Psychometric Properties of the Posttraumatic Growth Inventory for Children in Chilean Population Affected by the Earthquake of 2010

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The present study examines the psychometric properties of the Posttraumatic Growth Inventory for Children in its brief version (PTGI-C-R: Kilmer et al., 2009), an inventory that measured positive personal changes that occur after experiencing a traumatic event. The PTGI-C-R was applied to 393 children from 10 to 15 years of age affected by the earthquake and tsunami in Chile February 27, 2010. The scale showed good internal consistency and discriminant validity in relation to an inventory of posttraumatic stress symptoms. It was also able to discriminate between children who had high exposure to the earthquake and children with mild or no exposure. Confirmatory factor analysis showed adequate goodness of fit for a 2-factor structure: general change and spiritual change. The PTGI-C-R also showed factorial invariance in groups of high and low exposure. These positive psychometric qualities indicate the utility of the instrument for use in children and adolescents exposed to natural disasters.

The posttraumatic growth (PTG) is defined as the positive changes experienced by an individual as a result of the process of the struggle undertaken from the experience of a traumatic event (Calhoun & Tedeschi, 1999). According to Tedeschi and Calhoun (1996), PTG is composed of three dimensions: (a) changes in oneself, which refers to an increase in confidence in one's own abilities to deal with future adversities, (b) changes in interpersonal relations, which refers to a strengthening in relations with family and friends, and (c) changes in the philosophy of life and spirituality that refers to an assessment of one's own existence and life.

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Research on PTG has focused mainly on adults, finding important results in understanding this process (García, Jaramillo, Martínez, Valenzuela, & Cova, 2014; García, Reyes, & Cova, 2014; Gasparre, Bosco, & Bellelli, 2010; Helgeson, Reynolds, & Tomich, 2006; Prati & Pietrantoni, 2009). While there are few studies in children (Kilmer, 2006), the existence of PTG has been reported in children and adolescents exposed to potentially traumatic events (Meyerson, Grant, Carter, & Kilmer, 2011), allowing us to postulate that, in children, PTG may have something to do with coping and adaptation to adversity (Cryder, Kilmer, Tedeschi, & Calhoun, 2006), as well as rumination, both as deliberate and intrusive (Kilmer et al., 2009) and sources of support from family (Kimhi, Eshel, Zysberg, & Hantman, 2009) or teachers or peers (Yu et al., 2010).

One of the reasons for the lesser amount of studies on PTG in children may be because of the debate over whether or not it is a suitable construct for study at this stage, because it suggests that children do not have enough cognitive development to allow for modification of mental schemas after surviving a trauma (Tedeschi & Calhoun, 2004); however, to date it has accumulated enough evidence that children can also develop PTG (Meyerson et al., 2011).

The PTG in children has mainly been assessed with the Posttraumatic Growth Inventory for Adults (PTGI) by Tedeschi and Calhoun (1996). Cryder et al. (2006) adapted the PTGI to be applied to children and adolescents. This instrument, which was called PTGI-C, was applied to 46 children and adolescents of both sexes between 6 and 15 years of age who were exposed to