CHAPTER 2
REVIEW OF LITERATURE

Review of literature is the study of the prevalent materials related to the topic of research. This helps the researcher to get a clear idea about the particular field. It is further intended to serve as a means of exchanging information with the hope that it could prevent further duplications of the respondents to determine what is already known from similar research. The knowledge of other research literature is very important for researchers, to check their findings in line with the findings of the previous studies.

2.1 Studies on Posttraumatic Growth

Arandia, Mordeno and Nalipay (2016) conducted a study to find out which model best represents posttraumatic growth's (PTG) latent factor structure using Posttraumatic Growth Inventory (PTGI). It also aimed to find out the differential relationships of the components of the best-fitting PTG model with cognitive processing strategies. Confirmatory factor analyses were conducted with the one-factor, three-factor, and five-factor models of PTG in a sample of 217 Filipino women who have history of IPA (Intimate Partner Abuse) within the last 6 months of a previous or current relationship. Results revealed that the five-factor model comprised of appreciation of life, new possibilities, personal strength, spiritual change, and relating to others best fits the sample. Furthermore, all the components of the five-factor model were found to be positively correlated with cognitive processing of trauma strategies, including positive cognitive restructuring, denial, downward comparison, regret, and resolution/acceptance, albeit in varying degrees. These findings confirmed the robustness of the five-factor
model of PTG compared with other models in a sample of women victims of IPA. In addition, the findings demonstrated the relationship of PTG with cognitive processing of trauma.

Anjum and Maqbool (2015) assessed the level of posttraumatic growth in male and female youths of Kashmir between the age group of 18 -21 years. Posttraumatic growth inventory developed by Tedeschi and Calhoun (1996) was administered on 50 male and 50 female students. Results revealed that significant difference was found between male and female youth of Kashmir on overall score of PTGI. Females perceived more posttraumatic growth than males.

Taku, Tedeschi, and Cann (2014) conducted a study to examine the posttraumatic growth and its correlates among undergraduate students of Japan who had experienced the loss of their loves ones. PTGI and the revised impact of Event Scale were administered. Findings revealed that the curvilinear relationships were observed in the PTG domain of relating to others and the combined domain of spiritual change and appreciation of life, whereas linear relationships were found in the personal strength and new possibilities domains. These results suggest that although a certain level of stress response may be crucial for experiencing PTG, the relationship varies across the PTG domains in these bereaved young adults.

Hallam and Morris (2014) conducted a study to examine the factors associated with the posttraumatic growth among Stroke carers (n=70) and also compared the two models of PTG using this population. The model of Schaefer and Moos was compared to that of Tedeschi and Calhoun (1992) and Westport (1998). Posttraumatic growth: Positive changes in the aftermath of crisis. A cross sectional survey design was used. All carers completing the PTG measure (N = 70) reported growth, but average scores differed from cancer carers (Chambers et al., 2012), PTG was positively correlated with
deliberate and intrusive rumination, avoidance coping, social support, and quality of life. Regression analysis showed that factors identified by Tedeschi and Calhoun (deliberate rumination, intrusive rumination, social support, acceptance coping, survivor functioning) accounted for 49% of variance in PTG, whereas those identified by Schaefer and Moos (active coping, avoidance coping, social support, survivor functioning, and age) accounted for only 21%. Rumination, especially deliberate rumination, explained most variance in PTG and mediated the effect of social support on PTG.

Hussain and Bhushan (2013) did a qualitative investigation of Posttraumatic Growth experiences among 12 tibetan refugees residing in Dharamshala, Himachal Pradesh. Positive changes in outlook toward the world and people, realization of personal strengths, and experience of more intimate and meaningful relationships depicted the experience of Posttraumatic Growth in refugees. The study indicated that cultural world views provided necessary thrust and schemas for the PTG.

Arpawong, Sussman, Milam, Unger, and Land (2013) conducted a study on young cancer survivors who have recently completed treatment assessing posttraumatic growth in them. Survivors of childhood cancer (n=94; 47% Hispanic), ages 11-21. Findings reposted Posttraumatic growth and PTG was found significantly related with psycho social functioning and posttraumatic stress symptoms and inversely related to physical functioning and depressive symptoms.

Gray et al. (2012) did an open trial study to examine the effect of Adaptive closure on PTG in active duty service members. AD is a six week, manualized, hybrid of exposure therapy that incorporates cognitive techniques (Gray et al., 2012). They found that there was a significant increase in PTG, as measured by PTGI, and significant decrease in PTSD symptoms.
Dekel, Ein-Dor, and Solomon (2012) did a longitudinal study to examine the course and bidirectional relation between posttraumatic distress and posttraumatic growth (PTG). A sample of Israeli ex-prisoners of war and matched group were followed over 17 years. Participant’s posttraumatic stress disorder, anxiety symptoms and depression were measured at three time-points while as PTG was assessed twice. Analysis of PTG trajectory revealed that individuals with PTSD reported higher PTG levels across times than those without PTSD. Thus, growth is facilitated and maintained by endorsement rather than absence of PTSD.

Thombre, Sherman, and Simonton (2010) offered a novel examination of posttraumatic growth and its cognitive correlates among cancer patients in western India. As hypothesized, in bivariate analyses perceived growth was significantly associated with greater meaning-focused coping (sense-making, benefit-finding), and with reappraisal of worldviews.

Vishnovsky (2010) conducted a meta-analysis to examine the direction and magnitude of gender differences in self-reported posttraumatic growth. Results from 70 studies (N=16,076) revealed a small to moderate gender difference (g=.27, 95% CI=.21−.32), with women reporting more posttraumatic growth than men. Moderator analyses were then conducted to identify possible sources of these differences. The following moderators were examined: mean age of sample, measure used, nature of the stressful event, language of the measure, and type of sample (i.e., community samples, college students, or mixed). The only significant moderator was age, with women reporting incrementally more posttraumatic growth as the mean age of the sample increased (B = .004, p < .01, SE = .001, Q = 9.13). The size of the gender difference was not found between published (g=.30, 95%CI=.23−.38) and unpublished (g=.22, 95%CI=.12−.31) studies. The present findings indicate that modest, but reliable gender
differences exist in posttraumatic growth even when unpublished data are included in the analyses.

Birgit and Ehlers (2009) conducted two studies of assault survivors (Ns = 180, 70) to examine associations between posttraumatic growth (PTG) and posttrauma psychopathology. Both studies found significant curvilinear associations between PTG and posttraumatic stress disorder, whereas only Study 1 found a curvilinear association between PTG and depression symptom severity. Survivors with no or high growth levels reported fewer symptoms than those who reported moderate growth. Study 1 also investigated potential PTG predictors. Non-Caucasian ethnicity, religiousness, peritraumatic fear, shame, and ruminative thinking style, assessed at 2 weeks, predicted growth at 6 months. Posttraumatic growth may thus be most relevant in trauma survivors who attach enduring significance to the trauma for their lives and show initial distress.

Frazier and Berman (2008) conducted a study 3 days postrape on 67 women who had sought help at a hospital-based rape crisis program. More than half (57%) of the victims reported some positive change in their life as a result of the rape, even at 3 days postrape (Frazier & Burnett, 1994). Their responses were coded into nine categories. The most frequent positive change reported was that they were now more cautious (e.g., “It taught me to be more cautious and alert,” 22%). The other categories were each reported by fewer than 10% of the sample: appreciate life more (e.g., “I appreciate my children and my life more”), changed my relationships in positive ways (e.g., “It brought me closer to my husband than ever before”), reevaluate life and goals (e.g., “I have been forced to look at myself, my life, my relationships, and work”), take better care of myself (e.g., “I’ve quit drinking”), more assertive (e.g., “It taught me to be more assertive and a little less trusting”), realize strengths (e.g., “I’ve learned to like myself better and realize how strong I am”), choose different types of men (e.g., “I no longer will date men or
associate with men who cannot express emotion or be supportive”), and closer to God (e.g., “I’ve drawn closer to God”).

Baker, Kelly, Calhoun, Cann, and Tedeschi (2008) conducted a study on 286 undergraduate students enrolled in a large public university in the southeastern United States. Seventy-nine percent (n=226) were women and 21% were men (n=60), and ages ranged from 18 to 54 years (M=22.0, SD=7.4). Most were single (87%); 73% were Caucasian, 15% were African American, 5% were Asian American, 3% were Latino=Hispanic, and the remainder reported their ethnic status as “other.” Participants completed a sheet of demographic information, the Life Events Report, and then the PTGI scales in one of two sequences: original PTGI first followed by the 21 negative items or original PTGI after the depreciation items. The two sequences were randomly assigned to participants. All participants reported on the effects of a single, highly stressful event. Mean number of months since the event was 14.8 (SD=10.7). Total scores were higher for growth (the original PTGI; M=47.94) than for depreciation (M=16.24).

Another study by Baker, Kelly, Calhoun, Cann, and Tedeschi (2008) conducted a study on 48 men and 136 women from a large public university in the southeastern United States. Although most were undergraduate students in psychology, 48 were undergraduates in other departments, 7 were graduate students, and 12 were faculty or staff. Their ages ranged from 18 to 62 years (M=22.8, SD=7.4). In this study, internal reliabilities for the PTGI were good (Cronbachs alpha=.89), and for the five factors reliability coefficients ranged from .67 for Appreciation of Life to .82 for Relating to Others and Spiritual Change. For the depreciation items overall reliability was good (Cronbachs alpha=.90), and five-factors reliability coefficients ranged from .64 for Appreciation of Life to .83 for Relating to Others. Once again, we found that participants were willing to report changes in both growth and depreciation on the matched items.
even when the paired items were presented together. On average, across the 21 item pairs, 27% of participants reported some change on both dimensions on matched items, with a range from 10% to 52% on specific item pairs.

Taku, Calhoun, Tedeschi, Rivas, Kilmer, and Cann (2007) conducted a study to determine the underlying factor structure of the Japanese version of the Posttraumatic Growth Inventory (PTGI-I), a principal components analysis was performed on data from 312 Japanese undergraduate students who reported growth due to their most traumatic event within the last 5 years. Results showed the PTGI-J has high internal consistency and, of the original five factors reported by Tedeschi and Calhoun (1996), three were replicated: Relating to Others, New Possibilities, Personal Strength, and a fourth factor integrating Spiritual Change and Appreciation of Life emerged. There were neither gender differences nor relationships with time since trauma. PTGI-J scores were positively associated with posttraumatic symptoms and correlated with type of traumatic event experienced.

Duru (2006) studied 301 people (153 women, 143 men, 5 unidentified, with a mean age of 35) who experienced at least one traumatic event. He investigated the predictors of PTGI total score by assessing hopelessness, locus of control, problem-solving skills, and the perception of social support, in addition to demographic and clinical variables. PTG was predicted negatively by hopelessness and positively by the impact of the event on life, dissociation, and physical hyper arousal, while demographic variables were not predictors. The type of traumatic event experienced (accident, natural disaster, combat, or losing a loved one) was related to posttraumatic stress symptoms and PTG. Those exposed to natural disasters or combat reported more growth than accident survivors did.
Vazquez, Hervas, and Perez (2006) conducted a study on victims of March 11 attacks in Madrid 3 to 4 weeks after the attacks. 502 people which included students and general population were assessed of whom 20 had been directly exposed to the attacks and 43% knew someone who had been directly affected. The results showed that 31% of the participants perceived positive consequences from the attacks, whereas 61% reported having experienced learning. The area of most frequent growth was feeling closer to others (80% of the total sample), followed by higher social cohesion (79% of the total sample), and, last, feeling personally prepared for similar future situations (31% of the total sample).

Cobb, Tedeschi, Calhoun, and Cann (2006) did a study on a sample of women who had experienced intimate partner violence. They found that 67% reported higher than moderate levels of PTG. Those who were not currently in an abusive relationship reported higher levels of PTG than those currently in abusive relationship, but even those currently experiencing abuse reported PTG.

Berger and Weiss (2006) investigated PTG related to immigration experiences for Latinas in the New York metropolitan area. This study, along with the validation study (Weiss & Berger, 2006), are the only published studies that utilize the PTGI-S(Spanish Version).The sample experienced a variety of traumas, including immigration related traumas. The study found that participants had experienced a moderate level of stress and reported high levels of PTG.

Maguen, Vogt, King, King, and Litz (2006) have identified deployment-related and demographic predictors of several factors of posttraumatic growth in a sample of combat-exposed Gulf War I veterans. Participants were obtained via a Veterans Administration registry of Gulf War I veterans and were mailed a survey containing a number of scales assessing pre deployment, deployment, and post deployment factors
from the Deployment Risk and Resilience Inventory and the Posttraumatic Growth Inventory. Military status and perceived threat were significant predictors of appreciation of life. Relating to others, personal strength, and posttraumatic growth as a whole were best predicted by the post deployment variable of social support. Minority status was the only significant predictor of new possibilities, with ethnic minorities reporting more new possibilities post deployment.

Widows, Jacobsen, Booth-Jones, and Fields (2005) sought to identify predictors of posttraumatic growth among cancer patients (N=72) undergoing bone marrow transplantation. Greater posttraumatic growth in the post transplant period was related to younger age; less education; greater use of positive reinterpretation, problem solving, and seeking alternative rewards as coping strategies in the pre transplant period; more stressful appraisal of aspects of the transplant experience; and more negatively biased recall of pre transplant levels of psychological distress. Findings partially support Schaefer and Moos's (1992) model of life crises and personal growth and also suggest that temporal self-comparisons contribute to the experience of posttraumatic growth.

The attributed factors to Posttraumatic growth in the September 11th terrorist attacks were examined among 513 middle school adolescents (mean age = 13.5 years; 63% female; 44% Hispanic/Latino, 25% Asian, 16% White, 10% multiethnic/other, and 4% Persian; all residing in California), (Milam, Olson, Tan, Unger, & Nezam 2005). One-third of the participants, on average, reported experiencing positive changes post 9/11 in the following areas: appreciation of life, life priorities, spirituality, relationships, and self-reliance. Hispanic and White, compared to Persian (largely Iranian), participants had significantly higher PTG scores. Discussion of the terrorist attacks, identification with a religion, and optimism were positively associated with PTG, while alcohol use, depressive symptoms, and anxiety were inversely associated with PTG. Ethnicity,
discussion of the terrorist attacks, identification with a religion, optimism, anxiety, and alcohol use remained associated with PTG after adjusting for the other variables in a multiple regression analysis. Results suggest there are positive aspects of the psychological sequelae following the 9/11 attacks and these positive changes are associated with other salutary psychological and behavioural factors.

Weiss (2004) conducted a study on breast cancer survivors and their husbands. This correlational study identified the social context and event–related correlates of PTG among (n=72) husbands. Bivariate analyses indicated that husbands’ PTG was positively associated with general social support, greater marital support and depth of commitment, greater PTG in wife, shorter time since diagnosis and breast cancer meeting DSM-IV criteria for traumatic stressor. Multiple regression analysis revealed that the significant predictors of husbands’ PTG were depth of marital commitment, wife’s PTG, and breast cancer meeting DSM-IV traumatic stressor criteria.

Peterson and Saligman (2003) conducted a study on internet that included data from around 40,000 people and compared the data of those who participated in the study before and after the attacks. The results showed that, following the attack, seven character strengths (gratitude, hope, kindness, leadership, love, faith, and teamwork) increased significantly, and moreover, this increase was sustained months later.

Powell, Rosner, Butollo, Tedeschi, and Calhoun (2003) used one of the established measures of PTG, the PTGI (Tedeschi & Calhoun, 1995, 1996) to measure the growth among former refugees and displaced people in Sarajevo who were exposed to trauma for several years (1991 to 1995). Adults between 16 and 65 years old who lived in former Yugoslavia for most of 1980 to 1991, living at the time of interview (1999) in Sarajevo, but who had lived outside Sarajevo for more than 12 months between 1991 and 1995, not suffering from a psychotic disorder or other serious crisis, and literate enough
to answer the questionnaire with some help. Current and former military personnel were not excluded. The original samples of 97 and 104 persons were stratified to ensure an approximately equal number of each sex in three age groups: 16 to 30, 31 to 45, and 46 to 65 years. With some rather weak exceptions, there was no connection between posttraumatic growth and either the number of stressful events or posttraumatic symptoms. However, the former refugees, who spent a considerable amount of time abroad, did report significantly more growth than the internally displaced persons. In this case, sample membership was a better predictor of growth than the total number of stressful events experienced.

Waysman, Schwarzwald, and Solomon (2001) assessed 164 Israeli prisoners of war and a matched group of 184 veterans of the Yom Kippur war in terms of positive and negative changes in a wide range of areas. Findings indicated a positive correlation between hardiness and positive changes. The interaction of group also contributed to positive changes.

The national survey was carried out by Schuster, Stein, Jaycox, Collins, Marshall, Elliott, and Berry (2001) on September 14–19, 2001, with 560 participants; found that 36% of the adults interviewed said they had donated blood in response to the attacks. In the survey of the National Tragedy Study (September 13–19), Smith, Rasinski, and Toce (2001) observed that most American citizens engaged in positive civic actions as a response to the terrorist attacks: 59% of the general population performed at least some of these actions (charities, blood donation, or volunteering for organizations).

Maercker, Herrle, and Grimm (1999) used a German adaptation of the PTGI. Their study is unusual in that the time lapse between traumatic exposure and assessment was about 50 years. Study subjects were victims of the Dredson bombing night during
which 35000 people were killed within four hours. Results yielded a positive correlation between PTG and traumatic exposure in addition to internal control beliefs.

Krismanic and Kolesaric (1996) assessed 657 survivors of the war in Bosnia and Herzegovina and Croatia with an adaptation of the change in outlook questionnaire (Joseph, William, & Yule, 1993) called the positive and negative consequences of war questionnaire. Participants reported generally higher positive changes than negative changes with the more war affected subscales showing the greatest amount of positive changes.

Lehman, Davis, Delongis, Wortman, Bluck, Mandel and Ellard (1993) interviewed approximately 100 adults who had lost spouses or children in car accidents. Participant’s responses were classified into 12 categories, which were seen as reflecting three major domains: (a) changes in self-perceptions (b) changes in relationships (c) changes in life orientation signifying posttraumatic growth among the participants.

Collins, Taylor, and Skokan (1990) developed on a priori categorization of self reported PTG outcomes. They studied more than 50 cancer patients, some of whom were still in treatment. They found that there were more positive than negative changes in the activities and relationship domains, whereas the changes were balanced in the other domains.

2.2 Studies on Hope

Vartak (2015) conducted a study on 115 cancer patients. The baseline questionnaire was administered to assess the social support, hope and resilience in the patient. Results indicate that both hope and social support have a positive and statistically significant impact on the resilience of cancer patients (p <0.05 for hope and social
support individually). These findings raised the possibility that intervention at an early stage can increase the resilience and improve the mental health of cancer patients.

Zieba (2015) conducted a study on 50 people who lost their motor ability in accidents. Analyses of narrative interviews conducted with the accident victims suggest that a positive affective tone of narratives about the accident itself and the accident’s influence on later life is connected to higher levels of posttraumatic growth. Other factors facilitating the experience of posttraumatic growth were hope and basic trust, as well as the theme of agency present in the narratives.

Rajandram, Jenewein, McGrath, and Zwahlen (2011) conducted a cross-sectional study to explore the role of hope and optimism in the development of posttraumatic growth (PTG) in 50 patients who had been treated successfully for oral cancer. Validated assessment tools that were customised for these patients (PTG occurs in all cultures, but there are variations) were used to assess PTG, hope and optimism. Those who had been treated successfully for oral cancer had more hope if they had a higher income and were married. Hope, distinct from optimism would appear to be important in ‘positive reframing and generating positive strategies’.

Day, Hanson, Maltby, Proctor, and Wood (2010) conducted a 3-year longitudinal study to explore whether the two dimensional model of hope signify the degree scored after considering intelligence, personality and previous academic achievement. 129 respondents (52 males and 77 females) completed measures of trait hope, general intelligence and five factor model of personality, divergent thinking and their academic performance. The findings suggest that hope predicts objective academic achievement above intelligence, personality, and previous academic achievement.

Yadav (2010) conducted a study to investigate the relationship between perceived satisfaction from social support, hope and Quality of Life among People living
with HIV AIDS. A sample of 160 HIV-infected persons receiving treatment, care, and support from eight community based NGOs in Nepal. Using a cross-sectional design the results revealed that, the non-family support network was greater than family support network. Overall satisfaction from social support and hope was significantly correlated with Quality of Life, the greatest effect of social support was on environmental functioning, and the lowest was on social relationships, emotional support was less a predictor of social relationship than other types of supports.

Collins, Onwuegbuzie, and Jiao (2009) investigated the extent that cooperative group members’ levels of hopefulness, operationalized as a combination of pathways to meet desired goals and the agentic thinking that motivates an individual to use those pathways. Participants were 86 graduate students enrolled in a research methodology course. Groups (n = 28) formed the unit of analysis. A multiple regression analysis revealed that groups attaining the lowest scores on the article critique and research proposal assignments combined tended to report the lowest levels of hope, as measured by agentic thinking, and the greatest variation with respect to pathways to meet desired goals. These variables explained 20.5% of the variance in performance.

Utne, Miaskowski, and Bjordal (2008) did their study on Oncology inpatients in pain (n=225) from the Norwegian Radium Hospital. The research instruments included the Herth Hope Index (HHI), the Brief Pain Inventory (BPI), and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30). The Norwegian oncology inpatients reported significantly higher total HHI scores than the general Norwegian population. The largest difference was on the item “I feel scared about my future.” No relationships were found between total HHI scores and any of the pain intensity scores. Significant relationships were found between total HHI scores and the more psychosocial interference items on BPI and sleep.
Valle, Heubner, and Suldo (2006) studied middle and high school students in order to provide evidence of 1) stability of hope reports of adolescents over a 1-year period 2) predictive validity of adolescent hope reports, hope’s function; role as a moderator in the relationship between stressful life events and adolescent well-being. After analysing all the factors together the results provide support for consideration of hope as a key psychological strength in youth.

Rustoen, Howie, Eidsmo, and Moum (2005) investigated the role of hope in patients with heart failure and the influences of demographic and health-related variables on hope. 93 patients with heart failure and 441 healthy control subjects were studied, mean age was 75 years. The findings suggested that after controlling for demographic variables patients with heart failure had significantly higher global hope scores than control subjects. It was concluded that adaptation to a life, threatening illness may induce a "response shift" that causes such patients to have more hope than the general population.

Evangelista, Doering, Dracup, Vassilakis, and Kobashigawa (2003) conducted a study to investigate the role of hope on mood states and quality of life in heart transplant recipients. The participants were 50 women from single heart transplant clinic. The patients had undergone heart transplantation prior to study participation. Patients reported experiencing moderately low hope, high anxiety and hostility. The study supports the strong association between hope, mood states and Quality of life.

Rustoen, Howie and Eidsmo (2003) conducted a study to find out how sociodemographic and health-related variables were related to hope. The level of hope among 4000 Norwegian adult citizens, randomly drawn from the national register was assessed via questionnaires. The results showed that participants who were satisfied with their health reported higher levels of hope. Participants who had a chronic disease (eg.
CAD, AIDS, CANCER) reported significantly higher hope scores compared to those without a chronic disease. In this study, an individual's subjective evaluation of his/her health was the most important health related predictor of hope.

Clarke (2003) discussed the phenomena of faith and hope and their place in the course of psychiatry. Hopefulness (genuine hope as compared to false hope) and optimism were associated with positive health outcomes. Hopelessness was associated with poor outcomes. The research concluded that psychiatrists need to be able to explore issues of hope and faith with patients at times of life crises in order to facilitate adjustment in them. That could be an important part of the treatment of a depressed or demoralized person.

Stanton, Danoff-Burg and Huggins (2001) conducted a study on hope and coping strategies as predictors of adjustment in breast cancer. The participants were 70 women with stage I or II breast cancer. The results revealed that coping through active acceptance/hope at diagnosis predicted more positive adjustment across time and avoidance oriented coping predicted greater fear of cancer reoccurrence over and above participant age. It was also found that religious coping would be more effective for less hopeful women.

Rustoen and Wilklund (2000) investigated the role of hope in newly diagnosed patients with cancer. 131 Norwegian patients were studied. Most of the patients were found to be hopeful or moderately hopeful. The variable with the single most contribution to hope was whether the patient lived alone or in a family. The results revealed that younger people in particular experienced less hope when living alone.
2.3 Hope as a predictor of Posttraumatic growth

Hullmann (2015) conducted a study on parents (N=85) of children and adolescents (ages 2–18 years, M = 7.72 years) receiving treatment for cancer. Parents completed a demographic questionnaire, the Posttraumatic Growth Inventory (PTGI), and Hope Scale (HS). Hope was found to be related to PTG in parents of children with cancer, with higher levels of hope associated with greater PTG. Exploratory analyses on the subscales of the PTGI revealed that hope was also related to higher scores on the Relating to Others, New Possibilities, Personal Strength, and Appreciation of Life subscales. Spiritual Change was not related to hope in parents.

Byra (2015) conducted a study to determine the contribution of basic hope and coping strategies to accounting for PTG variability in participants with traumatic long-term Spinal Cord Injury. A study of 169 individuals with paraplegia in the range of PTG showed the highest degree of positive changes in appreciation of life (AL) and the lowest in self-perception. Regression analysis showed that coping strategies such as religion (REL), focus on the problem, humour, alcohol/drug use ideation and basic hope jointly account for 60% of variance of PTG. The highest contribution to accounting for this variability had religion. No significant relationship between growth and age of participants was confirmed.

Ho, Chan, and Ho, (2011) investigated the association of the positive coping strategies, hope and optimism with posttraumatic growth (PTG) in oral cavity (OC) cancer patients. Hope positively correlated with posttraumatic growth ($r = .49, p < .001$) as well as optimism ($r = .31, p < .05$). When compared to unmarried patients, married patients showed high levels of PTG and hope (married participants: mean = 53.15, SD = 11.04; unmarried participants: mean = 41.00, SD = 6.36; $t (48) = 2.403, p < .05$). Hope and optimism represent important indicators for PTG in OC cancer patients. An
intact dyad relationship seems to be important for hope and consecutive higher levels of PTG when compared to unmarried patients.

**2.4 Studies on Social Support**

Kumaraswamy and Ar (2016) conducted a study in one of the Universities in Malaysia. The aim of this study was to investigate the relationship between perceived social support, stress and gender differences among University Students. It was found that only a small group of the students scored very low on the perceived social support scale. A low significant inverse correlation was found between MSPSS and stress. Male students experienced greater stress than female students. Female students had a better perception of social support from their families as compared to male students. The fact is that, as the level of social support increase the level of stress decrease clearly shows that social support acts as a buffer to stress.

Matsuda, Tsuda, Kim and Deng. (2014) examined the associations between perceived social support and subjective well-being among Japanese, Chinese, and Korean college students. A total of 1332 (466 Japanese, 449 Chinese, 417 Korean) college students completed surveys measuring life satisfaction, positive affect, negative affect, and perceived social support from family, friends, and a significant other. Results of the pathway analysis showed that family support reduced negative affect and significant others support improved positive effect, and that both types of support were associated with life satisfaction among the three groups.

Derivois, Merisier, Cenat, and Castelot (2014) explored the prevalence of posttraumatic stress disorder (PTSD) symptoms related to social support received by the children and adolescents who survived the earthquake on January 12, 2010 in Haiti. They used stratified sampling and 540 children including teenagers were questioned.
Questionnaires based on the PTSD Checklist, the impact of Event Scale-Revised, and the Peritraumatic Distress Inventory, among others, was used and bivariate statistical analyses were carried out. The results showed high rates of complete and partial PTSD symptoms, with higher rates among females, and indicated the need for reinforcing social support as a resilience factor for youth.

Afzal and Khalid (2014) attempted to examine the relationship between the social support and postnatal depression (PND) in a sample of Pakistani mothers using the indigenous measures. 139 mothers diagnosed for PND were contacted in the hospitals and clinics of Lahore using the purposive sampling technique. These mothers were screened for the prior history of depression and only those having no reported history of depression were included in the sample (N= 106). They were further screened for postnatal depression using indigenously developed Postnatal Depression Screening Scale (PNDSS). The findings revealed that there is a significant negative correlation between PND and social support among Pakistani mothers.

Feder et al. (2013) conducted a study after three years of the 2005 Pakistan earthquake, aimed to identify potentially protective psychosocial factors associated with lower PTSD and depressive symptom levels. Adult earthquake survivors (N=200) were taken from affected areas in north western Pakistan and completed self-report questionnaires measuring PTSD and depressive symptoms, positive and negative affect, and four psychosocial variables (purpose in life, positive and negative religious coping, and social support). Sixty five percent of participants met criteria for probable PTSD. Purpose in life was associated with lower symptom levels and higher positive emotions. A form of negative religious coping (feeling punished by God for one’s sins or lack of spirituality) was associated with higher symptom levels and negative emotions. Higher perceived social support was associated with higher positive emotions.
Donough, Sabiston, and Ullrich-French. (2011) conducted a study on breast cancer survivors. The purpose of the study was to qualitatively explore the development of social relationships, social support, and posttraumatic growth among breast cancer survivors participating in a dragon boat program over 19 months. Guided by interpretative phenomenological analysis (Smith, Flowers, & Larkin, 2009), semi-structured interviews were conducted with 17 breast cancer survivors on five occasions over their first two seasons of dragon boating. Narrative accounts were developed for each participant, and four profiles emerged describing processes of social and posttraumatic growth development over time: “developing a feisty spirit of survivorship,” “I don’t want it to be just about me,” “it’s not about the pink it’s about the paddling,” and “hard to get close.” The results of this study suggest that there are multiple pathways of social relationships, social support, and posttraumatic growth and adaptation among breast cancer survivors involved in dragon boating. The link between social relationships, support, and posttraumatic growth over time was a novel finding. Participants who had positive social relationships and support also reported enhanced posttraumatic growth. This pattern was evidenced in the growing relationships and posttraumatic growth in the first three profiles, and, when relationships and support were disrupted, posttraumatic growth was minimal.

Kim, Han, Shaw, Mctavish, and Gustafson (2010) examined how social support and coping strategies are related in predicting emotional well-being of women with breast cancer. They examined two hypothesized models: (1) a moderation model where social support and coping strategies interact with each other in affecting psychological well-being; and (2) a mediation model where the level of social support influences choices of coping strategies between self-blame and positive reframing. In general, the data from the current study were more consistent with the mediation model than the moderation model.
These findings have some theoretical implications for the effectiveness of social support interventions in breast cancer by expanding the role of social support in improving emotional well-being.

Schroevers (2009) conducted a longitudinal study on a sample of 206 long-term cancer survivors. Social support was assessed with the Social Support List (SSL) at 3 months and 8 years after diagnosis. Positive consequences of the illness were assessed with the Silver Lining Questionnaire (SLQ) at 8 years after diagnosis. Correlation and regression analyses were used to examine the associations of initial levels of emotional support with the long-term report of posttraumatic growth. Regression analyses showed that more received emotional support at 3 months after diagnosis significantly predicted a greater experience of positive consequences of the illness at 8 years after diagnosis. This association remained significant, when controlling for concurrent levels of emotional support at 8 years after diagnosis.

Goodwin, Cost, and Adonu (2004) investigated the relationship between individual values, self-esteem and perceived and received support, with samples taken from four nations (the UK, Portugal, Ghana and Mozambique). Respondents completed Schwartz’s Portrait Values Questionnaire (Schwartz, Melech, Lehmann, Burgess, & Harris, 2001) and measures of self-esteem and perceived and received support. In path analyses, values significantly predicted perceived support and perceived support predicted self-esteem, but there was no direct relationship between values and self-esteem.

Holland and Holahan (2003) examined the relation of perceived social support and coping to positive adaptation to breast cancer. Participants were 56 women between the ages of 38 and 58 who had been diagnosed with Stage I or II breast cancer from 1 to 26 months earlier. Social support was measured with the Social Provisions Scale
(Cutrona & Russell, 1987). Adjustment was measured with the scales of Psychological Well-Being (Ryff, 1989). Results showed that perceived social support and approach coping strategies were associated with positive adjustment.

Muller, Fabbri, Diamond, and Dinklage (2000) conducted a study to examine the protective effect of social support in the relationship between exposure to violence and psychopathology. Exposure to violence in the family and exposure to violence in the community were examined separately. Exposure to violence was further divided according to whether violence was experienced as a victim or as a witness. Internalizing and externalizing forms of psychopathology, as well as post-traumatic stress symptomatology, were examined. Participants consisted of 65 high-risk adolescents admitted consecutively to psychiatric inpatient units. Data were collected by means of individual interviews, self-report questionnaires, and hospital charts. Results showed that social support emerged as a protective factor with respect to the maladaptive effects of community violence, regardless of whether violence was experienced as a victim or as a witness. In contrast, social support did not appear to buffer the maladaptive effects of community violence, regardless of whether the violence was experienced as a victim or as a witness.

Thompson, Kaslow, Kingree, Rashid, Puett, Jacobs, and Mathews (2000) conducted a study to examine the role of social support in the partner violence/psychological distress relation in a sample of African American women seeking medical care at a large, urban hospital (n = 138). Results from bivariate correlational analyses revealed that partner violence was related to lower perceived social support and greater psychological distress, and lower social support was related to more distress. Furthermore, findings based on path analysis indicated that low levels of social support helped account for battered women’s increased distress.
Walen and Lachman (2000) examined the (i) association of social support and strain with psychological well-being and health, (ii) investigate whether these associations depended on relationship-type (partner, family, friend), (iii) examine the buffering effects of support on strain (both within and across relationship-type), and (iv) test the extent to which these associations differed by age and sex. The sample contained 2,348 adults (55% male) aged 25 to 75 years (M, 46.3), who were married or cohabitating. Positive and negative social exchanges were more strongly related to psychological wellbeing than to health. For both sexes, partner support and strain and family support were predictive of well-being measures; partner strain was also predictive of health problems.

Stephens and Long (1999) conducted a study to assess the role of social support following posttraumatic stress disorder among Police officers in New Zealand Police. Traumatic experiences of police officers were positively related to PTSD symptoms, but this relationship was attenuated for officers who reported greater perceived social support from peers (coworkers). Other measures of social support (supervisors, family/friends) showed no interactive effects with trauma, although they were significantly and negatively related to the outcome.

Rigby and Slee (1999) Studied the relationships among suicidal ideation, involvement in bully-victim problems at school, and perceived social support in the samples of adolescent students (N = 1103 and N = 845) attending secondary school in South Australia. Results obtained from self-reports and peer nomination procedures to identify bullies and victims indicated that involvement in bully-victim problems at school, especially for students with relatively little social support, was significantly related to degree of suicidal ideation.
Liabre and Hadi (1997) tested hypothesis about the role of social support in the relation between trauma from the Gulf crisis experience and psychological or health distress 2 years after the crisis. Participants were 151 Kuwaiti boys and girls exposed to high or low levels of trauma during the crisis. Children exposed to high levels of trauma had higher PTSD and depression and more health complaints than controls. Social support did not mediate the relation between trauma and distress. However, social support and sex function jointly as moderators of trauma on distress. Social support was shown to buffer the effect of trauma in girls but not in boys.

2.5 Social Support and Posttraumatic Growth

Rayees (2015) studied the impact of conflict exposure and social support on posttraumatic growth among the young adults in Kashmir. This is a cross-sectional study involving 803 college students. The data were collected by four self-report instruments comprising of demographic data schedule, the exposure to Kashmir conflict checklist, the posttraumatic growth inventory and the multidimensional scale of perceived social support. The respondents reported relatively high levels of PTG and social support. Conflict exposure and total perceived social support were significantly associated with an increase in PTG.

Tanriverd, Savas, and Can (2012) investigated the role of perceived social support in enhancing PTG in cancer patients. This study involved 105 cancer patients. The data were collected using a questionnaire that determined the socio-demographic features, posttraumatic growth inventory (PTGI) and perceived social support. Participants reported relatively high levels of PTG and social support. Total perceived social support, support from family, and friends were significantly positive associated with the development of PTG among cancer patients.
Lelorain, Tessier, Florin, and Antignac (2012) conducted a study on 28 breast cancer survivors, all French cancer survivors, diagnosed with breast cancer 5 to 15 years earlier and were interviewed concerning changes after cancer. The analysis of results performed using Alceste software, revealed one thematic class of PTG which was specific to women with high coping and social support and active cognitive processing.

Durak and Ayvasik (2010) aimed to examine the effect of perceived social support (PSS), Perception of the event and coping on PTG. This model was tested in a sample of patients with myocardial infarction (MIP, N = 148) from various hospitals in Turkey. The structural equation analysis of the model revealed that perceived social support was significantly related to PTG through the effect of coping.

Scrignaro, Bami, and Magrin (2010) conducted a study to investigate the role of social support and coping strategies in enhancing post-traumatic growth (PTG) in cancer patients. A group of 41 cancer patients currently in the treatment and management phase of their illness were recruited for this longitudinal study. Social support and coping strategies were assessed only at T1. PTG was assessed using the Post-Traumatic Growth Inventory at T1 and T2 that were 6 months apart. Regression analyses showed that autonomy-supportive caregivers and a problem focused strategy of coping significantly predicted greater PTG at T2.

2.6 Studies on coping strategies

Sinha, Willson, and Watson (2015) conducted a cross-cultural study of stress and coping, 198 students in India and 344 in Canada (aged 16–25 yrs) were compared with respect to stress, coping, and selected psychosocial variables namely, locus of control, self-esteem, life orientation (optimism-pessimism), and social support. The results revealed instead that the Indian students report less stress than the Canadian students and
prefer emotion-focused coping strategies. The Indian students scored higher on chance control, but are similar to the Canadian students on powerful others and internal control. The Indian students are less satisfied with social support than are their Canadian counterparts.

Aslam and Kamal (2015) conducted a study to see the predictive role of coping strategies in psychological distress and posttraumatic growth among 1862 individuals exposed to floods 2010 in Pakistan. The age range of the participants was 15 to 66 years (M = 28.25, SD = 9.59), with participation of both men and women. Hierarchical multiple regression revealed that after controlling the demographic variables; coping strategies such as, self-distraction, denial, substance use coping, behavioural disengagement, venting, humour and self-blame coping accounted for 33 % of the variance in psychological distress. While, active coping, use instrumental support coping, positive reframing, planning, religious coping, and acceptance coping accounted for 31% of the variance in PTG. Moreover, psychological distress and posttraumatic growth were marginally correlated.

Liu, Shi, Yang, Rowlands, and Minghua Han (2015) conducted a study to explore the self-adjustment and experiences of religious coping. 16 Chinese patients with cancer were recruited from 4 hospitals in Taiwan, Shandong, and China from April 2013 to October 2013 and completed 0.5 - 1 hour of in-depth interviews. Data were analyzed by modification of Colaizzi’s phenomenological method. Three themes were derived from the experiences of the participants: 1) self-adjustment including cognitive adjustment, faith adjustment and behavior adjustment; 2) the experience of religious coping with the cancer patients including emotional, physical and social aspect; 3) hope and power including the hope to heal, to survive from cancer, and to live longer, the cure, the spiritual supporter and the helper. The use of religion is an effective method for patients
coping with cancer. Cancer patients use religion to obtain physiological, psychological, and spiritual comfort. It is estimated that over 100 million people in China believe in religion, and a majority of them suffer from major illnesses.

Rezaei, Mousari, Safari, Bahrain, and Menshadi (2015) conducted a study on 367 students to determine the relationship between optimism, pessimism and coping strategies and mental health and ability to predict these concepts in students mental health in the academic year 2014 in Lorestan University. Tools for data collection in this study are mental health questionnaire (GHQ-28), Life Orientation Test-Revised (LOT-R) and a questionnaire dealing with stressful situations (CISS). Data analysis shows that there are significant relationships among optimism, pessimism, and mental health (p < 0.01). There is positive and significant relationship between problem-oriented coping strategies and subject’s mental health. Also there is a significant negative relationship between coping strategies and mental health (p < 0.01). The results of study show that optimism, pessimism, coping strategies and problem-oriented coping, differently explain variance related to mental health and its subscales significantly (p < 0.01).

Anshel and Brinthaupt (2014) aimed to examine the effects of an approach-avoidance coping skills program on changes in perceived stress and physical energy among police officers. Participants included 11 police officers in a medium-sized US city who volunteered to engage in a coping skills program due to experiencing excessive job-related stress. Analyses indicated reduced use of approach coping strategies that approached significance. Participants reported significantly higher levels of physical energy at post test compared to pre test. Higher levels of physical energy were also associated with greater use of avoidance coping at post test. Personal narratives by selected officers indicated a particularly stressful work environment, and that the officers
adopted many of the approach and avoidance coping skills in reducing job-related stressors.

Predescu and Sipos (2013) conducted a study to assess the cognitive coping strategies, emotional distress and the relationship between them and the quality of life in mothers of children with Autism Spectrum Disorder (ASD) compared to mothers of children with Attention Deficit Hyperactive Disorder (ADHD). Data were collected from 114 mothers of children with diagnosis of ASD or ADHD. For quality of life and emotional distress, no significant differences were found between the two groups. The coping strategies of the mothers of children with ASD significantly correlated with the overall assessment of the family quality which was: positive refocusing, positive revaluation and catastrophizing. The results suggest that the use of adaptive coping strategies correlates with a higher family quality of life, while for the maladaptive ones, the relationship is reversed.

Faramarzi, Pasha, Esmaelzadeh, Jorsarai, Mir, and Abedi (2013) conducted a study to investigate the relationship between coping strategies with anxiety and depression symptoms in infertile men and women. This descriptive-analytic study was conducted from 2011-2012 on 168 Iranian Infertile couples. Ways of Coping Questionnaire (WCQ), The State-Trait Anxiety Inventory (STAI), and Beck Depression Inventory (BDI) were administered. Results revealed that Escape/avoidance contributed the greatest amount of unique variance to the model for anxiety/depression of infertile women (P < 0.0001, P < 0.001) and followed by distancing (P < 0.0001, P < 0.01), accepting responsibility (P < 0.0001, P < 0.01). Seeking social support was the negative significantly predictor for both anxiety and depression in infertile women (P < 0.01, P < 0.01), but planned problem solving was the inversely predictor for only depression in infertile women (P < 0.01). Escape/avoidance was the only predictor factor of the model
anxiety for infertile men (P < 0.01). Escape/avoidance and self controlling were the positive predictors (P < 0.001) and planned problem solving was the negative predictor for men depression (P < 0.05).

Bussel and Naus (2010) study supported several predictions for coping and distress during chemotherapy (Time 1), and coping, perceived stress, and posttraumatic growth two years later (Time 2) in women with breast cancer. At T1, the emotion-focused coping strategies of disengagement, denial, self-blame, and venting were positively related to physical and psychological distress. In addition, the cognitive strategies of religion, positive reframing, and acceptance together accounted for a significant amount of the variance in fatigue and distressed mood. Positive reframing and acceptance negatively related to chemotherapy distress, while using religion positively related. However, using religion at chemotherapy (T1) related to more posttraumatic growth at two-year follow-up (T2). Furthermore, at two-year follow-up, (1) using religion, positive reframing, and acceptance accounted for forty-six percent (46%) of the variance in posttraumatic growth; (2) positive reframing related to more posttraumatic growth; (3) instrumental and emotional support related to more posttraumatic growth; (4) acceptance related to less perceived stress; (5) self-blame related to more perceived stress; and (6) posttraumatic growth marginally related to lower perceived stress. These findings support the current theoretical model that posttraumatic growth is adaptive, that it results from cognitively processing trauma, and that coping may moderate this growth.

Morris, Shakespeare-Finch, and Scott (2007) did a study in which coping processes were assessed in a sample of 335 men and women with heterogeneous cancer diagnoses undergoing treatment in a regional Australian hospital in a two year time period. Results show that positive reframing is positively correlated with all PTGI factors
and focussing on/venting emotions, social support engagement, and active coping are associated with two dimensions of PTG (New Possibilities and Relating to Others).

Desmond and MacLachlan (2006) conducted a study to examine the contribution of demographic/amputation-related variables and coping strategies to the prediction of psychosocial adaptation in veterans with acquired lower limb amputations. Multiple indicators of the psychosocial adjustment of 796 individuals in the UK aged between 26-92 years with lower limb amputations were assessed. Hierarchical linear regressions were performed to investigate relationships between demographic/amputation-related variables (i.e. age, time since amputation, amputation level and amputation aetiology), the dimensions of coping (namely problem solving, seeking social support and avoidance) and self-reported adaptation to amputation, as well as symptoms of intrusion, anxiety and depression. Results indicated that coping styles were important predictors of psychosocial adaptation. Avoidance was strongly associated with psychological distress and poor adjustment. In contrast, problem solving was negatively associated with depressive and anxious symptomatology whereas seeking social support was negatively associated with symptoms of depression and positively associated with social adaptation. These findings suggest the potential for interventions designed to promote particular coping strategies to improve psychosocial outcomes.

Jerlock, Johansson, Jellgren, and Welin (2006) assessed coping strategies in patients with unexplained chest pain and examine the relationships between coping strategies, negative life events, sleep problems, physical activity, stress, and chest pain intensity. The sample consisted of 179 patients younger than 70 years of age. Emotive coping was related to chest pain intensity ($r = 0.17, p = 0.02$). Women used emotive coping to a greater extent than did men ($p = 0.05$). The multivariate analysis shows that
physical activity decreased emotive coping (OR 0.13, p < 0.0001) while sex, age, sleep, mental strain at work and negative life events increased emotive coping.

Khan et al. (2006) conducted a study on coping strategies among (n=140) male and female teachers with high and low job strain. The results revealed that Male and Female teachers with high job stress differed on the coping strategy i.e., Self distraction. Significant difference existed between the male and female teachers with low job strain on use of humour dimensions of coping strategy. Male as well as female teachers consider all strategies effective irrespective of active or passive type of coping situations.

Hasida (2005) conducted a study to examine the association between demographic variables, problem focused and emotion focused coping and distress, among 510 adults. They found that emotion focused coping showed strong positive associations with distress, whereas problem focused coping was negatively related to distress.

Qawi (2002) studied the coping strategies for dealing with the stress and manifestations of depression in United Arab Emirate University. The sample consisted of 234 students, and resulted that females are more depressed, and are using methods directed emotional i.e emotional coping to manage with stress.

Ben-Zur, Rappaport, Ammar, and Uretzky (2000) aimed at knowing the “Coping strategies, life style changes, and pessimism after open-heart surgery” and surveyed 171 patients 2-20 months after undergoing coronary artery bypass graft surgery (CABG). The post-CABG period was characterized by fewer working hours, a higher level of physical exercise, a reduction in smoking, and more appropriate nutritional habits, compared with the pre operation period. Results revealed that the anxiety level of post-CABG patients was higher than that measured in a community sample. Post-CABG high psychological distress (anxiety and mood states) and low functional capacity were associated with high
levels of pessimism and ineffective emotion-focused coping strategies. The study recommended that these results be used by social workers in devising psychological interventions aimed at improving post CABG patients' quality of life and bolstering their coping strategies.

2.7 Coping Strategies as a significant predictor of Posttraumatic growth

Akbar and Witruk (2016) examined the relationship between gender and posttraumatic growth mediated by coping behaviour in disaster survivors. The sample consists of 100 survivors of earthquake in Bantul district and volcano eruption in Cangkringan Sleman district in Yogyakarta Province Indonesia. Data were collected several years after disasters in 2013. The measurement instruments used for data collection had subscales on coping and post-traumatic growth level. The result showed that coping was significantly associated with posttraumatic growth. The relation between gender and posttraumatic growth is mediated by coping behaviour.

Nisa and Rizvi (2015) conducted a study to investigate the relationship between social support, coping strategies and post traumatic growth in a sample group of cancer patients. The sample of 286 cancer patients was selected purposively from department of Radiation Oncology, Government Medical College and associated hospitals, Karan Nagar, Srinagar, Florence Hospital, Chanapora Srinagar, and Noora Hospital, Zainakote, Srinagar. The results revealed that social support and adaptive coping strategies are significantly correlated with Post-Traumatic Growth (r =.32, p <.001 & r =.35, p <.001 respectively).

Tuncay and Musabak (2015) examined the relationship between PTG, socio demographic factors, amputation-related variables, and coping strategies in 106 Turkish military veterans (Mean age = 23.40 ± 2.62 years) injured in combat operations with
lower-limb amputations. Hierarchical regression analysis revealed that problem-focused coping strategies were significant predictors of PTG. Socio demographic and amputation-related factors did not contribute to PTG.

Byra (2015) conducted a study to determine the contribution of basic hope and coping strategies to accounting for PTG variability in participants with traumatic long-term Spinal Cord Injury. A study of 169 individuals with paraplegia in the range of PTG showed the highest degree of positive changes in appreciation of life (AL) and the lowest in self-perception. Regression analysis showed that coping strategies such as religion (REL), focus on the problem, humour, alcohol/drug use ideation and basic hope jointly account for 60% of variance of PTG.

Ahlawat, Nair, and Devi (2015) conducted a study to determine the relationship between posttraumatic growth, ways of coping and anxiety among cancer patients. The study was done on 100 cancer patients (62 Male, 38 female) diagnosed with a variety of cancer and are consecutively admitted in the in-patient unit, Radiotherapy department of Post Graduate Institute of Medical Sciences (P.G.I.M.S.), Rohtak Haryana. There was a highly positive correlation between PTG and WAYS. State-trait anxiety was found to be highly negatively co-related to post traumatic growth and ways of coping. Thus it can be concluded that post traumatic growth and ways of coping goes in same manner which suggest that the better the coping behaviour used by cancer patients more will be the post traumatic growth and there was negative relationship between post traumatic growth, ways of coping and state-trait anxiety.

Bulik (2014) investigated the role of coping strategies with stress in posttraumatic growth in a group of medical rescue workers. The data on 80 medical rescuers who had experienced traumatic event in their worksite were analyzed. The age of the participants ranged from 21 to 67 years (M = 35.47; SD = 10.21). The Posttraumatic Growth
Inventory and Inventory to Measure Coping Strategies with Stress – Mini-Cope were used in the study. The results revealed that the strategy “turning to religion” i.e. Religious coping plays the major role in posttraumatic growth. In the process of emerging positive changes posttraumatic growth avoidance strategies seem to play more important role than strategies focused on the problem itself.

Amendson (2014) conducted a research to understand how spiritual coping impacts posttraumatic growth after sexual assault. 20 volunteers who have experienced sexual assault were taken for the study from public library, grocery store and food co-ops, coffee shops, and spiritual bookstore bulletin boards. Overall, posttraumatic growth was lower than would be expected among those who have experienced trauma. A positive style of spiritual coping was associated with positive relationships and the strongest posttraumatic growth outcomes, whereas a negative style of spiritual coping was associated with difficulty in relationships and the weakest posttraumatic growth outcomes.

Turner-Sack, Menna, Sctchell, Maan, and Cataudella (2012) examined associations between posttraumatic growth, coping strategies, and psychological distress in adolescent cancer survivors. Adolescents who finished cancer treatment 2 to 10 years prior (N = 31) completed self-report measures of posttraumatic growth, coping, symptomatology, and disease-related characteristics. Younger age at diagnosis and less use of avoidant coping strategies predicted lower levels of psychological distress. Adolescent’s beliefs that they were more likely to relapse and the use of more acceptance coping strategies predicted higher levels of posttraumatic growth. Adolescent cancer survivors may be capable of experiencing posttraumatic growth. Those who believe they are more prone to relapse and use more acceptance coping strategies are likely to have higher levels of posttraumatic growth.
Schmidt, Blank, Belizzi, and Park (2012) investigated attachment style, coping strategies, social support, and posttraumatic growth (PTG) in 54 cancer survivors. Secure attachment was significantly associated with active coping, positive reframing, and religion, and these were all associated with PTG. Insecure types of attachment and social support variables were unrelated to PTG. Regression analysis suggests that positive reframing and religion as coping strategies may mediate the relationship between secure attachment and PTG.

Sears, Annette, and Burg (2003) predicted the outcomes of benefit finding, positive reappraisal coping, and posttraumatic growth. They examined using interviews and questionnaires from a longitudinal study of women with early-stage breast cancer followed from primary medical treatment completion to 3 (n=92) and 12 months (n=60) later. Most women (83%) reported at least 1 benefit of their breast cancer experience. Benefit finding (i.e., identification of benefits, number of benefits), positive reappraisal coping, and posttraumatic growth had distinct significant predictors. Positive reappraisal coping at study entry predicted positive mood and perceived health at 3 and 12 months and posttraumatic growth at 12 months, whereas benefit finding did not predict any outcome.

In this chapter, we have received a number of studies under major heads. Studies quoted in this chapter relates well with the coping styles, hope, social support and posttraumatic growth. However, the review suggests further research is needed to shed greater light on these important variables. The chapter offers the contributions of influential scholars representing a wide array of perspectives on posttraumatic growth, hope, social support and coping strategies.