

# Cognitive and social consequences of participation in social rites: Collective coping, social support, and post-traumatic growth in the victims of Guatemala genocide

ANNA GASPARRE, SERENA BOSCO AND GUGLIELMO BELLELLI

University of Bari, Italy



## Abstract

*The collective emotion experienced by those who lived the same experience or meet in a rite to celebrate and remember it, produces effects on both the individual and the community. Our study explored the psychosocial effects, particularly those related to post-traumatic growth, that participating in different rituals had on the reactions of the victims of Guatemala Genocide; it also aimed at investigating the differentiated effects of participation in demonstrations on individual and interpersonal coping reactions. Fifty nine genocide survivors were enrolled from different Guatemala areas and administered measures of: participation in religious and commemoration rituals and in human rights movement, social sharing, intensity of basic emotions, impact of the event, coping, perceived benefits of sharing, and post-traumatic growth. Results revealed that participation in rituals was associated with: higher social support and sharing regarding traumatic events, coping through social support, altruistic behaviour, communal coping or engagement in political action and human rights social movements, whereas, at the same time, with less avoidant thoughts and reactions related to the traumatic event, supporting Durkheim's contention. Participation in rituals was also associated with post-traumatic growth, confirming that rituals reinforce positive beliefs about oneself, others and society. Finally, mediation analysis suggested that the effects of participating on post-traumatic growth and socio-emotional support were mediated by communal coping or engagement in social movements. .*

*Keywords:* Genocide, rituals, post traumatic growth, coping.

## Consecuencias cognitivas y sociales de la participación en ritos sociales: afrontamiento colectivo, apoyo social y crecimiento post-traumático en las víctimas del genocidio de Guatemala

### Resumen

*La emoción colectiva vivenciada por las personas que viven la misma experiencia o que se reúnen para celebrar y recordar esa experiencia produce efectos en la comunidad y el individuo. Nuestro estudio explora los efectos psicosociales, particularmente de crecimiento post-traumático, que la participación en diferentes rituales tiene en las víctimas del genocidio de Guatemala; este estudio también se orienta a investigar los efectos diferenciales de la participación en manifestaciones en las reacciones de afrontamiento persona e interpersonal. 59 sobrevivientes del genocidio fueron reclutadas en diferentes áreas de Guatemala y respondieron a medidas de: participación en rituales de conmemoración y religiosos y en movimientos por los derechos humanos, frecuencia de compartir sobre las emociones, intensidad de las emociones básicas, impacto del hecho, afrontamiento, beneficios del compartir emocional y crecimiento post-traumático. Los resultados revelan que la participación en rituales se asocia con: mayor apoyo social y hablar o compartir sobre los hechos traumáticos, afrontamiento mediante el apoyo social, conductas altruistas, afrontamiento comunitario o compromiso en acciones políticas y movimiento en defensa de los derechos humanos, así como con menor pensamientos y reacciones de evitación vinculadas al trauma, confirmando las ideas de Durkheim sobre los efectos psicosociales positivos de los rituales. La participación en los rituales se asoció también con el crecimiento post-traumático, confirmando que los rituales refuerzan las creencias positivas sobre el yo, los otros y la sociedad. Finalmente, análisis mediacionales sugieren que los efectos de la participación en los rituales sobre el crecimiento post-traumático y el apoyo socio-emocional es mediado o explicado por la implicación en movimientos sociales o afrontamiento comunitario.*

*Palabras clave:* Genocidio, rituales, crecimiento post traumático, afrontamiento.

*Author's Address:* Anna Gasparre (University of Bari, Department of Psychology, Piazza Umberto I, n. 1 - Palazzo Ateneo, 70121, Bari). +395714213, +390805714886. E-mail: a.gasparre@psico.uniba.it

Guatemala has survived four decades (1960s-1996) of internal armed conflict and massive political repression, the structural causes of which are rooted in extreme inequality, State-organized policies of exclusion, the accumulation of property in the hands of a few, and marginalization of the majority (Taracena Arriola, 2004). Guerrilla forces formed in Guatemala in the 1960s after the revolt of a group of young military officers, a rebellion provoked at least in part by a CIA-supported overthrow of Guatemala's democratic government. Nearly 12,000 persons were assassinated between 1966 and 1970. Altogether, between 100,000 and 200,000 people (women, children, and the elderly, the majority of whom were civilians) were violently killed during the nearly 40 years of conflict, and approximately 83% of them were Maya. More than half of those killed were assassinated in group massacres aimed at destroying community (CEH, 1999).

Specifically, during the 1970s and 1980s, the Guatemalan army developed a "scorched earth" policy and burned to the ground over 400 villages of the Highland indigenous population. Many of those who participated in those massacres had been forced into military service. During that time, the authority of the local leadership, including mayors, local community development groups, and civil authorities, was subordinated to that of the military commissioners and the local paramilitary forces (PAC). Consequences of this State-sponsored violence included the displacement of hundreds of thousands of peasants and the militarization of the countryside (ODHAG, 1998). According to the Commission for Historical Clarification (CEH, 1999), one million persons—approximately 25% of the population of the Guatemalan Highlands—were displaced between 1981 and 1983. Fifty thousand of the more than 400,000 persons who sought refuge in México, Belize, and the United States subsequently spent 15 to 20 years living in refugee camps (Fariás, 1994). Despite the signing of the Peace Agreements on December 29, 1996, the publication of a Catholic Church-sponsored investigation of human rights violations, *Guatemala: Never Again* (ODHAG, 1998), and an official report of the United Nations-sponsored Commission for Historical Clarification, *Guatemala: Memory of Silence* (CEH, 1999), it has been challenging to institutionalize reforms and to implement the agreements. One of the most significant dimensions of this effort continues to be ongoing fear and the struggle against impunity.

Studies documenting human rights violations in Guatemala, such as *Guatemala: Never Again* (ODHAG, 1998) and *Guatemala: Memory of Silence* (CEH, 1999), confirm the extent of the violence in Guatemala during that period, as well as the continuing climate of fear that persists in the country years after the official cessation of the conflict. *Guatemala: Never Again* was based on more than 5,000 testimonies of victims and witnesses of political violence and analyzed the collective impact of these years of horror on the emotional climate and the perception of cohesion in the community.

This article presents a community study that sought to understand better these responses with a particular focus on participation in rituals and other forms of communal coping, and their effects on Maya survivors and communities. Durkheim's (1912) classic theory of social rituals (Martín Beristain, Páez, & González, 2000; Páez, Rimé, & Basabe, 2005) proposes that, in social rituals (commemorations, celebrations, religious ceremonies, demonstrations, and the like), individuals' consciousness echoes one another in a reciprocal stimulation of emotion. This contributes to the development of a state of emotional communion. Participants' salience of their self is lowered, their collective identity is enhanced, and they experience unity and similarity. Beliefs and representations shared in the community are set at the foreground of their preoccupations, consolidating by this way people's faith in their cultural beliefs and their confidence in collective action. Thus, Durkheim considered social rituals to be particularly effective in enhancing participants' feelings of group belonging and social integration (Rimé, 2007). From a functionalist psychological perspective (Freud, 1921,

Schachter, 1959; Wheeler and Reis, 1991), social support and rituals help to reduce uncertainty, to explain and control, as well as to alleviate anxiety and risk perception (Howard, 1989; Malinowski, 1948). However, Pargament's (1997) review found that participating in religious rituals was unrelated in five, or positively related in six out of twelve correlational studies to negative affect – only in one study was participation negatively related to anxiety. In two longitudinal studies, participation in ceremonies of leave taking was unrelated to grief and psychological symptoms 12 months later (Weiss & Richard, 1997), and 24 months later (Lasker et al., 1989, quoted in Pargament, 1997). These results prove that participation in rituals increases or, at least, does not decrease negative affect.

Amongst the Mayan population in Guatemala participating in mourning rituals whilst coping with the collective violence enhanced current sadness, and did not protect against negative emotions and grief (Martín Beristain et al., 2000). Congruent with Durkheim's perspective, this study shows that Mayan participating in funerary rituals has positive psychosocial effects: participants report lower disengagement, higher altruistic coping and reconstruction of social support. Participating in demonstrations is associated with the reinforcement of positive beliefs about the social world or social representations (Rimé, 2005), improving collective and personal self-esteem and efficacy, as well as fulfilling needs of control and enhancement. Rituals are fundamental catalysers of commitment with values and beliefs: participants in demonstrations and in social movements report higher stability and agreement with ideological beliefs even after 20 years (Páez et al. 2005). A traumatic event like the Guatemala genocide calls into question the cultural world view and basic beliefs about the benevolence, meaningfulness and controllability of the social world, which has to be restored, largely through symbolic forms of coping such as ceremonies (Janoff-Bulman, 1992). Traumatized persons, particularly suffering from strong stress reactions, report more negative beliefs about the self and the social world (Foa et al., 1999). Traumatized people also describe positive life changes after a traumatic event: growth or improvement as a person, interpersonal benefits (receiving social support and reinforcing empathy and pro-social behaviour), and social benefits (such as reinforcing the cohesion of the community). Stressing the positive aspects of the response to traumatic events predicts a better adjustment to them in the long term (Nolen-Hoeksema & Davis, 2005; Tennen & Affleck, 2005). Initial emotional upset and social support are preconditions of post-traumatic growth – people whose social beliefs have not been shattered, or have not been distressed by events are not motivated towards constructing and perceiving positive changes, and community support mobilisation is necessary to reconstruct a benevolent view of the social world (Armeli, Gunthert & Cohen, 2001; Janoff-Bulman, 2004).

The main objective of the present work is to explore the psychosocial effects, particularly with respect to post-traumatic growth, that participating in different types of rituals had on the reactions of people directly affected by the events of Guatemala Genocide. Second, this study aims at differentiating between the effects of the participation in demonstrations as a communal form of coping and more individual and interpersonal coping reactions such as seeking social support and altruistic behaviour.

## Method

### *Participants*

The sample consisted of fifty-nine persons (41 women) ranging in age from 29 to 90 ( $M = 49.0$ ;  $SD = 15.4$ ). Of these, 63% were in full-time employment, 29% were housewives, and 3.4% were retired. Data referring to culture identification revealed that in 93% of the cases people declared to identify themselves mostly with *Maya*

culture ( $M = 3.72$ ,  $SD = 0.6$ ), while the identification with *half-caste* ( $M = 2.0$ ;  $SD = 1.2$ ) and with *ladino* culture ( $M = 2.0$ ;  $SD = 1.2$ ) was lower; that is, it reached 36% and 29 %, respectively.

### Procedure

All participants were directly affected by the Guatemalan Genocide and were recruited from different regions of Guatemala either individually or through various local humanitarian associations, such as ODHAG, ECAP and FAMDEGUA. First, the researcher contacted them to ask if they were willing to participate. During this first stage all participants were informed of the study procedures. Participants were told that we were conducting “a research project to investigate the emotions experienced by people who survived the genocide in Guatemala over 40 years”. The study was not presented as a treatment and people were also told that participation was for research purposes only. When participants declared they were ready, they were given a questionnaire. The interviewer was a psychology undergraduate student trained in interviewing procedure who was instructed to read the questions and introduce the various options of answer. This form was favored over individual administration, after having ascertained the low socio-educational status of participants. They had to identify just one of the sixteen negative events related to the genocide they had experienced or witnessed. The interview involved measures of social sharing, emotional and cognitive arousal related to events, the Differential Emotions Scale (DES), the Impact of Event Scale (IES), Coping (Brief Cope) and the Post-Traumatic Growth Inventory (PTGI). The open interview took about one hour, and took place in a reserved space. Thanks to the collaboration of local humanitarian associations, it has been possible to meet two Maya communities, the *Lacama II* and *Santa Lucía*. Within these communities, part of the persons interviewed spoke a Maya idiom (dissimilar to official Spanish), and so the questions and related answers were translated. The data were collected in 2008, 24 years after the climax of collective violence in Guatemala.

### Measures

*Demographic Measures.* Participants were asked to answer a number of socio-demographic questions (sex, age, etc.). They were then invited to select one from a list of sixteen negative events related to the genocide the person had experienced or witnessed (e.g. Harassment, Mass murdered people, Forced disappearances). Questions regarding the ethnic identification followed.

*Culture Identification Measure.* This measure consists of six items. Participants were asked to assess, on a five-point scale (0, *not at all* / 4, *extremely*), the extent to which they identified themselves with any of six types of cultures: Maya, Half-Caste, Ladinos, South-American, North-American, and European.

*Emotional Upset.* A measure of the intensity of emotional upset felt at the time of the event, assessed on an eleven-point scale (0, *not at all upset* / 10, *extremely upset*).

*Frequency of social sharing of emotions.* Participants rated the frequency of sharing since the event happened on a five-point scale (0 = *never*, 1 = *once*, 2 = *two-three times*, 3 = *four-five times*, 4 = *more than six times*) and the number of partners of sharing on a seven-point scale (0 = *none*, 1 = *one partner*, 2 = *two partners*, 3 = *three-four partners*, 4 = *five-six partners*, 5 = *more than six partners*). The two social-sharing items showed a high correlation ( $r_{(59)} = .68$ ).

*Izard's Differential Emotions Scale – DES – (Izard, 1997).* The DES assesses the intensity with which the subject experiences his/her emotional responses to a stimulus. Participants rated, along seven-point scales (0, *not at all* / 6, *completely*), how intensely

the recall of the genocide event evoked the following primary emotions: Attention, Happiness, Surprise, Sadness, Anger, Disgust, Fear, Shame, Guilt, Joyfulness, Anxiety, and Resentment. A factor analysis yielded three factors, the first combining the negative emotions, the second combining shame and guilt, and the third combining attention, joyfulness, and happiness. The first factor of the scale reached a Cronbach's  $\alpha$  of .91. We used the total of this factor as an indicator of the intensity of emotional arousal. The second factor obtained a Cronbach's  $\alpha$  of .88, and the third factor had a Cronbach's  $\alpha$  of .41. The emotions experienced most intensely were: sadness, anger, fear, attention, surprise, and resentment – all with means over 2.

*Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979).* We used the IES to assess a cognitive activation of the stressful event. It is a 15-item index of the impact of the event comprising two scales: Avoidance (e.g., "I avoided letting myself get upset when I thought about it or was reminded of it", etc.) and Intrusions (e.g., "I had trouble falling asleep or staying asleep because of pictures or thoughts about it that came into my mind", etc.). Participants were asked to assess, on a four-point scale (0, *never* / 3, *very often*), how frequently each response had been experienced after the event. Intrusion and Avoidance scores are the means of the relevant item subsets. The scales had an adequate reliability: Cronbach's  $\alpha$  for Intrusions was .90 and Cronbach's  $\alpha$  for Avoidance was .86.

*Dimensions of Coping by means of searching social support.* The Way of Coping scale (Folkman & Lazarus, 1985; Penley, Tomaka & Wiebe, 2002) was adapted to Guatemalan experience by using 19 items measuring different coping styles: a) seeking *social support*, *emotional discharge* and *positive reappraisal* (e.g., "Seeking emotional support, accepted sympathy and understanding from someone", "Express and discharge emotions", "Changed or grew as a person in a good way"), b) *avoidance* and *distancing coping* (e.g., "withdrawal from the situation" "coping by drinking alcohol"), and c) *coping by means of altruistic behaviour* ( $\alpha = .79$ ).

To assess *communal coping* we asked the respondents to answer four items as to the degree in which they participated in *demonstrations* and *social movements for human rights*, and engaged in *political* and *military activity* (e.g., the Army and Civil Patrol; PAC) ( $\alpha = .63$ ). Responses were given on a four-point Likert-type response scale, ranging from *never* (0), to *always* (3). One potential problem was the overlapping between this index and questions on participation in rituals. The overlapping was only partial because here we asked about participation in demonstrations and in the items referring to rituals we asked about participation in commemorations. In any case, to avoid semantic overlapping between communal coping and secular rituals we also performed analysis excluding *demonstrations* of the communal coping index ( $\alpha = .65$ ). Another problematic issue was the item related to military activity, which implies usually participating in the so called PAC or anti guerrilla communal patrols monitored by the army. Some members of these patrols were involved in crimes of war and we wonder if participation in PAC really is an index of participation in social movements (at least in pro human rights movements). Besides, participation in these patrols was mandatory and probably did not imply a voluntary involvement in human rights violations. Empirically, military activity highly correlates with political activity ( $r_{(59)} = .68$ ) and social movements for human rights ( $r_{(59)} = .25$ ) and does not correlate with demonstrations. Deleting military activity the alpha decreases from .63 to .46, so we also considered military activity in performing the communal coping index excluding demonstrations.

*Post-traumatic Growth Inventory (PTG)* (Tedeschi & Calhoun, 1996). PTGI is an instrument for assessing positive outcomes reported by persons who have experienced a traumatic event. This 21-item scale includes factors of *New Possibilities*, *Relating to Others*, *Personal Strength*, *Spiritual Change*, and *Appreciation of Life*. The PTGI appears to have utility in determining how successful individuals, coping with the aftermath of

trauma, are in reconstructing or strengthening their perceptions of self, others, and the meaning of events. Participants were asked to assess the extent to which they had perceived each change after the event on a scale 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*. Cronbach' alpha has been reported to range from .89 to .69.

*Social Support.* The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet & Farley, 1988) was used. The MSPSS is a 12-item index of perceived support. It comprised three scales assessing the perception of support from "family", "friends" and the "others significant". The content of items refers to the global perceived support and emotional perceived support. Participants were asked to assess, on a six-point scale (0, *completely disagree* / 5, *completely agree*), the extent to which they agreed with each statement of the scale. Cronbach' alpha has been reported to range from .89 to .93.

*Participation in rituals.* Participants were asked by means of three items to assess on a four-point scale (0, never to 3, *often*) how often they participated in commemorations (e.g., celebrations designed to honour the memory of the event), as well as in truth and reparation commissions (Rehmi project), and how often they participated in funerary and commemorative religious rituals.

## Results

### *Descriptive results*

All the participants had been exposed to extreme collective violence. The events most frequently selected by them were "armed break-in" (11 %), "the death of the family members (parents, brothers etc.)" (10%), "forced disappearances" (10%), "the depredation and destruction of the home" (9%), "people struck to death" (9%), "homicides with machetes" (8%), "people killed in mass (massacres in the churches)" (8%), and "massive and indiscriminate attacks" (7%), while the other events were selected with a frequency lower than 3.

Descriptive analysis conducted on post-traumatic growth measure revealed that the PTG domain in which victims reported growth to the highest extent was Spiritual Change ( $M = 4.3$ ;  $SD = 1.10$ ), followed by Appreciation of Life Change ( $M = 4.0$ ;  $SD = .89$ ), Personal Strength ( $M = 3.9$ ;  $SD = .93$ ), Relating to Others ( $M = 3.9$ ;  $SD = .86$ ), and New Possibilities ( $M = 3.7$ ;  $SD = 1.0$ ). Paired sample t-tests indicated that Spiritual Change and Appreciation of Life Change were significantly higher than the other domains of PTG [ $3.5 < t_{(38)} < 4.1$ ,  $p < .001$ ;  $2.1 < t_{(38)} < 3.5$ ;  $0.05 < p < .001$ ]. No significant differences emerged among the PTG domains of Personal Strength, Relating to Others, and New Possibilities ( $p > .05$ ).

### *Emotional upsetting and social sharing*

The mean intensity of experienced emotion when the event happened was quite high ( $M = 7.1$ ;  $SD = 2.1$ ). The emotions most intensely experienced were resentment, sadness, anger, fear, surprise, anxiety – all with means over 2. Descriptive analysis conducted on social sharing measures revealed that the emotional episode was shared more than five times in 95% of cases ( $M = 3.71$ ;  $SD = 1.10$ ) and with more than 4 people in 90% of cases ( $M = 4.40$ ;  $SD = 1.21$ ). Respondents declared to have participated in rites to a high extent. The mean ratings of participation in secular commemorations, in truth and reparation commissions (Rehmi project) and in funerary and commemorative religious rituals were respectively 2.25 ( $SD = .90$ ), 2.12 ( $SD = 1.1$ ) and 2.30 ( $SD = 1.0$ ). All of these means were similar among themselves and significantly higher than the intermediate score of 1.50, and all the paired  $t$  values (58) are above 4,  $0.05 < p < .001$ .

*Correlation of Maya identification with the IES, DES, MSPSS, PTGI, Coping strategies, and participation in rituals*

Maya identification was associated with positive emotion of DES ( $r_{(59)} = .37, p < .001$ ) and participation in rituals ( $r_{(59)} = .22, p < .05$ ). No significant associations were found with the scores in the other scales ( $p > .05$ ).

*Correlation of participation in rituals with the IES, DES, MSPSS, PTGI, and Coping strategies*

Rites were associated with higher social support, higher social sharing about the past traumatic event, coping through social support, altruistic behaviour, and communal coping or engagement in political action and human rights social movements, as well as with less avoidant thoughts and reactions related to the traumatic event, confirming Durkheim's contention. Moreover, participation in rituals was associated with post-traumatic growth, confirming that rituals reinforce positive beliefs about self, others, and the society (see Table I).

TABLE I  
*Correlations of participation in rituals with the IES, DES, MSPSS, PTGI, and Coping strategies*

Variables	Participation in Rituals			
	Truth and reparation commissions	Secular commemorations	Funerary Rituals	Index of Participation
Avoidance - IES	-.24*	-.20	-.14	-.23*
Intrusion - IES	.16	.28*	.30*	.29*
Negative Emotion - DES	.19	-.02	.19	.13
Positive Emotion - DES	-.08	-.19	.02	-.10
Social Support - MSPSS	.26*	.26*	.26*	.30*
PTGI	.38**	.22*	.39**	.37**
Altruistic Coping	.26*	.13	.21*	.22*
Avoidant Coping	-.16	-.19	.08	-.11
Communal Coping with demonstration	.39**	.37**	.41**	.45**
Communal Coping excluding demonstration	.36**	.30*	.27*	.36**
Social Support Coping	.26*	.19	.31**	.29*
Frequency of Sharing	.32**	.22*	.41**	.36**

\*  $p < .05$ ; \*\*  $p < .01$  (one-tailed)

*Participation in rituals and post-traumatic growth*

The average level of participation in rituals was found to be associated with all domains of PTG, except for Spiritual Change ( $p > .05$ ). The highest correlation was with Personal Strength ( $r_{(59)} = .44, p < .00$ ), followed by Appreciation of Life Change ( $r_{(59)} = .35, p < .01$ ), New Possibilities ( $r_{(59)} = .44, p < .01$ ), and Relating to Others ( $r_{(59)} = .44, p < .05$ ).

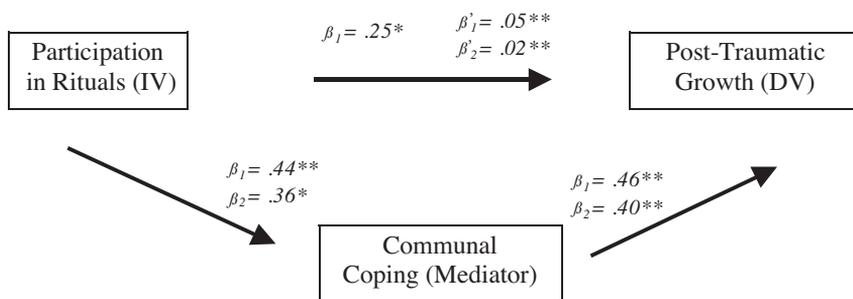
*Communal Coping as a Mediating Variable of the effect of Participation in rituals on Post-Traumatic Growth*

In order to test the hypothesis that the effect of participation in rituals on post-traumatic growth was mediated by communal coping (Hypothesis 1), we followed the guidelines for mediation analysis suggested by Baron and Kenny (1986). Analysis was

performed for the index of communal coping with and without the demonstration item. For the presence of a significant mediating pathway, several conditions must be met. There must be significant relations between: (a) the independent variable (participation in rituals) and the dependent variable (post-traumatic growth); (b) the independent variable (participation in rituals) and the potential mediators (communal coping); and (c) the potential mediators and the dependent variables. Support for our hypothesis would be found if the effect of participation in rituals (the independent variable) on post-traumatic growth (the dependent variable) was to disappear or be significantly reduced by introducing the communal coping variable (see Baron & Kenny, 1986). To further evaluate the mediation effect of the communal coping index, a Sobel test was performed (Preacher & Hayes, 2004). Regression analyses including the demonstration item of the communal coping index revealed that post-traumatic growth was predicted by participation in rituals [ $R^2 = .05$ ,  $F_{(1, 58)} = 4.1$ ;  $p < 0.05$ ,  $\beta = 0.25$ ,  $t = 2.0$ ,  $p < .05$ ] (Figure 1). Participation in rituals also explained the communal coping measure [ $R^2 = .18$ ,  $F_{(1, 58)} = 14.2$ ,  $p < .01$ ,  $\beta = .44$ ,  $t = 3.7$ ,  $p < .01$ ]. And communal coping predicted post-traumatic growth [ $R^2 = .21$ ,  $F_{(2, 58)} = 8.8$ ,  $p < .01$ ,  $\beta = .46$ ,  $t = 3.58$ ,  $p < .01$ ]. When the effect of communal coping on the outcome was controlled, the effect of participation in rituals was not significant [ $\beta = .05$ ,  $t = 0.38$ ,  $p > .05$ ]. A Sobel test ( $Z = 1.81$ ,  $p < .05$ ) confirmed that the effect of participation in rituals on post-traumatic growth was mediated by communal coping. Analysis excluding the demonstration item of the communal coping index, to avoid overlapping between variables, again shows that communal coping was predicted by participation in rituals [ $R^2 = .12$ ,  $F_{(1, 58)} = 8.5$ ,  $p < .01$ ,  $\beta = .36$ ,  $t = 2.9$ ,  $p < .05$ ], and communal coping predicted post-traumatic growth [ $R^2 = .25$ ,  $F_{(2, 58)} = 10.8$ ,  $p < .00$ ,  $\beta = .40$ ,  $t = 3.29$ ,  $p < .05$ ]. When the effect of communal coping on the outcome was controlled, the effect of participation in rituals was not significant [ $\beta = .22$ ,  $t = 0.18$ ,  $p > .05$ ]. A Sobel test ( $Z = 2.73$ ,  $p < .00$ ) confirmed that the effect of participation in rituals on post-traumatic growth was mediated by communal coping.

FIGURE 1

Testing Hypothesis 1: Communal coping mediates the effect of participation in rituals on post-traumatic growth



**Note**

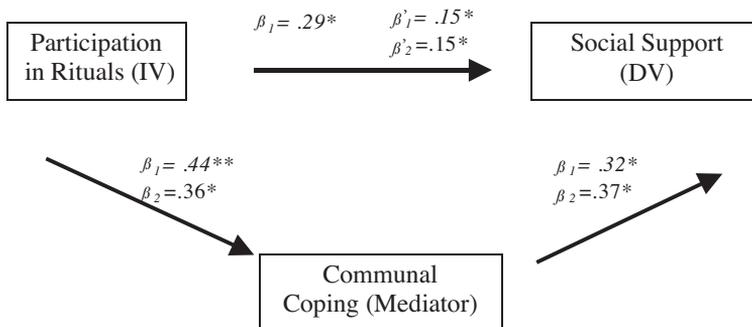
$\beta_1$  Regression coefficient of analysis including the demonstration item of the communal coping index  
 $\beta_2$  Regression coefficient of analysis excluding demonstrations of the communal coping index

*Communal coping as a Mediating Variable of the effect of participation in rituals on Socio-emotional support*

We next tested whether changes in communal coping strategy moderated or mediated the effects of participation on socio-emotional support (Hypothesis 2). Again, the guidelines for mediation analysis suggested by Baron and Kenny (1986) are met.

Regression analyses revealed that socio-emotional support was predicted by participation in rituals [ $R^2 = .71$ ,  $F_{(1, 58)} = 5.44$ ;  $p < .05$ ,  $\beta = .29$ ,  $t = 2.33$ ,  $p < .05$ ] (Figure 2). Participation in rituals also explained the communal coping measure (Figure 2, path a). [ $R^2 = .18$ ,  $F_{(1, 58)} = 14.22$ ;  $p < .01$ ,  $\beta = .44$ ,  $t = 3.77$ ;  $p > .01$ ]. Communal coping predicted socio-emotional support [ $R^2 = .14$ ,  $F_{(2, 58)} = 5.69$ ,  $p < .05$ ], [ $\beta = .32$ ,  $t = 2.34$ ,  $p < .05$ ]. Even in this case, when the effect of communal coping on the outcome was controlled, the effect of the participation in rituals was not significant [ $\beta = .15$ ,  $t = 1.11$ ,  $p > .05$ ]. A Sobel test ( $Z = 2.0$ ,  $p < .05$ ) confirmed that the effect of participation on socio-emotional support was mediated by communal coping. Analysis excluding the item on demonstrations of the communal coping index, to avoid overlapping between variables, shows that participation in rituals again explained the communal coping measure [ $R^2 = .12$ ,  $F_{(1, 58)} = 8.5$ ,  $p < .01$ ,  $\beta = .36$ ,  $t = 2.9$ ,  $p < .01$ ]. Communal coping predicted socio-emotional support [ $R^2 = .18$ ,  $F_{(2, 58)} = 7.5$ ,  $p < .05$ ,  $\beta = .37$ ,  $t = 2.97$ ,  $p < .05$ ]. Even in this case, when the effect of communal coping on the outcome was controlled, the effect of participation in rituals was not significant [ $\beta = .15$ ,  $t = 1.24$ ,  $p > 0.05$ ]. A Sobel test ( $Z = 2.0$ ,  $p < .05$ ) confirmed that the effect of participation on socio-emotional support was mediated by communal coping.

FIGURE 2  
Testing Hypothesis 2: Communal coping mediates the effect of participation in rituals on social support



**Note**

$\beta_1$  Regression coefficient of analysis with the demonstrations item of the communal coping index  
 $\beta_2$  Regression coefficient of analysis excluding demonstrations of the communal coping index

## General Discussion

First of all, our survey describes an important level of participation in rituals – half of the respondents reported participation in the Rehmi project. This could be an over-reporting of social desirable responses, even if the current Guatemalan reality is not so friendly with this type of social activities. Another possibility is that we contacted a sample of particularly active persons; in fact, we contacted people by means of social organizations. This explanation is most likely to be the actual one. However, even if our sample is a “self-selected” sample, we found some variability and, what is more important, that the level of participation in rituals was related to a lot of congruent positive outcomes.

Our results support Durkheim’s position: commemoration rites about past traumatic events, funerary rituals, and participation in transitional justice rites, like the Rehmi project, elicit social cohesion and solidarity. Rites were associated with higher social support and sharing about traumatic events, coping through social support, altruistic behaviour, communal coping or engagement in political action and human

rights social movements, and, on the other hand, with less avoidant thoughts and reactions related to the traumatic event, supporting Durkheim's contention. Moreover, participation in rituals was associated with post-traumatic growth, confirming that rituals reinforce positive beliefs about self, others, and the society. Ninety five per cent of participants reported some level of post-traumatic change: a higher level of spiritual growth and appreciation of life (over the theoretical mean of the scale), and to a lower extent discovering personal strength, improving interpersonal relations, and least frequently new possibilities in life.

Collective commemorations, mourning rituals and participation in rituals of transitional justice have a social function: activities of collective remembering insert individuals in the entire society, reaffirming the continuity of society, reinforcing social support and positive social representations. These functions of rituals are more salient in a national context dominated by impunity such as in Guatemala, where justice and punishment of perpetrators and reparation do not exist.

For Durkheim, collective commemorations and mourning rituals reinforce emotional reactions of grief, sadness, and anger. Rituals put pressure on people to place their emotional behaviour and feelings in conjunction with bereaved relatives. By means of ritual practices intense emotional reaction is induced in a structured manner. Sharing the same emotional climate is associated with a positive statement of their commitment, not only to the suffering group members, but also with social values. For Durkheim, the amplification of negative emotions by means of rituals is an important step in order to strengthen social cohesion and mobilization (Durkheim 1912/1963; Kemper, 1991). These effects of rituals on in-group cohesion and reframing of past suffering are particularly important in a context unfriendly towards victims of collective violence because of the scarce official acknowledgement of human rights violation. Our results did not support the Durkheimian position with respect to the intensification of emotions: funerary rituals were neither associated to negative emotional reactions nor to positive emotions. However, rituals reinforced intrusive thought or reminiscences of trauma, which are usually related to anxiety.

Regarding types of rituals, future-oriented ones, such as participation in the Rehmi project, which allow people to express their suffering and ask for reparation, at least at a symbolic level, show stronger association with positive outcomes (7 associations with positive outcomes). On the other hand, secular commemorations, past-oriented rituals, show less association (only one was related with a negative outcome - intrusive thoughts). Moreover, both types of commemorations were associated with rumination, while the participation in the Rehmi project was not associated with it and participants in this project reported the strongest negative association with avoidant reactions. Probably, people collaborating with this human rights project are more empowered people, using less avoidance as a coping reaction. However, even if this interpretation is correct, the general results suggest that the oriented rituals approach, aimed at the future, seems more adaptive.

Mediational analysis suggests that participation in commemorations and transitional justice rituals reinforces social integration and positive social representations, mainly increasing or reinforcing more concrete communal forms of coping. These results come from the strong identification of our sample with the collectivist Maya culture, in which speaking and helping each other are the fundament of the community. Indeed, the more participants declare to identify themselves with Maya culture, the more they experience positive emotions and participate in rituals.

Of course, it is also possible that the engagement in social movements explains higher participation in rituals, higher agreement with positive beliefs (i.e., post-traumatic growth), and higher social support. In other words, engagement in sociopolitical movements implies participation in demonstrations and rituals, as well as sharing positive social representations. Mediational analysis suggests that

participation in social movements is more important than in specific rituals or that participation in rituals is embedded in social movements. The study confirms, in agreement with the literature (Martín Berinstain et al., 2000; Pargament, 1997; Weiss and Richards, 1997), that participation in rituals leads to a strengthening of perceived social support and to post-traumatic growth. This suggests that collective positive emotions, such as the solidarity within rites, foster the reconstruction of interpersonal and social resources in a manner similar to personal positive emotions (Fredrickson Tugade, Waugh, & Larkin, 2003).

The adoption of collective coping strategies was crucial to encourage a greater perception of social support and determination of post-traumatic growth. Within the collectivist culture of Guatemalan Maya, community problems can be faced adopting common strategies of coping focused on improving the condition of the community itself. It is this collectivist spirit which accounts for the improvements that are produced by the participation of genocide victims in rituals. In situations of sharing of emotions and experiences, victims can elaborate their own painful history, feel supported by the community and enhanced as persons. These results lead us to conclude that, through rituals and forms of collective sharing of emotions, the emotional climate of some communities is really improving, and they also lead us to hope that in some regions of Guatemala they are finally coming to build the foundations for a revival of the society from the ruins of its internal war. However, in order to reconstruct the Guatemalan society, probably large scale, more ambitious and explicit forms of acknowledgement of past misdeeds and forms of reparation are necessary. Currently, these initiatives are limited and wait to be instantiated.

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