
CAN RELIGIOUS COPING PREDICT POSTTRAUMATIC GROWTH

Ainul Mardiah¹, Elida Syahriati^{2*}

Universitas Mercu Buana, Indonesia¹, Syiah Kuala University, Indonesia²

E-mail: ainul.mardiah@mercubuana.ac.id¹, elida.syahriati@gmail.com²

Received: 13th March 2015; Revised: 22th April 2015; Accepted: 11th May 2015

Abstract

The aim of this study is to examine religious coping on posttraumatic growth in Acehnese. The measurements in this research are: Short Form of Posttraumatic Growth Inventory, and Brief Religious Coping. All measurements demonstrate good internal consistency reliability ($\alpha = .62 - .73$). Factor analyses for each measurement were conducted and the new generated factors are used in subsequent analyses. Results showed that positive religious coping can predict PTG, in the other hand negative religious coping in both type cannot predict PTG; first, type wondering about God, and feeling punished by God. Furthermore, PTG does not different on gender and types of trauma.

Keywords: posttraumatic growth; positive religious coping; negative religious coping

Abstrak

Tujuan dari penelitian ini adalah untuk menguji kontribusi religious coping terhadap posttraumatic growth (pertumbuhan psikologis paska trauma). Alat ukur yang digunakan untuk riset ini adalah: Short Form of Posttraumatic Growth Inventory (SF-PTGI), dan Brief Religious Coping. Semua alat ukur menunjukkan reliabilitas yang bagus ($\alpha = .62 - .73$). Uji faktor analisa dilakukan untuk setiap alat ukur yang digunakan, dan faktor baru yang dihasilkan seterusnya digunakan untuk analisa berikutnya. Hasil menunjukkan bahwa positive religious coping terhadap posttraumatic growth (pertumbuhan psikologis paska trauma), sementara negative religious coping tidak bisa memprediksi posttraumatic growth (pertumbuhan psikologis paska trauma), baik itu dimensi mempertanyakan Ketuhanan, dan perasaan dihukum oleh Tuhan. Lebih lanjut, tidak ada perbedaan PTG berdasarkan gender dan tipe trauma.

Kata kunci: pertumbuhan psikologis; positive religious coping; negative religious coping

How to Cite: Mardiah, A., Syahriati, E., (2015). Can Religious Coping Predict Posttraumatic Growth. *TARBIYA: Journal Of Education In Muslim Society*, 2(1), 61-69. doi:10.15408/tjems.v2i1.1741.

Permalink/DOI: <http://dx.doi.org/10.15408/tjems.v2i1.1741>

Introduction

Researches have been showing that traumatic event not only caused people have negative psychological condition but also it also can caused people can gain psychological growth. Psychological growth or known as posttraumatic growth is positive psychological change after struggle with traumatic event, mainly on: better appreciation of life, a sense of personal strength, and better relationships with others, a deeper spirituality, and recognition of new possibilities (Calhoun & Tedeschi, 2006). Posttraumatic growth is more than positive illusion, it can foster one's bereaved (Taku, Calhoun, Cann, & Tedeschi, 2008), prevent from suicide (Yu *et al.*, 2010), spinal cord injury (Chun & Lee, 2008). PTG not instant and simple process, it involved: meaning making, rumination, shattered world assumption, and coping (Calhoun & Tedeschi, 2006).

In facing the life threatening situation, mostly likely people will turn back to religion as a coping stress mechanism. Pargament (1997) defined religious coping is search for the significant of sacred during stressful time. It has been grouped into positive and negative categories of religious thought, feeling, behavior, and relationship. Positive religious coping (i.e., turning to religion) represents a sense of spirituality, a secure relationship with God, a belief that there is meaning to be found in life, and a sense of spiritual connection with others. Meanwhile, negative religious coping (i.e., turning away from religion) is an expression of a less secure relationship with God, a tenuous and pessimistic view of the world.

Research reports from International Organization Migration, Universitas Syiah Kuala, Bakti Husada, Canada Embassy, & Harvard Medical School (2006) around 91 % of Acehneses use prayer in times of stress, followed by talking with friends and family (68%),

consulting a religious specialist (54%) and trying to forget what happened (56%) are roughly tied for third place ranking. Medical care (33%), sport and exercise (24%) and traditional healing care (17%) are all noteworthy sources of support to overcome bad memories of conflict experiences.

Aceh has long prided itself on being "Verandah of Mecca" (*Serambi Mekkah*), an exemplary focus of religious practice and learning and the channel to the heartland of Islam. The Aceh's history over the last 130 years is marked by almost continual war, rebellion and repression (Reid, 2006). Aceh known as the place where having substantial natural resources, such as: oil and natural gas. The conflict between Acehneses people with central government started when the profit distribution is not equally shared; therefore Hasan Tiro planned the Aceh Movement (*Gerakan Aceh Merdeka*). During this time the central government tries to repress this movement by sending troops to Aceh.

This is where the human right violence happened for almost 30 years data from International Organization Migration, Universitas Syiah Kuala, Bakti Husada, Canada Embassy, & Harvard Medical School (2006) give a fact about the abusive behavior during that period, for example North Coast Aceh, people experiencing combat (bombing, and fire fights) is around 78% from 596 samples, rape is around 1%, child disappeared or killed is about 3- 5%, destruction of property is 45%, lack of food, water because of conflict is around 82%. This overwhelming traumatic event caused not only physiological trauma but also psychological trauma (Posttraumatic Stress Disorder). IOM report (2007) from 14 districts with highly conflict situation yield that 23%- 55% meet criteria for major depressive disorder, 12%- 36 % experiencing PTSD, and 39%- 69% meet the anxiety criteria.

The traumatic event continues to another one that happened in December 2004, Aceh was hit by Tsunami and more than 200.000 died in this natural disaster. When we look overall the history of Aceh, it shows us that Aceh people faced challenging and difficult situation that impact their psychological condition such as: distress, PTSD, anxiety and others. This devastating event have an impact to psychological condition in individual and social level in Aceh, research found that the prevalence of severe emotional distress and depressive symptoms using the Hopkins Symptoms Checklist-25 (HSCL-25), it was 83.6% demonstrated severe emotional distress, and 77.1% demonstrated depressive symptoms in tsunami-affected communities that had experienced armed conflict arising from the ongoing independence movement in Aceh Province, Indonesia (Souza, Bernatsky, Reyes, & de Jong, 2007). Psychological trauma in children showed more broad range of traumatic event, such as: 61% kids feel afraid and fear, 43% experiencing heart pounding, 13 %- 11% encounter PTSD symptoms, 1%-2% meet the criteria for major depression, and 0.5 % suffers from Enuresis, conduct disorder and anxiety (Poudyal et al., 2009; Wiguna, Guerrero, Kaligis, & Khamelia, 2010).

Looking back to Aceh history, it seems impossible for posttraumatic growth to happen. On the contrary, it is based on my observation in field Acehnese survivors have more than psychological buffering side, but they transcend the experience into something new. Especially for children, they are feeling the terror of the event but they still keep going to school, study, and play.

Taken this fact together, this study is design to provide the first empirical study in Aceh-Indonesia to examine the religious coping as predictors for posttraumatic growth. Furthermore, this research examines

posttraumatic growth differences based on different types of trauma (Tsunami, GAM conflict, and mixed types of trauma) and gender.

Method

Participants

Four hundred and thirteen students (174 males, 239 females) were survivors of tsunami, war conflict or both. 12 high schools out of 21 sub-districts in Aceh Besar- Aceh, voluntarily participated in this study. The average age of participants ranged from 14-20 years. Range of trauma age starting from 5 years old- 12 years old. 172 had conflict experience, 154 had Tsunami experience and 87 students had both Tsunami and conflict.

Measures

Posttraumatic Growth. It consists of 10-items measured with six subscales: New Possibility, Relating to Others, Personal Strength, Spiritual Change, and Appreciation of Life. It has good internal consistency, acceptable test- retest reliability, and among persons reporting a variety of life difficulties, scores on the scale are approximately normally distributed. Items are rated on a 6- point Likert-typed scale, ranging from 0 (I did not experience this change as a result of my crisis) to 5 (I experienced this change to a very great degree as a result of my crisis). The SF- PTGI total score is computed by summing item responses, and thus ranges from 0- 50. The internal reliabilities are high ($\alpha = .89$), the factors of SF- PTGI which emerged also showed substantial internal consistency: New Possibilities ($\alpha = .72$); Relating to others ($\alpha = .81$); Personal Strength ($\alpha = .82$); Spiritual Change ($\alpha = .84$) and Appreciation of Life ($\alpha = .75$).

Religious Coping. The Brief RCOPE is a 14-item scale with seven items for each dimension. Participants rate their use of individual coping strategies when dealing with

difficult situations on a four-point scale ranging from “not at all” (1) to “a great deal” (4). Brief RCOPE consist of two sides: *first*, positive religious coping subscale (Cronbach’s alpha=0, 92), which includes strategies such as seeking spiritual support and benevolent religious reappraisals. *Second*, negative religious coping subscale (Cronbach’s alpha=0, 82), which includes: “questioned God’s love for me” and “wondered whether God had abandoned me”. Responses are summed to create subscale score, with higher scores indicating more frequent use of the coping strategy.

Result

Factor Analysis

Short form of Posttraumatic Growth Inventoy (SF-PTGI)

The present study shows that overall KMO measures of sampling adequacy for the set of variables including the analysis was .844, which exceeds the minimum requirement of .50. One item was excluded from further analysis due to the failure to meet the above criterion. In the current analysis the result showed that the items on the two-factor structure instead of the five-factor structure, the two- factor structure accounted for 44% of the variance and had an eigenvalue of 4.55. The internal consistency of the total SF-PTGI ($\alpha = .757$). However, the Kaiser rule used by Tedeschi and Calhoun in developing the PTGI has been criticized for over extracting too many components, and for not producing consistently accurate results (Merenda, 1997). The examination of the scree plot suggested a single-factor solution for the PTGI. Overall, these results indicate that the SF-PTGI is measuring one construct with the current sample.

Brief Religious Coping(Brief RCOPE)

Result from factor analysis of 14 items Brief RCOPE yield that there are three factors, those are: positive religious coping, wondering about God, Punished by God. The present study shows that overall KMO is .808 with variance 51% and eigenvalue is 7.09. The internal consistency positive religious coping ($\alpha = .769$), wondering about God ($\alpha = .725$), punished by God ($\alpha = .637$).

PTG differences based on trauma exposure types and gender

Based on the ANOVA test, PTG did not differ across different types of exposure to trauma $F(2, 410) = .841, p > .05$. Tsunami and conflict victims ($M = 34.57$, 95% confidence interval 32.81 to 36.33); tsunami ($M = 35.81$, 95% confidence interval 34.67 to 36.95); conflict ($M = 35.69$, 95% confidence interval 34.55 to 36.83).

Table 1. Anova Test- Different Types of Trauma Exposure on PTG

Variables	Trauma Type						F (Sig)
	Tsunami & Conflict		Tsunami		Conflict		
	M (SD)	95% CI	M (SD)	95% CI	M (SD)	95% CI	
PTG	34.57 (8.25)	[32.36, 36.78]	35.81 (7.15)	[34.36, 37.26]	35.69 (7.56)	[34.09, 37.29]	.841

The t-test yielded no statistical gender difference on PTG, male ($M=35.3, SD= 7.38$) and female ($M=35.5, SD= 7.7$), $t(411) = -.271, p=.786$.

Table 2. T-test, Gender differences on PTG

Variable	Male		Female		F (Sig)
	M (SD)	95% CI	M (SD)	95% CI	
PTG	35.38 (7.38)	[-1.68, 1.27]	35.59 (7.70)	[-1.67, 1.26]	.286

* $p < .05$. ** $p < .01$.

Discussion

The use of the term “posttraumatic” indicates that growth occurs after an extreme event, and that it is not caused by other minor stressors, nor does it form part of a natural process of personal development (Zoellner & Maercker, 2006). There are several factors that impact PTG, those are: optimism, self-confidence, ego resiliency, previous crisis experience in life, coping, and socio-demographic; i.e. education, marital status (Calhoun & Tedeschi, 2006). There are five domains in PTG: relating to others, life appreciation, personal strength, new possibilities, and spiritual growth.

In a study concerning religiosity, distress, and forgiveness to posttraumatic growth in 1482 youth, it was found that religious youth reported higher levels of growth than secular youth. Among secular and traditional youth, posttraumatic symptoms, and unwillingness to forgive positively related to growth among religious youth, however, only forgiveness effects growth (Laufer, Solomon, & Levine, 2010). Study of posttraumatic growth in children and adolescents after hurricane Katrina found that age and symptoms severity were not related with PTG, whereas social support accounted for 35% of the variance and active coping accounted for 10% of the variance of the model as related to posttraumatic growth (Schexnaildre, 2007).

The aims of this study are: *first*, to examine the role of negative and positive religious coping in predicting posttraumatic growth. *Second*, are there any different in posttraumatic growth based on different types of trauma (Tsunami, GAM conflict, and mixed types of trauma). Result from this study showed that positive

Regression Modeling: Religious Coping as Predictor of Posttraumatic Growth

The linear regression models in Table 1 were conducted to see the three types of religious coping in predicting PTG. The results indicated that positive religious coping can predict PTG: $F(1, 411) = 12.08, p < .01$, but not with negative religious coping in both type; first, type wondering about God cannot predict PTG: $F(2, 410) = 6.89, p > .05$, and so does the feeling punished by God: $F(3, 409) = 4.62, p > .05$.

Tabel 3. Regression Analysis of Religious Coping as Predictor of PTG

Variable	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Positive Coping	.442	.127	.169*	.442	.129	.162	.391	.133	.150
Wondering about God				.089	.109	.040	.036	.120	.017
Feeling punished by God							.175	.166	.059
R^2	.029			.030			.033		
F for change in R^2	12.08**			6.373			4.620		

Note: Age and depression were centered at their means.

religious coping predict posttraumatic growth but not with negative religious coping. It can be explain by the Islamic value that give nuance of Acehese culture where everything is surrendering to Allah. This believes is embedded in every Moslem, such as: when Allah gives ones trial in this life, it means Allah loves him or her

أَمْ حَسِبْتُمْ أَنْ تُدْخَلُوا الْجَنَّةَ وَلَمَّا يَأْتِكُمْ مَثَلُ الَّذِينَ خَلَوْا مِنْ
 قَبْلِكُمْ مَسْتَهْمِبِينَ وَالضَّرَّاءُ وَالْبَأْسَاءُ وَزُلْزَلُوا حَتَّى يَقُولَ الرَّسُولُ وَالَّذِينَ
 ءَامَنُوا مَعَهُ مَتَى نَصْرُ اللَّهِ الْإِنَّا نَصْرُ اللَّهِ قَرِيبٌ ﴿٢١٤﴾

and Allah want to increase ones level of Iman.

Allah says in Al-Quran:

“Or do you think that you will enter Paradise while such [trial] has not yet come to you as came to those who passed on before you? They were touched by poverty and hardship and were shaken until [even their] messenger and those who believed with him said, "When is the help of Allah?" Unquestionably, the help of Allah is near” (Q.S. Al-Baqorah (2): 214)

Prophet Muhammad PBUH said:

إِنَّ عَظْمَ الْجَزَاءِ مَعَ عَظْمِ الْبَلَاءِ وَإِنَّ اللَّهَ إِذَا أَحَبَّ قَوْمًا
 ابْتَلَاهُمْ فَمَنْ رَضِيَ فَلَهُ الرِّضَا وَمَنْ سَخَطَ فَلَهُ السَّخَطُ

“Verily, with greater rewards come greater trials. Verily, when Allah loves a people He will test them, so whoever is pleased then for him is satisfaction, and whoever is angry then for him is wart” (Source: Sunan At-Tirmidhi 2396, Grade: Hasan)

This kind of belief system give optimistic perspective in life and in the end increase life satisfaction and reduce psychological distress (Warren, Eck, Townley, & Kloos, 2014). In line with Maltby & Day (2003), Pargament, Smith, Koenig, & Perez (1998) suggests that

individuals, who use positive religious coping, adopt a positive view to stress, interpreting stressful events as allowing for personal development and growth. Although both positive and negative religious coping styles have been found to be positively associated with growth, the relationships between positive religious coping and growth are generally much stronger.

Furthermore, cultural worldviews, such as religiosity help one's to make sense and assimilate the traumatic event and gain psychological growth (Laufer et al., 2010). Religious coping is an active cognitive processing which survivor use religion as source of comfort and give the meaning, and build new narrative based on healthy perspective (Chen & Koenig, 2006; Peres, Moreira-Almeida, Nasello, & Koenig, 2007). It has been found that using religion as ways to cope have benefit. In accordance with it, Antonovsky (1996) state the SOC concept in explaining why some people have better health in difficult situation. SOC is stands for sense of coherence where people try to understand the difficult situation as a whole picture, perceive it as a challenging rather than burden, and can use resources in dealing with it.

“A'ishah (may Allah be pleased with her) narrated that once some pain afflicted the Prophet (peace and blessings be upon him) causing him to suffer and turn about in his bed. She said, "Had one of us done this, you would have blamed him." He (peace and blessings be upon him) replied: "An ailment is intensified for the righteous. Whenever a believer is afflicted by a hardship, whether it is a thorn or more, a sin is taken off from him because of it, and he is elevated by one rank (in Paradise)" (Ahmad)

Hadith Rasulullah Peace and Blessing upon Him:

“Abu Hurairah (may Allah be pleased with him) reported that the Prophet (peace and

blessings be upon him) said," Whenever a Muslim is afflicted by harm from sickness or other matters, Allah will drop his sins because of that, like a tree drops its leaves" (Al-Bukhari and Muslim)

Based on two hadith above, it can be understood that traumatic event itself does not have to be translated as a bad things, instead of it is a good thing. It because of trials in life can enhance ones level or in psychological term, it said: ones will have growth after the challenging in life. So, it is no wonder that it will foster the spiritual growth.

Moreover, there are no differences on PTG based three types of trauma experienced; Tsunami, war conflict and both of these events. In line with the previous research by Milam, Ritt-Olson, & Unger (2004) there were no differences in PTG scores among different types of stressful event; death of a close family member, move to a new home, loss of a close friend, major illness/injury to a close family member, parents/guardians divorced/separated, $F(5,426) = .80$. In line with Tedeschi (1999) state that violence not only transformed in individual level but also in social level. In other words that human violence also can transform to psychological growth. On contrary to research with Shakespeare-finch & Armstrong (2010) found group differences between sexual abuse, motor vehicle accidents and bereavement, where bereaved group reporting high level of PTG than other groups. As reported by (Karanci et al., 2012) different type of traumatic event had an impact on two domain of PTG, namely the relating to others and the appreciation of life domains. Furthermore Cryder, Kilmer, Tedeschi, & Calhoun (2006) suggest that this discrepancy can be explained by two things, first: the expose to traumatic event (i.e. experiencing directly or watching the traumatic event) and second the degree that traumatic event impact the world assumption of survivor, for instance:

members of one family experience tsunami but one of them have PTSD and other does not, it might be the traumatic event itself hit the cognitive belief system in one survivor but for other it is not. It is unclear to determine level of trauma requires for PTG to happened, it is need to be investigated in future.

Within, this study it was shown that gender differences on PTG was insignificant. In line with result study from García, Páez-Rovira, Zurtia, Martel, & Reyes (2014), it is found no differences PTG between gender. It is inconsistent with the result study from Vishnevsky, Cann, Calhoun, Tedeschi, & Demakis (2010) where there is mild to moderate different on PTG base on gender. Furthermore, based on their study age can moderate the relationship between gender and PTG, where this correlation can be seen as woman growing older. This difference as a result of rumination possibility in women is higher than man. More research needs to explore this area of investigation.

Conclusions

This study was design to provide the first empirical study in Aceh- Indonesia to examine the religious/spiritual coping as predictors for posttraumatic growth. This current study contributes significantly to the field in a number of areas. First, this study explores the developmental of posttraumatic growth in Aceh's adolescent. Second, this study give an overview to mental health professional and therapist who want to conduct psychological programs in helping survivor. Even though this fact; positive and negative religious coping, are beyond scientific enquiry, still this is the root of Acehnese value.

The limitation of this study need to be considered is the religious coping measurement. It should be translated and it has to be cultural

sensitive, some items form measurement is difficult to understand because the respondents from different background of culture and religion do not have the same framework. Thus, the next researcher should consider using measurement that is cultural sensitive. The result has implication to understand the role of religious coping both positive and negative in fostering PTG. Therefore, it is highly expected role of religious leader in fostering positive religious coping in helping people dealing with traumatic events.

References

- Calhoun, L. G., & Tedeschi, R. G. (2006). *Introduction*. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: research and practice*. New Jersey: Lawrence Erlbaum Associate, Inc.
- Chen, Y. Y., & Koenig, H. G. (2006). Traumatic Stress and Religion: Is there a Relationship? A Review of Empirical Findings. *Journal of Religion and Health*, 45(3), 371–381. doi:10.1007/s10943-006-9040-y
- Chun, S., & Lee, Y. (2008). The experience of posttraumatic growth for people with spinal cord injury. *Qualitative Health Research*, 18(7), 877–90. doi:10.1177/1049732308318028
- Cryder, C. H., Kilmer, R. P., Tedeschi, R. G., & Calhoun, L. G. (2006). An exploratory study of posttraumatic growth in children following a natural disaster. *The American Journal of Orthopsychiatry*. doi:10.1037/0002-9432.76.1.65
- García, F., Páez-Rovira, D., Zurtia, G., Martel, H., & Reyes, A. (2014). Religious Coping, Social Support and Subjective Severity as Predictors of Posttraumatic Growth in People Affected by the Earthquake in Chile on 27/2/2010. *Religions*, 5(4), 1132–1145. doi:10.3390/rel5041132
- International Organization Migration, Universitas Syiah Kuala, Bakti Husada, Canada Embassy, & Harvard Medical School. (2006). *Psychosocial needs assessment of communities affected by the conflict in the Districts of Pidie, Bireuen, and Aceh Utara*. Jakarta. Retrieved from <http://scholar.google.com/scholar?hl=de&q=aceh+and+PTSD&btnG=&lr=#3>
- Karanci, A. N., Işıklı, S., Aker, A. T., Gül, E. İ., Erkan, B. B., Özkol, H., & Güzel, H. Y. (2012). Personality, posttraumatic stress and trauma type: factors contributing to posttraumatic growth and its domains in a Turkish community sample. *European Journal of Psychotraumatology*, 3(0), 1–14. doi:10.3402/ejpt.v3i0.17303
- Laufer, A., Solomon, Z., & Levine, S. Z. (2010). Elaboration on posttraumatic growth in youth exposed to terror: the role of religiosity and political ideology. *Soc Psychiatr Epidemiology*, 45, 647–653. doi:10.1007/s00127-009-0106-5
- Maltby, J., & Day, L. (2003). Religious orientation , religious coping and appraisals of stress: assessing primary appraisal factors in the relationship between religiosity and psychological well-being, 34, 1209–1224.
- Milam, J. E., Ritt-Olson, A., & Unger, J. B. (2004). Posttraumatic Growth among Adolescents. *Journal of Adolescent Research*, 19(2), 192–204. doi:10.1177/0743558403258273
- Pargament, K. I. (1997). *The psychology of religion and coping; theory, research and practice*. New York: The Guilford Press.
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37(4), 710–724. doi:10.2307/1388152
- Peres, F., Moreira-Almeida, A., Nasello, G., & Koenig, G. (2007). Spirituality and Resilience in Trauma Victims. *Journal*

Religion Health. doi:10.1007/s10943-006-9103-0

- Poudyal, B., Bass, J., Subyantoro, T., Jonathan, A., Erni, T., & Bolton, P. (2009). Assessment of the psychosocial and mental health needs, dysfunction and coping mechanisms of violence affected populations in Bireuen Aceh. A qualitative study. *Torture: Quarterly Journal on Rehabilitation of Torture Victims and Prevention of Torture*, 19(3), 218–226.
- Reid, A. (2006). Introduction. In A. Reid (Ed.), *Verandah of violence: the background to the Aceh problem*. Singapore: Singapore University Press.
- Schexnaildre, A. M. (2007). *Predicting posttraumatic growth: coping, social support, and posttraumatic stress in children and adolescents after hurricane Katrina*. University and Agricultural and Mechanical College, Louisiana State.
- Shakespeare-finch, J., & Armstrong, D. (2010). QUT Digital Repository: This is the accepted version of this journal article: Shakespeare-Finch, Jane and Armstrong, Deanne (2010) Trauma type and posttrauma outcomes: differences between survivors of motor vehicle accidents, sexual assault, and. *Journal of Loss and Trauma*, 15(2), 69–82.
- Souza, R., Bernatsky, S., Reyes, R., & de Jong, K. (2007). Mental health status of vulnerable Tsunami-affected communities: a survey in Aceh province, Indonesia. *Journal of Traumatic Stress*, 20(3), 263–269. doi:10.1002/jts.
- Taku, K., Calhoun, L. G., Cann, A., & Tedeschi, R. G. (2008). The Role of Rumination in the Coexistence of Distress and Posttraumatic Growth Among Bereaved Japanese University Student. *Death Studies*, 32(5), 428–444. doi:10.1080/07481180801974745
- Tedeschi, R. G. (1999). Violence transformed. *Aggression and Violent Behavior*, 4(3), 319–341. doi:10.1016/S1359-1789(98)00005-6
- Vishnevsky, T., Cann, A., Calhoun, L. G., Tedeschi, R. G., & Demakis, G. J. (2010). Gender Differences in Self-Reported Posttraumatic Growth: A Meta Analysis. *Psychology of Women Quarterly*, 34, 110–120.
- Warren, P., Eck, K. Van, Townley, G., & Kloos, B. (2014). Psychology of Religion and Spirituality Relationships Among Religious Coping, Optimism, and Outcomes for Persons With Psychiatric Disabilities Relationships Among Religious Coping, Optimism, and Outcomes for Persons With Psychiatric Disabilities. *Psychology of Religion and Spirituality*, 14, 1941–1022. doi:dx.doi.org/10.1037/a0038346
- Wiguna, T., Guerrero, A. P. S., Kaligis, F., & Khamelia, M. (2010). Psychiatric morbidity among children in North Aceh district (Indonesia) exposed to the 26 December 2004 tsunami. *Asia-Pacific Psychiatry*, 2(3), 151–155. doi:10.1111/j.1758-5872.2010.00079.x
- Yu, X. N., Lau, J. T. F., Zhang, J., Mak, W. W. S., Choi, K. C., Lui, W. W. S., ... Chan, E. Y. Y. (2010). Posttraumatic growth and reduced suicidal ideation among adolescents at month 1 after the Sichuan Earthquake. *Journal of Affective Disorders*, 123(1-3), 327–331. doi:10.1016/j.jad.2009.09.019
- Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology - A critical review and introduction of a two component model. *Clinical Psychology Review*, 26(5), 626–653. doi:10.1016/j.cpr.2006.01.008