

# Posttraumatic Growth as Related with Coping among Breast Cancer Patients



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## Abstract

Posttraumatic growth, is a term used to describe positive psychological changes experienced as a result of an individual's efforts to cope with life crisis that exert high levels of stress, such as breast cancer (Tedeschi and Calhoun, 2004). Posttraumatic growth can manifest through five domains: New possibilities, Relating to others, Appreciation of life, Personal strength, and Spiritual challenge. Coping refers to cognitive and behavioral efforts to reduce or tolerate the demands of the stressful events (Busse and Naus, 2010). PTG act as a coping strategy in terms of positive illusions that might help people counterbalance emotional distress. The present study aims to answer the question that how the posttraumatic growth have been related with coping strategies? The study was conducted on 100 breast cancer patients of post-surgery having the age range of 40-70 years. The Indian adaptation of Posttraumatic Growth Inventory (Tedeschi and Calhoun, 1996), and COPE Scale (Carver, et. al., 1989) was used. Results showed that Problem focused coping, Emotion focused coping and Socially Supported coping has been found to be positively related with posttraumatic growth and the avoidant coping was tended to be negatively related with posttraumatic growth and its dimensions. The findings of present study suggest the need to design intervention program to enhance coping skills and posttraumatic growth in breast cancer patients

**Keywords:** Posttraumatic Growth, Coping, Breast Cancer.

## Introduction

Worldwide, the most common cancer is breast cancer among women (DeSantis et al., 2014). The diagnosis of such dreaded disease like cancer turmoil the lives of the person. A patient dealing with cancer or any particular type of cancer like breast cancer often goes through exhaustive and debilitating treatment. As well as the patients has to face physical, psychological and functional residual effects like loss of breast, hair loss, weak immunity, hardness of veins, stress, fatigue and insomnia. Due to fluid retention, swelling of arm occurs which is a very painful process and is a common complication (Kaed, R, 2011). The breast cancer experience presents difficult challenges for the women. Moreover, breast cancer survivors might also face economic problems as well (Kaed, R, 2011). A study conducted by Ferrell et al (1997) reveal that there are some other worries also with which the breast cancer patients also had to deal including fear of death, fear of recurrence.

## Review of Literature

### Breast Cancer

Breast cancer incidence is on the rise in India and is the second most common malignancy in Indian Women (Pakseresht et al, 2009). According to Reddy (2004) breast cancer rate are higher in urban than in rural areas and is the leading cancer for women in Mumbai, Delhi, Bangalore and Bhopal. Rizwan and Saadullah (2009) stated that the incidence of breast cancer in India is at peak among the young aged population.

Due to cancer diagnosis, intrusive negative thoughts were commonly seen among the women. They see their life worthless, no meaning in life, isolate themselves from others, and feel stress. But along with this, many survivors of breast cancer also report positive life changes during their diagnosis and treatment (Carver and Antoni, 2003). Despite of the fact that they are dealing with such disease, many breast cancer patients are able to regain their lives and fulfill duties (Rowland and Massie, 1996).

**Posttraumatic Growth**

Previous researches show a fundamental paradigm shift in the researches of breast cancer which include positive effects despite of the illness (Tedeschi and Calhoun, 1995). According to Tedeschi et al (1998), facing trauma must be an event which is enough to cause breakdown or turmoil which may initiate coping mechanisms to build a revised life structure with a better quality than was the case previously. Here this is to be emphasizing that many people diagnosed with breast cancer report experience of positive changes despite of their chronic illness. Tedeschi and Calhoun (1996) coined the term Posttraumatic Growth to explain this positive changes despite of such a traumatic event of cancer diagnosis. Tedeschi and Calhoun (1995) stated that the process of understanding the traumatic or stressful event can be facilitated by these positive changes. According to Sears, Stanton and Danoff-Burg, (2003) the majority of cancer patients identify positive life changes due to their cancer experience. Coping: Coping refers to a range of psychological features and behavioral methods people use to manage their stress. (Folkman & Moskowitz, 2004). Coping is defined as a dynamic process involving cognitive and behavioral efforts to enable people to live with internal or external demands brought about by disease (Lazarus and Folkman, 1984). It is an effort to prevent or diminish threat, harm, and loss, or to reduce associated distress stress and some difficulties about the cancer stigma products may lead the patients to use different types of coping strategies. Kvillemo and Branstrom (2014) had done a meta-analysis which indicated that in several circumstances, coping effectiveness was dependent on cancer stage, treatment, disease duration, and type of coping measure. Coping also may be one way to integrate new information into a rebuilt assumptive world (Janoff-Bulman, 1992). Positive reframing is a strategy that can use to help to recognize potential positive changes related to breast cancer (Silva et al, 2012).

**Method****Research Question**

Inan and Üstün (2014) reported that the negative effects of breast cancer survivors were more focused in previous researches rather than the positive effects. Moreover, positive psychological outcomes like PTG may facilitate the coping strategies to deal with the challenges which the women face after going through the diagnosis and treatment of breast cancer. The study focuses on to understand that how the patients cope with these difficulties or challenges. The present study addresses the question that what is the relationship between posttraumatic growth and coping?

**Objectives of the Study**

1. To see the level of Posttraumatic growth among breast cancer patients.
2. To assess the level of Coping among breast cancer patients.
3. To find out the relationship between Posttraumatic growth and Coping and its dimensions.

**Hypothesis**

1. There will be positive relation between Posttraumatic growth and Problem focused coping, Emotion focused coping, and socially supported coping.
2. There will be negative relation between Posttraumatic growth and Avoidant coping.

**Variables****Criterion variable**

Posttraumatic growth has been operationally defined in terms of five sub-dimensions namely;

1. *New Possibilities*: It can be described as willingness to seek out new path and take new opportunities. The person overcome a fear and accomplishes new life goals.
2. *Relating to others*: It is a feeling of closeness, togetherness and attachment with family, friends and relatives and can easily connect or get support from others.
3. *Personal Strength*: It can be expressed in terms of increased level of empowerment and strong mental health that people can more ready to take new challenges.
4. *Spiritual change*: It is an increment in the interest in practicing religion or a strong desire to develop spiritual understanding and integrating spirituality in daily life.
5. *Appreciation of life*: It is a phenomenon that occurs when the person's view towards their unstable life are changed to new sense of vulnerability and an increased awareness of life's value.

**Predictor Variable**

Coping has been operationally defined in terms of four dimensions namely;

1. *Problem focused coping*: is directed at the stressor taking steps to remove or to evade it, or to diminish its impact if it cannot be evaded.
2. *Emotion focused coping*: is aimed at minimizing distress triggered by stressors.
3. *Avoidant coping*: describe ignoring or withdrawing from the stressor/problem or associated feelings or emotions.
4. *Socially supported coping*: to obtain advice or express emotions.

**Nature of Study**

Co-relational

**Sample**

The present study was conducted on 200 post-operative breast cancer patients of stage II and III undergoing treatment of chemotherapy or radiotherapy. The age range was 40-70 years with the mean age of 55 years.

**Tools**

1. *Posttraumatic Growth Inventory (PTGI)*: The inventory was developed by Tedeschi and Calhoun (1996) includes five factors namely new possibilities having 5 items, relating to others having 7 items, personal strength with 4 items, spiritual change with 2 items and appreciation of life having 3 items. It is 21-item self report measure having 6-point Likert-scale from 0 to 5 (no change to change to very great degree). High

Cronbach's alpha coefficient revealed strong internal reliability i.e, .90.

2. *COPE Scale*: The COPE scale was used to identify the coping strategies a person use to cope with traumatic event. The scale was developed by Carver *et al* (1989) includes 15 sub scales which are categorized into four sub-dimensions namely problem focused coping, emotion focused coping, avoidant coping, and socially supported coping. It is a 60 – item self report scale having 4- point likert –scale from 1-4. High Cronbach's alpha coefficient revealed strong internal reliability i.e, 0.78.

Hindi translation of both the scales was done with the help of Back Translation Method. The

reliability and item test correlation was ascertained for both the scales. The ascertained reliability was 0.82 for Posttraumatic Growth Inventory and 0.73 for COPE Scale.

**Results**

The following table 1 is showing the descriptive statistics of the variables i.e, Posttraumatic Growth and Coping along with their dimensions. The first dimension of PTG i.e. New Possibilities (NP) had 5 items with the scale range 0-25 and the scale mean is 12.5. On the analysis of its data, the obtained range and obtained mean was found to be 0-23 and 11.51 respectively. The assessed value of SD was found 6.833.

**Table 1: Showing descriptive statistics of different variables and their dimensions.**

	No. of items	Scale Range	Scale Mean	Obtained Range	Obtained Mean	SD
NP	5	0-25	12.5	0-23	11.51	6.833
RTO	7	0-35	17.5	2-34	16.75	9.349
PS	4	0-20	10.0	0-20	9.14	5.497
SC	2	0-10	5.0	0-10	4.68	2.639
AOL	3	0-15	7.5	0-15	8.61	3.516
PTG (T)	21	0-105	52.5	4-94	50.68	26.247
PFC	16	16-64	24.0	17-64	23.50	11.521
EFC	16	16-64	24.0	16-60	22.00	11.062
AC	16	16-64	24.0	16-62	31.29	16.363
SSC	12	12-48	18.0	12-42	15.58	9.153

Similarly, for the second dimension of PTG i.e, Relating to Others (RTO) with 7 items had 0-35 scale range and the scale mean was 17.5. The obtained range and Obtained mean was found to be 2-34 and 16.75 respectively. The value of SD was found as 9.349.

Likewise, the third dimension of PTG i.e Personal Strength (PS) consists of 4 items having the scale range 0-20 with the scale mean 10.0. The obtained range was found to be 0-20 with the obtained mean 9.14 which was found to be below average level. The value of SD was found to be 5.497. Moreover, while assessing the Spiritual Change (SC), ie, the fourth dimension of PTG, the total items were 2 having the scale range 0-10 and the scale mean 5.0. The obtained range for Spiritual Change was found to be 0-10 and the obtained mean was 4.68. The level of SC was found to be below average level among the breast cancer patients. The fifth and the last dimension of PTG i.e Appreciation of Life (AOL) contain 3 items. The scale range and the scale mean were found to be 0-15 and 7.5 respectively. The obtained range was found to be 0-15, but the obtained mean was found to be slightly above average of life i.e 8.61. The value of SD for this dimension was 3.516. Overall PTG consists of 21 items having the scale range 0-105 and the scale mean 52.5. While assessing the level of PTG, the

obtained range was found to be 4-94 and the obtained mean was 50.68. The level of PTG among breast cancer patients was found to be below average level. The SD was 26.247.

Similarly, in the above table 1, Problem focused coping comprised of 16 items with the scale range and the Scale mean were 16-64 and 24.0 respectively. The range obtained was 17-64 and the obtained mean was 23.50 which were tended to be slightly below average level among the breast cancer patients. The calculated value of SD was 11.521. Moreover, for Emotion focused coping and Avoidant coping, both contains 16 items and the scale range and Scale mean were found to be 16-64 and 24.0 respectively. The obtained range and obtained mean for emotion focused coping was 16-60 and 22.0 respectively. While for avoidant coping, the obtained range and obtained mean were found to be 16-62 and 31.29 respectively, which was found to be above average level. The SD was found to be 11.062 for emotion focused coping and 16.363 for avoidant coping. The fourth dimension of coping i.e, socially supported coping consists of 12 items having the scale range 12-48 and scale mean 18.0. The obtained range and obtained mean tended to be 12-42 and 15.58 respectively. The SD was found to be 9.153 for socially supported coping.

Table 2: Showing the correlation between different dimensions of Posttraumatic Growth and Coping

	Problem Focused Coping	Emotion Focused Coping	Avoidant Coping	Socially Supported Coping
Relating to Others	.942**	.941**	-.929**	.923**
New Possibilities	.939**	.939**	-.923**	.925**
Personal Strength	.931**	.924**	-.913**	.903**
Spiritual Challenge	.877**	.866**	-.864**	.862**
Appreciation of Life	.699**	.713**	-.671**	.660**
Posttraumatic Growth (T)	.957**	.956**	-.939**	.936**

Significance level: 0.01\*\*, 0.05 \*

Table 2 shows the relationship between the Posttraumatic Growth and Coping along with their dimensions. While analyzing the data, it was found that the first dimension of PTG i.e, Relating to others was found to be positively related with problem focused coping ( $r = .942$ ), emotion focused coping ( $r = .941$ ) and socially supported coping ( $r = .923$ ) while it was found to be negatively related with avoidant coping ( $r = -.929$ ). A study done by *Sears and Colleagues (2003)* on the women diagnosed with breast cancer also reveal that coping strategy is one path to the emergence of PTG. Accepting the traumatic event of cancer diagnosis may be an important factor that can facilitate PTG.

Similarly, New possibilities was also found to be positively related with problem focused coping ( $r = .939$ ), emotion focused coping ( $r = .939$ ) and socially supported coping ( $r = .925$ ) while it was tended to be negatively related with avoidant coping ( $r = -.923$ ). Moreover, Personal strength and Spiritual Challenge were found to be positively related with problem focused coping ( $r = .931$ ;  $r = .877$ ), emotion focused coping ( $r = .924$ ;  $r = .866$ ) and socially supported coping ( $r = .903$ ;  $r = .862$ ) while it was found to be negatively related with avoidant coping ( $r = -.929$ ;  $r = -.864$ ). Likewise, the fifth dimension of PTG i.e, Appreciation of life was also found to be positively related with problem focused coping ( $r = .699$ ), emotion focused coping ( $r = .713$ ) and socially supported coping ( $r = .660$ ) and negatively related with avoidant coping ( $r = -.671$ ).

While analyzing the overall Posttraumatic growth, it was tended to be positively related with problem focused coping ( $r = .957$ ), emotion focused coping ( $r = .956$ ) and socially supported coping ( $r = .936$ ) and negatively related with avoidant coping ( $r = -.939$ ).

Summarizing the results, it would be demonstrated that those persons who are able to engage in adaptive coping strategies like problem focused coping, positive reappraisal, and religious coping have high level of PTG (*Shaw et al., 2005 and Linley and Joseph, 2004*). Other longitudinal researches also reveal that active coping strategies and emotional social support were found to be positively related with PTG (*Danhauer et al, 2013; Schroevers et al, 2010*)

#### Limitations and Suggestions

1. The present research mainly focuses on breast cancer patients only but this can also be done with other cancer patients also.
2. Caregivers play an important role in cancer patient's life. So they can also be included in further research.

3. In the present research only coping is assessed, but there might be some other variables which may influence the PTG of breast cancer patients.
4. Some kind of intervention program can be developed for the breast cancer patients to enhance their coping skills.

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