

## **Counseling as a Predictor of Posttraumatic Growth among the Garissa University Terrorist Attack Survivors**

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### **Abstract**

The study investigated the predictive relationship between counseling and posttraumatic growth among Garissa University terrorist attack survivors. The study was anchored on the organismic valuing theory after adversity, and it adopted the explanatory sequential mixed method research design. The study took a two-phase model starting with quantitative data collection and analysis followed by qualitative data collection and analysis. A total sample of 210 participants was selected using simple random sampling and extreme case sampling techniques. Quantitative data were collected using a standardized questionnaire; the 21-item Posttraumatic Growth Inventory (PTGI). Qualitative data were collected using interview guides. Quantitative data were analyzed using univariate analysis multiple regression analysis. Qualitative data were analyzed using themes and narratives from participants. The study found positive significant relationship between the number of counseling sessions attended and posttraumatic growth among the survivors of Garissa University terrorist attack. The study further found that participants who attended between 5 and 10 counseling sessions after the attack reported the highest posttraumatic growth while those who attended critical incident debriefing only reported the lowest growth. The participants who did not attend any form of counseling reported higher posttraumatic growth compared to those who attended critical incident debriefing only. These findings may be relevant in designing future interventions for trauma survivors that are growth focused as complementary approaches to the existing crisis-focused counseling. The findings further raised curiosity on the effectiveness of critical incident debriefing as a trauma intervention strategy which warrants further research on the construct.

*Key words:* posttraumatic growth, critical incident debriefing, counseling, trauma, terrorism, posttraumatic stress disorder.

## **Introduction and background**

In the last seven years the world has witnessed tremendous increase in traumatized populations as a result of terrorism. This has been aggravated by the Arab uprising that began in 2011 leading to collapse of many nations in the Middle East (United Nations High Commission for Refugees, 2014). The uprising has led to increased terror activities worldwide resulting in escalation of traumatic events such as rape, torture, enslavement, beatings and mass killings almost every year (Dabashi, 2012; Ozden, 2013). The current vicious cycle of violence has led to economic decline which deprives the already traumatized population of its basic survival needs (Naufal, 2012; Ozden, 2013).

Kenya like the rest of the world has experienced some of the worst terror attacks in the past seven years. These include the Westgate attack of September 2013 that claimed 67 lives (Gentleman & Kulish, 2013), Mandera bus attack of November 2014 that claimed 28 lives (Obulutsa, 2014), Mandera quarry massacre of December 2014 that claimed 36 lives (Catrina, 2014) and the Garissa University attack of April 2015 that claimed 148 lives (Muraya, 2016) and is the focus of this study. Apart from the physical harm, economic decline and spread of communicable diseases caused by terrorism, studies show increasing multiple psychological conditions such as anxiety, depression, memory and concentration impairment, sexual dysfunction, prolonged grief disorder and PTSD among others (Nickerson et al., 2014). Terrorism has been conceptualized differently by various disciplines but Lopez and Pineda (2013) summarized it as behaviour aimed at intimidating, causing fear and hopelessness to a group of people to achieve a political, religious or selfish end. This is an indication that terrorism is more of a psychological strategy than a military one. The conceptualization of terrorism as psychological war was supported by Nasim, Khan and Aziz (2014) who identified a common philosophy of terror as, killing few people to influence thousands referring to the traumatic motivation of terrorism. This is evident that the aim of terrorism is to kill and psychologically devastate many people through the pursuit of intimidation. This could have the potential to alter the cognitive functioning and self-concept of survivors by creating a more hopeless perception of the world.

Studies across the world show that the psychological casualties resulting from terrorism are more than the physical ones. For instance, Rugiero and Vos (2013) reported that in the sarin gas attack

in Tokyo in 1995, 12 people died, 900 received medical treatment and 9000 people presented with psychological complaints ranging from insomnia, grief, anger, rage and hyper-vigilance. Lopez and Pineda (2011) observed that in Oklahoma City bombing in 1995, there were 168 fatalities but over 8000 individuals sought crisis intervention. The psychological magnitude of terrorism has also been demonstrated by Nasim and Aziz (2014) who carried out a survey on the effects of terrorism in Pakistan and reported 3.9% physical effects, 17.2% social effects and 79.2% mental health effects. These findings point to the need for a paradigm shift in the war on terror, with more focus on psychological interventions rather than increased military spending that continues to be witnessed across the world.

Despite the neglect of mental health concerns of traumatized populations, there is evidence for entrenchment of counseling interventions in the rehabilitation programs for trauma survivors due to advocacy from counseling professionals (Alayarian, 2011; d'Ardenne, 2012; Forbes et al, 2011). However, this approach appears not sufficient as many practitioners and researchers focus on the negative outcomes of trauma alone (Odhayani, Watson, & Watson, 2013; Sherin & Nemeroff, 2011; Terwase, Abdul-Talib, Zengeni, & Terwase, 2015). Recent studies show that trauma could transform people positively, a phenomenon referred to as posttraumatic growth. Posttraumatic growth literature across the world indicates that stressing and life-threatening events may lead to experience of positive personal growth (Cann, Cahoul, Tedeschi, Tanya, & Lindstrom, 2011) characterized by five domains. Tedeschi and Calhoun (1996) originally coined these domains as:

- Relating to others - people who have undergone posttraumatic growth report positive change in interpersonal relationships such as enhanced emotional closeness with significant others.
- New possibilities - people who have experienced posttraumatic growth have been shown to find new paths in their life that never existed prior to the traumatic event.
- Personal strength - this involves having greater sense of self-reliance and self-efficacy.
- Spiritual change - this is where trauma survivors report having deeper meaning of life and increased religious faith.

- Appreciation of life - this develops by attaching higher value on life as compared to the period prior to experiencing the traumatic event.

The five-factor model of posttraumatic growth has also been replicated by confirmatory factor analysis from many other studies (Lee, Luxton, Reger, & Gahm, 2010) across the world. The organismic valuing theory conceptualizes trauma as falsehood which could be countered by humans' inborn ability to seek growth and know the direction that leads to well-being (Joseph & Linely, 2005). According to this theory, growth after adversity is inborn and could be activated by social-environmental factors which the rationale for the current investigation of counseling as a predictor of posttraumatic growth. Terror management theory has also asserted that trauma could transform people positively by activating the death anxiety defenses such as self-esteem, improved interpersonal relationships and strengthened cultural values (Burke, Faucher, & Mortens, 2010; Kesebir & Pyszczynki, 2012).

The purpose of this study was to explore the positive outcomes of trauma and how counseling could impact this growth. The aim was to avail new knowledge that could help psychotherapists and counselors to design new solution focused interventions for trauma survivors to complement the existing problem focused approaches. The exploration of positive outcomes of trauma could also be a counterterrorism strategy as it diverts the survivors away from the intended intimidation to hope and thriving.

### **Methodology**

The study was carried out at Moi University main campus with the target population being the 650 survivors of Garissa University terrorist attack. These survivors were transferred from Garissa University to complete their studies at Moi University away from the initial location of the traumatizing experience. The study adopted the mixed methods sequential explanatory design by combining the correlational and phenomenological research design. According to Ivankova, Cresswell, and Stick (2006), this design takes a two-phase approach. Quantitative data were collected and analyzed in the first phase, followed by collection and analysis of qualitative data. The aim of the quantitative data was to promote understanding of the general research problem as well as the relationship between variables and hypothesis testing. The quantitative data also guided the selecting information-rich sample for the qualitative phase. This was arrived at by

selecting participants who recorded the highest scores on the Posttraumatic Growth Inventory (PTGI) and later followed up for in-depth probing.

Qualitative data on the other hand aimed at explaining the patterns that emerged from the quantitative phase. The follow-up model of the explanatory design was used in this case. In this study, 10 students with the highest PTGI scores were selected to provide in-depth information on posttraumatic growth and counseling interventions on the terror survivors. Data were collected using the PTGI, a Likert standardized questionnaire developed by Tedeschi and Calhoun (1996). The inventory measures posttraumatic growth on five domains namely new possibilities, relating with others, personal strength, spiritual change, appreciation of life and overall posttraumatic growth. The tool showed high internal consistency with Cronbach's alpha coefficient of 0.859.

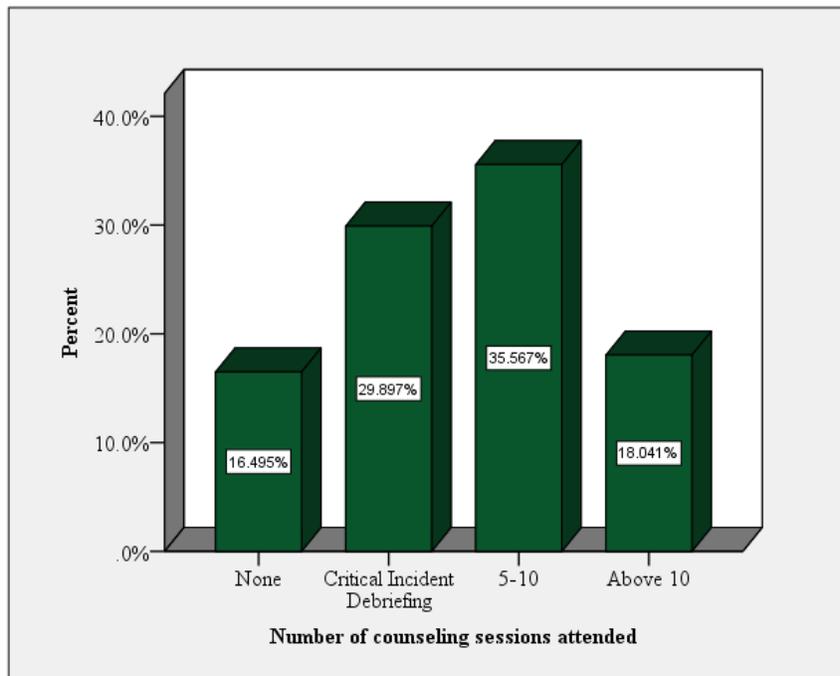
## **Results**

### **Demographic Characteristics**

The demographic characteristics of the sample were analyzed to enable other future researchers to compare their findings with the current study. The age of participants ranged from 19 to 30 years. Gender was fairly distributed in the sample with 56.7% being male and 43.3% being female. The majority of the participants (79.9%) were married while 20.1% were single. The majority of the participants (57.7%) were Protestants followed by 29.9% who were Catholics, 8.8% were from other religions and 3.6% were from the Muslim faith.

### **Descriptive Statistics of the Number of Counseling Sessions Attended**

This section sought to know the number of counseling sessions attended by participants after the attack. The study classified participants in terms of those who did not undergo any counseling, those who attended critical incident debriefing only, those who attended counseling for 5- 10 sessions and those who attended more than 10 sessions. Figure 1 shows the descriptive statistics of the number of counseling sessions attended.



*Figure 1: Number of Counseling Sessions Attended*

From Figure 1 a majority of the participants (35.6%) attended between 5 and 10 counseling sessions followed by those who attended critical incident debriefing of 1 and 5 sessions at 29.9%. Those who attended above 10 sessions were 18% while those who never attended any session were 16.5% of the sample. From these findings there is evidence for overwhelming consumption of counseling services among the terrorist attack survivors.

This is contrary to the findings of Munywoki et al (2017) who reported that people with psychological issues preferred other helping avenues as opposed to counseling. However, this study was conducted on the general population who had not gone through any event of a similar magnitude like the terror attack in the current study. In the current study 93.5% of the participants went for counseling which supports the argument that entrenchment of these services in response to the growing terror attack cases in the world has increased over the last few years (Alayarian, 2011; d'Ardenne, 2012; Forbes et al., 2011). The findings indicated a good trend in the counterterrorism initiatives and trauma management. This is a deviation from the past as indicated by the findings of Thielman (2005) that after the 1998 bombing in Nairobi, survivors sought help from diverse models ranging from prayer and God (20%), family support (18%), group therapy (9%), counseling (6%) and personal resourcefulness (3%). However, from the

current study it is not clear whether the participants attending the counseling did it from their own intrinsic motives to grow or were motivated by the desire to do away with the intense pain from the experience of trauma.

### Number of Counseling Sessions and Posttraumatic Growth

Participants filled the self-administered Posttraumatic Growth Inventory. Means for the posttraumatic growth domains were computed with the minimum possible mean being 0 and the maximum possible mean being 5 for each domain. Total scores for the entire questionnaire were also computed with the minimum possible total being 0 and the maximum possible total being 105.

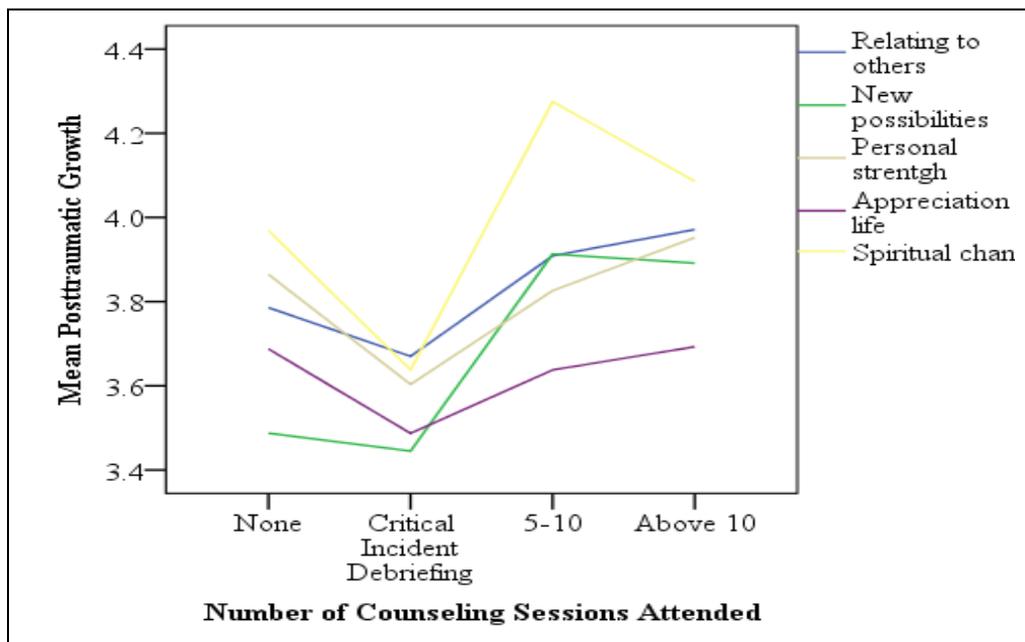
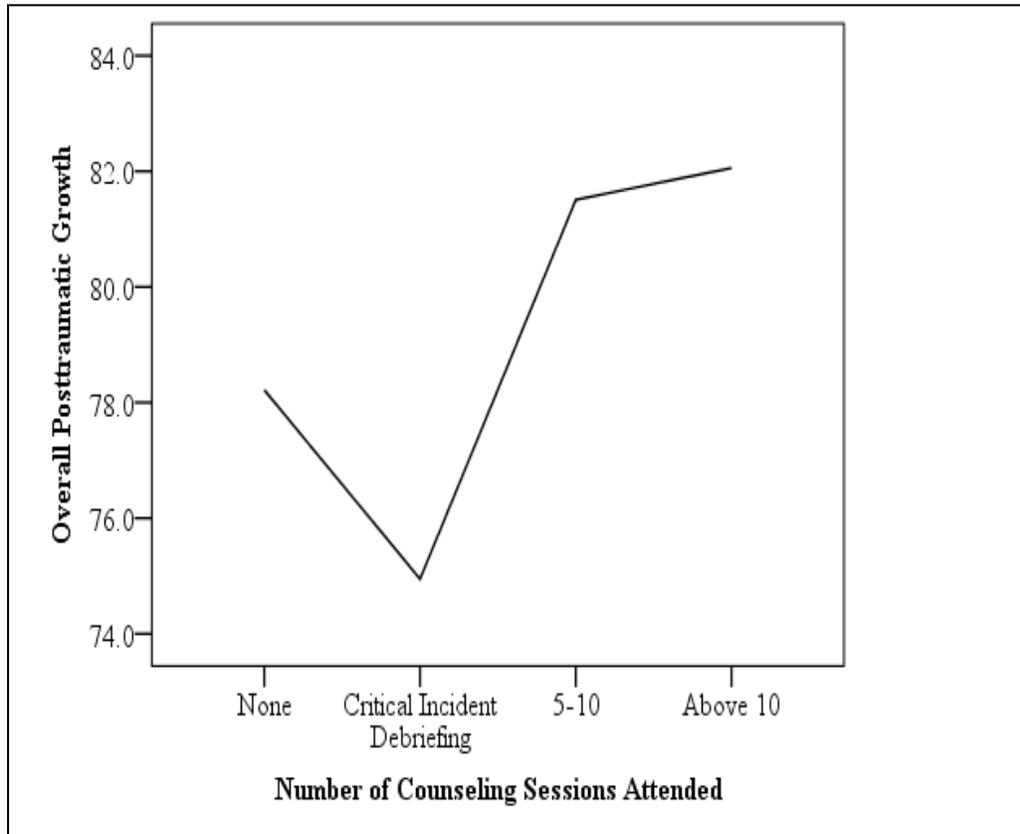


Figure 2: Posttraumatic Growth and the Number of Counseling Sessions

On the spiritual change dimension, survivors who attended critical incident debriefing only recorded the lowest growth (mean= 3.64; standard deviation= 1.18) followed by those who did not attend any counseling sessions (mean= 3.97; standard deviation= 1.13), those who attended more than 10 sessions had (mean= 4.09; standard deviation= 1.26) with the highest growth being reported by those who attended between 5 and 10 counseling sessions (mean= 4.28; standard deviation= 0.87). On relating to other dimensions, survivors who attended critical incident debriefing only recorded the lowest growth (mean=3.67; standard deviation= 0.73) followed by

those who did not attend any counseling sessions (mean= 3.79; standard deviation= 0.82), those who attended between 5 and 10 sessions (mean= 3.91; standard deviation=0.69) with the highest growth being reported by those who attended more than 10 counseling sessions (mean=3.97; standard deviation= 0.71). On the new possibilities dimension, survivors who attended critical incident debriefing only recorded the lowest growth (mean=3.45; standard deviation=0.81) followed by those who did not attend any counseling sessions (mean=3.49; standard deviation=1.00), those who attended above 10 counseling sessions (mean=3.89; standard deviation=0.67) with the highest growth being recorded by those who attended between 5 and 10 sessions (mean=3.91; standard deviation=0.76). On the personal strength dimension, survivors who attended critical incident debriefing recorded the lowest growth (mean=3.60; standard deviation=0.84) followed by those who attended between 5 and 10 sessions (mean=3.83; standard deviation=0.89), those who did not attend any counseling sessions (mean=3.87; standard deviation=0.91) with the highest growth being reported by those who attended more than 10 sessions (mean=3.95; standard deviation=0.96). On appreciation of life dimension, the highest growth was recorded by those who did not attend any counseling session and those who attended more than 10 sessions (mean=3.69; standard deviation=1.08 and 1.01 respectively) followed by those who attended between 5 and 10 sessions (mean=3.64; standard deviation=0.90) with the lowest growth being recorded by those who attended critical incident debriefing only (mean=3.49; standard deviation=0.90).



*Figure 3: Overall Posttraumatic Growth and the Number of Counseling Sessions Attended*

For total posttraumatic growth, the lowest growth was reported by survivors who attended critical incident debriefing only (mean= 74.95; standard deviation=13.81) followed by those who did not attend any counseling (mean=78.22; standard deviation=15.46), those who attended between 5 and 10 counseling sessions (mean=81.51; standard deviation=12.55) with the highest growth being recorded by those who attended more than 10 sessions (mean=82.06; standard deviation= 13.90).

### **Inferential Analysis**

The study hypothesized that: ‘There would be no significant relationship between initial trauma processing strategies and posttraumatic growth of Garissa University terror survivors’.

Table 1: The Number of Counselling Sessions and Posttraumatic Growth

Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics F	df1	df2	Sig. F Change
1	.154 <sup>a</sup>	.024	.019	13.7724	.024	4.658	1	192	.032

a. Predictors: (Constant), Number of counseling sessions attended

b. Dependent Variable: Total posttraumatic growth.

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	883.461	1	883.461	4.658	.032 <sup>b</sup>
1	Residual	36418.477	192	189.680		
	Total	37301.938	193			

a. Dependent Variable: Total posttraumatic growth

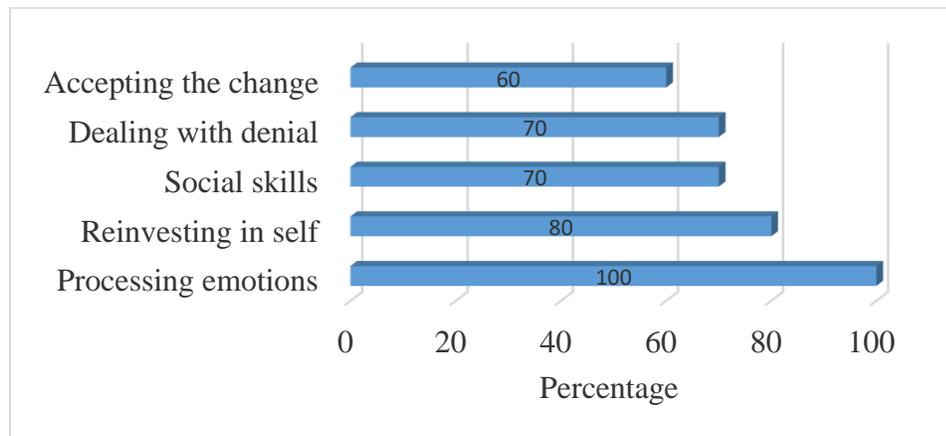
b. Predictors: (Constant), Number of counseling sessions attended

Multiple regression analysis was conducted to examine the relationship between the number of counseling sessions attended and posttraumatic growth. Table 1 summarizes the regression and ANOVA results. As can be seen, the predictor number of counseling sessions attended produced  $R^2 = .024$ ,  $F = 4.658$ ,  $P \leq 0.05$ . This implies that 2.4% of the variation in posttraumatic growth was explained by the number of counseling sessions attended. This finding implies that there was a general significant relationship between the posttraumatic growth and number of counseling sessions attended because the p-value was 0.032 which was less than the standard probability ratio of 0.05. As shown in the regression model, R square and adjusted R was high and therefore this implies that there was high variation that could be explained by the model. Moreover, the

regression model shows F-statistic of 4.658 and probability ratio (sig. F change) of 0.032 was less than the p-value of 0.05. This means that independent variables were significant in explaining the variation in the dependent variable. We therefore rejected the null hypothesis and adopt the alternative hypothesis. We concluded that there was significant positive relationship between the number of counseling sessions attended and posttraumatic growth of Garissa University terrorist attack survivors.

### **Qualitative data from Interviews**

This phase of research was conducted in order to explain the possible dynamics behind counseling that could have enhanced the posttraumatic growth reported in the quantitative phase. The participants were asked to report on the various ways in which counseling had improved their well-being after experiencing the terrorist attack.



*Figure 4: Themes for Value Added by Counseling to Survivors*

The majority of the participants reported that counseling helped them process their emotions (100%), reinvest in self (80%), enhance social skills (70%), deal with denial (70%) and accept the change (60%).

### **Processing of emotions**

Participants reported to have experienced mixed negative emotions such as feelings of anger, guilt, hatred, rejection, grief and bitterness, among others, after the attack. In addition, most survivors reported to have unusual emotional burden that kept them disturbed. The questions of ‘why me?’ ‘Where was God when this happened?’, among others, kept them in a state of

confusion and pain. The exploration of these aspects during the counseling period brought relief and hope for the future. One participant said,

*During the attack, I witnessed friends separated and executed on the basis of religion that one professed. My friends were shot because they were not Muslims. The bullet that was lodged in my arm was as a result of my Christian faith.... After the attack I hated Muslims with passion....I burned with anger every day and harbored bitterness in my heart. One day I went to hospital and found a Muslim making enquiry at the reception and I walked out. I carried this burden for long but through counseling I began to see Muslims as human beings and to direct my hatred towards the terrorists. At the moment I can meet and talk to them and even some of my friends are Muslims. (Participant 04, personal communication, Feb 27, 2018).*

It was reported that the majority of the counselors were focused on emotion processing and the survivors who had blocked emotions and found a way of venting them out.

### **Reinvesting in self**

Participants reported that the shock from the attack brought their life to a halt. A number of them had opted to abandon education as it was perceived to be the main reason that took them to Garissa from different parts of the country. To them, had it not been for education, they could not have gone through this pain. Parents were also possessive after the attack and they too backed the idea of withdrawal from college. The survivors attributed their decision to proceed with education to the counseling sessions they underwent.

One participant said,

*Had it not been counseling, I would not have continued with my education. My parents too softened their stance on this issue after they had some sessions with my counselor. Counseling challenged me to view education not only as the reason I went through the terrorist attack experience but a reason to defeat the terrorists who had wanted to terminate it. (Participant 07, personal communication, March 1, 2018)*

Some of the participants also took short courses in counseling for personal development. After the counseling sessions, there was re-evaluation of life and alterations in the priorities that

survivors had in life. One participant said, *I have reorganized my entire life..... I have worked on motivating others and I think I am a good motivational speaker.* (Participant 06, personal communication, March 1, 2018).

### **Social skills**

Counseling was reported to have had major influence on social skills enhancement after the attack. With trust of the survivors having been greatly severed by the attack, interpersonal skills were affected too. Feelings of suspicion, bitterness and anger that engulfed the survivors were negative to relationship building. Survivors reported that it was through group counseling sessions that they began to build their trust for friends once more. The sessions provided an opportunity for the survivors to make new friends and practise the friendship enhancement skills. Participant 03 (personal communication, March 1, 2018) reported, *the most important thing that counseling did for me was enhancing my relationship with others. I formed new friendships in my new environment and now feel more connected than when I first relocated from Garissa University.*

This sentiment was echoed by participant 10 (personal communication, March 2, 2018), who attributed his reconnection with friends to the support given by peer counselors.

*The peer counselors did a wonderful job. They offered support the time I needed it. The peer counselors' support helped me so much in breaking the resistance I had towards friendship formation. They became my first new friends in Moi University and helped me develop trust to take the risk of acquiring other friends on campus.*

### **Dealing with denial**

As a result of the sudden and surprise nature of the attack, trauma intensity was high and most of the survivors remained in denial for some time. They reported disbelief and inability to come to terms with the fact that their close friends had been murdered in this heinous attack.

Participant 05 (personal communication, Feb 27, 2018) said,

*It is through counseling that I was able to confront my denial and come to terms with the loss of my friends. Initially, I refused to believe that they were dead. When I attended the*

*funerals of a few of them I told myself that it was not my friends who were being buried but empty caskets.*

Participant 07 (personal communication, March 1, 2018) had a similar feeling. He reported that,

*I did not believe my friends were dead. I thought it was a movie. For some weeks I strongly believed they did not die but had been abducted and that they would be reuniting with us soon.*

### **Accepting the change**

The attack was viewed to have brought about a major disruption in the participants' lives. They were forced to suspend their studies for some time as rescue and identification of bodies took place. Transferring from Garissa University, the location of the attack, was a long and difficult process especially at a time when trust in people had been shattered. Accepting all these changes was not easy to the majority of the survivors. Survivors felt that counseling played a significant role in helping them settle in the new environment and accept the abrupt change from their previous campus. Participant 01 (personal communication, March 3, 2018) said,

*In Garissa, I was staying in the hostels within campus but on relocating here, I had to stay outside the campus in my own rented house. I did not have friends here and it was like starting all over again. Counselors helped me navigate through this uncertainty and after some time I have been able to settle in this new environment.*

Survivors felt that to a large extent, counseling helped them live with the reality of having lost their friends through death. To some who were expecting that their dead friends would come back one day, counseling sessions helped them to live with the hope of meeting the friends in future as opposed to them coming back. The lost items, lost time in the education and lost peace as a result of change in routine was a great concern for the survivors. Counseling provided reassurance that normalcy would return. The philosophical questions that kept lingering in the minds of the survivors on what would happen next were addressed through counseling. A participant reported,

*The confusion in which I found myself after this attack was so overwhelming. I had many questions as I tried to comprehend what the future would look like. When I faced my counselors my thinking changed. I was helped to see some order ahead despite the*

*current status of confusion I was in. I thank the counselors.* (Participant 05, personal communication, March 3, 2018).

## **Discussion**

The findings show that counseling enhanced posttraumatic growth among the survivors of Garissa University terrorist attack. This is in agreement with other global studies. For instance, a study by Jeon, Han, Choi, Ko, and Kim (2016) conducted on a sample of 10 survivors of large scale maritime disaster that occurred in South Korea to investigate the therapeutic value of Eye Movement Desensitization and Reprocessing (EMDR) on posttraumatic growth reported similar results. The results indicated that after 3 months from treatment completion, significant increase in posttraumatic growth was observed. It was concluded that EMDR therapy enhanced posttraumatic growth in disaster survivors. Similarly, Chen et al. (2016) conducted a study examining the effect of positive psychological intervention on posttraumatic growth among primary health care workers in China on a sample of 579 health care workers from Shenzhen. The PTGI scores before and after psychological interventions were compared. The findings revealed that scores on PTGI were significantly higher after the psychological intervention than before. A study in South Africa on posttraumatic growth among prisoners reported that there were significant group differences between those who attended psychotherapy and those who did not (Vanhooren, Lijssen, & Dezutter, 2018). Those who attended psychotherapy reported higher posttraumatic growth on all the domains. Just like the current study psychological intervention contributed to higher posttraumatic growth. This could be attributed to the ability of counseling to help survivors process the negative thoughts about the terror attack hence paving way for positive transformation.

From the findings of the current study, it is surprising that participants who attended critical incident debriefing only, which is the most common response to traumatic events by mental health professionals reported the lowest posttraumatic growth on all the 5 domains and the total growth. These findings are supported by Mayou, Ehlers, and Hobbs (2002) who argued that despite dealing with short term pain in trauma survivors, people who rely on critical incident debriefing alone develop greater distress 3 years after the traumatic event.

It was also noted that the group of survivors who did not attend any counseling sessions recorded some posttraumatic growth level that was higher than those who attended critical incident debriefing only. This could be justified by the organismic valuing theory which posits that humans have inborn ability to seek growth, know what is important for them and the direction that will lead them to greater wellbeing (Joseph & Linely, 2005). It is possible that the reason for substantial posttraumatic growth among the group of participants who did not attend any counseling sessions was the inborn human nature. This shows that the survivors were responsible for the initiation of their own growth and all other factors only came in to enhance the growth. The meaning management theory holds the same assumption that humans have inborn motivation for survival and find meaning in their survival (Wong, 2008). The non-directed growth witnessed in this group could not be explained by any other factor other than inborn characteristics.

Interview data from participants showed that counseling was instrumental in the processing of blocked emotions, reinvesting in self, enhancement of social skills, dealing with denial and accepting change following the experience of the terror attack. The findings were consistent with Vanhooren, Leijssen, and Dezutter (2018) who reported that emotional support was positively correlated with posttraumatic growth among incarcerated individuals. Calhoun and Tedeschi (2013) described counseling as expert companionship which helps trauma survivors to process their painful emotions and develop new ways of thinking. The focus of counselors on emotional issues of participants was therefore crucial to healing and functioning beyond the pre-trauma levels. According to Alayarian (2011), emotional blockage can be one way of storing trauma in the body and liberation from this could mark the beginning of progress in trauma treatment. The presence of emotional blockage among the participants could have been an impediment to their cognitive processes which are vital in posttraumatic growth.

According to Barrington and Shakespeare-Finch (2013) reinvesting in self after trauma could help survivors to return to normalcy. Traumatic events cause major disruption in life and alter normal routines in the life of survivors. These disruptions could further intensify trauma as they constitute loss. In the current study, the focus of counselors on re-investing in self among survivors was a key step towards trauma recovery. The challenge towards reorganization of life

after trauma among these survivors could have boosted self-introspection hence finding meaning. According to terror management theory, reinvesting in self may take the form of beginning projects that may outlive the concerned person as a way of reducing death anxiety (Solomon, Greenberg, & Pyszczynki, 2015). From the testimonies of participants in the current study, it is clear that some of the participants decided on investing in self as a way of defeating the awareness of death.

Calhoun and Tedeschi (2013) referred to counseling in posttraumatic growth as expert companion implying that counseling was a relationship built on trust and empathy. By virtue of the process of counseling being a relationship, development of social skills among the survivors would be inevitable. The findings of Vanhooren, Leijssen, & Dezutter (2017) agree with the current study on the development of interpersonal skills through counseling. In their study which used qualitative research design participants reported to have improved in the way they related with others. Among the social skills reported by the participants included improved empathy, perceiving others differently, being authentic in relationships, and improved self-disclosure.

Counseling was instrumental in helping the survivors process the denial. Other participants reported pain during the denial stage. They felt that failing to accept the death of their friends was the most painful experience as it disrupted their sleeping patterns and general life routines. This is consistent with the findings of Barbara (2013) who asserted that counseling was instrumental in reducing denial among children with sexual behaviour problems. Freda (2014) reported similar findings confirming the role of counseling in processing of negative coping mechanisms among trauma survivors. The current study found that negative cognitive processing strategies namely denial and regret were negatively predicted posttraumatic growth. The role played by counseling in reducing denial could therefore have paved way for enhancement of posttraumatic growth among the participants.

Other studies have shown that the reduction of denial and other negative coping mechanisms after counseling automatically pave way for acceptance and other positive trauma coping strategies (Barbara, 2013; Freda, 2014). In the current study, participants accepted the reality of the terrorist attack despite the pain associated with it. McHugh, Forbes, Bates, Hopwood, &

Creamer (2012) found that psychotherapy helped survivors of trauma in development of gratitude and forgiveness, virtues that are important in letting go the past and embracing growth.

### **Conclusion**

This study examined the relationship between counseling and posttraumatic growth among the survivors of Garissa University terrorist attack. The study found that the majority of the survivors attended counseling sessions after the terrorist attack. The study findings showed that there was significant positive relationship between the number of counseling sessions attended and posttraumatic growth among the Garissa University terrorist attack survivors. The results further showed that posttraumatic growth was highest among the survivors who attended 5 to 10 counseling sessions, followed by those who attended above 10 sessions and those who attended none with the lowest growth being recorded by those who attended critical incident debriefing only. The study also found that counseling was instrumental in helping the survivors process emotions, re-invest in self, enhance social skills, deal with denial and accept the change brought by the attack. These findings would improve trauma counseling by incorporating the knowledge of posttraumatic growth away from the current models which majorly focus on the past pain of survivors. The awareness of posttraumatic growth domains would help trauma counselors explore the healing journey of survivors from an optimistic point of view which may help to rebuild the shattered world view of the survivors. The minimal growth associated with critical incident debriefing in this study raises concern that warrants critical evaluation of this intervention strategy commonly used by psychologists.

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