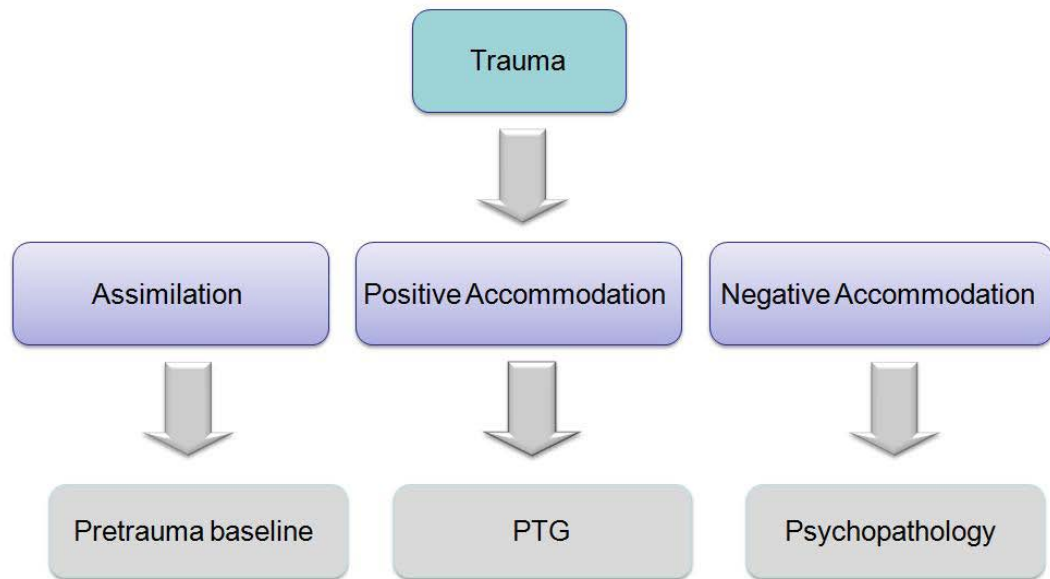


The major propositions of this model are—

- (i) Human beings have an “assumptive world” of their own which comprises of set of beliefs.
- (ii) This “assumptive world” guiding their actions besides helping find meaning and purpose in life.
- (iii) Major traumatic events can threaten this “assumptive world” due to shattering of the schemas.
- (iv) People fight back in order to restore life back to normalcy. Various cognitive processes show the way to rebuilding of new schemas, thus helping in realistic reappraisal of events.
- (v) As a result the survivor develops “schemas that incorporate the trauma and possible events in the future, and that are more resistant to being shattered. These results are experienced as growth” (Tedeschi & Calhoun, 2004, p. 5).

Organismic valuing theory

The organismic valuing theory was proposed by Joseph and Linley (2005). It has its root in the person centered approach of humanistic perspective. It argues that human beings have the intrinsic tendency toward rebuilding their assumptive world. This is guided by their innate inclination towards growth and actualization. The figure given below demonstrates the organismic valuing theory.



The major propositions of this model are—

- (i) Human beings engage in the psychological resolution of traumatic experience in three possible ways— assimilation, positive accommodation, and negative accommodation.
- (ii) Assimilation helps the person return to the pretrauma baseline.
- (iii) Negative accommodation might result into psychopathology.
- (iv) Positive accommodation is likely to result to growth.

This model explains why some people achieve towering level of growth while some other fails to do so. It also elucidates how the newly experienced trauma leaves behind some learning value that are gradually accommodated and one starts realistically reappraising the life experiences portraying their existential implications.

Biopsychosocial-evolutionary view

Besides these two theoretical models, Christopher's viewpoint (2004) has integrated biological, psychosocial, and evolutionary vision of response to traumatic events. According to him, "...normal trauma response is better understood as an evolutionary inherited mechanism for metalearning, which shatters and reconstitutes the metaschema (i.e., concepts of self, society, and nature), in which learning normally takes place" (p. 92). He argues that trauma always changes the person biologically and demands metacognitive reconfiguration of schema. This is important for deriving meaning in life. The mismatch between the biological and social aspects of the self is accountable for psychopathology. Whether a person would develop pathological or would derive positive outcome depends "(i) whether the organism is sufficiently biologically healthy to make use of the resources available to it; (ii) whether the cognitive schema are available to transform stress and anxiety into learning, meaning, and adaptive behavior, and (iii) whether social relationships are complex, responsive, and flexible enough to adequately dampen stress arousal" (Christopher, 2004, p. 77).

We shall now shift our focus on two important psychological constructs that describe human potential to thrive when circumstances are unfavourable.

Resilience

Langer (2004) has defined resilience as "the ability to restore balance following a difficult experience and integrate it into the backup of one's total life experiences". It is a process of adaptation with cognitive, conative and affective determination when faced

with adversity. Wagnild and Young (1990) have proposed five themes— equanimity, perseverance, self-reliance, existential aloneness, and meaningfulness. Equanimity refers to balance in the outlook of life and experiences of an individual. On the other hand, perseverance reflects the individual's uninfluenced determination in crisis. Self-reliance is the conviction in one's capability. Self-reliance is instrumental in congregating resources within the self. Studies report certain degree of loneliness experienced by those exhibiting resiliency. This is termed as existential aloneness. Meaningfulness is the successful conversion of negative experiences into positive outcomes that augment personal growth and life-satisfaction. Thus, resilience is the ability of an individual to bounce back in the aftermath of an extremely intricate situation or events despite the existing constraints.

Aspects of Resilience

There are four aspects of resilience— perseverance, internal resourcefulness, external resourcefulness, and positive coping. Perseverance is the determination of an individual to sustain his/ her constructive effort, thus producing goal-directed behaviour. It is operational at the cognitive, conative as well as behavioural levels. At cognitive level one regulates his/ her thoughts in order to remove the internal blockages. This might fetch possibilities about transformation. The conative level is reflected in sustained effort till the completion of the task. It strengthens the propensity of finishing the task by surmounting the adversity. At the affective level, perseverance does not allow anxiety, fear, and hopelessness to be too intense.

Beliefs, skills, and self-confidence constitute the internal resources. It also incorporates correct utilization of time and energy. This is how previous life experiences are used to unravel present problems. On the other hand, external resources embrace financial assistance, information, emotional support, and opportunities. They have significant role dealing with the crisis. Positive coping is reflected in the optimistic approach towards the self. It encourages acceptance of the present challenges and hope for the future.

Self-efficacy, definite belief in lives and the capability to reframe obstruction are the three constitutional factors that augment resilience. They combine with emotional and cognitive factors, thus affecting one's adjustment. "Resilience does not come from rare and special qualities, but from the everyday magic of ordinary, normative human resources in minds, brains, and bodies" (Deveson, 2003).

Coping

We succeed managing the adversities and challenges that life presents to us. This is coping. According to Lazarus and Folkman (1984) it is "constantly changing cognitive, behavioural, (and emotional) efforts to manage particular external and/or internal demands that are appraised as taxing or exceeding the resources of the person". The available literature in psychology talks about dichotomous types of coping strategies such as primary versus secondary control (Rothbaum, Weisz, & Snyder, 1982), mastery versus meaning (Taylor, 1983), problem-focused versus emotion-focused coping (Lazarus, 1991), and assimilative versus accommodative coping (Brandtstädter, 1992).

Approaches to coping

The two major approaches to coping are problem-focused and emotion-focused coping. Problem-focused coping incorporates attempts that manage and change the sources of the psychological burden directly. Acquisitions of new skills, creating substitute solutions, etc. are examples of problem-focused coping. On the other hand, emotion-focused coping refers to organizing the emotional responses generated due to a stressor. Wishful thinking, seeking emotional support and social comparison are examples of emotion-focused coping.

Besides behaviourally oriented strategies, coping is also looked at from cognitive planning and preparedness perspectives. Cognitive coping represents engagement in conscious mental process for managing negative life events. Reappraisal and refocus on planning are the examples of cognitive coping strategies. The other strategy is the proactive coping strategy. It is a combination of autonomous goal setting with self-regulatory goal attainment. The primary objective of proactive coping is to recognize cues to reduce or modify stressful life events. According to Greenglass (2002), 'it integrates planning and preventive strategies with proactive self-regulatory goal attainment; it integrates proactive goal attainment with identification and utilization of social resources; and it utilizes proactive emotional coping for self-regulatory goal attainment' (p. 41).