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# Traumatic Stress Symptoms, Forgiveness, and Meaning in Life in Four Traumatized Regions of the World

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The present study examined self-reported levels of traumatic stress symptoms, forgiveness, and meaning in life in residents of regions experiencing ongoing violence (Middle East), recent past violence (Africa), distant past violence and disaster (Caucasus), and recent natural disaster (Caribbean). The sample included 900 individuals from Africa (Kenya  $n = 149$ ; Burundi  $n = 104$ ; Rwanda  $n = 57$ ), the Middle East (Israel  $n = 34$ ; Jordan  $n = 22$ ; Palestine  $n = 220$ ), the Caucasus (Armenia  $n = 109$ ), and the Caribbean (Haiti  $n = 205$ ). Analyses of covariance controlling for demographic factors revealed significant regional differences. Violent ongoing trauma in the Middle East and recent violent trauma in African countries were associated with higher traumatic stress symptoms than in the Caribbean where trauma was nonviolent and in the Caucasus region where trauma was quite distant. Forgiveness levels were lowest among participants in the Middle East and highest in Africa. Meaning in life was also lowest in the Middle East. There is wide diversity in the sociocultural traumatic events and calamities that befall societies; those events have unique impacts on survivors' levels of traumatic stress symptoms, forgiveness, and meaning in life. Counselors, clergy, aid-workers, and policymakers should be apprised of the range of sociocultural traumatic experiences and associated differential outcomes.

*Keywords:* trauma, meaning in life, forgiveness, international, sociocultural

The present study examines levels of traumatic stress symptoms, forgiveness, and meaning in life in residents of regions experiencing

ongoing violence (Middle East), recent past violence (Africa), distant past violence and disaster (Caucasus), and recent natural disaster (Caribbean). These regions were specifically chosen to demonstrate the contrasting characteristics of the sociocultural traumas they have endured. The African countries of Burundi, Rwanda, and Kenya have all experienced recent social conflict and ethnic cleansing in the last two decades (Smart, 2013). Armenian people make up the Caucasus sample and Armenia has a distant history of a century-old, traumatic Ottoman Turkish genocide 1895–1923 and a devastating earthquake of 1988 (Abrahmian & Hayrapetyan, 2013; Kalayjian, Shahinian, Gergerian, & Saraydarian, 1996). The Caribbean

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sample is comprised of Haitians who recently experienced a devastating earthquake in 2010 (Haiti Earthquake, 2015). Middle Eastern countries have been embroiled in conflicts over national boundaries for decades on end (Laqueur & Rubin, 2008). These distinctly different types of societal events have wrought trauma and presented challenges to forgiveness and meaning making in residents of these areas. The purpose of the present study is to examine how different sociocultural traumatic experiences, both past and present, relate to traumatic stress symptoms, forgiveness, and meaning-making.

### Sociocultural Trauma

Sociocultural traumas are those events or situations that threaten the existence or core beliefs of a society or culture (Alexander, Eyerman, Giesen, Smelser, & Sztopmka, 2004). As compared with traumas that occur to a single individual (e.g., assault), sociocultural traumas are typically massive in scale and affect large proportions of a society's population and often threaten the very fabric of community life (Alexander et al., 2004). Importantly, not every citizen has to be directly exposed to a traumatic event to be negatively affected and show trauma symptoms (Kleber, Figley, & Gersons, 2013; Volkan, 2000). In sum, the individual's experience of a specific, personal traumatic event is of less interest than the experience of the sociocultural event. As such, individual-level trauma was not assessed.

National and regional traumatic events around the globe have spurred the investigation of the relationship between traumatic experiences, traumatic stress symptoms, and posttraumatic stress disorder (PTSD). Different sociocultural traumatic experiences have implications for the intensity and longevity of traumatic stress symptoms and PTSD. For instance, children who have experienced violent traumas are significantly more likely to have long-term traumatic stress symptoms and higher rates of anxiety and depression than those who have experienced a natural disaster (Kumar & Fonagy, 2013). As another example, consider that Haiti experienced a 7.0 magnitude earthquake that devastated the small island (Haiti Earthquake, 2015) while Rwanda, Burundi, and Kenya have all experienced genocides in the last 8–22 years (Smart, 2013). Research has shown that follow-

ing the Haitian earthquake about 25% of individuals suffered from PTSD (Cerdá et al., 2013). In contrast, following the Rwandan genocide, between 52% and 62% of participants met criteria for probable PTSD (Neugebauer et al., 2009).

Additional evidence of the particular potency of violent trauma in eliciting PTSD is seen in areas where repeated terrorist attacks continue over a long period of time (Karairmak & Güloğlu, 2014). Perhaps one of the best examples of this is in the Middle East where three different political regimes in the West Bank, Israel, and Gaza Strip continue decades of intractable conflict. Estimates suggest that between 23% and 70% of Palestinians in the Middle East have probable PTSD (Dimitry, 2012). The aftereffects of sociocultural traumatic events can also be long-lasting as 36% of a sample of descendants of Armenian refugees suffered from PTSD relating to the Ottoman Turkish Genocide of Armenians from 1914–1923 (Kalayjian et al., 1996). A consistent theme runs through this literature suggesting that traumatic stress symptomology and PTSD vary according to different kinds of sociocultural traumatic experiences. Violent, continuing, and chronic trauma are features that are associated with increases in traumatic stress symptoms and PTSD.

### Forgiveness

Forgiveness is a multidimensional construct that involves giving up motivations for revenge, feelings of resentment, and hostility toward an offending person, group, or experience (Thompson et al., 2005; Worthington, 2006). Forgiveness can be considered both a state and trait, but trait forgiveness is thought to be of considerable importance because it influences the likelihood of forgiving across time and situations and is consistently linked to health (Toussaint, Worthington, & Williams, 2015).

Individuals with high trait forgiveness are more likely to forgive irrespective of the adversity they face (Thompson et al., 2005; Worthington et al., 2015). However, like most personality traits, forgiveness dispositions are expressed differentially across situations (Bandura, 1978). For instance, many sociocultural traumas involve intergroup violence (Neuberg

et al., 2014; Vollhardt, Mazur, & Lemahieu, 2014), and intergroup violence may be especially difficult to forgive (McLernon, Cairns, Hewstone, & Smith, 2004). Continuing conflict and lack of positive contact with former offenders may make forgiveness under these circumstances even more difficult because this does not facilitate reduction of negative feelings or safety needs being met (Ajdukovic & Biruski, 2008; Van Tongeren, Burnette, O'Boyle, Worthington, & Forsyth, 2013). Even the most forgiving person may find it difficult to forgive in these circumstances.

In contrast, consider the situational factors influencing forgiveness in the context of a natural disaster. These events typically have fewer salient individuals to blame and there is less perceived control over the situation (Norris & McFarlane, 2006). Nevertheless, anger and forgiveness remain highly relevant in a natural disaster (Kalayjian, 1995). For example, forgiving forecasters for lack of warning, neighbors for lack of support, and aid-workers, and perhaps even the international community, for inadequate, slow, or misdirected response. But, these individuals are not to blame for and had no control over the disaster and these situational characteristics may interfere less with forgiveness as compared with disasters that result from conflict and violence.

An additional factor in considering socio-cultural trauma and forgiveness regards societal values. In a meta-analysis of various predictors of forgiveness across 13 countries, forgiveness was higher in societies that were focused on postmaterialistic values such as altruism, morality, and community as compared with societies focused on economic and safety needs (Hanke & Fischer, 2013). When basic safety and security needs are not being met in a society, it interferes with postmaterialistic motivators of forgiveness. In the case of both natural and man-made disasters, basic needs are often not being met and this too may hinder forgiveness.

In sum, individuals with stronger dispositions to forgive do so across time and situations. However, some situations are easier to forgive than others and levels of forgiveness may reflect these social determinants. Situations involving conflict and violence are likely more difficult to forgive and add to this that often in disasters

basic needs are not being met and this may interfere with the forgiveness process.

### Meaning-Making

A meaningful life is one that makes sense, is directed and motivated by goals, and matters in the world (George & Park, 2016). One can feel a presence of meaning in life, or one may persistently search for it (Steger, Frazier, Oishi, & Kaler, 2006). Violence often leaves victims with disruptions of core beliefs and little sense of meaning in life (Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2012). Research shows that on both the individual and group level, making sense of trauma comes more swiftly and fully to those who have experienced fewer or less frequent traumatic events as compared to those who have experienced more (Dorahy et al., 2009; Woo & Brown, 2013). In cases of ongoing trauma, such as the Middle East (Dimitry, 2012), complex trauma can often be the outcome. Complex trauma is characterized by chronic exposure to various traumatic events and causes difficulties with meaning-making, as well as, emotion regulation, attention, self-perception, and interpersonal relationships (Woo & Brown, 2013). In summary, several features of traumatic experiences—violence, frequency, chronicity—impact the process of meaning-making.

### Present Study

The present study examined traumatic stress symptoms, forgiveness, and meaning in life in residents of regions experiencing ongoing violence (Middle East), recent past violence (Africa), distant past violence and disaster (Caucasus), and recent natural disaster (Caribbean). Reviewing the above literature on sociocultural trauma led to the hypothesis that violent and recent trauma would be associated with intensified traumatic stress symptoms. Hence, it was expected that individuals from African and Middle Eastern regions would show higher levels of traumatic stress symptoms as compared to those from Caribbean and Caucasus regions. Based on the forgiveness theory and research reviewed above, it was expected that recent, violent conflict would be associated with decreased dispositional proclivities toward forgiveness. Given the ongoing conflict between neighboring countries in the Middle East, it was expected that individuals in this area would show

the lowest levels of forgiveness. African participants in the present study have also recently experienced sociocultural traumas and consequently it was expected that these individuals would also show low levels of dispositional forgiveness. Because the Caucasus participants have experienced distant violence (i.e., genocide 1914–1923) and natural trauma (i.e., 1988 earthquake) and the Caribbean participants have experienced a more recent but natural trauma (i.e., 2010 earthquake), it was expected that they would experience higher levels of forgiveness. Because previous research has identified chronic, violent trauma as a particularly potent disruptor of meaning-making, it was predicted that individuals in the Middle East would show lower levels of meaning as compared to individuals from other areas. Relatedly, it was expected that the search for meaning would be higher in individuals from the Middle East as compared with other regions.

## Method

### Participants

Participants were 900 individuals living in four distinct regions of the world. The African region contains individuals living in Kenya

( $n = 149$ ), Burundi ( $n = 104$ ), and Rwanda ( $n = 57$ ). The Middle East region contains individuals living in Israel ( $n = 34$ ), Jordan ( $n = 22$ ), and Palestine ( $n = 220$ ). Caribbean participants were from Haiti ( $n = 205$ ) and Caucasian participants were from Armenia ( $n = 109$ ). Although current violence continues at Armenian borders with Azerbaijan due to the enclave Karabakh, participants were drawn from nonborder areas where current violent activity is relatively low. In each region local collaborators who were involved in nongovernmental organizations such as hospitals, churches, and community centers recruited participants by making announcements in classes and meetings, distributing flyers, and inviting community members to participate. Institutional ethics and local organizational approval was obtained prior to data collection and all participants provided informed consent prior to participation.

Average age of the total sample was 27 years ( $SD = 10$ , Range = 18–75,  $Mdn = 23$ ). The total sample was mostly female, nonmarried, Christian, current college students. Individuals from the four regions differed on all demographic variables (see Table 1). Caucasus and

Table 1  
Total Sample and Group Demographic Characteristics

Variable	Total sample ( $N = 900$ )	Africa ( $n = 310$ )	Caucasus ( $n = 109$ )	Caribbean ( $n = 205$ )	Middle East ( $n = 276$ )	Statistical test <sup>a</sup>	Effect size <sup>b</sup>
Age	27 (10)	25 (8)	30 (11)	31 (10)	25 (9)	23.96***	.09
Gender							
Male	300 (36%)	152 (49%)	12 (11%)	79 (39%)	57 (25%)	65.40***	.28
Female	542 (64%)	156 (51%)	97 (89%)	122 (61%)	167 (75%)		
Marital status						32.63***	.20
Married	139 (17%)	27 (9%)	33 (30%)	31 (15%)	48 (22%)		
Not married	694 (83%)	278 (91%)	76 (70%)	170 (85%)	170 (78%)		
Religion						411.18***	.48
Christian	582 (65%)	296 (96%)	107 (98%)	98 (48%)	81 (29%)		
Muslim	298 (33%)	12 (4%)	2 (2%)	89 (44%)	195 (71%)		
No religion	19 (2%)	2 (1%)	0 (0%)	17 (8%)	0 (0%)		
Education						654.51***	.52
< High school	201 (25%)	25 (9%)	0 (0%)	171 (91%)	5 (2%)		
High school degree	69 (9%)	52 (17%)	1 (1%)	8 (4%)	8 (4%)		
College student	524 (64%)	225 (74%)	104 (95%)	6 (3%)	189 (88%)		
Employed	21 (3%)	1 (1%)	4 (4%)	2 (1%)	14 (7%)		

Note. Age values are means (standard deviations). Percentages are within regions. Some region percentages do not sum to 100% due to rounding.

<sup>a</sup> Statistical test for age is the  $F$ -test, for all others it is chi-square. <sup>b</sup> Effect size for age is eta-squared, for all others it is Cramer's  $V$ .

\*\*\*  $p < .001$ .

Caribbean participants were about 5 to 6 years older than African and Middle Eastern participants. African and Caribbean participants were more male than Middle Eastern and Caucasus participants. More Caucasus and Middle Eastern participants were married compared to Caribbean and African participants. Fewer Caribbean and Middle Eastern participants were Christian compared with Caucasus and African participants. Conversely, more Caribbean and Middle Eastern participants were Muslim compared with Caucasus and African participants. Caribbean participants were less educated compared with the other regions.

### Measures

Because of the difficult conditions and time constraints under which our measures were administered, the briefest yet most reliable and valid measures were required. All measures are suited for use in international research (Fetzer Institute, 1999; Mollica, McDonald, Massagli, & Silove, 2004; Steger, 2016), but each required translation for use with these specific samples. The procedures outlined by Brislin (1986) were used for the translation of our measures, and the recommendations of Sousa and Rojjanasrirat (2011) regarding choice of translators was also followed. This procedure included: (a) translation of the English items from each measure to the necessary target language of each different sample by translators whose native language was the target language; (b) blind backward translation from the target language to English by translators whose native language was English; (c) comparison of the original, translated, and back-translated measures; (d) fielding a small pilot study ( $n = 10\text{--}15/\text{translation}$ ); and (e) conversation about discrepancies and resolution thereof by translators with input from pilot participants. Measures were administered in a group setting with research assistants and local interpreters available to provide thorough instructions and help with any questions or comprehension issues. Estimates of internal reliability are provided for each measure.

**Traumatic stress symptoms.** Intensity of traumatic stress symptoms was measured using the Harvard Trauma Questionnaire (Mollica, McDonald, Massagli, & Silove, 2004). Part 4 of the Harvard Trauma Questionnaire consists of

16 traumatic stress symptoms derived from *DSM-IV* criteria. Participants respond to each question on a 4-point Likert-type scale (1 = *not at all*; 4 = *extremely*). Example symptoms include: (a) “difficulty concentrating;” (b) “feeling jumpy, easily startled;” and (c) “trouble sleeping.” The psychometric properties of the Harvard Trauma Questionnaire have been evaluated numerous times and over 35 translations now exist (Harvard Program in Refugee Trauma, 2016). For the present study it was necessary to translate the measure into Swahili, Kreyole, and Armenian for use in Africa, Haiti, and Armenia, respectively. Validated English and Arabic language versions already exist (De Fouchier et al., 2012; Mollica et al., 2004; Kleijn, Hovens, & Rodenburg, 2001). English translations were used for some participants in Kenya and all participants in Israel. Arabic translations were used in Jordan and Palestine. Internal consistency in the present study was  $\alpha = .85$ .

**Forgiveness.** Forgiveness was measured using the three-item forgiveness subscale of the Brief Multidimensional Measure of Religiousness/Spirituality (Fetzer Institute, 1999). An example item is “I have forgiven those who hurt me.” Participants responded to the items on a 4-point Likert-type scale (1 = *never*; 4 = *always or almost always*). The forgiveness scale has shown construct validity, test-retest reliability, and internal consistency in American samples (Fetzer Institute, 1999; Masters et al., 2009). The Brief Multidimensional Measure of Religiousness/Spirituality has also been validated in Brazil, India, Ireland, and Italy (Bodling, Heneghan, Walsh, Yoon, & Johnstone, 2013; Capanna, Stratta, Collazoni, & Rossi, 2013; Curcio, Lucchetti, & Moreira-Almeida, 2015; Johnstone, Bhushan, Hanks, Yoon, & Cohen, 2016). For the present study it was necessary to translate the measure into Swahili, Kreyole, Armenian, and Arabic for use in Africa, Haiti, Armenia, and Jordan and Palestine, respectively. English versions were used for some participants in Kenya and all participants in Israel. Internal consistency in the present study was  $\alpha = .74$ .

**Meaning in life.** Meaning in life was measured using the Meaning in Life Questionnaire (Steger et al., 2006). The Meaning in Life Questionnaire is a 10-item self-report scale designed to assess presence of and search for meaning in life. Participants responded on a 7-point Likert-

type scale (1 = *absolutely untrue*; 7 = *absolutely true*). An example of a presence of meaning item is “I have discovered a satisfying life purpose.” An example of a search for meaning item is “I am searching for meaning in my life.” The Meaning in Life Questionnaire has shown convergent and discriminant validity, internal consistency, temporal stability, and stable factor structure in American samples (Steger, Frazier, Oishi, & Kaler, 2006). The Meaning in Life Questionnaire has been validated in numerous cultures and translated into at least 33 different languages (Michael Steger, 2016). For the present study, it was necessary to translate the measure into Swahili, Kreyole, Armenian, and Arabic for use in Africa, Haiti, Armenia, and Jordan and Palestine, respectively. English versions were used for some participants in Kenya and all participants in Israel. Internal consistency in the present study was  $\alpha = .70$  and  $\alpha = .80$  for the presence of and the search for meaning, respectively.

### Procedure

Meaningful World (identity redacted for blind review) is a nonprofit humanitarian group whose mission is to foster a meaningful, peaceful, and just world that allows every individual to enjoy physical, mental, social, and spiritual health. Through research and education Meaningful World works to identify problems and find solutions to trauma. Participants arrived at the research and education workshops offered by Meaningful World in their area and provided informed consent. Questionnaires were completed before the education phase of the workshop began. The workshop included group healing through expression of feelings, empathy, discussion of lessons learned, empowerment through education, and reestablishing connection to Mother Earth. Workshops concluded with chakra balancing body movements, deep

diaphragmatic breathing, affirmations, and meditation.

### Analyses

Descriptive statistics and bivariate correlations were computed. Data were analyzed using standard analysis of covariance techniques. Because of differences across the groups in age, sex, marital status, religion, and education, these variables were controlled in all analyses. *F* tests are provided as omnibus tests of group differences, partial eta is reported as the effect size estimate, and pairwise comparisons are conducted on all variables with significant group differences to identify more clearly where differences exist. All statistical tests were evaluated at an alpha level of  $p < .05$ .

### Results

Descriptive statistics and bivariate correlations for the total sample are provided in Table 2. Presence of meaning was inversely associated and search for meaning was positively associated with traumatic stress symptoms. Forgiveness was positively associated with presence of and search for meaning.

One way analyses of covariance (ANCOVAs) were calculated to examine differences between participants in African, Caucasus, Caribbean, and Middle Eastern regions in levels of traumatic stress symptoms, forgiveness, and presence of and search for meaning (see Table 3). Regional differences were observed for forgiveness and presence of meaning in life, and no covariates were significant for either of these analyses. After controlling significant covariation due to gender, regional differences were observed for traumatic stress symptoms. After controlling for significant covariation due to marital status, regional differences were observed for search for meaning in life. Accord-

Table 2  
*Total Sample Descriptive Statistics and Bivariate Correlations*

Variable	Mean ( <i>SD</i> )	Traumatic stress symptoms	Forgiveness	Presence of meaning
Traumatic stress symptoms	1.88 (.50)			
Forgiveness	3.22 (.73)	-.01		
Presence of meaning	5.58 (1.13)	-.27***	.18***	
Search for meaning	5.32 (1.47)	.22***	.08*	-.05

\*  $p < .05$ . \*\*\*  $p < .001$ .

Table 3  
*Levels of Traumatic Stress Symptoms, Forgiveness, and Presence and Search for Meaning by Group*

Variable	Africa ( <i>N</i> = 310)	Caucasus ( <i>N</i> = 109)	Caribbean ( <i>N</i> = 205)	Middle East ( <i>N</i> = 276)	<i>F</i>	$\eta_p^2$
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )		
Traumatic stress symptoms	2.04 (.51)	1.76 (.52)	1.60 (.79)	1.98 (.57)	17.80***	.07
Forgiveness	3.60 (.62)	3.18 (.63)	3.22 (.92)	1.68 (.58)	180.09***	.49
Presence of meaning	5.60 (1.25)	5.43 (1.36)	5.97 (1.94)	4.96 (1.19)	6.23***	.03
Search for meaning	5.56 (1.72)	4.98 (1.77)	5.30 (2.58)	5.38 (1.61)	3.68**	.02

\*\*  $p < .01$ . \*\*\*  $p < .001$ .

ing to the rubric offered by Cohen (1988), effect sizes indicated that differences on traumatic stress symptoms were moderate in size, differences on forgiveness were very large, and differences on meaning variables were more modest.

Pairwise comparisons (see Table 3) revealed that traumatic stress symptoms in African and Middle Eastern participants were significantly higher than symptoms in Caucasus and Caribbean participants. No significant differences in symptoms were observed between African and Middle Eastern participants or Caucasus or Caribbean participants. Forgiveness levels were significantly lower among Middle Eastern participants compared with participants of all other regions, significantly higher among African participants compared with all other regions, and did not differ significantly between participants from Caucasus and Caribbean regions. Presence of meaning was significantly lower in the Middle Eastern participants compared to all other regions, significantly higher in Caribbean participants compared with all other regions, and did not differ significantly between participants from African and Caucasus regions. Search for meaning was significantly higher in African participants as compared with Caucasus participants, but no other significant differences were observed.

## Discussion

### Traumatic Stress Symptoms

As hypothesized and in general agreement with previous research (Kumar & Fonagy, 2013), individuals in this study living in regions with ongoing and recent sociocultural trauma appear to experience increased traumatic stress symptoms as compared with natural disaster or

distant sociocultural trauma. These results should be interpreted with caution. Individual differences in the degree of sociocultural trauma exposure and a plethora of confounding factors (e.g., personality, social, demographic factors) could explain these regional differences. Nevertheless, it is interesting to note that Caucasus, African, and the Middle Eastern participants have all experienced violent trauma, yet individuals from the Caucasus region had lower traumatic stress symptoms than those from Africa and the Middle East. Similar to Karenian et al.'s (2011) results, this might suggest that cross-generational traumatizing effects can gradually fade. This seems to be a plausible explanation because Armenian participants make up the entirety of the Caucasus sample and Armenia's sociocultural violent trauma is, after all, over a century old. In short, because of Armenia's distant violence, limited recent conflict, and natural sociocultural traumas (e.g., 1988 earthquake), our Caucasus sample showed traumatic stress symptom levels similar to Caribbean participants and lower than African and Middle Eastern participants.

### Forgiveness

As hypothesized, Middle Eastern participants showed lower forgiveness than participants from any other region. Quite unexpectedly, African participants showed higher levels of forgiveness than participants from any other region. Caucasus and Caribbean participants did not differ from one another. Middle Eastern participants may have had lower levels of forgiveness because ongoing conflict, resultant negative emotions, and safety and security concerns interfere with forgiveness (Hanke & Fischer, 2013; Van Tongeren et al., 2013). There are numerous potential contributors to negative

emotions and safety and security concerns. Infrastructure is poor, poverty and refugees camps are common, unemployment is high, and basic goods are scarce (Dimitry, 2012). Police forces patrol borders, restricting movement, and intermittent small-scale violence continually occurs. Meaningful World's team experienced firsthand an event where Israeli military bombed a camp, forced entry, and abducted a young man. These types of experiences may make it more difficult for Middle Eastern participants to be as forgiving as other regions of the world. Furthermore, these kinds of experiences may drive concerns for safety and political needs and this is a strong predictor of low forgiveness (Hanke & Fischer, 2013).

Because African individuals had experienced recent violent trauma, and few individuals have received apologies or any form of restitution, low levels of forgiveness were expected (Ajdukovic & Biruski, 2008; McLernon, Cairns, Hewstone, & Smith, 2004; Van Tongeren et al., 2013). To the contrary, the very absence of any forgiveness facilitating factors appears to drive surprisingly high forgiveness levels. Counterintuitively, because perpetrators have not directly apologized, perhaps the only way to reach forgiveness may be through unconditionally forgiving—the ability to have positive forgiving attitudes toward an offender in the absence of positive circumstances (e.g., apology; Mukashema & Mullet, 2013). Future research will need to explore if the motivation behind granting unconditional forgiveness is related to one's culture, differences in cultural conceptualizations of forgiveness, or if time since the violent trauma allows for more positive contact, trust-building, and a reduction in negative feelings (Tam et al., 2007; Van Tongeren et al., 2013).

### Meaning in Life

As hypothesized, Middle Easterners in this study had significantly lower presence of meaning in life when compared with individuals from all other regions, and this confirms previous work (Woo et al., 2013). Trauma is disruptive to making sense of life especially when it is continuous (Triplett et al., 2012; Woo & Brown, 2013). The conflict in the Middle East has been ongoing since 1948, which may be why presence of meaning in life is significantly lower

than in other regions. Our Caribbean sample showed the highest levels of presence of meaning, and perhaps this is the result of the natural, instead of violent, trauma and its one-time occurrence (Dimitry, 2012; Dorahy et al., 2009; Woo & Brown, 2013). Alternatively, Caribbean participants might have benefited from strong social support from family, friends, faith communities, and broader local and regional support networks (Burnett & Helm, 2013; Cerdá et al., 2013). Or perhaps one of the other key resilience builders such as hardiness, self-enhancement, repressive coping, or positive emotion, is prominent in Caribbean people (Bonanno, 2008).

Unexpectedly, African, not Middle Eastern, participants showed significantly higher search for meaning in life when compared with Caucasus participants. No other region differed from another on search for meaning in life. Africans showed both high levels of forgiveness and search for meaning and perhaps, as Frankl (1946/1962) suggested, forgiveness stimulates or enables the search for meaning. This may be especially true for recent traumatic events in which attempts to search for meaning may help reestablish presence of meaning in life again thereby facilitating posttraumatic growth. Indeed, forgiveness and meaning in life appear to be important parts of posttraumatic growth (Linley & Joseph, 2011; Schultz, Tallman, & Altmair, 2010). Conversely, searching for meaning for extended periods of time can ultimately increase distress and interfere with posttraumatic growth (Linley & Joseph, 2011; Steger et al., 2006). That Caucasus participants showed the lowest levels of search for meaning may reflect an adaptive coping response to more distant trauma. Interestingly, individuals in the Middle East have the lowest presence of meaning in life, but the search for meaning is not significantly elevated. Apparently lack of meaning is not a sufficient reason to search for it. Continuing conflict in the Middle East may also hinder search for meaning (Dimitry, 2012; Triplett et al., 2012; Woo et al., 2013). Future research should look at how time since an event, ongoing conflict, and type of sociocultural trauma can impact meaning in life.

## Limitations

As with all international trauma research of this type, the present study has some limitations. First, a quasi-experimental design was used that precludes causal conclusions. Second, the present study relies on self-reports and convenience samples. Although sociodemographic variables were controlled and accounted for little variation in analyses, differences across regions could still be explained by unmeasured variables (e.g., personality, economic development, cultural factors). Likewise, larger, probability samples from each country would allow for country-specific comparisons to be made instead of having to group some countries into regions (i.e., Middle East, Africa). Third, despite considerable evidence of the cross-cultural validity of posttraumatic stress (Hinton & Lewis-Fernández, 2011), there are differences in the definition and expression of posttraumatic stress symptoms across cultures (Hinton & Lewis-Fernández, 2011; Yeomans & Forman, 2009; Young & Breslau, 2016). Fourth, we did not assess individual-level trauma history. Last, although our translation procedures allowed us some degree of confidence in content, semantic, technical, and criterion equivalence, they did not allow us to establish conceptual equivalence (Flaherty et al., 1988). Consequently, some regional differences may be the result of our measures not accurately capturing the construct of interest in each particular cultural context.

## Conclusions

There is considerable diversity in sociocultural traumas. Participants in African and Middle Eastern regions have experienced recent and ongoing violence. African participants in this study showed the greatest intensity of traumatic stress symptoms, and astonishingly, they showed the highest levels of forgiveness. Middle Eastern participants in our sample showed the second greatest trauma symptom intensity and the lowest levels of forgiveness, by far. High levels of trauma due to ongoing intractable conflict going on for over 67 years could be the underlying reasons. African participants might have been offering unconditional forgiveness as the only path to peace and this may have supported meaning-making. Given widespread and ongoing conflict in the Middle East neither for-

giveness nor meaning-making was robust in the present sample. Participants in our sample from the Caucasus and Caribbean regions appeared to fair better in terms of traumatic stress symptoms, forgiveness, and meaning-making and this may have to do with the timing and nature of their respective sociocultural traumas or other protective features of those cultures or strengths of their people. The contours of sociocultural trauma and its unique interplay with cultural forces and values continues to be an important avenue of investigation and the study of traumatic stress, forgiveness, and meaning offer some important insights. These insights may inform victims, counselors, clergy, humanitarian workers, and policymakers. A better understanding of the experience of victims will offer improved approaches to counseling and care, and continued attention to these issues will bring greater relief to those who most need it.

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