

Posttraumatic Growth in Adolescent Survivors of the Mount Merapi Eruption Disaster

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Corresponding author:	Abstract
*Triyono <u>triyonoalarief@staff.uinsaid.ac.i</u> <u>d</u>	Background: Natural disasters can cause material losses and psychological trauma, but on the other hand, it has the potential to trigger positive impacts such as post-traumatic growth (PTG). Therefore, this study will specifically examine PTG in adolescent survivors of the Mount Merapi eruption in Balerante Village,
Article History	Kemalang, Central Java. Objective: Exploring more deeply about PTG (Post- Traumatic Growth) in adolescent survivors of the Merapi volcanic eruption in
Submitted : January 05 th , 2025	Balerante Village. Method: A qualitative phenomenological approach involving four subjects aged 19-24 years who directly experienced the Mount Merapi
Final Revised : March 13 th , 2025	eruption disaster. Informants were selected using the snowball sampling technique. Data collection was conducted through observation and in-depth interviews. The data analysis technique employed was Interpretative
Accepted : March 18 th , 2025	Phenomenological Analysis (IPA). Result: The results showed that PTG in adolescent survivors of the Mount Merapi eruption was reflected in disaster preparedness, positive post-traumatic changes, and the emergence of new ambitions. Factors contributing to PTG included social support and individual
	spirituality. Conclusion: Trauma can be a turning point for adolescents, allowing them to grow into more resilient individuals in living their lives.
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Abstrak

Latar Belakang: Bencana alam dapat menyebabkan kerugian materi, dan trauma psikologis, namun juga berpotensi memicu dampak positif seperti posttraumatic growth (PTG). Meski penelitian PTG pada penyintas bencana alam sudah banyak dilakukan, kajian spesifik tentang PTG pada remaja penyintas erupsi Gunung Merapi di Desa Balerante, Kemalang, Jawa Tengah, belum tersedia. **Tujuan:** Mengeksplorasi lebih mendalam mengenai PTG pada remaja penyintas bencana erupsi Gunung Merapi di Desa Balerante. Metode: Kualitatif fenomenologi yang melibatkan empat subjek berusia 19-24 tahun yang mengalami langsung bencana Erupsi Gunung Merapi. Informan dipilih melalui teknik *snowball sampling*. Pengambilan data menggunakan observasi dan wawancara mendalam. Teknik analisis data yang digunakan yaitu *Interpretative Phenomenological Analysis* (IPA). **Hasil**: Hasil penelitian ini menunjukkan PTG pada remaja penyintas bencana erupsi Merapi ditunjukkan dalam bentuk kesiagaan menghadapi bencana, perubahan positif setelah trauma, dan munculnya ambisi baru. Faktor pendorong yang mempengaruhi PTG diantaranya dukungan sosial dan spiritualitas pada masing-masing individu. Penelitian ini diharapkan dapat mendukung intervensi psikologis dan program penguatan potensi PTG. **Simpulan**: Trauma dapat menjadi ititik balik bagi remaja untuk tumbuh menjadi individu yang lebih tangguh.dalam menjalani kehidupan.

Kata Kunci: Bencana erupsi gunung Merapi; posttraumatic growth; remaja.

Introduction

Indonesia is often hit by natural disasters. The history of disasters in Indonesia shows that it is located in an area that is at risk of disasters (Yulianto et al., 2021). Indonesia's geographical, demographic, sociological, and historical conditions make the country vulnerable to various types of disasters, whether natural, non-natural, or social. (Wardyaningrum, 2014). One of the disasters that occur in Indonesia is volcanic eruptions. Indonesia has 129 active and 500 inactive volcanoes, with 60% having considerable eruption potential (Gosal et al., 2018). Mount Merapi is one of the most active and threatening volcanoes in Indonesia. Mount Merapi is located in four regencies, namely Sleman Regency in Yogyakarta Special Region, Magelang Regency, Boyolali Regency, and Klaten Regency in Central Java Province, with an altitude of approximately 2,978 m above sea level and an area of approximately 300-400 km2 (Sari, 2017). Mount Merapi erupted 75 times from 1550 until 2018 (Widodo, 2019). The largest eruption occurred in October-November 2010 and produced an eruption as high as 17 km. This eruption released lava at a tremendous speed, and explosions were heard as far south as the Yogyakarta. (Jousset et al., 2013).

Mount Merapi, with its history of devastating eruptions, symbolizes the power of nature that not only a ffects the surrounding environment but also the lives of people living nearby. Mount Merapi is not only a physical threat but also affects social, psychological, and sociocultural aspects (Rachmayani, 2015), so that the eruption that occurred caused various experiences for the victims who felt it. Victims of the eruption of Mount Merapi come from all ages, from the elderly, parents, teenagers, and children. Natural disasters that occur must have a traumatic impact on victims, including children. According to Kurniati et al. (2021), natural disasters affect the physical, psychological, and social aspects of children at an early age. The most common psychological impact is PTSD (Posttraumatic Stress Disorder) or post-traumatic stress disorder. Other effects include depression, anxiety, sleep disturbances, and decreased quality of life (Warsini et al., 2014). These impacts can trigger ongoing trauma, and trauma experienced in which often returns when adolescents enter adolescence (Kurniati et al., 2021).

According to the World Health Organization (WHO), adolescents are in the age range of 10-24 years. Adolescence is a transition phase from childhood to adulthood, during which many physical and psychological changes occur. Psychic changes in adolescents include mental changes, such as achieving a clearer self-identity and increasingly logical, abstract, and idealistic thinking patterns. In this phase, adolescents develop the ability to think more critically and independently along with the physical changes they experience (Fero et al., 2023; Noordin et al., 2020). The results of preliminary studies through direct interviews by researchers on several adolescents in Balerante Village revealed the presence of trauma in several adolescents in Balerante Village, such as what happened to subject G, who still often remembered moments during the eruption disaster when he heard the sounds of explosions or rumbling; subject E was afraid to see videos that reminded him of the eruption disaster; and subject P was still afraid when the eruption occurred. The subject even immediately went to the home of the subject's friend who was located safely, even though what happened was a small eruption. Therefore, this study included adolescent subjects to examine the impact of trauma experienced in childhood.

Trauma experienced by individuals after a disaster, in addition to having a negative impact, can also have a positive impact. PTG, or post-traumatic, is a form of this positive impact (Cao et al., 2018). PTG refers to the growth or positive changes that individuals experience as a result of their struggles in dealing with traumatic events (Tedeschi & Calhoun, 1996). According to Tedeschi and Calhoun (1996), PTG is categorized into five main aspects: new opportunities, relationships with others, personal strengths, spiritual changes, and appreciation of life. PTG is influenced by several factors that drive whether the achievement of PTG is successful. The factors that influence PTG can be divided into two categories: external and internal (Martin, 2021; Henson et al., 2022). External factors include the level of distress from trauma, social support, and sociocultural influences that can affect how a person adapts and grows after a traumatic experience. Internal factors, on the other hand, involve personal traits, distress management, coping styles, and emotional self-disclosure, all of which play an important role in how individuals process experiences. They interact with each other and contribute to the development of PTG (Teixeira & Pereira, 2013)

Previous research on PTG can be found in several studies, such as that conducted by Salawali et al. (2020) on adolescents who survived natural disasters. This study found that traumatic experiences could trigger positive changes in their lives. Adolescents in this study interpreted trauma as doing good and finding meaning in life. Another study conducted by Fatiyah (2016) on 30 subjects of trauma survivors found that approximately 53% of subjects (16 people) had high scores on the Posttraumatic Growth Inventory (PTGI) where women were better able to achieve PTG than men (a difference of 0.25) where women were higher in all PTG domains.

Balerante Village was officially declared as Disaster Prone Area (KRB) III by the Center for Geological Disaster Research and Technology Development (BPPTKG), which means that it is an area that

has the potential or frequent occurrence of hot clouds, lava flows, volcanic bombs, toxic gases, and rockfalls (incandescent). This village has been the object of various studies, including the impact of the eruption of Mount Merapi on the community. A study conducted by Setiyawan and Purwanto (2016) found a psychological impact of the eruption on residents of Balerante Village. Schubert et al. (2016) showed that the rate of PTG in PTSD survivors was greater than that in those who did not experience PTSD. Research by Ernawati et al. (2020) found signs and symptoms of PTSD in residents around Mount Merapi after the eruption in 2010, namely feeling sad as if re-experiencing the eruption event. Previous studies have emphasized the impact of trauma, and no research has been conducted on PTG after the Mount Merapi eruption disaster in Balerante village.

This study aimed to describe PTG in adolescent survivors of the Mount Merapi eruption. This research is important because understanding PTG in adolescent survivors of natural disasters, especially the eruption of Mount Merapi, can provide a broader picture of how trauma can be a catalyst for positive psychological growth (Alqumairah, 2020). In addition, the results of this study are expected to contribute to the development of more effective psychological interventions and recovery programs that focus on strengthening the potential of PTG at both individual and community levels. Thus, adolescent disaster survivors not only recover from trauma but are also empowered to grow into stronger, resilient individuals with a more meaningful outlook on life.

Method

This study applied a qualitative approach with a phenomenological method. The qualitative approach was used because the researcher aimed to explore a deeper understanding of the participants' experiences in the process of growth and the positive changes they experienced after experiencing trauma.

The subjects chosen to conduct this research were adolescents aged 19-24 years who experienced the Mount Merapi eruption disaster in Balerante Village. The subjects were selected through snowball sampling, which is a gradual technique similar to a snowball. A small rolling snowball will increase in size as snow is added as it moves. This process starts with a small number of people or cases and then develops through networks or relationships with other respondents (Nurdiani, 2014). From the results of this selection, four subjects were selected as research informants.

Table 1. Research Subjects			
Subject	Age	Gender	
G	21 Years	F	
Р	21 Years	М	
E	24 Years	М	
S	19 Years	F	

Data Measurement

The data collection methods used were observation and semi-structured interviews. The main data were obtained through in-depth interviews conducted directly to explore the experiences and views of adolescents regarding the process of growth and positive changes they experienced after facing trauma.

Data Analysis

The data analysis used in this research was Interpretative Phenomenological Analysis (IPA), a qualitative approach that aims to understand how people understand their life experiences (Smith et al., 2021).

Result

Data analysis conducted on four adolescent survivors of the Merapi eruption found PTG in several forms: 1) preparedness in facing disasters, 2) positive changes felt after trauma, and 3) ambition after trauma. The following is an explanation of the theme's results.

Theme 1. Preparedness in the face of disaster

The four subjects experienced several eruption disasters from 2010 to 2021. When experiencing the 2010 eruption disaster, the subjects felt very traumatized, but there were differences in their attitudes when experiencing eruption disasters in subsequent years. As experienced by subject G, who was traumatized during

the 2010 disaster in 2018 when the eruption occurred again, the subject did not underestimate and had careful preparations. Subjects also understood what to do at that time, such as self-evacuation and preparing important items that must be carried. The same is the case with subject P, where the subject already knows the preparations he needs to face disasters, such as preparing important documents, self-evacuation, and evacuation. This was also felt by subject E, who had more initiative to evacuate independently and prepare important luggage that the subject had to carry, such as clothes and important documents. Subject S claimed to be more accustomed to the eruption he experienced. The same was true for the three subjects who prepared important items and then went to the evacuation barracks.

According to subject G, "Jadi setelah 2010 itu terus 2018 kita yang lari dari sini nah kita jadi terbiasa bukannya menyepelekan bencana tapi kita jadi lebih tau gimana bertindak"

According to subject P, "belajar untuk berfikir lebih jauh ke depan seperti menyiapkan dokumen penting keluarga dan menjadi pengungsi mandiri dan dapat melaksanakan evakuasi mandiri diri sendiri dan keluarga kalau saja seuaktu waktu terjadi erupsi lagi"

According to subject E, "Kalo sekarang misal ada tanda-tanda, pasti baju sama surat-surat yang penting pasti sudah di dalam tas, sudah prepare"

According to subject S, "cara ngatasinya ya pertama sih tenang di dengarin dulu mbak..suara apa itu, didengarin dulu, kalau memang itu suara gunung ya cari..ee..biasanya ya ambil barang-barang berharga dulu itu kalau ngungsi lari ke barak pengungsian"

Theme 2. Positive changes felt after trauma

Disasters not only have a negative impact on subjects, but can also have a positive impact. Subject G felt several positive impacts, such as becoming a stronger person, being closer to his parents, and feeling more grateful for his life. As for subject P himself after experiencing the disaster, he felt that he was more introspective and thought further ahead, was grateful for what happened, and felt closer to God. This change was also felt in subject E, where the subject felt more grateful for what he got at this time. Subject E also felt that he was used to the dangers of eruptions. For subject S, the positive changes felt led to his religious side. Subject S was grateful that everything God had taken away during the eruption had been replaced with something better. The subject is also at peace and accustomed to existing threats and surrenders to all God's will that has and will happen.

According to subject G, "Iya mba lebih deket (dengan tuhan). Yaa lebih deket aja sih mba komunikasinya. sekarang hikmahnya yang aku rasain justru gak ngedown tapi merasa karena asalku dari sini, aku punya lebih banyak cerita dan pengalaman dari yang lain. Jadi maksudnya dulu aku ngedown sekarang engga. Kalo bersyukurnya lebih ke begitu apresiasi ke diri sendiri kaya aku udah pernah ngerasain hal itu mba"

According to subject P, "tapi dari kejadian tersebut saya jadi mawas diri dan belajar untuk berfikir lebih jauh ke depan mbak. Ya itu pasti mbak, kan hubungan pertama kita itu kepada tuhan mbak, walaupun tidak ada bencana pun kita juga harus terus mendekatkan diri pada Tuhan mbak, karena setiap yang terjadi itu sudah ditakdirkan dan pasti ada nilai positifnya dibalik kejadian itu tidak hanya hal-hal yg merugikan saja"

According to Subject E, "Lebih bersyukur sekarang. Disini banyak mba yang dulunya kurang deket sama Tuhan sekarang lebih deket. Yang dulunya mungkin jarang sholat, sekarang ya minimal ikut sholat Jumatan. Yang 2018 itu saya biasa, saya gak ngungsi."

According to subject S, "Kalau itu sih ya berserah diri, kalau bencana itu ya mbak ikhtiar dulu ya berusaha menyelamatkan diri dulu ya mbak baru pasrah. Terus setelah itu kan digantikan lagi sama Allah yang lebih dari itu, Mm yang kemarin itu anu mbak, kan pohon-pohonnya itu pada mati semua..kan alhamdulillah dikasih bantuan sama pemerintah, sama desa gitu..bibit-bibit yang baru, ditanam lagi, tumbuhnya itu lebih dari yg kemarin gitu"

Theme 3. Ambition after trauma

After the post-disaster trauma, ambitions arose in the four subjects. As experienced by subject G, who has the goal of developing potential in Balerante Village by opening a business in Balerante Village. The subject was motivated by the state of Balerante Village after the eruption disaster, which seemed like there was no life anymore; the subject was determined to develop Balerante Village. Subjects P and E, on the other hand, wanted to focus on Korean language schools so that they could later work in Korea. Both subjects chose to focus on working outside Balerante Village and did not have a view of what to give to Balerante Village.

While subject G does not yet have a view of what he wants to do in the future, the subject is currently focused only on teaching PAUD in Balerante Village.

According to subject G, "Dari kejadian itu aku juga kan ambil bisnis karena itu pengen ngembangin yang ada disini yang awalnya dulu kaya hampir gaada kehidupan lagi, aku mau berbisnis biar disini itu keangkat lagi sejak kejadian itu. Mau mengembangkan potensi yang ada disini, apa ya mba aku malu. Ya mulai dari yang kecil-kecil aja mba. Budidaya dari limbah2nya itu kan juga bisa dibisnisin. Tapi itu baru rencana aja mba"

According to subject P, "Nggak soalnya mau fokus sama sekolah Bahasa korea, pernah di ajak. Aku sekolah mas di Magelang, sekolah Bahasa Korea"

According to subject E, "Mungkin mau ke korea lagi aja, Lebih ke gaji si mas, atau prosesnya lebih mudah disana"

According to subject S, "Mm kalau saya saat ini belum ada pandangan ya. Ngajar di paud mbak"

Based on the results of the theme explanation presented above, it can be explained in a simple form, as in the following table:

Table 2. Research themes			
Superordinate Theme	Emergent Theme		
Disaster Preparedness	• Understand what to do when disaster strikes again		
	• Taking the initiative to self-evacuate		
	• Preparing important items that must be carried		
Positive Changes After Trauma	• More grateful		
	• Closer to God		
	• Become a stronger person		
Having Ambition After Trauma	Having new targets to achieve		
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Discussion

The emerging PTG phenomenon is in line with Tedeschi and Calhoun (1996), who categorized PTG into five main aspects: new opportunities, relationships with others, personal power, spiritual changes, and appreciation for life. PTG can be achieved by a new schema formed due to an event; the schema emerges as a result of a process that is reinforced by the support of people around it (Tedeschi & Calhoun, 2004). This study was conducted by interviewing and observing four adolescents in Balerante Village who experienced post-disaster trauma according to World Health Organization) criteria aged 10-24 years. Observations and interviews were conducted face-to-face in Balerante Village in October 2024. Researchers in the discussion want to reveal the PTG experienced by the four subjects, which includes the PTG process, PTG factors, and positive changes felt by the four subjects.

The eruption experienced by the four subjects started in 2010 and was the largest eruption they had ever experienced, followed by phreatic eruptions in 2018 and 2021. The four subjects had different processes and experiences. Like their experiences at the beginning of the trauma. Despite having different ages when the first eruption they experienced in 2010 occurred (G 7 years old, P 7 years old, E 10 years old, and S 5 years old), all four subjects experienced a great deal of trauma. They felt fear, confusion, and loss during and after the disaster. They recalled certain moments, such as the sound of a loud bang or the confusion they experienced while evacuating. This impact is in line with research by Kurniati et al. (2021), where the post-disaster impact can affect physical, psychological, and social aspects in early childhood.

During the recovery process, these four subjects showed adaptation. Subjects E and P avoided videos reminding them of their trauma. Avoidance behavior is a form of adaptation in the form of self-protection to avoid emotional pain (Arifah & Indriyani, n.d.). The disasters that were also experienced by Subjects G and S made them stronger and more resilient. Although there are still lingering symptoms of trauma, such as anxiety and fear, that reappear in certain situations, for example when hearing sounds that remind them of the trauma, they show that the experience does not completely hamper their lives. They tend to accept the reality that they cannot control and leave everything to God. This was shown in the last phreatic eruption they experienced in 2021, where they were better prepared and tended to get used to the situation when the eruption occurred.

The four subjects were also influenced by several driving factors that enabled them to achieve PTG, such as the social support that they tended to receive. Support from family and the social environment plays a major role in the trauma recovery process (Yarni & Komalasari, 2024). This can be seen in subject G, where

closeness to parents, especially the subject's father, increases and often receives emotional support, which makes it easier for the subject to get through his trauma period. The same thing was shown in subject S, who was more cared for and taken care of by his family after the disaster. In addition, assistance from the government and community in Balerante Village also played an important role in the process of achieving PTG in the four subjects. There is assistance with tree seedlings and infrastructure from the government, which indirectly helps recovery and gives hope to the four subjects. This made the subjects see that something positive had happened after the eruption. Another factor is the existence of spirituality and beliefs in each subject. The belief that everything happens is God's will, which makes them stronger in dealing with trauma. They tend to surrender to their fate. Harwansyah et al., (2023) also mentioned that PTG can be achieved if there is a role of spirituality in the individual.

Positive changes were also felt by the four participants, where there was an attitude of preparedness in facing disasters. An attitude of preparedness is demonstrated by an increased understanding of the actions that must be taken if a similar disaster occurs. This included self-evacuation, which the subjects were very concerned about. In subject G, evacuation is like a mandatory thing that must be done if a disaster occurs. Subjects E, P, and S felt the same way. It is important for them to know what should be done when an eruption occurs. The subjects have made preparations in the form of packing valuables in one place to facilitate evacuation if a disaster occurs again. The vulnerability of the area where the participants lived was included in the high category (Wahyu et al., 2020). Therefore, preparedness and vigilance are required by the community. This is in accordance with research by Tazkiyah (2019): PTG can arise from finding a way out of problems and making traumatic experiences a lesson. This attitude was also found in adolescent survivors of the Merapi eruption disaster who made their traumatic experience a valuable lesson and applied it in the form of preparedness to face the next disaster that might occur.

Various positive changes were felt by the four subjects after trauma. The similarity between the four subjects is that they get a greater sense of gratitude after trauma. Miragall et al. (2021) found that an increase in PTG can occur in gratitude and how to interpret an event. Subject G was grateful for himself, who could get through terrible things in his life and felt proud of himself for surviving the eruption disaster. This makes the subject feel that he has more experiences that can be shared and told to his friends. Gratitude is also felt by subject P, who makes himself a more forward-thinking and introspective person. Subjects E and S were grateful that what had been taken away by God was replaced with something better, such as dairy cows and tree seedlings given by the government, which made Balerante Village better than before the eruption. The gratitude obtained by these four participants is a form of appreciation for life in the things they get (Tedeschi & Calhoun, 1996).

Positive changes are also felt through closeness to God. According to Tedeschi and Calhoun (1996), growth in one's spirituality is an aspect of PTG. Spirituality can be described as an individual's closeness to God (Novanti & Asiyah, 2023). Subject E feels a spiritual difference in himself and his surroundings, from previously rarely praying now paying more attention to his prayers, which makes the subject feel closer to God. Subject S always includes God in his life. In particular, he felt the need to make an effort towards God when the eruption occurred again. Likewise, subjects P and G felt it was important to include God in every aspect of their lives.

The four participants also perceived themselves as becoming stronger. Miragall et al., (2021) in their study, demonstrated that an increase in Post-Traumatic Growth (PTG) can occur through enhanced resilience within individuals. This perceived resilience mitigated emotional stress, making the four subjects stronger. Subject P, who had become more self-aware and forward-thinking, displayed strong resilience, the ability to face challenges wisely, and preparedness to handle future difficulties, making them more robust in recovering from tough situations. This was also evident in Subject G, who was accustomed to eruptions and showed a transformation from a previously devastated state to a more stable state using their experiences as a form of self-appreciation. A similar pattern was observed in Subjects E and S, who had become familiar with the threat of eruptions in Balerante Village.

Ambition after trauma became a form of transformation in four subjects. Research conducted by Tedeschi and Calhoun (2004) found that an individual's understanding of their trauma could lead to ambition or goals toward something new. Subject G became aware of the damage to Balerante Village following the disaster and felt deep sadness about the event. The subject developed an ambition to advance Balerante Village through entrepreneurship, aiming to prove that a flattened village could thrive by harnessing its existing potential. Participants E and P chose to learn Korean and hoped to secure jobs in Korea. Meanwhile, Subject S opted to contribute locally by teaching in an early childhood education program (PAUD), as they found joy

in interacting with children. This diversity of ambitions demonstrates that traumatic experiences can serve as catalysts for achieving aspirations.

The findings of this study indicate that the four subjects experienced unique forms of Post-Traumatic Growth (PTG), particularly in terms of vigilance, positive changes, and ambition after trauma. These findings align with the PTG model proposed by, which identifies five key aspects through which individuals overcome severe challenges: new opportunities, personal strength, relationships with others, appreciation of life, and spiritual change.

PTG emerged in all subjects during adolescence. In a study by Harwansyah et al., (2023) PTG was observed in young adults as a response to prior trauma, showing that PTG does not necessarily occur immediately after trauma. A key factor for all four subjects was social support, in which family and community played a crucial role in facilitating PTG. This study highlights that PTG may emerge years after a traumatic event, as observed in these subjects, who experienced PTG during adolescence in response to childhood trauma.

Overall, the participants experienced better changes due to the trauma of the previous disaster. The subjects described PTG as not only limited to the process of recovering from trauma but also a motivating force to live life with new goals and more appreciation, both in disaster preparedness, perceived positive changes, and ambitions pursued. These adolescent survivors of the Merapi eruption showed that the trauma they experienced did not prevent them from growing into more resilient and empowered individuals.

Conclusion

Some of the positive aspects felt by adolescent survivors of the Merapi eruption disaster include understanding the actions that must be taken when the disaster occurs again, taking the initiative to evacuate independently, preparing important items that must be carried out, feeling more grateful, feeling closer to God, becoming a stronger person, and having new targets to achieve. This study reveals that PTG in adolescent survivors of the Merapi eruption disaster is shown in three forms: preparedness for disaster, positive changes after trauma, and the emergence of new ambitions. Thus, the experience of trauma not only leaves wounds but also becomes a turning point that encourages positive growth, especially in adolescents who are able to utilize these experiences to become more resilient individuals in living life.

Future research should explore how age and social environment influence the emergence of PTG. Longitudinal studies are also recommended to understand the development of PTG over time, especially among adolescents who have experienced trauma from an early age, as well as to delve deeper into the role of social and cultural environments in fostering PTG. Expanding this study to include survivors from other regions is also suggested to assess the extent to which these findings can be generalized to a broader context.

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