

Post traumatic growth inventory: measuring the positive legacy of trauma on adolescences

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Abstract

Post traumatic growth is one of the terms to describe the positive changes resulting from the struggle with trauma which emphasizes the potential transformation of one's experience after experiencing a traumatic event (Meyerson, Grant, Carter, dan Kilmer. 2011). Tedeschi and Calhoun (1996) stated that what is important in the formation of post traumatic growth is the upheaval that occurs as a result of a traumatic event, and it is not specifically determined what traumatic event is needed. Growth in post traumatic growth does not occur as a direct result of a trauma, but as a result of the individual's struggle to accept his new reality (Tedeschi and Calhoun, 2004). Tedeschi and Calhoun (1996) measure the positive changes that occur in victims of traumatic events in five domains, namely increased appreciation of life, closer and more meaningful relationships with others, awareness of inner-strength or positive aspects they have, awareness of choices or new possibilities in life and changes in the spiritual aspect. Testing of the measuring instrument was carried out on 33 individuals (age range 15-22 years) to test the readability of the measuring instrument which had been translated from English into Indonesian. After measuring instrument on 33 individuals (age range 15-22 years), we found that at least there are 4 items, namely item numbers 1, 2, 10, and 19 which have a correlation coefficient (r) below 0.2.

Keywords: posttraumatic growth, trauma, adolescences

Introduction

Post traumatic growth is one of the terms to describe the positive changes resulting from the struggle with trauma which emphasizes the potential transformation of one's experience after experiencing a traumatic event (Meyerson, Grant, Carter, dan Kilmer. 2011) [4]. Post traumatic growth not only returning to the psychological state as before the crisis or tragedy occurred, but undergoing transformation or change to become more developed and achieve a better state, such as increasing closeness to the people around us, realizing one's own strengths or strengths that were not realized before, and changing priorities life (Tedeschi dan Calhoun, 2004) [10].

Tedeschi and Calhoun (1996) [7] stated that what is important in the formation of post traumatic growth is the upheaval that occurs as a result of a traumatic event, and it is not specifically determined what traumatic event is needed. Tedeschi and Calhoun (2004) [10] emphasizes the importance of events that have a "seismic" effect to cause a psychological crisis due to the destruction of someone's basic assumptions or core beliefs in order for post traumatic growth to happen. Growth in post-traumatic growth does not occur as a direct result of a trauma, but as a result of the individual's struggle to accept his new reality (Tedeschi and Calhoun, 2004) [10].

Understanding of a scheme or basic assumptions (core beliefs) requires understanding at a certain cognitive level, therefore studies on post traumatic growth are mostly conducted with adolescents and adults (Tedeschi and Calhoun, 2004) [10]. In addition to various age levels, post traumatic growth studies have also been carried out using various events, including Yaskowich (2002) [11] in cancer patients, Milam, Ritt-Olson, and Unger (2004) [5] who used death in loved ones, and

Ickovics, Kershaw, Milan, Lewis, Meade, and Ethier (2006) [3] who use pregnancy and interpersonal problems. These studies show that post traumatic growth can occur due to various events and at various age levels.

Post traumatic growth

Tedeschi and Calhoun at the beginning of their research interpreted positive changes due to trauma with various terms, including perceived benefits, positive aspects, and transformation of trauma (Tedeschi and Calhoun, 2004) [10]. Since then, other terms have emerged such as stress-related growth, discovery of meaning, positive emotion, and positive by-product to explain the positive changes that occur after individuals experience traumatic events (Tedeschi and Calhoun, 2004) [10]. Tedeschi and Calhoun (2004) [10] finally chose to use the term post traumatic growth in their research because it better represents the essence of the phenomenon being studied.

Post traumatic growth was proposed by Tedeschi and Calhoun (1996) [7] to describe positive changes resulting from the results of a person's upheaval in overcoming traumatic events. Tedeschi and Calhoun (1999, 2001) [8] revised the meaning to be a positive psychological change as a result of one's struggle after experiencing an event that endangered one's life, then Tedeschi and Calhoun (2004) [10] added the meaning to be an experience of positive psychological change as a result of the upheaval of a person's life crisis. could change his life. Tedeschi and Calhoun (2004) [10] concluded that post traumatic growth is the perception of positive psychological changes that occur in a person due to his struggles or struggles in dealing with traumatic events, life crises or situations that threaten the

safety or integrity of his life.

The difference between post traumatic growth and other concepts such as resilience, fortitude, and optimism are that the individual has gone through the conditions or situation before the crisis upheaval occurred, the individual not only managed to survive, but also experienced a change or transformation which is seen as an important change and depth, and beyond the initial conditions. Resilience is a person's ability to recover and return to their original state before depression, serious illness, or misfortune (Tedeschi and Calhoun, 2004) ^[10]. Fortitude is defined as a personality characteristic that is able to control and regulate its personality so that it remains healthy and normal in response to stressful events (Kobasa, In Tedeschi and Calhoun, 2004) ^[10]. The difference between post traumatic growth and resilience is that it involves changes beyond the state before the traumatic event.

Tedeschi and Calhoun (2004) ^[10] did not find a direct relationship between post traumatic growth and the concepts of resilience, fortitude, and optimism. However, they argue that individuals with high coping capacities will experience growth but only slightly, because high coping capacities make individuals not experience inner turmoil in overcoming their trauma, and Tedeschi and Calhoun argue that inner turmoil with trauma is important for post traumatic growth can occur.

Domain of post traumatic growth

Tedeschi and Calhoun (1996) ^[7] measure the positive changes that occur in victims of traumatic events in five domains or domains, namely increased appreciation of life, closer and more meaningful relationships with others, awareness of self-strength or positive aspects they have, awareness of choices or new possibilities in life and changes in the spiritual aspect.

The following is a more in-depth explanation of the domain of post traumatic growth:

a) Appreciation of life

This domain has reactions that are common in people who are trying to overcome the turmoil of great adversity. Many individuals say that they have become more appreciative of their lives. Small things that were never noticed before become very valuable, like the joy of a sunny day or the value of the smiles of the people around you.

b) Interpersonal relationship

Subjects who experience the loss or death of a loved one will pay more attention to the importance of the people around them, and pay more attention to other people. Conditions or situations of sharing fate also increase compassion. The common fate makes individuals feel more connected to others.

c) Awareness of inner-strength

Tedeschi and Calhoun (2004) ^[10] found that there were individuals who were bereaved by the death of a family

member who were able to overcome their problems better than before, because they found positive aspects or strengths that had not been realized before the traumatic event, such as the emergence of independence that had not been realized before in problem solving.

d) New possibilities

Changes that occur because a person seeks new and different ways to overcome his trauma, in the research of Tedeschi and Calhoun (2004) ^[10], a subject who has experienced the loss of a family member chooses a career as a nurse so that he can try to provide care and comfort to others in his life. face suffering and loss.

e) Spiritual change of outlook

Individuals who are religious or atheist can experience changes in this domain or realm. The most visible behavior in this domain change is more.

Process of post traumatic growth

Growth in post-traumatic growth does not occur as a direct result of a trauma, but the positive changes that occur are as a result of upheaval or individual struggle in accepting a new reality as a result of the traumatic events they experience (Tedeschi and Calhoun, 2004) ^[10].

Tedeschi and Calhoun (2004) ^[10] include a framework for thinking about the process of post traumatic growth and various elements that support the formation of post traumatic growth. In their framework, Tedeschi and Calhoun explain the importance of events that cause the destruction of assumptions or schemes about the world of individuals, there is no specific mention of events or disasters that must be experienced, but must have an impact that can cause emotional shock that can destroy individual schemes regarding ideal life images. to be achieved (Tedeschi and Calhoun, 2004) ^[10].

As a result of the destruction of the ideal life picture scheme, individuals will automatically and without any intention, rethink about the traumatic events experienced (rumination) in an effort to reduce the emotional stress they feel. Individuals who experience the rumination process will question their condition after a traumatic event, usually occurring through self-disclosure by writing (narration), speaking (sharing), or praying (Tedeschi and Calhoun, 2004) ^[10].

Social support will really help control or manage emotional disturbances experienced and the formation of new schemes. The social support provided can be in the form of emotional support, instruments or goods, information, and assessment support. When the emotional stress or emotional disturbance experienced has decreased, and thoughts about the traumatic event (rumination) have turned into a reflection that has meaning and constructive thoughts (search for meaning and reappraised), then growth has occurred.

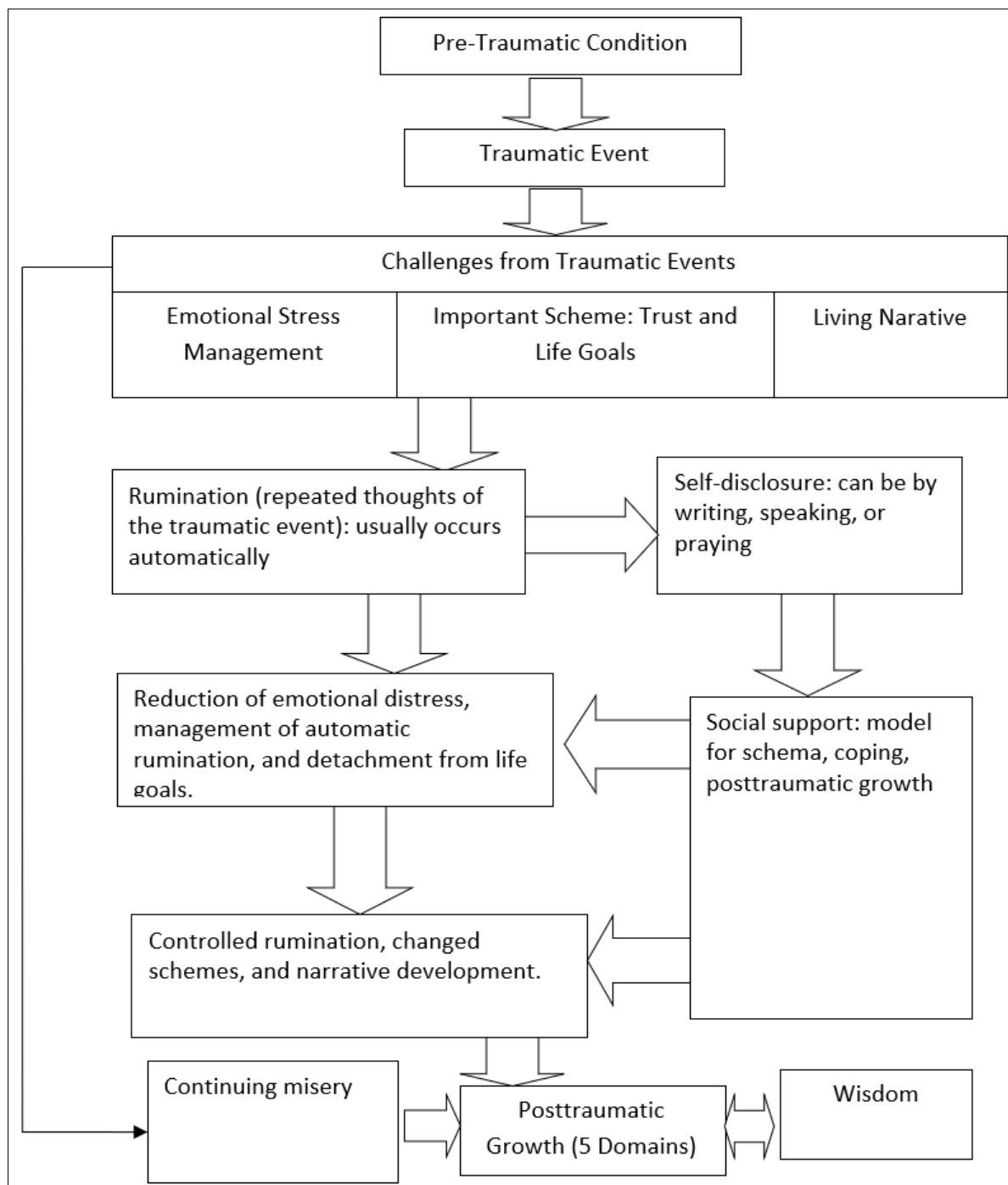


Fig 1: Post Traumatic Growth Process (Tedeschi and Calhoun, 2004)

Measurements of post traumatic growth

The development of a post traumatic growth measuring tool was carried out by Tedeschi and Calhoun in 1996 by creating items that reflect the domain or domains of post traumatic growth. Of the 34 items, 21 items were selected that best reflected the domain or realm of post traumatic growth. The items were developed from a literature review discussing responses to stressful events, as well as interviews with victims who have lost family members, disabled limbs, and other life crises.

The results of the factor analysis of these items resulted in 21 items covering 5 domains of post traumatic growth: appreciation for life, closer and meaningful relationships with others, awareness of one's own strengths or positive aspects,

awareness of choices or possibilities new in life and a change in outlook spiritually.

Post-traumatic growth inventory

Post Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun 1996) [7]. PTGI is a measurement scale that measures the experience of positive change that occurs after a traumatic event. The formation of items is based on the 5 PTG domains (possibility of novelty, interpersonal relationships, inner strength, respect for life, and spiritual change) on a 4-point scale.

The following table shows changes to the Posttraumatic Growth Inventory (PTGI) measurement tool.

Table 1: Dimension of Post Traumatic Growth Inventory (PTGI)

Dimension	Items	Item No.	Examples
Interpersonal relationship	6	6, 7, 12, 15, 18, 20	I feel closer to other people (friends or family) (7)
New Possibilities	5	1, 2, 14, 19, 21	Now I have the opportunity to do things I couldn't do before (14)
Inner Strength	5	4, 8, 10, 13, 17	I learned that now I can deal with my problems better (17)
Spiritual Changes	3	5, 11, 16	Now I trust God more (16)
Appreciation of Life	2	3, 9	Now I understand the importance of my life (3)
Total Item	21	1-21	

Validity and reliability test results

All of these measuring instruments are obtained from theoretical constructs used in research abroad where the original form is in English. The measuring instrument used has a high level of validity and reliability.

The measuring tool adaptation process is carried out by translating from English to Indonesian, then a back-translation process is carried out by a linguist to determine the consistency of the measuring instrument. Measuring instruments that have been translated into Indonesian are tested to determine their validity and reliability. Validity means the extent to which the accuracy and accuracy of a measuring instrument in carrying out its measuring function, while reliability is the extent to

which the results of a measurement can be trusted (Azwar, 2012) [2].

Testing of the measuring instrument was carried out on 33 individuals (age range 15-22 years) to test the readability of the measuring instrument which had been translated from English into Indonesian. The test results found that there were several errors in the writing and preparation of measuring instruments so that they could be corrected before being used in data collection. After the readability test and language improvement were carried out, the researchers tested the measuring instrument on 33 individuals (age range 15-22 years) to test it on a pilot data basis. The details of the reliability and validity test can be seen in the following table.

Table 2: Item validity test results PTGI

No. Item	Measuring Aspect	Corrected item-total correlation (r)	Coeffisien Alpha if items are deleted
1		0.014	0.787
2		0.024	0.783
10		0.138	0.781
19		0.157	0.781

Table 3. Item validity test results PTGI

Coeffisien Alpha	Corrected item-total correlation	Invalid Items	Number Invalid Items	Coeffisien Alpha after revision
0.776	0.14-0.673	1, 2, 10, 19	4	0.810

In terms of item validity testing of the 21 items proposed, there are 4 items, namely item numbers 1, 2, 10, and 19 which have a correlation coefficient (r) below 0.2. The value of r below 0.2 indicates that the item in question does not measure the psychological construct that you want to measure precisely or measures more error variance (Anastasi and Urbina, 1997) [1]. If these four items are eliminated, it can increase reliability. Although the value of the correlation coefficient of these items (r) is below 0.2, the item alpha coefficient is still high so that for this study, no items were deleted but the language structure was improved.

Conclusion

After measuring instrument on 33 individuals (age range 15-22 years), we found that at least there are 4 items, namely item numbers 1, 2, 10, and 19 which have a correlation coefficient (r) below 0.2. Out of 5 items representing domain new possibilities, 3 were not measure the psychological construct that want to measure precisely, which mean either translation from original form were not accurate or it was too confusing with local understanding that needed more explanation for this item. Meanwhile item number 10 shows that only 1 out of 5 items representing domain inner strength that has value below

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0.2, which mean the other four is still good and maintain reliability for this domain.

After this measurements, next step could choose a participants who qualified with the criteria, had a seismic event in life, to explore post traumatic growth that occur in Indonesian people, and maybe in specific event.

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