

CHAPTER- 1

INTRODUCTION

1.0 Posttraumatic Growth

“The pain of yesterday is the strength of today.” – Paulo Coelho

“When hard times strike, we long for the day when we will get over it and have closure. This is a difficult – often impossible – road to travel. There are some things in life that we must learn to live with because they will never truly go away for good. Despite that truth, there is life – rewarding and abundant life – after distress and pain.” (John F. Westfall, 2008, p. 2)

In his book entitled “It’s not about the bike: My journey back to life” Armstrong has portrayed transformation following his struggle with cancer: “… There are two Lance Armstrongs, pre-cancer, and post. Everybody’s favorite question is How did cancer change you? The real question is how didn’t it change me? I left my house on October 2, 1996, as one person and came home another… The truth is that cancer was the best thing that ever happened to me. I don’t know why I got the illness, but it did wonders for me, and I wouldn’t want to walk away from it. Why would I want to change, even for a day, the most important and shaping event of my life?” (Lance Armstrong, 2000, p. 5)

Posttraumatic growth has been described as a “positive psychological change resulting from a traumatic life event or highly challenging life circumstances” (Tedeschi & Calhoun, 1996; 2004). The concept was christened in 1995 by psychologists Richard Tedeschi, Ph.D. and Lawrence Calhoun, Ph.D.
Positive growth phenomena after a period of agonized suffering and trauma is a recognized fact, deliberated upon in ancient scriptures, beliefs and philosophy. Noticeably the emerging new concept is dealing with the problems in a methodical manner to assist in clinical practice and scientific investigation. Practically most research on trauma has focused on the negative aspects regarding traumatic events; only a small body of research has focused on what has been termed as posttraumatic growth. The basic idea of posttraumatic growth (PTG) is exactly opposite to that of posttraumatic stress disorder (PTSD), the manner in which we’ve viewed trauma for the past few decades.

1.1 The Dimensions of Posttraumatic Growth

Trauma survivors when faced with adversities get transformed in diverse ways according to their capabilities. Posttraumatic growth being multifaceted in nature, trauma victims may experience growth in one domain or other. Posttraumatic Growth is different for every individual and is likely to appear in five broad areas. Tedeschi and Calhoun, (1996) have pointed out five major domains of posttraumatic growth. They are:

- **Awareness of new possibilities in life**

  People set new priorities in life, take up new roles, meet new people become conscious of what’s important in life by shunning off old ideas, priorities and goals that they had prior to facing adversities and hard times. People also try to set new goals in life and new opportunities start to open up in the aftermath of traumatic events.
• **Improvement in close personal relationships**

  People tend to relate to other persons in new and better ways, perhaps by being more compassionate, more empathic and more understanding towards significant others. Disclosure of traumatic events forces oneself to be close to other people emotionally thus evolving and generating new ways into better relationships with others.

• **Increased personal strength**

  People sense an increase in their personal resources like beliefs, convictions and thoughts of what they had prior to the traumatic event and presently have a feeling of being strong that they thought they could never be. Some people discover in themselves their inborn power & strength which is a result of their struggle with traumatic experience.

• **Better appreciation of life**

  People begin to be grateful for the things life has to offer which they used to take for granted prior to the traumatic event. They start to recognize the value of their time on earth which results in the understanding the importance of their respective lives.

• **Positive spiritual change**

  People become more connected spiritually which encompasses different kinds of aspects like for some strengthening of religious beliefs and practice occurs, for others spiritual existential change occurs in which they understand life in a different way and for some understanding of depth and profound nature to living occurs which they think they should have recognized before.
1.2 The Models of Posttraumatic Growth

The following segment gives an overview of the most significant models of Posttraumatic Growth and presents an evaluation of the research literature in this area.

There have been numerous models or theories that have attempted to explain factors which contribute to posttraumatic growth or finding benefit. The basis, or theoretical underpinnings, for many of these theories stem from stress and coping research models (e.g., Lazarus & Folkman, 1984). Researchers have debated whether PTG is an outcome, process, or both, by using different theoretical models. Theories or models of PTG have been categorized in three styles: PTG as a coping style (e.g., process) (Park & Folkman, 1997); a legitimate form of growth (e.g., PTG, finding benefit) (Affleck & Tennon, 1996; Tennen & Affleck, 2002), or a form of defensive denial (e.g., positive illusions) (Lerner & Gignac, 1992; Maercker & Zoellner, 2004).

1.2.1 Outcome Models of PTG

The widely held view that posttraumatic growth refers to actual changes that an individual can experience in relation to an identified trauma is the foundation for models that conceptualize PTG as an outcome of the struggle with a stressor. The view that PTG represents a real and actual change, suggests that the experience of suffering leads to learning processes that change the way an individual views self, others and the world. This change in identity has behavioural implications such as awareness of new possibilities in life, improvement in close personal relationships, increased personal strength, better appreciation of life and positive spiritual change.
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In the following section the most cited outcome models in the literature are reviewed. A synthesis of the models is presented along with the models’ strengths and limitations.

1.2.1.1 Model of Life Crisis & Personal Growth (Schaefer & Moos, 1992)

One of the first models to examine the aftermath of traumatic events and outcomes was Schaefer and Moos (1992) model of life crisis and personal growth. Their model posits that both environmental and personal system factors impact life crises and the aftermath of trauma. Factors related to the event may influence appraisal and coping responses, which in turn may impact positive outcomes of the life transition (Schaefer & Moos, 1992). All of the factors in their model are connected by feedback loops, which have the potential to influence one another.

Their model takes into account such individual characteristics as sociodemographic, self-efficacy, reliance, incentives, physical health, well being, and previous traumatic experience. Environmental factors include social support (e.g., from relatives, colleagues and co-workers) and socioeconomic factors (e.g., finances, community, and living situation). Factors related to the event, including the severity, time period, event timing and whether the event affects an individual or group of people are also relevant to their model.

Schaefer and Moos (1992) hypothesized that three primary outcomes can result from a traumatic event: increases in social resources (e.g., better relationships with friends and family members), increases in personal resources (e.g., more cognitive differentiation, assertiveness, self-understanding, empathy, altruism, and maturity); and the development of and increases in coping skills (e.g., ability to
think through problems, seek help when needed, and regulate affect). Additionally, coping styles and responses are believed to assume a critical role in outcomes including appraisal-focused coping, problem-focused coping, and emotion-focused coping. Appraisal coping is defined as interpreting and attempting to understand a situation. Problem-focused coping is defined as actively engaging in coping strategies, such as positively reappraising the crisis, seeking support, and taking action to solve problems. Emotion-focused coping relates to managing one’s feelings, expressing anger, and acceptance of the situation. Coping style appears to play an important role in experiencing PTG, as well as positive and negative health outcomes in general.

1.2.1.b Model of Growth (Janoff & Bullman, 1992; 2006)

Janoff-Bulman’s (1992) theory of growth emphasizes assumptions about the world and how traumatic events can “shatter” such assumptions. The three fundamental assumptions proposed by Janoff-Bulman include: the world is benevolent; the world is meaningful; and the self is worthy. Such assumptions provide individuals with a sense of security and safety. Along with assumptions, schemas provide a structured way to organize experiences and assumptions (Fiske, 2004; Janoff-Bulman, 2006). Janoff-Bulman (2006) makes a distinction between schemas and assumptions. Schemas are narrower in scope and are incrementally influenced by daily interactions with the world. On the other hand, assumptions are broader and encompass schemas, and can be challenged by significant life crises (Janoff-Bulman, 2006).
Janoff-Bulman (1992; 2006) suggests that before experiencing a traumatic or life changing event, the world is considered to be a safe and just place. Traumatic events call into question one’s assumptive world and threaten the sense of meaning in life, including self concept, comprehensibility, and meaningfulness of one’s assumptive world. Following a traumatic event it is hypothesized that instead of assuming the world is predictive and controllable, the world becomes dangerous, unsafe, and unpredictable. One’s inner world becomes fragile and writ with uncertainty leading to feelings of vulnerability. Following traumatic events, subsequently, individuals attempt to rebuild their assumptions and their shattered beliefs about the world. The reconstructed assumptions may be different than their pre-event assumptions about the world. Through processes such as coping and social support, it is further hypothesized that individuals rebuild and reconstruct their assumptions to adjust to life post-trauma.

1.2.1.c Model of Transformation Coping (Aldwin, 1994; 2007)

Aldwin (1994) has examined PTG as an outcome from a “transformation coping” perspective. In her original model, coping served several functions leading to three different possible outcomes. Transformation positive coping is hypothesized to lead to a greater intensity of functioning or growth whereas transformation negative coping directs to a reduction of functioning and negative outcomes. Homeostatic coping directs to a return to a baseline level of functioning. In transformation coping change could be quite small or quite large, such as rejecting a social network of friends in an attempt to remove oneself from detrimental situations (O’Leary, et al., 1998).
Aldwin (1994) discussed personal variables and resources believed to be related to the outcomes in the transformation coping model. Factors such as intelligence, flexibility, determination, and willingness to take personal risks may increase the likelihood that one will experience positive outcomes as a result of the negative life event. Personality characteristics such as hardiness (e.g., Kobasa, 1979) and sense of coherence (e.g., Antonovsky, 1987) may influence one’s life and be positively related to growth. Last, Aldwin reported that those who are optimistic often use problem-focused coping strategies that may lead to growth. Recently, however, Aldwin (2007) noted that the term “transformation coping” has not been accepted in the academic community. She reported preferring the term “stress-related growth”, a term coined by Park et al. (1996) to denote the process of change following adversity.

1.2.1.d Model of Discontinuous Change & Thriving Theory (O’Leary & Ickovis, 1995)

The O’Leary and Ickovis (1995) model of discontinuous change and thriving theory purports to have three outcomes from stressful life events: thriving, recovery, and survival. Individuals who reach recovery return to homeostasis or a baseline level of functioning and those who survive never regain their previous level of functioning. Thriving is analogous to PTG: it is not simply a form of resilience or addressing the challenge of a distressing event but it is moving above and beyond one’s level of pre-event functioning (O’Leary & Ickovis, 1995; O’Leary et al., 1998). Additionally, thriving is hypothesized to be behavioral, cognitive, or affective. Thriving theory suggests that individuals must take on adversity and confront it in an active way, even though such confrontation may not be within one’s
awareness (O’Leary et al., 1998). Similar to the Schafer and Moos (1992) theory, thriving theory stresses the importance of the availability of individual and social resources to enhance the likelihood that growth will occur.

1.2.1.e Conceptual Model of Posttraumatic Growth (Tedeschi & Calhoun, 1996; 2004)

The most popular and well accepted growth following adversity outcome model comes from Tedeschi and Calhoun (1995, 1996, 2004; Calhoun & Tedeschi, 2006; Tedeschi, Park, & Calhoun, 1998). Researchers consistently refer to Tedeschi and Calhoun’s Posttraumatic Growth model as an outcome model. However, they acknowledge that PTG is also a process that takes place (Tedeschi, Shakespeare-Finch, & Friedman, 2008; Tedeschi & Calhoun, 1996). Similar to other growth models (e.g., Janoff-Bulman, 1992) they theorize that a traumatic event must be “seismic” or have the ability to shake or destroy one’s assumptive world. Emphasis in the PTG theory is placed on rumination, or cognitive engagement. Tedeschi and Calhoun use Martin and Tesser’s (1996) definition of rumination in that repeated thinking, including reminiscing and problem solving, is not necessarily intrusive in trying to make sense of the event. In the immediate aftermath of the event, one’s beliefs and goals change and individuals attempt to manage emotional distress. Individuals participate in a ruminative process (e.g., cognitive engagement) that at first is mostly automatic and intrusive. As time progresses, rumination continues in an attempt to reduce emotional distress. New goals and assumptions about life are beginning to be processed. Later, growth takes place by active rumination, which is more deliberate. Schemas become challenged and one takes on a new life narrative. Additionally, PTG is viewed as a multidimensional construct that takes into account
changes in life goals and beliefs, the development of life narratives, and enhancement of wisdom. In this model other variables such as personal resources, coping processes, and social support are believed to influence PTG.

**Fig 1.1 Posttraumatic Growth Model**

1.2.1.f Organismic Valuing Theory (Joseph & Linley, 2008)

Other PTG models or theories have attempted to take into account both positive and negative outcomes associated with traumatic life events. Joseph and Linley (2005; 2006; 2008) have conceptualized PTG based on their *organismic valuing theory*. Their theory is underscored within a positive psychology framework and assumes that individuals are inherently motivated to achieve growth. Organismic valuing theory focuses on the integration between appraisal processes and individual’s assumptive world. Organismic valuing theory assumes that individuals, following traumatic events, move through a series of appraisals, emotional states, coping styles, to either assimilate or accommodate trauma related information.

The theory suggests there are three means by which individuals process and cognitively interpret information. First, individuals who assimilate the trauma related information may use maladaptive coping strategies, such as self-blame, to maintain a presence in their current assumptive world. These individuals usually return to pre-levels of event functioning. They develop stringent defense mechanisms that may make them more vulnerable to future stressful or traumatic events. Second, individuals who are able to accommodate trauma related information, or change their worldviews, can either achieve positive or negative value direction. Those who positively accommodate may use adaptive coping strategies, by appraising and accepting the new trauma information. Positive accommodation may lead to PTG (e.g., increased personal strength, change in life perspective, improved interpersonal relationships with others). Experiences that are accommodated in a negative direction, by use of maladaptive coping strategies, lead
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Organismic valuing theory also stresses the importance of supportive others and social support in the aftermath of trauma. Specifically, the process of assimilation and accommodation are influenced by the individuals in one’s environment. Outcomes are theorized to be contingent upon the degree in which individuals are open to changing their pre-existing schemas about life (Joseph & Linley, 2008)

Conclusion

To summarize, PTG outcome models reflect several common themes, including the notion that in order for PTG to be perceived an event must reach a severe level, enough to challenge one’s assumptions about life. Hypothesized factors that need to be present for growth to occur include ability for individuals to appraise the event and participate in a form of coping (e.g., active coping). Based on coping style, as well as personal (e.g., open to experience) and environmental (e.g., social support resources), individuals are believed to perceive PTG. There also appears to be a cognitive processing component, or rumination, that is necessary for growth to take place.

There are criticisms of the outcome models and theories of growth, including the lack of articulation regarding specific process or mechanisms that account for growth. Most models or theories do not explicitly address that PTG may be used as a coping strategy. Most models note that it takes time for growth to occur. Furthermore, in the immediate aftermath of the event, most individuals have not had
sufficient time to cope with the trauma, reduce emotional distress, or cognitively process (e.g., ruminate over what has taken place) the event for perceived growth to occur. With that said, researchers have not well-articulated or empirically supported the processes that take place in the immediate aftermath of a traumatic event. Thus, outcome models do not satisfactorily address the time-course trajectory of when growth can occur.

1.2.2 Process Models of PTG

Posttraumatic Growth has also been conceptualized through process models (e.g., benefit-finding, Affleck & Tennon, 1996; Tennen & Affleck, 2002). Such models focus on PTG as a form of coping or mechanism and describe it as a perception of change and not necessarily actual change. Process models explain PTG as an illusory perception of change in identity achieved through such strategies as self-enhancing appraisals, making past memories negative or making comparison with others. All of these processes could be compensatory or defensive in order to protect the original identity from being changed or shattered. The following section reviews the most cited process models in the literature.

There is a considerable amount of overlap between PTG process models and PTG outcome models. These studies are outlined from a review of process models by Zoellner and Maercker (2006).

1.2.2.a Cognitive Adaptation Theory (Taylor, 1983)

Taylor (1983) provided one of the earliest and most influential theories of adaptation to threatening events. According to the cognitive adaptation model, traumatic events lead individuals to search for meaning in the experience, in an
attempt to restore a sense of mastery over the event and life more generally, and engage in self-enhancing evaluations in an effort to regain a sense of self-esteem.

Cognitive adaptation theory (Taylor, 1983) posits that when individuals experience challenging life events, they respond in cognitively adaptive ways to help them return to or exceed their previous level of psychological functioning. Under this theory individuals search for meaning in an effort to gain mastery and enhance the self. In the context of PTG, self enhancement occurs by individuals’ construing personal benefit from their experience. This way of viewing the experience can be deemed “illusionary” because there is no factual basis for positive cognitions. Whether PTG reflects actual growth or an illusion is very challenging to distinguish and some researchers have incorporated both an adaptive and maladaptive side into their PTG model.

Benefit finding depends on the capacity to sustain and modify cognitive biases or illusions that buffer against the sense of threat in the present and the future. By illusions, it does not mean beliefs that oppose known facts, but rather looking at facts in a particular light that yields a more positive picture. These positive illusions are a part of normal cognitive functioning and beneficial to mental health (Taylor & Brown, 1988).

**1.2.2.b Stress and Coping Theory (Lazarus & Folkman, 1984)**

To understand PTG as a process, it is important to examine how individuals appraise traumatic life events. Appraisal of the traumatic event is an important aspect of the post event process. Lazarus and Folkman (1984) differentiated between both primary and secondary appraisals. Primary appraisal occurs when a person
gives importance to a particular person – environment transaction. Under most circumstances, life events can be appraised and assimilated into one’s global worldview. As stated previously, traumatic events often call one’s worldview into question and lead one to believe that they are not in control of fate (Janoff Bulman, 1992). Secondary appraisal occurs when the individual evaluates the traumatic event and thinks about the possible outcomes i.e. coping process. Secondary appraisals include evaluations about expectations for coping with the event and possible outcomes (Lazarus & Folkman, 1984). The use of both primary and secondary appraisals are important in the aftermath of trauma and can influence how one copes with the event, and subsequently perceives PTG.

**1.2.2.c Model of Meaning- making Coping Process (Park & Folkman, 1997)**

Posttraumatic Growth has been conceptualized within the framework of global and situational meaning (Park & Folkman, 1997). Global meaning refers to a more general level of meaning in one’s life including basic goals and fundamental assumptions, beliefs, and expectations about the world. Global meaning has the potential to influence peoples’ understanding of the past and future, influence individual expectations of the future, and play an important part in perception of situational meaning. Global meaning, thus, is similar to what has previously been referred to as an assumptive world (Janoff-Bulman, 1989; Parkes, 1975; 1993). Global meaning encompasses beliefs about the world (e.g., the world is a good, just, and fair place; Janoff-Bulman, 1992), and beliefs about self (e.g., self worth and self control; Taylor, 1983; Janoff-Bulman, 1992). Situational meaning refers to “the interaction of a person’s global beliefs and goals and the circumstances of a particular person environment transaction” (Park & Folkman, 1997; p. 121).
According to Park and Folkman (1997), in the context of their meaning-making coping model, individuals cope successfully with a stressful life event by either changing the appraised meaning of the situation to assimilate into their preexisting global meaning or changing their beliefs or goals to accommodate the event (e.g., Janoff-Bulman, 1992; Park & Folkman, 1997). Within the context of their model, PTG and benefit-finding occur through cognitive reappraisal strategies such as compensatory self-enhancement, downward comparisons, and the development of a different perspective on the situation. Meaning-making, or PTG, occurs during the coping process when individuals reduce discrepancies between situational and global meaning, thus perceiving new growth and changing global meaning. Areas of growth would fall within the global meaning framework. For example, benefits in the personal strength area would come under the cluster of assimilation, or altering the situational meaning to adjust with the global meaning (Park & Folkman, 1997).

1.2.2.d The Janus-Face/ Two Component Model (Maercker & Zoellner, 2004; 2006)

The more recent two component model considers PTG to have a functional and a constructive side, as well as an illusory, self-deceptive or dysfunctional aspect (Zoellner & Maercker, 2006). They suggest that the perception of PTG is partly a distorted positive illusion that helps to ease emotional distress. The constructive side of PTG may be evident in healthy adjustment in the long term, while the illusory, self-deceptive side is associated with denial in the brief or lengthy time period. This side of PTG presents as a cognitive avoidance strategy which can be maladaptive to long term adjustment. However, if an illusory perception of growth co-exists with
planned attention to the traumatic event, rather than avoidance, then it is thought to serve as a brief period adaptive coping strategy. The model proposes that the illusory perception of growth represents a coping attempt with a purpose in brief time period. However, the realistic constructive aspect is expected to be associated with adjustment and wellbeing in the long term. It is suggested that successful coping after a trauma sees the realistic, self-transforming component of PTG that develops over time and the illusory component reduces over time (Zoellner & Maercker, 2006).

Conclusion

In summary, PTG research acknowledges that growth is conceptualized from a number of different perspectives which may represent different processes and outcomes. In examining the conceptualization of PTG, Tennen and Affleck (2002) note that benefit-finding may reflect “selective evaluation, a coping strategy, a personality characteristic, a reflection of verifiable change or growth, an explanation of one’s temperament, a manifestation of an implicit theory or change, or a temporal comparison” (p. 594). Similarities between outcome and growth models stress the importance of personal and environmental resources, such as coping strategies and supportive others. Models have also begun to incorporate both positive and negative outcomes (e.g., OVT; Joseph & Linley, 2005, 2008) to encompass all components of PTG, which had been lacking in previous PTG theories and models.

There are several factors or processes that remain unclear in both process and outcome theories of PTG. First, uncertainty remains whether PTG reflects a unidimensional or multidimensional construct (Joseph & Linley, 2008). Most
models or theories suggest growth as a global construct with areas of growth not explicitly addressed. Thus, researchers need to employ factor analytic methods to examine the dimensionality of PTG.

Second, PTG models are unclear at what point after trauma individuals perceive benefits, including at very early time points. This ambiguity is further evidenced by a lack of empirical studies examining PTG at early time points. While the majority of the theoretical research is in agreement that it takes months or even years for PTG to take place, empirical support is lacking. Thus, the time frame between PTG as a coping strategy early in the aftermath of a trauma and PTG as an outcome long after the traumatic event remains uncertain. With longitudinal perspective research designs and creative research methodologies, researchers can begin to understand the complex processes of PTG over time.

**CORRELATES OF POSTTRAUMATIC GROWTH**

**1.3 Posttraumatic Distress**

The word “trauma” is derived from the Greek language denoting ‘wound’. The definition of trauma refers to either a physical, or to a psychological wounding, with ‘wounding’ meaning a piercing or breaking of an external surface. This study is concerned with the psychological aspect and effects of a trauma that may or may not be accompanied by a physical injury or shock, in which the external world perforates the internal world of the individual (Tedeschi & Calhoun, 1995).

Based on the DSM – IV- TR diagnostic criteria for PTSD, it specifically defines trauma as – “direct personal experience of an event that involves actual or
threatened death or serious injury, or other threat to one’s physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate” - Criterion A1. (APA, 2000, p.463)

“The person’s response to the event must involve intense fear, helplessness, or horror (or in children, the response must involve disorganized or agitated behavior)” - Criterion A2. (APA, 2000, p.463)

Tedeschi and Calhoun (1995) explain other qualities of trauma that should be borne in mind: the suddenness and unexpectedness of the trauma, the extraordinary nature of the trauma, the perceived lack of control, blame of others, the possibility of irreversible serious consequences, and the developmental stage of the individual at which the trauma occurs. The impact of the traumatic stressor is affected by a number of factors. Some of these factors include but are not limited to, the nature of the trauma, the response of society, social support systems and personal characteristics of the individual. (Regehr & Sussman, 2004).

Latest findings depict that human beings are likely to experience positivity during the healing process, which assists them to adjustments and lead forth. At the time of adversity human beings try to adapt themselves and have an empathetic approach (Baum & Grunberg,1991; Sattler et al., 1995). Parents, siblings, relatives and well-wishers play a significant role by providing moral support in boosting the suppressed spirits. (Kaniasty & Norris, 1995).
The conservation of resource stress theory presents an effective outline for understanding the reactions to traumatic life events. The theory explains that individuals reconstruct their resources for self-improvement and increase their optimistic approach. The theory suggests that psychological stress takes place when there is danger of resource deficit (Hobfoll, 1989). According to the theory, there are four categories of resources considered for a person’s well-being: condition (marital status, job, societal roles), individual traits (age, understanding, self-esteem, competency), energy (finance, security) and material things (residence, vehicle and other materialistic assets).

The theory also implies that the resource benefits are likely to prove fruitful. For instance, people who have undergone and borne the agony of natural calamities or other traumatic events learn the importance of preparation, new coping strategies and increase their sense of self-efficacy (Calhoun & Tedeschi, 1998; Monnier & Hobfoll, 2000; Sattler et al., 2000). Many research works reveal that deficiency of resources stand responsible for maximum psychological stress variance than variables such as sense of coherence, coping style, anxiety after a natural calamity (Freedy et al., 1994; Sattler et al., 2002). Most research suggests that resources connected to personal traits are partly reasonable for distress. This is because of the changes related to disturbance in routine life during the period of recuperation.

1.3.1 Relation of Distress to Growth

Trauma has both salutogenic and pathogenic effects on an individual. Three veins of thought that emerge about the relationship between Growth and Distress have been put forward by various researchers. First approach is that distress and
growth are at opposite ends of the same range, in which both are correlated negatively (Frazier et al., 2001). Secondly, distress and growth are related in a positive manner (Solomon & Dekel, 2007; Pooley et al., 2012; Blix et al., 2013). Thirdly, distress and growth are independent entities showing no association between them (Joseph et al. 1993; Morris & Finch 2011). These confusing findings are majorly due to studies which are cross-sectional in nature rather than longitudinal where in growth and its correlates can be observed and understood in an appropriate manner.

A probable path proposes the idea that distress ensures successive growth. Tedeschi and Calhoun (2004) contend that PTG is the result of the post trauma psychological turmoil. The thought process which goes in the mind after an ordeal leads to productive processing and this consequently gives rise to growth. According to this composition, it is assumed that PTSD and PTG have positive association with each other. On the contrary, on the opposite end growth leads to distress rather than vice versa. It has been proposed that PTG is a medium for paving the way for salutogenic outcomes. For example, Davis, Nolen-Hoeksema, and Larson (1998) consider PTG as an interpreter of meaning while others (e.g., Taylor & Armor, 1996) think PTG as a self improvement appraisal (Zoellner & Maercker, 2006). Considering PTG as a coping mechanism it is expected that PTSD and PTG are associated in a negative manner which means that higher the growth the lesser the distress that follows.
1.3.2 The Role of Trauma

Various types of stressors and crises can serve as the impetus for growth. It is unclear whether certain events are more likely to result in personal growth than others. Although, it is not the event itself that is responsible for posttraumatic growth (PTG) as much as it is how the individual copes with the aftermath of the trauma. In order for the stressor to be an opportunity for growth, it must be seismic enough to cause disequilibrium in functioning (causing great emotional distress and discomfort). As the individual struggles to adapt and cope with the distress, they may emerge from the crisis changed—better off than they were before. This section will review the empirical evidence for PTG following illness, natural disasters and bereavement.

1.3.2.a Life Threatening Illness

One type of stressor that has been associated with growth is life-threatening illness. Individuals experiencing serious illness often struggle to cope with the threat of shortened lifespan, pain, or loss of function. For some individuals such stressors prompt them to re-examine their values and priorities. For example, Schwartzberg (1994) conducted a study in which a majority of the sample of HIV-positive men described a transformative experience as a result of their illness. They reported the struggle with HIV served to mobilize their personal strengths and internal resources. Some individuals reported becoming more compassionate, empathic and altruistic. Another study by Gaskins and Brown (1992) also found HIV-positive men reporting affirmative changes in their lives as a result of their diagnosis, including improved philosophy of life, acceptance of their sexual orientation, and a reduction of high-risk behaviors.
Similarly, a number of studies of individuals with cancer have identified posttraumatic growth as evidenced by enhanced personal and social resources (O’Connor, Wicker, & Germino, 1990; Kristjanson & Ashcroft, 1994). Studies on women with breast cancer have found positive outcomes, such as improved quality of interpersonal relationships, increased optimism, strengthened personal character, and enhanced empathy towards others (Northouse, 1994; Zemore, Rinholm, Shepel, & Richards, 1990). Research with men diagnosed with advanced testicular cancer also report similar findings (Rieker, Edbril, & Garnick, 1985). Finally, studies on individuals who received bone marrow transplant (BMT) cancer treatment found that individuals reported several positive psychological outcomes. The outcomes reported by BMT survivors included enhanced life philosophy, improved family relationships, and increased social support (Fromm, Andrykowski, & Hunt, 1996) as well as, finding new meaning and value in life, increased self esteem and self confidence, and improved life goals and purpose (Curbow, Legro, Baker, Wingard & Somerfield, 1993).

1.3.2.b Divorce

The trauma of divorce is unique and complex as it typically involves two individual, children and society making it difficult to comprehend for both children and adults alike, resulting in subsequent adjustment problems. As the event is uncontrollable, unexpected, sudden in most cases, it alters the schema of the persons involved, thus changing the individuals perpetually in the course of the events presently occurring and in the years in which the traumatic divorce process would follow. Divorce compels individuals to make simultaneous, substantial changes in not one, but many spheres of their life within a brief period of time (Pledge, 1992).
Divorce also involves difficult and complicated crises of self-esteem, self-confidence, child rearing, financial support and life’s aspirations. As compared to married couples, divorced persons undergo and suffer through decreased levels of happiness, psychological and physical well being, self concept and greater psychological distress, risk of mortality (Amato, 2000). Despite the devastating negative facts regarding divorce, Booth and Amato (1991) discovered that an increase in stress levels is seen in pre-divorce period which resumes to past levels only after two years in divorced individuals.

1.3.2.c Death of Spouse or Child

Experiencing the death of a loved one can also provide the context for growth. Kessler (1987) interviewed bereaved individuals and found that many of them described positive changes after their loss, such as enhanced wisdom and maturity, a new life perspective, increased independence and compassion, and purpose in life. Individuals who lost a spouse reported higher levels of independence and self-reliance as they adjusted to living alone. Several individuals in her study described an intention to live life more purposefully and to the fullest as a result of a heightened awareness of the fragility of life. Simon and Johnson (1998) investigated the experience of adult individuals who lost a parent during their childhood; these bereaved individuals reported increased self reliance and self-efficacy, and a greater understanding of others in adulthood. Similarly, Calhoun and Tedeschi (1990) interviewed individuals about their experience with bereavement. Most of the respondents described some positive psychological changes, including increased independence and maturity, greater social support, improved ability to cope with
other crises, a deepening of religious beliefs, and an acceptance of their own mortality.

1.3.2.d Disasters and Major Accidents

Researchers have also identified positive outcomes that resulted from successful adaptation to natural disasters such as earthquakes, fires, floods, volcanic eruptions, lightning, tsunamis as well as motor vehicle accidents. Two studies on children who endured hurricanes found positive changes in some individuals, such as increased empathy and compassion for others, improved family relationships, and insight into basic necessities needed for survival (Coffman, 1998; Saylor, Swenson, & Powell, 1992). Miles, Demi, and Mostyn-Aker (1984) examined the experience of rescue workers who confronted massive death and destruction from disasters. They found confrontation with disaster changed the life of a majority of the rescue workers in their study; they reported increased altruism and compassion and an enhanced appreciation for the fragility of life.

Similarly, Harms and Talbot (2007) explored the association between PTG and PTS in serious road accident victims. Findings suggested 99% of accident survivors reported PTG while one third of them still experienced psychological distress even after 4 years of their traumatic road accident experience. Nishi et al. (2010) examined the relationship between PTG, PTSD and resilience in motor vehicle accident survivors. Results reported that PTG correlated positively with resilience and PTSD in 118 motor vehicle accident victims. Additionally three domains of PTG i.e. new possibilities, personal strength, relating to others showed positive link with resilience while the other two areas of PTG i.e. appreciation of life and spiritual change showed positive link with PTSD symptoms.
1.3.2.e Sexual and Physical assault

Sexual and physical assault, a horrific and severe traumatic event is any involuntary sexual act in which an individual is physically forced to engage against their will, including rape, groping or torturing the person physically in any way. Tedeschi, Park and Calhoun (1998) suggest that the trauma survivors of such extreme atrocity also report positive changes in life which includes constructive changes in oneself, significant others and spiritual aspects of the individual. Survivors who report positive changes are at less risk to report PTSD and trauma-related symptoms as compared to those who keep ruminating on the negative feelings of reduced self worth, self confidence, and self image which they endured in the whole traumatic process (Frazier et al. 2001).

1.3.3 Posttraumatic Distress and Posttraumatic Growth

Trauma seems to have two contrasting opinions regarding its consequences. Firstly, as we all know trauma’s destructive effects which disturb the psychological and physical equilibrium, thus giving rise to various physical and mental health problems. This has been voiced by many researchers like Breslau, Davis, Andreski, and Peterson (1991); Kessler, Sonnega, Bromet, and Hughes (1995) who provide evidence that trauma leads to PTSD, anxiety, depression and alcoholism. Secondly, trauma also has its positive side i.e. the constructive effects where individuals gain an optimistic outlook in their traumatic life events subsequently resulting in experiencing in positive psychological changes known as posttraumatic growth. In a similar vein Pooley et al. (2012) explained posttraumatic stress and posttraumatic growth with their relationship to coping and self – efficacy in the NW Australian Cyclone communities. Results suggest that higher levels of PTS direct the way for more growth to occur.
1.4 Sense of Coherence

Aaron Antonovsky (1923-1994) an Israeli medical sociologist, gave the concept of salutogenesis – “origin of health”. The phrase comes from the Latin word, ‘salus’ meaning health and ‘genesis’ meaning origin. It is based on the idea that factors causing human health and welfare should be given prime importance rather than concentrating on aspects that cause illness and malady. The perspective of salutogenic theory is to consider health as an ease-disease continuum with progress towards health and well being. (Eriksson and Lindström, 2007). It is an alternative medicine belief that concentrates on factors strengthening the health concept rather than disease and illness view. The vital elements in the salutogenic model are firstly the course of direction that leads to physical well being and problem-solving philosophy; secondly, to utilize the available resources appropriately; thirdly, identifying a universal and pervasive sense in individuals, groups or communities that serve as an overall system for this process i.e. Sense of Coherence. (Lindstrom and Eriksson, 2005). Over the years, it has been seen that salutogenesis has become a recognized and well known concept in community health and well being (Mellem, 2008).

Antonovsky (1987, p. 19) has identified Sense of Coherence as:

“a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that

(1) the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable and explicable;

(2) the resources are available to one to meet the demands posed by these stimuli; and
1.4.1 The Dimensions of Sense of Coherence

The first domain of Sense of Coherence is Comprehensibility, which is the degree of confidence that individuals have that they will make sense of the stimuli from their internal and external environments (Antonovsky, 1987).

The second domain of the Sense of Coherence construct is Manageability, which is the degree of confidence that individuals have that they have the resources available with which to respond to the demands placed on them.

The third domain of Meaningfulness, refers to the degree to which individuals recognize that their life, and the demands or challenges that are placed on them, have meaning and as such are worthy enough for them to emotionally, cognitively and physically invest in them (Antonovsky, 1987).

According to Antonovsky, the third area is the most significant and vital for individuals facing stressor and their perception of their own lives. He believes that if a person finds no purpose to endure life’s obstacles and face them i.e. they find no meaning while tackling difficult life events, then they will not make the efforts to understand and deal with events effectively.

1.4.2 Concept of Stressors and GRRs

Antonovsky also studied the effect of various stressors and found that individuals who could deal effectively with stress had more resistance against sickness than their counterparts. According to Antonovsky (1990, p. 74) “Stressors can be defined as a stimulus which poses a demand to which one has no ready-made,
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immediately available and adequate response”. When individuals are challenged by stressors, they enter a state of conflict, which is measured on both psychological and physiological levels. Stressors generally do not have an inbuilt potential to cause disease, but if resolved resourcefully can be managed perfectly leaving us with feelings of happiness and gratitude. Good tension management facilitates movement towards the health spectrum (Antonovsky 1979).

Antonovsky introduced the concept of GRR – “Generalised Resistance Resources” in his book entitled “Health, stress and coping” published in 1979. Generalised resistance resources can be defined as follows –

“A GRR is a physical/ biochemical/ artifactual-material/ cognitive/ emotional/ valuative - attitudinal/ interpersonal-relational/ macrosociocultural characteristic of an individual/ primary group/ subculture/ society that is effective in avoiding/combating a wide variety of stressors and thus preventing tension from being transformed into stress” (Antonovsky 1979, p. 103).

Elaborating on the above definition, an individual can make the optimum utilization of GRR while employing coping strategies to deal with stressors, deficit of GRR in turn promptly poses as a stressor. GRR can be capital, expertise, skill, intelligence, foresight, civilization, social support and religion.

He further gives details that early childhood experiences, societal upbringing, societal conditions like lawfulness and certainty all collectively increase GRR, essential to influence and build a strong SOC, where early childhood experiences play a crucial role. GRRs provide an individual with a set of consistent and
meaningful life experiences. The basis of GRRs are mainly found in one’s societal class and materialistic reserves. While confronting stressful situations, an individual with a strong SOC, can utilize one’s GRRs whatever be its sources. In his second book entitled –“Unravelling the mystery of health” (Antonovsky 1987), he further refined the definition of GRRs as “phenomena that provide one with sets of life experiences characterised by consistency, participation in shaping outcome, and an underload-overload balance”. Antonovsky (1987, p.105)

Finally three factors determining health and SOC is elaborated as follows-

1. The level to which an individual confronts and is exposed to stressors directly affects health and well beings in general.

2. Excellent physical health of mind and body in itself is a generalised resistance resource (GRR).

3. If an individual is on the healthful end of ease-disease spectrum, it can lead to acquirement of other positive and health-related GRR.

1.4.3 Sense of Coherence and Posttraumatic Growth

The field of trauma research has only recently begun to explore the association between Sense of Coherence and Posttraumatic Growth, especially with considering the three dimensions of Sense of Coherence. Antonovsky (1987) emphasizes the significance of meaningfulness as a motivational element of sense of coherence and affirms that without meaningfulness the other two elements of SOC i.e. comprehensibility and manageability’s essence are lost. An individual has the strength to endure the most challenging traumatic life event if he finds meaning in life and gains insight and awareness about the why’s of traumatic event. Apart from
studies conducted by Znoj (1999); Forstmeier et.al. (2009) and Aguirre (2008) there seems to be a lack of literature concerning the association between SOC, Meaningfulness and PTG.

1.5 Cognitive Emotion Regulation

Cognitive emotion regulation is defined as the cognitive strategies consciously utilized by the individual in order to handle any emotionally stimulating information (Garnefski et al. 2001). Cognitive emotion regulation can be linked to the broader concept of emotion regulation which is defined as “all the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features” (Gross, 1999; Thompson, 1994, p.50).

Years of research have shown that human life is inextricably associated with the regulation of emotions by cognitions or thoughts and help people to keep control over their emotions during or after the experience of threatening or stressful events (Garnefski et al., 2001) For example, while undergoing a traumatic life event, we may be predisposed to think of blaming ourselves or putting the blame on others. We may try to accept or positively reappraise the situation or we may dwell on our feelings by ruminating. Although the potentiality of advanced thinking and regulating emotions through cognitions is unanimous, large individual differences exist in the amount of cognitive activity and in the content of the thoughts by which people regulate their emotions in response to life experiences, life events, and stressors.
Observably, the concept of cognitive coping is closely linked to the idea of cognitive emotion regulation. One significant distinction between the two viewpoints is that both the commonly acknowledged problem-focused and emotion-focused components of coping comprise a combination of cognitive and behavioral strategies, whereas the cognitive emotion regulation theory is based on the postulation that thinking and acting refer to different processes and, therefore, considers cognitive strategies, independent from behavioral strategies (Garnefski et al., 2001; Garnefski, van den Kommer et al., 2002).

1.5.1 Emotion Regulation

Emotions signify the “wisdom of the ages” (Lazarus, 1991, p. 820), imparting time-tested answers to persistent adaptive difficulties. Significantly, still emotions do not constrain us to react in particular manner, but only make it more possible for us to do so. This flexibility allows us to regulate our emotions. When sad, we may cry, but do not every time do so. When happy, we may jump and laugh with joy, but do not each time do so. Our regulation of emotions is deeply connected to our health and well being.

The research on emotion regulation has its origins in early psychoanalytic theory which emphasizes on the nature of psychological defences (Breuer & Freud, 1957; Freud, 1946). Secondly, it can also be linked to stress & coping theory by Lazarus, 1966; Lazarus & Folkman, 1984. Together, these pioneering theoretical efforts laid the groundwork for contemporary empirical work on emotion regulation in both children (Thompson, 1991 and adults Gross, 1998).
1.5.2 Stress and Coping Theory (Lazarus & Folkman, 1984)

According to Lazarus and Folkman (1984) cognitive emotion regulation can be linked to stress and coping theory. Appraisal of the traumatic event is an important aspect of the post event process. Lazarus and Folkman (1984) differentiated between both primary and secondary appraisals. Primary appraisal occurs when a person gives importance to a particular person–environment transaction. Under most circumstances, life events can be appraised and assimilated into one’s global worldview. As stated previously, traumatic events often call one’s worldview into question and leads one to believe that they are not in control of fate (Janoff Bulman, 1992). Secondary appraisal occurs when the individual evaluates the traumatic event and thinks about the possible outcomes i.e. coping process. Secondary appraisals include evaluations about expectations for coping with the event and possible outcomes (Lazarus & Folkman, 1984). The uses of both primary and secondary appraisals are important in the aftermath of trauma and can influence how one copes with the event, and subsequently perceives PTG.

1.5.3 Cognitive Emotion Regulation and Posttraumatic Growth

Cognitive Emotion Regulation strategies are cognitive processes consciously employed by an individual to handle emotionally arousing information. Coping strategies are main elements considering the pathways to PTG. It is also seen that individuals who are competent of developing positive coping strategies can adjust to the aftermath of traumatic events in an affirmative manner. According to Tedeschi & Calhoun (2004) stress generated by cognitive rumination is altered into productive processing, which in turn starts growth development. Garnefski et al. (2008) also explored the relationship between personality, cognitive coping and psychological
health with posttraumatic growth in patients suffering from severe myocardial infarction. Results reported that cognitive coping strategies played a significant role in determining PTG, besides personality and psychological health.

1.6 Wisdom

Wisdom is the key universal virtue among the four cardinal virtues considered by philosophers and theologians, the others by tradition placed in order are prudence (wisdom), justice, fortitude (courage) and temperance. Virtues can be defined as “cognitive and motivational dispositions that in themselves designate not only adaptive fitness for individual’s achievements, but also the idea of convergence of individual goal achievement with becoming and being a good person from a communal and social-ethical viewpoint” (Baltes, Gluck & Kunzmann 2002, p. 75). Wisdom as a virtue has the quality of encouraging interests that can lead to personal growth in an individual as well as progress of society as a whole. Wisdom as a strength is an indicator of human excellence involving a challenge, requiring sound decision making skills eventually contributing to the common good.

1.6.1 Theories of Wisdom

Wisdom has often been quoted in ancient sayings and philosophical journals. Early Western classical discourses reviewed by Robinson (1990) revealed three distinct concepts of wisdom. First concept is termed as ‘Sophia’ – mostly found in an individual seeking a contemplative life. The second concept is named as ‘Phronesis’ – practical in nature is displayed by great statesmen. Lastly, the third concept is called as ‘Episteme’ displayed in scientific understanding of an
Aristotle added a new category entitled ‘Theoretikes’ – dedicated to theoretical thought and knowledge devoted to truth.

1.6.2 Implicit Theories of Wisdom

Implicit theories are better known as folk theories of wisdom as a construct describing its basic elements which were described by Clayton (1975) and then further explained by German psychologist Paul Baltes’s (1993) analysis of cultural-historical occurrences.

The first systematic examination of the construct of wisdom was done by Clayton in 1975. She used rating as a method wherein she made people estimate the resembling aspects, prevailing in pairs of words which are co-related to rational thinking (e.g. intelligent, wise, empathic, instinctive, erudite). She identified three dimensions of the construct through a statistical procedure called as multidimensional scaling. The three identified dimensions were:

1) Affective (empathy and compassion)
2) Reflective (intuition and introspection)
3) Cognitive (experience and intelligence)

In a study later done by Sternberg (1985) using a similar procedure as above, he identified 6 qualities of wisdom namely:

1) Reasoning ability
2) Sagacity (profound knowledge and understanding)
3) Learning from ideas and environment
4) Judgment
5) Expeditious use of information
6) Perspicacity (acuteness of discernment and perception)

In yet another study, Holliday and Chandler (1986) determined five factors underlying Wisdom:

1) Exceptional understanding
2) Judgement and communication skills
3) General competence
4) Interpersonal skills
5) Social unobtrusiveness

In our everyday language as well the connotation of wisdom is conveyed substantially. Baltes (1993) incidentally, scrutinized minutely the philosophical and cultural-historical works and later on gave the following findings about wisdom:

1) Addresses important/difficult matters of life
2) Involves special or superior knowledge, judgement and advice
3) Reflects knowledge with extraordinary scope, depth and balance applicable to specific life situations
4) Is well intended and combines mind and virtue
5) Is very difficult to achieve but easily recognized

There does exist cultural differences as well as similarities where implicit definitions of wisdom are concerned. Western and Eastern ideologies differ on their views of what makes someone wise. Those from Eastern traditions may take the affective side into account in equal balance with the cognitive side of wisdom, whereas westerners might stress cognition over affective dimensions (Takahashi, 2000). Personal qualities such as compassion, open-mindedness, humbleness, and
others maybe a part of a description of a wise person in these eastern cultures, while intelligence, problem-solving and planning maybe more emphasized in Western cultures (Yang, 2008).

1.6.3 Explicit Theories of Wisdom

Explicit theories of wisdom contemplate more on behavioral aspects of the concept as compared to implicit theories of wisdom. Explicit theories pertaining to wisdom are entwined with the former theories of personality and cognitive development as they highlight the application of pragmatic knowledge in search of outstanding human functioning.

Robert Sternberg, Yale psychologist further developed his prior work on intelligence and creativity (Sternberg, 1985; 1990) and gave the balance theory of wisdom. It is defined as “the processes (balancing of interests and of responses to environmental contexts) in relation to the goal of wisdom (achievement of a common good)” (Sternberg 1985, p. 45). Wisdom is based on tacit knowledge that is built up over time as people learn how to pursue and achieve valued goals successfully. Tacit knowledge is the action-oriented component of practical intelligence (i.e., knowing “how” to do rather than knowing “what” to do). Sternberg believes that knowledge of how to live successfully is learned in the lessons what life has to offer, not through formal education or direct instruction from others. Tacit knowledge becomes the foundation for wisdom when it is used to achieve a common good rather than a self-interested good, and when it is focused on finding ways to balance the often conflicting interests and alternatives involved in real-life situations.
Fig. 1.2 A Balance Theory of Wisdom

According to Sternberg’s balance theory, wise people are skillful in balancing 3 interests and 3 possible courses of action in arriving at solutions to life problems. The 3 interests are: self well-being and basic needs (intrapersonal), the well-being and basic needs of significant others like a spouse, friend or employer (interpersonal), those related to community, country, environment or religion (extrapersonal). Balancing these multiple interests to achieve a common good requires consideration of 3 courses of action concerning whether and how much individuals need to change themselves (adaptation), change their environment, including others or select a new environment altogether.

As stated by Sternberg in his wisdom model, “a wise person goes through a process that may resemble high levels of moral decision making. First, the person is challenged by a real-life dilemma that activates the reasoning abilities that were first developed in adolescence and later polished in adulthood. Then, the person’s life history and personal values bear on his/her use of available tacit knowledge in balancing interests and generating wise responses. The person striving to be wise then examines possible responses to determine the extent to which solutions require adaptation to the environmental and cultural context, shaping of the environment to fit the solutions or selection of a new environment where the solutions might work. Finally, if balance is achieved, then the common good is addressed with the proposed solution” (Sternberg, 1990, p. 60).

To summarize, Sternberg’s concept of wisdom means applying tacit knowledge to find the best possible solution that balances both multiple interest and
possible actions involving adaptation and change. A balance of interests defines a common good and balanced actions serving a common good defines wisdom.

Baltes and his associates developed Berlin Wisdom Model in which wisdom is defined as ‘expert knowledge’ concerning the “fundamental pragmatics of life.” (Baltes, 1997; Baltes & Smith, 1990; Baltes & Staudinger, 2000). According to the Berlin Wisdom Model, wisdom is defined as “… knowledge and judgment about the essence of the human condition and the ways and means of planning, managing and understanding a good life.” Simply stated, “wisdom is an expertise in conduct and meaning of life.” (Baltes & Staudinger, 2000, p.124).

Wisdom is measured according to the following five criteria:

1. Factual knowledge: A basic criteria refers to extensive knowledge of the pragmatics of life. Knowing the “what” of the human nature and progress, societal interaction, societal norms, individual differences.

2. Procedural knowledge: A basic criteria refers to knowing “how” to develop strategies and approaches for solving life’s problems and giving advice, dealing with conflicts, achieving goals and aims of life.

3. Lifespan contextualism: A meta criteria refers to knowledge of different contexts of life and social environments (e.g. education, family, peers, leisure, values, work) and how these roles and settings change over time, both for individuals and society.

4. Relativism of values: A meta criteria refers to appreciation of different perspectives on individual and cultural differences in values and life priorities.
5. Awareness and management of uncertainty: A meta criteria refers to present decision-making skills for understanding complicated information and coping effectively with suitable solutions.

1.6.4 Wisdom and Posttraumatic Growth

Tedeschi and Calhoun’s outcome model of PTG suggests that PTG and enhancement of individual’s life narratives may reciprocally affect each other. PTG shares some universal basics with Wisdom as described by i.e. “fundamental pragmatics of life” (Baltes & Smith, 1990 p. 21). When PTG is experienced by individuals, changes begin to occur that are constantly continuous and have a reciprocal effect simultaneously with the growth of general wisdom about life and life narratives. In a review of literature conducted by Linley (2003), it was pointed out that wisdom and its three dimensions have a significant function in the conception of posttraumatic growth and its positive adaptation to psychological trauma. The three dimensions include identification and organization of uncertainty, assimilation of cognition and affect & appreciation and recognition of human weakness and shortcomings. All these dimensions of wisdom together facilitate in the outcome and process of adapting to posttraumatic growth.

It has long been known that individuals have experienced positive growth in the face of adversity. Finding “something positive” in the aftermath of adversity has been a hallmark trait of many cultures and religions (Calhoun & Tedeschi, 2006; Tedeschi & Calhoun, 1995; 1996; 2004). The ancient Greeks, Hebrews, and Christians, as well as other religious ideologies including Hinduism, Buddhism, and Islam, have attempted to integrate the notion of suffering into their beliefs and
worldviews (Tedeschi & Calhoun, 1995). In the past century, the writings of Victor Frankl (1959) on the Holocaust examined suffering and attempted to make sense of life from an existential perspective. Thus, the theme of suffering and hardship and the individual’s quest to understand adversity is nothing new.