

## Post-Traumatic Growth Elements among Adolescents Living in Kibagare Informal Settlement of Nairobi County in Kenya

Caroline W. Muraguri<sup>1</sup>, Dr Josephine Arasa<sup>2</sup>, Dr Michael Kihara<sup>3</sup>

<sup>1</sup> Candidate, Doctor of Psychology, Clinical Psychology  
USIU- Africa  
[cwanjiram@yahoo.com](mailto:cwanjiram@yahoo.com)

<sup>2</sup> Associate Professor of Psychology, Head of Department Psychology  
Department of Psychology, School of Humanities and Social Sciences,  
USIU- Africa  
[jarasa@usiu.ac.ke](mailto:jarasa@usiu.ac.ke)

<sup>3</sup> Associate Dean  
Department of Psychology, School of Humanities and Social Sciences,  
USIU- Africa and School of Graduate Studies, Research and Extension  
USIU- Africa  
[mkihara@usiu.ac.ke](mailto:mkihara@usiu.ac.ke)

### Abstract

Adolescents and children are more prone to traumatic critical occurrences, especially adolescents from low-income neighbourhoods. When an adolescent witnesses a traumatic incident or event in his or her life, it will have a profound and long-lasting influence on their development. The posttraumatic growth (PTG) phenomenon explores five main areas: spiritual growth, relating to others, personal strength, new possibilities and appreciating life. PTG process was grounded in Bronfenbrenner's ecological systems theory. The descriptive-analytic quantitative design was used to measure the PTG elements amongst adolescents aged 8 to 18 in the Kibagare informal settlement. The target population was 1000 students of St. Martins School. A multistage sampling method was conducted, and 265 participants were the sample size. A questionnaire containing the Socio-Demographic Questionnaire, the Child and Adolescent Trauma Screen tool, and the Post-Traumatic Growth Inventory children updated version was administered. Data analysis was done using IBM SPSS. The findings revealed that various PTG elements existed among adolescents, indicating spiritual possibility; (M=2.517, SD=0.742), reporting new possibilities (M=2.243, SD=0.765) among others. The

study recommends greater involvement of the community, parents and family in building interventions that focus on posttraumatic growth to enable the adolescent in the informal settlement to cope with traumatic events. This can be implemented through spiritual programs offered by spiritual leaders and mental health clinics in informal settlements that use the discovery of PTG elements as a part of their interventions. In addition, teachers can support adolescents in coping with traumatic experiences by inculcating the practice of the five aspects of posttraumatic growth.

*Keywords:* Adolescents; Post-Traumatic Growth; Complex trauma

### **Introduction and Background**

Trauma is a psychologically painful, agonizing, or shocking experiences that might have a long-lasting effect on the exposed individuals (Maier, 2007). Children and adolescents are particularly vulnerable to traumatic critical events (Carney, 2008). When adolescents experience a traumatic event in their lives, it is often accompanied by a long-lasting impact on their development (Stevens et al., 2018). During childhood and adolescence, many developmental changes occur, as depicted in the biological, psychological, sociocultural, and spiritual areas. Therefore, if an adolescent experiences trauma during a period of such rapid changes, their growth and development may be adversely affected (Carney, 2008). This finding was echoed by Husson et al., who carried out a study among 286 14 to 39-year-old adolescents and youth with cancer. Their study revealed that adolescents are vulnerable to stress due to the developmental milestones they must achieve; this makes their experience of traumatic events more severe. During times of crisis, anxiety, or exposure to a traumatic incident, caregivers, teachers, and parents must pay particular attention to the needs of teenagers.

Complex trauma refers to an adolescent's exposure to a wide variety of traumatic events that are typically continuous, interfere with functioning, and are interpersonal. Some individuals may endure long-term repercussions due to this exposure. These traumatic events are rife and very severe and often happen within a caregiving system. Evidence illustrates that traumatic effects can result from experiencing, witnessing, or hearing about the event (Gregorowski & Seedat, 2013; The National Child Traumatic Stress Network, 2003). It is also defined as outcomes that occur after exposure to early life traumatic stress (Regehr & Roberts, 2010). Complex trauma was defined in the present research as the exposure or experience of several traumatic experiences in an adolescent's life. In a caregiving system, attachment figures offer protection and comfort to children; therefore, experiencing trauma within a caregiving system will adversely affect an adolescent (George & Solomon, 1999). It may encompass neglect, witnessing family and psychological violence, being displaced, community violence, separation from family, and physical and sexual abuse (Wamser-Nanney & Vandenberg, 2013).

Research has focused on the only types of injustices or violations, such as sexual or physical abuse. However, experiencing severe, multiple, and repeated trauma can have a relentless after-effect and place these adolescents at risk for further traumatic exposures (Cook et al., 2005). Surveys in urban medical care facilities revealed that adolescents receiving treatment for substance abuse had been exposed to multiple traumatic early childhood events (Khoury et al., 2010). It has been noted that young individuals frequently attempt to cope with stress, and traumatic symptoms, in maladaptive ways, such as the use and abuse of alcohol and drugs (NCTSN, 2013). While the literature has primarily focused on the adverse effects of trauma, such as depression, anxiety, and posttraumatic stress disorder, there has been a less commonly explored aspect of the positive outcomes (positive

psychology) of trauma that may result from negative life experiences (Substance Abuse and Mental Health Services, 2014).

Positive psychology suggests that there may be positive effects after trauma, such as discovering new goals, values, and priorities, sometimes described as Post-Traumatic Growth (PTG) (Tedeschi & Calhoun, 2004). Tedeschi and Calhoun (2004) pioneered the notion of PTG, a positive psychological transformation resulting from an extremely demanding, stressful, and traumatic event. Contrary to most early trauma studies, which claimed that direct and indirect exposure to complex trauma was related to primarily poor mental health consequences such as depression, anxiety, and post-traumatic stress disorder, post-traumatic growth can occur.

According to Tedeschi and Calhoun (2004), the PTG process does not eradicate the sorrow of loss and tragedy nor eliminate the psychopathology that may result from exposure to or experiencing several traumas. They tried to explain the possibilities of growth in suffering. They proposed that people grow in five general areas; closer relationships may be developed through increased connection to others (RO), an increased sense of one's strength (PS), appreciating life (AL), spiritual change (SP) and new opportunities emerge from the struggle opening possibilities not present before (NP).

Post-traumatic growth has been experienced by varied populations, including terrorism attack survivors (McCormack & McKellar, 2015) (Acquaye, 2017); victims of natural disasters; (Marshall et al., 2015), (Zhou & Wu, 2016); torture victims; (Montgomery, 1998), Internally Displaced Persons (Khechuashvili, 2014), cancer survivors (Jansen et al., 2011) and many others.

PTG has the substantial benefit of promoting interpersonal and social relationships. The phenomenon gives hope and the ability to cope with stressors to those who have experienced traumatic events (Wagner et al., 2016). It is closely linked to interpersonal

aspects, for example, shared view of the traumatic events; others' responses to one's disclosure of events will help to bring about meaning (Wagner et al., 2016); finding benefit in having family and friends, an enhanced sense of compassion towards others is developed; personal strength is acquired people extend gratitude, become aware of their strengths and limitations; appreciation of life and each new day Joseph (2015). Chan and Rhodes (2013) reported after a study of female survivors after Katrina that positive growth involving religious coping greatly benefits physiological well-being. Therefore, a wealth of literature on posttraumatic development recently asserts that adolescents may experience positive effects after a traumatic event.

There has been much focus on the psychopathological consequences of trauma. The presence of PTG, on the other hand, indicates that life's pressures may also bring about positive development and psychological growth in people, groups, and society. Unfortunately, little work has been done on posttraumatic growth elements among adolescents; in general, most research has been done on the adult population exposed to different types of traumatic experiences (Laufer et al., 2009). Laceulla et al. (2015) were among the first researchers to study 1776 adolescents ages 8-12 in the Netherlands who had been exposed to adverse events. In contrast to most posttraumatic growth studies, their research focused on specific domains rather than the general component of posttraumatic growth. Zhou et al. (2015) were also among the early researchers of posttraumatic development in adolescents; the study focused on 376 students and the role of rumination on posttraumatic stress disorder and posttraumatic growth after the Wenchuan earthquake. Murad and Thabet's (2017) study among adolescents in the Gaza strip reported that adolescents who experience war continuously report posttraumatic growth. They said that sex and place of residence had no significant influence on posttraumatic development, but some important differences were noted with the age of the adolescents. Ickovics et al. conducted a

study among 328 14- 19-year-old adolescent girls living in the poorest cities in the USA. They reported that most adolescents residing in informal settlements or inner cities are often exposed to distressing events. There is limited research in Kenya, particularly among adolescents living in informal settlements where traumatic events occur daily, exposing them to continuous and complex traumatic experiences. This study sought to bridge the gap by assessing the post-traumatic growth elements in adolescents living in Kibagare informal settlements exposed to multiple traumatic events. The present research objective was to determine if adolescents in the Kibagare informal settlement experience growth despite being exposed to various continuous traumas.

### **Methodology**

The study adopted a descriptive-analytic quantitative design to measure the exposure to outcomes of PTG elements amongst adolescents aged 8 to 18 in the Kibagare informal settlement. The study's target demographic was teenagers from 3,000 homes in Kibagare's informal settlements, which had 15,000 people. A multistage sampling technique was conducted, and the sample used in the study was 265 participants.

Data was collected using a questionnaire containing the Socio-Demographic Questionnaire, the Child and Adolescent Trauma Screen tool, and the updated Post Traumatic Growth Inventory children version. The investigator and research assistants supervised the administration of the questionnaire and evaluation instruments in a group setting. For the primary study, three assistants were trained, and data collection took four days.

The study procedure involved a researcher-administered questionnaire with a group administration style and participants' filling in their questionnaires. The study took approximately 30 to 45 minutes and was administered at once by various research assistants to avoid contamination. At the end of data collection, debriefing was done.

Data analysis was done using the SPSS version 25. The researcher acquired a valid government research permit from National Commission for Science, Technology and Innovation (NACOSTI), a research authorization letter from the Ministry of Education State Department of Early Learning and Basic Education, including Institutional Review Board (IRB) approval, before embarking on the data collection exercise. Consent was obtained from the headmaster and the parents of the identified pupils participating in the study. The parents and head teacher were informed of any potential hazards. Adolescents who felt uncomfortable or at risk of harm were directed to guidance and counselling instructors and the principal.

### **Results**

The PTG elements that were assessed included relationships with others (RO), personal strength (PS), appreciation of life (AL), spiritual change/possibility (SP) and new possibilities (NP). The elements were measured using a Likert scale. Items are rated on a 4-point scale ranging from 0 (No change), 1 (a slight modification), 2 (some change), to 3 (much difference). The descriptive statistical tests were Mean (M) and Standard deviation (SD). The mean value was interpreted as follows:  $M < 0.5$  = No change (No growth took place),  $0.5 < M < 1.4$  = a little (a little post-traumatic growth took place),  $1.5 < M < 2.4$  = some (some post-traumatic growth took place),  $M > 2.5$  = much post-traumatic growth took place). Each component was averaged, and its SD was obtained, as reported in Table 1. The most negligible value of the mean was 1.932 ( $M=1.93$ ,  $SD=0.688$ ), and the highest was 2.517 ( $M=2.5$ ,  $SD=0.742$ ). When rounded off to zero decimal place, the least mean value was 2 ( $M=2$ ), and the highest value was 3 ( $M=3$ ), meaning that on average, the respondents rated the elements as 'some' and 'a lot'.

**Table 1: Mean and Standard Deviation for PTG element**

	<b>N</b>	<b>Missing</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
Relating to other (RO)	265	0	2.2264	0.78435	0	3
Personal Strength (PS)	265	0	1.9321	0.68749	0.5	3
Appreciation of life (AL)	265	0	2.1528	0.77377	0	3
Spiritual possibility (SP)	265	0	2.517	0.74155	0.5	3
New Possibility (NP)	265	0	2.2434	0.76513	0.5	3

Most participants indicated that they had much changed regarding spiritual possibility (M=2.517, SD= 0.742). This was followed by those who stated that they had some growth in terms of new possibilities (M=2.243, SD=0.765 ), then those who noted that they had some changes in terms of relating to others (M=2.23, SD=0.784) and appreciating life (M=2.153, SD= 0.774) and finally a few who noted that they have some changes in terms of personal strength (M=1.932, SD=0.688).

Indeed, the study's findings corroborated previous findings by Tedeschi and Calhoun (1996), who found that during times of suffering, people may grow in five distinct areas, including the establishment of closer connections, improved connection to others, and an increased sense of one's strength. The trauma survivor's attempts to cope with the trauma and aftermath are linked to their growth. It is argued in psychology that post-traumatic development is a component of positive psychology (Minaudo, 2017).

### **Discussion**

Studies by Laufer et al. (2009) reported that adolescents experienced more significant growth in spiritual change, and the ones who were religious experienced a higher PTG. Joseph echoed these sentiments in a study in 2015 that survivors of trauma experienced a



more fulfilled life and change in their spiritual level. Acquaye (2017) reported in her study that those with a religious affiliation experienced higher posttraumatic growth. Chan and Rhodes (2013) reported that those with a religious commitment experienced higher posttraumatic growth.

Changes in finding new possibilities were ranked as second highest with  $M=2.24$  SD  $0.765$ . The respondents experienced some growth in seeing new possibilities after and during exposure to complex trauma. These adolescents could share and see new opportunities that had not been present before. These findings were similar to a study by Murad and Thabet (2017) on adolescents from the Gaza strip who had constantly experienced and been exposed to war. The Gaza traumatic events checklist, similar to the CATS tool used in this study, was used to specify the types and frequency of exposure to traumatic events; the Gaza strip study reported new possibilities mean score at ( $M= 10.86$ ,  $SD = 3.276$ ).

The PTG component, *relating to others*, revealed that participants in this study had a mean and standard deviation of ( $M=2.23$ ,  $SD= 0.784$ ). Zhou et al. (2015) stated that adolescents experienced a sense of valuing friends and family. Sometimes a community experiences growth when each individual leans on another, strengthening the larger group. In some instances, caregivers facilitate PTG amongst adolescents by helping them re-establish safety and structure, thus improving the relationship between the caregiver and the adolescents.

The study discovered a statistically significant difference in the area of personal strength. However, among teenagers, this was the lowest-ranked area of development. In the present study, the responses indicated personal strength level of posttraumatic growth at ( $M=1.932$ ,  $SD = 0.688$ ). The findings of the current study were in contrast with studies by Laceulla (2015), who reported an increase in personal strength of adolescents who had been

exposed to adverse events ( $M=2.79$ ,  $SD=1.94$ ), and Zhou et al. (2015) who assessed middle school children in Wenchuan after an earthquake also reported growth in personal strength.

The explanation for the low mean in personal strength in a traditional African set-up would be that people exist as communities and co-exist corporately. There are many shared communal facilities, water, sanitation, and spaces in informal settlements. Most activities in the informal settlements are celebrations, funerals, and rulings by village elders communally. This may explain why most adolescents may not focus or be aware of their strengths and instead see themselves as part of the larger macro system.

Murad and Aziz (2017) conducted research with 400 teenagers aged between 15 and 18 years in the Gaza strip to assess the association between traumatic events, post-traumatic stress disorder, resilience, and post-traumatic growth. The SD for the enjoyment of life was (2.79), with a total mean of (6.54), indicating a statistically significant positive result. Husson et al. (2017) discovered that adolescents and young adults who had suffered from a chronic disease developed a feeling of appreciation for life between 6- and 24-months following baseline evaluation. Other studies revealed that young adolescents and youth frequently reported high PTG scores based on enhanced life appreciation after suffering from chronic illnesses like cancer (Husson et al., 2017).

The findings implied that despite the adolescents experiencing complex trauma, they still experience Post-Traumatic Growth (Ickovics, 2006). In their study among the inner city, adolescent girls exposed to distressing events identified higher levels of growth in appreciation of life in adolescents that were pregnant, mothers and those that had lost a loved one, and lower posttraumatic increase in those that had interpersonal problems, especially in the domain of personal strength. This implies that there are possibilities for growth in suffering during adolescent pregnancies. Indeed, the results of the study supported previous findings by Tedeschi and Calhoun (1996), who noted that in times of suffering, people might

grow in five different areas, including new opportunities emerge from new possibilities, development of closer relationships, increased connection to others and a greater awareness of one's strength. The survivor's attempts to cope with the trauma and aftermath are linked to the survivor's growth.

### **Recommendations**

The study recommended that the survivors be supported by parents, community, schools, mental health practitioners and religious leaders to help them cope with the aftermath of a trauma. This will help them enhance the adolescent's positive psychology to improve their lives despite having gone through a traumatic event. Therefore, it was recommended that the government ensure mental health services are readily available and affordable among the informal settlement dwellers. Furthermore, religious leaders in the vicinity of informal settlements should be actively involved in providing spiritual support to teenagers who have experienced complicated trauma. Religious leaders in informal settlements should be actively involved in offering spiritual guidance to adolescents exposed to complex trauma. Mental health professionals should use interventions sensitive to their clients' culture, religion, and socio-economic status and promote growth. The mental health practitioner's treatment plans should influence areas of strength and development in self and how adolescents relate to others. They should use creative arts to encourage survivors to tell their narratives to enhance growth. Mental health practitioners can encourage adolescents to seek social support to help them cope with the trauma and gain growth, especially in relating to others. They can help adolescents discover things they appreciate and are grateful for and rediscover their strengths and new possibilities by finding new ways of doing things and new interests.

Because the study was limited to the Kibagare informal settlement in Nairobi, even though there are many informal settlements in Nairobi and other cities and towns in Kenya, it

was suggested that a study be conducted in other informal settlements in Kenya and the findings compared to the findings of this study.

### References

- Acquaye, H. E. (2017). PTSD, Optimism, Religious Commitment, and Growth as Post-Trauma Trajectories: A Structural Equation Modeling of Former Refugees. *Professional Counselor*, 7(4), pp. 330-348.
- Carney, J. (2008). Perceptions of Bullying and Associated Trauma During Adolescence. *Professional School Counseling*, 11(3), pp. 179–188.
- Chan, C. S., & Rhodes, J. E. (2013). Religious coping, posttraumatic stress, psychological distress, and posttraumatic growth among female survivors four years after Hurricane Katrina. *Journal of traumatic stress*, 26(2), pp. 257-265.
- Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kagan, R., Liataud, J., Mallah, K., Olafson, E., & Van Der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, 35(5), pp. 390-398.
- George, C., & Solomon, J. (1999). Attachment and caregiving: The caregiving behavioral system. *Handbook of attachment: Theory, research, and clinical applications*, pp. 649-670.
- Gregorowski, C., & Seedat, S. (2013). We are addressing childhood trauma in a developmental context. *Journal of Child & Adolescent Mental Health*, 25(2), pp. 105-118.

- Husson, O., Zebrack, B., Block, R., Embry, L., Aguilar, C., Hayes-Lattin, B., & Cole, S. (2017). Posttraumatic growth and well-being among adolescents and young adults (AYAs) with cancer: a longitudinal study. *Supportive Care in Cancer*, 25(9), pp. 2881-2890.
- Ickovics, J. R., Meade, C. S., Kershaw, T. S., Milan, S., Lewis, J. B., & Ethier, K. A. (2006). Urban teens: Trauma, posttraumatic growth, and emotional distress among female adolescents. *Journal of consulting and clinical psychology*, 74(5), p. 841.
- Jansen, L., Hoffmeister, M., Chang-Claude, J., Brenner, H., & Arndt, V. (2011). Benefit finding and post-traumatic growth in long-term colorectal cancer survivors: prevalence, determinants, and associations with quality of life. *British journal of cancer*, 105(8), pp. 1158-1165.
- Joseph, S. (2015). A person-centered perspective on working with people who have experienced psychological trauma and helping them move forward to posttraumatic growth. *Person-Centered & Experiential Psychotherapies*, 14(3), pp. 178-190.
- Khechuashvili, L. (2014). Comparative study of psychological well-being and posttraumatic growth indicators in IDP and non-IDP citizens of Georgia. *Education Sciences & Psychology*, 32(6).
- Khoury, L., Tang, Y. L., Bradley, B., Cubells, J. F., & Ressler, K. J. (2010). Substance use, childhood traumatic experience, and posttraumatic stress disorder in an urban civilian population. *Depression and Anxiety*, 27(12), pp. 1077–1086.
- Koenig, H. G. (2008). *In the wake of disaster: Religious responses to terrorism and catastrophe*. Templeton Foundation Press.

- Laceulle, O. M., Kleber, R. J., & Alisic, E. (2015). Children's experience of posttraumatic growth: Distinguishing general from domain-specific correlates. *PloS one*, *10*(12), e0145736.
- Laufer, A., Raz-Hamama, Y., Levine, S. Z., & Solomon, Z. (2009). Posttraumatic growth in adolescence: The role of religiosity, distress, and forgiveness. *Journal of Social and Clinical Psychology*, *28*(7), pp. 862-880.
- Maier, T. (2007). Weathers and Keane's "the criterion A problem revisited: controversies and challenges in defining and measuring psychological trauma". *Journal of Traumatic Stress*, *20*(5), pp. 915-919.
- Marshall, E. M., Frazier, P., Frankfurt, S., & Kuijer, R. G. (2015). Trajectories of posttraumatic growth and depreciation after two major earthquakes. *Psychological trauma: theory, research, practice, and policy*, *7*(2), p. 112.
- McCormack, L., & McKellar, L. (2015). Adaptive growth following terrorism: Vigilance and anger as facilitators of posttraumatic growth in the aftermath of the Bali bombings. *Traumatology*. <https://doi.org/10.1037/trm0000025>
- Minardo, N. (2017). Eranda Jayawickreme & Laura E.R. Blackie: Exploring the Psychological Benefits of Hardship: A Critical Reassessment of Posttraumatic Growth. *Journal of Youth and Adolescence*, *46*, (2017), pp. 2387-2390.
- Montgomery, E. (1998). Refugee children from the middle east: Edith Montgomery: rehabilitation and research centre for torture victims, Copenhagen, department of epidemiology and social medicine, Aarhus University. *Scandinavian Journal of Social Medicine. Supplementum*, pp. 1-152.

Murad, K., & Thabet, A. A. (2017). The relationship between traumatic experience, posttraumatic stress disorder, resilience, and posttraumatic growth among adolescents in Gaza strip. *Glob. J. Intellect. Dev. Disabil*, 3, pp. 73-82.

National Child Traumatic Stress Network. (2003). What is Child Traumatic Stress? 1–2.

Retrieved from:

[https://www.nctsn.org/sites/default/files/resources/what\\_is\\_child\\_traumatic\\_stress.pdf](https://www.nctsn.org/sites/default/files/resources/what_is_child_traumatic_stress.pdf)

Regehr, C., & Roberts, A. (2010). Intimate partner violence. *Burgess, A., Regehr, C., Roberts, A. (Coords.) (Eds.), Victimology: Theories and Applications. Jones and Bartlett Publishers, Sudbury*, pp. 197-223.

Stevens, J. S., van Rooij, S. J., & Jovanovic, T. (2016). Developmental contributors to trauma response: the importance of sensitive periods, early environment, and sex differences. *Behavioral neurobiology of PTSD*, pp. 1-22.

Substance Abuse and Mental Health Services (SAMHSA). (2014). Trauma-Informed Care in Behavioral Health Services Treatment Improvement Protocol (TIP) Series 57 Part 3: A Review of the Literature Contents S. [https://store.samhsa.gov/shin/content//SMA14-4816/SMA14-4816\\_LitReview.pdf](https://store.samhsa.gov/shin/content//SMA14-4816/SMA14-4816_LitReview.pdf)

Tedeschi, R. G., & Calhoun, L. (2004). Posttraumatic growth: A new perspective on psychotraumatology. *Psychiatric Times*, 21(4), pp. 58-60.

Tedeschi, R. G., & Calhoun, L. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of traumatic stress*, 9(3), pp. 455-471.

The National Child Traumatic Stress Network. (2016). *Understanding Complex Trauma and Complex-PTSD*. NHS Fife Department of

Psychology. <https://www.moodcafe.co.uk/media/31229/Complex%20Trauma%20V3.0%20Final%5B1%5D.pdf>

- Wagner, A. C., Torbit, L., Jenzer, T., Landy, M. S., Pukay-Martin, N. D., Macdonald, A., ... & Monson, C. M. (2016). The role of posttraumatic growth in a randomized controlled trial of cognitive-behavioral conjoint therapy for PTSD. *Journal of traumatic stress, 29*(4), pp. 379–383.
- Wamser-Nanney, R., & Vandenberg, B. R. (2013). Empirical support for defining a complex trauma event in children and adolescents. *Journal of traumatic stress, 26*(6), 671-678.
- Williams, W. I. (2006). Complex trauma: Approaches to theory and treatment. *Journal of loss and trauma, 11*(4), pp. 321–335.
- Williams, W. I. (2006). Complex trauma: Approaches to theory and treatment. *Journal of loss and trauma, 11*(4), pp. 321–335.
- Yohani, S. C. (2008). I am creating an ecology of hope: Arts-based interventions with refugee children. *Child and Adolescent Social Work Journal, 25*(4), pp. 309–323.
- Zhou, X., & Wu, X. (2016). The relationship between rumination, posttraumatic stress disorder, and posttraumatic growth among Chinese adolescents after the earthquake: A longitudinal study. *Journal of Affective Disorders, 193*, pp. 242–248.