

UNIVERSIDADE DE LISBOA  
FACULDADE DE PSICOLOGIA



**RESILIENCE AND PSYCHOLOGICAL TRAUMA: THE  
CONNECTION WITH FAMILY COHESION AND  
POSTTRAUMATIC GROWTH**

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**MESTRADO INTEGRADO EM PSICOLOGIA**

**(Secção de Psicologia Clínica e da Saúde/Núcleo de Psicologia Clínica Sistémica)**

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**Dissertação orientada pela Professora Doutora Maria Teresa Ribeiro**

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## Resumo

O objectivo desta investigação é analisar aspectos relacionados com resiliência e trauma em indivíduos que experienciaram um evento traumático nos últimos 4 meses e que receberam assistência do Centro de Apoio Psicológico e Intervenção em Crise (CAPIC) do Instituto Nacional de Emergência Médica (INEM). As variáveis escolhidas para este estudo são o nível de resiliência, o nível de crescimento pós-traumático, a coesão familiar, o sexo, a idade e as qualificações académicas.

Foi utilizada metodologia quantitativa (questionários) para recolher informação em relação às variáveis de nível de resiliência, crescimento pós-traumático e informação sociodemográfica. Posteriormente, recorreu-se ao *Statistical Package for Social Sciences software (IBM SPSS Statistics) 21.0 for Windows* para realizar a análise estatística necessária.

Foi utilizada metodologia qualitativa (entrevista) para recolher dados do evento traumático, coesão familiar e de crescimento pós-traumático (na qualidade confirmatória). Posteriormente estes dados foram analisados com recurso ao software *NVIVO (10.0 version for Windows)*.

Qualitativamente, em cada caso, foi possível analisar várias interacções entre variáveis e os seus componentes. Houve concordância na medida de crescimento pós-traumático (entre as metodologias qualitativas e quantitativas). Várias implicações clínicas provenientes desta investigação e da observação qualitativa são apresentadas.

**Palavras-chave:** Crescimento Pós-Traumático, Resiliência, Coesão Familiar, Eventos traumáticos, Variáveis Sociodemográficas

**Abstract**

The purpose of this research is to examine aspects related to resilience and trauma present in individuals that suffered from a traumatic event in the last 4 months and were aided by the Psychological Aid and Crises Intervention Center (Centro de Apoio Psicológico e Intervenção em Crise - CAPIC) from the Medical Emergency National Institute (Instituto Nacional de Emergência Médica - INEM). The variables chosen for this study are the level of resilience, level of posttraumatic growth, family cohesion, gender, age and educational qualifications.

Quantitative methodology (questionnaires) was used to collect data on the variables of level of resilience, posttraumatic growth and socio-demographic information. Later, the *Statistical Package for Social Sciences software (IBM SPSS Statistics) 21.0 for Windows* was used to provide de statistical analysis needed.

Qualitative methodology (interview) was used to collect data on the traumatic event, family cohesion and confirmatory data on the level of posttraumatic growth and later analysed using the software *NVIVO (10.0 version for Windows)*.

Results showed that there was no relation between posttraumatic growth and any other variables. Qualitatively and in each case it was possible to analyse several interactions between variables and their components. There was concordance on the measure of PTG (between qualitative and quantitative methodology). A number of clinical implications originated from the qualitative observation are presented.

**Key-words:** Posttraumatic Growth, Resilience, Family cohesion, Traumatic events, Socio-demographic variables

## **1. Introduction**

### **1.1. Traumatic Events**

In everyone's life cycle there are events that can be potentially traumatic, be it because of the dimension of those events (natural disasters, terrorist attacks) or because of the perceived or actual impact that they have on the victims' lives (Briere & Elliot, 2000). From all the adults exposed to traumatic events, 90% don't experience any kind of psychological disorder and from the remaining 10%, most recover in a time span of 12 to 24 months (Raphael & Newman, 2000). However, this prognostic is strongly influenced by the way people cope with the events they have been exposed to, as well as the interpretations made towards them (e.g. external locus of control vs. internal locus of control, control perception after the incident, risk perception regarding the possibility of the event happening again). It's possible to divide trauma into Type I and Type II. Type I trauma refers to sudden external events and the main symptomatology is the repetition of related themes, a strongly activated state of hyper vigilance and intrusive memories. Type II trauma regards chronic situations that have kept themselves steady in time, like physical or sexual abuse, with symptomatology that includes negation, numbness and episodic amnesia (Raphael & Newman, 2000).

There are various disorders that can emerge due to an individual being exposed to a traumatic event; however, there are two worth mentioning in a more detailed way: Acute Stress Disorder (ASS) and Posttraumatic Stress Disorder (PTSD).

## **1.2. Posttraumatic Stress Disorder and Acute Stress Disorder**

In 1980 the American Psychiatric Association (APA) included in the DSM III: Diagnostic and Statistical Manual of Mental Disorders the Posttraumatic Stress Disorder (PTSD) (Anders, Frazier & Shallcross, 2013). The current criteria for the diagnosis of PTSD can be found in the DSM V: Diagnostic and Statistical Manual of Mental Disorders (DSM - V). Criterion A defines the events to be considered potentially traumatic. Therefore it includes, but is not limited to, exposure to war as a combatant or civilian, threatened or actual physical assault (e.g., physical attack, robbery, mugging, childhood physical abuse), threatened or actual sexual violence (e.g., forced sexual penetration, alcohol/drug-facilitated sexual penetration, abusive sexual contact, noncontact sexual abuse, sexual trafficking), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war, natural or human-made disasters, and severe motor vehicle accidents. This criterion also includes the indirect exposure, like being informed of any of the above regarding a close relative or friend, as well as the repeated exposure in the conduct of a professional activity. However, exposure through social media isn't considered a traumatic event (American Psychiatric Association, 2013). Criterion B verifies the presence of one or more intrusive symptoms associated with the event, while Criterion C analyses the persistent avoidance of memories or stimulus related to the traumatic experience. Criterion D evaluates negative changes in cognitive functioning and general mood that have started or worsened following the event. Criterion E assumes the presence of marked altered reactions to stimulus associated to what happened and Criterion F indicates that the period of the symptoms verified in Criterion B, C, D and E should be superior to a month. Criterion G assures that these changes cause distress and discomfort in clinical, social, occupational and other contexts important to the normal functioning of the individual. Finally, Criterion H defines that for the final diagnosis of PTSD all the changes verified in the previous criterions can't be attributed to

substance abuse (e.g. alcohol, medication) or another medical condition (American Psychiatric Association, 2013).

The main difference between ASD and PTSD is the time frame, since in ASD the symptoms must develop and fade away within a month after the traumatic event. If the symptoms remain past that time frame and the necessary criteria are verified, the diagnosis might be changed to that of PTSD. However, not all instances of PTSD evolve from ASD and multiple cases of ASD do not grow beyond the first month. Alternatively, acute stress reactions – normative and expected – don't usually develop past the first week, preventing the diagnosis of ASD (American Psychiatric Association, 2013).

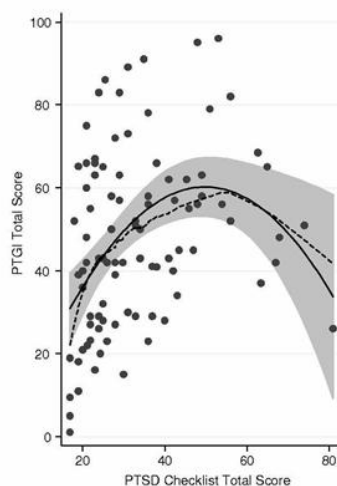
### **1.3. Resilience**

In the act of studying the human aptitude to deal with and overcome marking life events the concept of resilience emerged. Resilience is a concept imported from physics – it defines the quality of a material to withstand an extreme force applied to it. In psychology it refers to the capacity of certain individuals to deal with potentially traumatic or challenging events without psychopathological reactions or adjustment problems (Hervás, 2009). The difference between recovery and resilience is brought to light by Bonanno (2008), pointing out that recovery refers to the trajectory the individual goes through since the traumatic event, including the appearance of symptoms that can match ASD or, later, PTSD, until it regains the previous lifestyle and activities without any indication of psychological distress or psychopathology, while resilience refers to the absence of such reactions and the maintenance of all life aspects previous to the event.

#### **1.4. Posttraumatic Growth**

However, Tedeschi and Calhoun (2004) suggest that the confusing and scaring post trauma period where fundamental beliefs are challenged, can also be a unique chance for growth. The term used to describe this phenomenon - Posttraumatic Growth (PTG) – refers to a positive psychological shift, experienced as the result of challenging events in the life of each individual (Calhoun & Tedeschi, 1999). The way PTG develops within individuals has been the subject of various investigations. Stockton, Hunt and Joseph (2011), in the first study of their investigation, confirmed that regarding cognitive processing, automatic ruminations that were intrusive and exclusively negative had an adverse effect in the general psychological functioning. However, in their second study they verified that both reflection periods and voluntary rumination were positively associated with PTG, confirming that ruminations related to the traumatic event that aren't exclusively negative and make use of actively thinking about what happened and its consequences, can contribute for a better adaptation. Most people report personal growth in personal strength (e.g. increased capacity to deal with stress), relationships (e.g. increased intimacy with friends and family), and the perception of self, life appreciation and spiritual life. Regarding the way it first appears and develops, theories (Stockton, Hunt & Joseph, 2011; Triplett, Tedeschi, Cann, Calhoun & Reeve, 2012; Butler et al., 2005) have defended that traumatic events trigger unconscious rumination that is followed by deliberate ruminations, that brings posttraumatic growth. To allow the process that might lead to PTG, the crisis the victim went through should create significant challenges, otherwise it won't have the impact needed to trigger posttraumatic growth (Triplett, Tedeschi, Cann, Calhoun & Reeve, 2012). An investigation conducted regarding the 9/11 terrorist attacks, reported that posttraumatic growth in the months following the event was associated with high levels of symptoms related to trauma (Butler et al., 2005). However, this association is only valid until a certain point, after which there is a drop-off in the levels

of posttraumatic growth. Low levels of distress after the traumatic event are indicative that the victim was only slightly affected, without reason to begin a process of posttraumatic growth. A high level of posttraumatic distress might give origin to undeniable psychopathology, specifically PTSD, indicating that the ability of the victim to deal with negative events and all its implications is compromised, as well as the necessary cognitive processing to accommodate this experience into their lives, making the outcome of posttraumatic growth very unlikely. Still, if the traumatic event caused a moderate level of posttraumatic stress in the victim, causing the need to review attitudes towards one's life and the perception of the world, then this might set off intrusive thoughts and avoidance behaviours. Since these symptoms are in a moderate level the individual maintains coping mechanisms and the ability to reflect with clarity, allowing the cognitive processing needed to overcome the challenge presented (Joseph, Murphy & Regel, 2012). Previous studies (McCaslin et al., 2009; Levine, Laufer, Hamama-Raz, Stein & Solomon, 2008) reported the curvilinear relation between posttraumatic stress and posttraumatic growth (*Figure 1*). Despite this fact, the authors alert for the fact the participants were part of a convenience sample made of medical school students, instructed youngsters with a high socioeconomic level (McCaslin et al., 2009).



*Figure 1. Curvilinear relation between posttraumatic stress and posttraumatic growth*

*(McCaslin et al., 2009)*

In another investigation (Levine et al., 2008) with a sample of teenagers which showed symptoms congruent with PTSD, the results showed only two posttraumatic growth factors, one related to interpersonal relationships and the other with the perception of self and life philosophy. These go against previous studies that defined five posttraumatic growth factors, however, many adaptations to different populations showed a number of different factors rising from statistical analyses (Resende, Sendas & Maia, 2008). A longitudinal study from Dekel, Mandl and Solomon (2011) tried to compare the factors that predicted posttraumatic growth and posttraumatic stress disorder, with two main findings. First, that peritraumatic factors give origin to both outcomes (PTSD and PTG) and that the exposure and response during the traumatic event, namely active coping and loss of control predicted PTSD at the same rate it predicted PTG. Second, that posttraumatic growth is predicted by unique factors, not associated with posttraumatic stress disorder, and vice-versa. Specifically, self-control predicts PTG in a way superior e beyond its relation with PTSD, while pre-traumatic factors and personality variables are only associated with the presence and development of PTSD.

Joseph (2004) attempted to integrate client centred therapy and more tradition approaches in treating posttraumatic stress disorder. He found out that client-centred theory not only accounts for the development of PTSD, but also for the possibility of posttraumatic growth. Directly comparing the client-centred model and social-cognitive terms, it's possible to attend to the following table (Figure 2):

Person-centred model	Social-cognitive terms
Event which is sudden, obvious, and demonstrates incongruence between self and experience.	Traumatic event which shatters basic assumptions about the self and the world.
⇓	
Breakdown and disorganization of self-structure, manifested as experience of incongruence in awareness and at other times as defence.	Phenomenology typical of post-traumatic stress (intrusive and avoidant experiences).
⇓	
Person-centred therapy leads client accurately to symbolize in awareness of their experience.	Exposure-based techniques lead to re-experiencing.
⇓	
Reintegration of self and experience in a way consistent with actualizing tendency.	PTSD symptoms diminish.
⇓	
Becoming more fully functioning.	Phenomenology typical of post-traumatic growth.

*Figure 2. Conceptualization of PTSD and PTG in accordance with the client-centred approach and the socio-cognitive approach (Joseph, 2004)*

Slavin-Spenny, Cohen, Oberleitner & Lumley (2011) conducted an investigation with the objective of understanding which strategies might facilitate posttraumatic growth and if the symptoms would be affected in different ways. In this study there were 213 individuals with unresolved traumatic unresolved episodes. They were distributed along four groups, each making different use of disclosure of information (written, oral alone, oral with a passive listener and oral with a responsive listener) and two more groups, used for control. Each group had a 30 minute session and after six weeks, the ones that went through the disclosure process regarding their traumatic experience presented higher indicators of posttraumatic growth than the control groups, with no significant differences between the different types of disclosure. Regarding symptom reduction (intrusive thoughts, avoidance, physical and psychological distress) there was a verifiable decrease, with no difference between control and disclosure groups. Maybe the most important thing to take from this report is the fact that with only 30 minutes of disclosure, regardless of the conditions in which it was made, it was

possible to verify a significant increase in posttraumatic growth, like the possibility to anticipate new opportunities, greater ease in relating to other, increase of perceived personal strength and life appreciation. It is important to note that despite the symptoms the participants showed at the start of the study, there was no clinical diagnosis of PTSD. This means it is important to check if the strength of the symptoms might influence the success of disclosure along its different variations (Slavin-Spenny et al., 2011). It's important to stress the difference between posttraumatic growth and the reduction of symptoms, since it is possible to verify growth without the decrease of symptomatology and, as the results point to, it's possible that what influences one of these factors doesn't influence the other. However, the single disclosure session about traumatic events experienced by individuals had a positive effect on posttraumatic growth (Slavin-Spenny et al., 2011).

Morril et al. (2008) explored the possibility of posttraumatic growth being a moderator of the relation between PTSD symptoms, depression and quality of life. Results showed that PTG moderates both relations (symptoms – depression; symptoms – quality of life). The hypothesis that emerges from this paper is that posttraumatic growth is reflexive of the cognitive adaptation process (positive reinterpretation) of the individuals experimenting posttraumatic symptomatology. Following this process it becomes possible for them to understand potential benefits or rearrange the memory and interpretation given to the event based on those benefits, removing the importance of the distress related to trauma. This way, the individual's routing towards posttraumatic growth while experiencing PTSD symptoms will affect the relation between these and depressive symptomatology (positive relation) and quality of life (negative relation). In this case, the effect will decrease the depressive symptoms and increase the quality of life, making the PTSD symptoms less significant overall with the addition of PTG to the equation. Despite its limitations regarding the sample used (female subjects diagnosed with breast cancer), this paper suggests that an intervention

aligned with promoting posttraumatic growth in patients with PTSD symptomatology will cause the reduction of depressive psychopathologies and a rising in quality of life (Morril et al., 2008). Despite these findings, investigations conducted with populations coming from distinct cultural backgrounds suggest that differences like collectivism vs. individualism or personal independence can affect both the way that PTSD develops and the prevalence of posttraumatic growth. The tendency is for a higher PTG in cultures rich in a philosophy of individualism (e.g., EUA) than in cultures that are traditionally communitarian and collectivist (e.g., Spain) (Steger, Frazier & Zacchanini, 2008). Even with papers like this, concluding that intercultural differences are present regarding the posttraumatic growth phenomenon, clinically it is extremely relevant to ascertain the possible influence of these contrasting cultural factors in the strategies implemented to promote PTG.

A relevant piece of data that comes from an investigation with survivors of a terrorist attack in Pakistan (suicide bombing) reveals the possibility for PTSD and PTG to coexist, at least in survivor from a traumatic event with intention human origin, as in terrorist attacks (Kiran, Rana & Azhar, 2010).

Sherr et al. (2011) in a paper with individuals diagnosed with VIH obtained results that indicate a connection between posttraumatic growth and viral load, something that raises questions for further studies to explore the effect of posttraumatic growth in other health indicators and possible bio-physiologic benefits.

From all the collected evidence it is possible to advance the conclusion that PTSD symptoms aren't necessarily a psychopathology or a disorder in and on itself, but can be indicators of an intern emotional and cognitive fight in the process of rebuilding and finding meaning in a life post-trauma (Joseph, 2012).

## **1.5. Family Cohesion**

Family cohesion is considered on the main dimensions, along with conflict, of the familiar environment (Holmbeck et al., 2002) and, as a variable, it refers to the appropriate, healthy and positive interaction between family members (Field & Duchoslav, 2009). This excludes any kind of disrespect for one's individuality. It is crucial to find a balance between the self and those around the individual, so that functional communication allows conciliation between symmetry and complementarity in family relations (Alarcão, 2000). The larger the number of family members, the more frequent will be interferences related with personal characteristics, necessities and interests. Family members assume new and multiple roles and tasks simultaneously (Relvas, 1996). This kind of adaptive functioning is the expected in a family system that carries high levels of family cohesion, since one of the family's main tasks is that of supporting its members. When a member of the family finds himself in a stress inducing situation all other members will feel that stress, and the system as a whole will demand change to deal with the problem (Alarcão, 2000).

The Bioecological Model of Human Development rose as a new theoretic perspective regarding human behaviour development. This model puts emphasis in changes in the interaction of the person with the process of stability and change between with the context. This empowers all that surrounds the individual as something that can contribute to explain his behaviour. This theory emphasizes the interaction between an individual and the various contexts and setting he is inserted in, as something bidirectional and based on reciprocity (Bronfenbrenner & Morris, 2006). Not only the individual affects family cohesion through his behaviour but, in the light of the bioecological model of human development, the family dynamics will have a strong noticeable impact upon the individual, with potential to facilitate trauma and resilience related processes.

The key finding of a research conducted with immigrant families (Singh, Lundy, Vidal de Haymes & Caridad, 2011) was the positive role of family in preventing or controlling trauma. Even though family ties and networks are modified critically when separated from their extended familiar network by migration, it appears that a greater cohesion between the members is a source of support that helps them face the mental health challenges.

Uruk, Sayger and Cogdal (2007) point that family cohesion and adaptability has a significant influence on trauma symptoms and psychological well-being. More specifically, the relationship of family cohesion and adaptability with trauma is negative; whereas with psychological well-being it is positive.

Previous papers point towards a correlation between the factors connected to family cohesion and the development of posttraumatic growth, specifically with a low influence regarding the family members that co-habit with the individual and the civil status, but a strong influence regarding the latent factors like family communication and satisfaction in patients with breast cancer (Svetina & Nastram, 2012). In this research it is possible to conclude that dimensions related to family can predict posttraumatic growth besides their roles as coping strategies and demographic factors – family communication seems to be the mediator variable of the association between family satisfaction and posttraumatic growth.

Since posttraumatic growth after a traumatic event isn't a universal development (Joseph & Linely, 2005) it remains unclear the totality of the factors that contribute to posttraumatic growth.

## **2. Method**

### **2.1. Methodology**

This research is related to an on-going Clinical Psychology Ph.D. research<sup>1</sup> specifically in the area of Resilience and Psychological Trauma. The participants are victims of potentially traumatic events, aided by the Psychological Aid and Crises Intervention Center (Centro de Apoio Psicológico e Intervenção em Crise - CAPIC) from the Medical Emergency National Institute (Instituto Nacional de Emergência Médica - INEM) in Portugal.

This thesis is exploratory, using the richness present in the qualitative data collected through the interviews. Even though there is a basic use of descriptive and correlational statistics to complement the analyses, the research is mainly qualitative.

### **2.2. Conceptual Map and Research Questions**

Here we can find the conceptual map of this research, made after the research on each subject and its interactions with different variables and their components (Figure 3). In this conceptual map it is possible to observe the factors where change is reported in the Portuguese population regarding posttraumatic growth, as well as the components of family cohesion. It also represents the research questions: 1. “What levels of posttraumatic growth are found in individuals in these conditions?” 2. “Is there a relation between family cohesion and posttraumatic growth in this sample from the Portuguese population?” and 3. “Is there a correlation between resilience and posttraumatic growth in this Portuguese sample?”

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<sup>1</sup> P.h.D. Research Project, in Clinical Psychology, more specifically about Resilience and Psychological Trauma, presented to the Faculty of Psychology of the Lisbon University by Dr. Joana Faria.

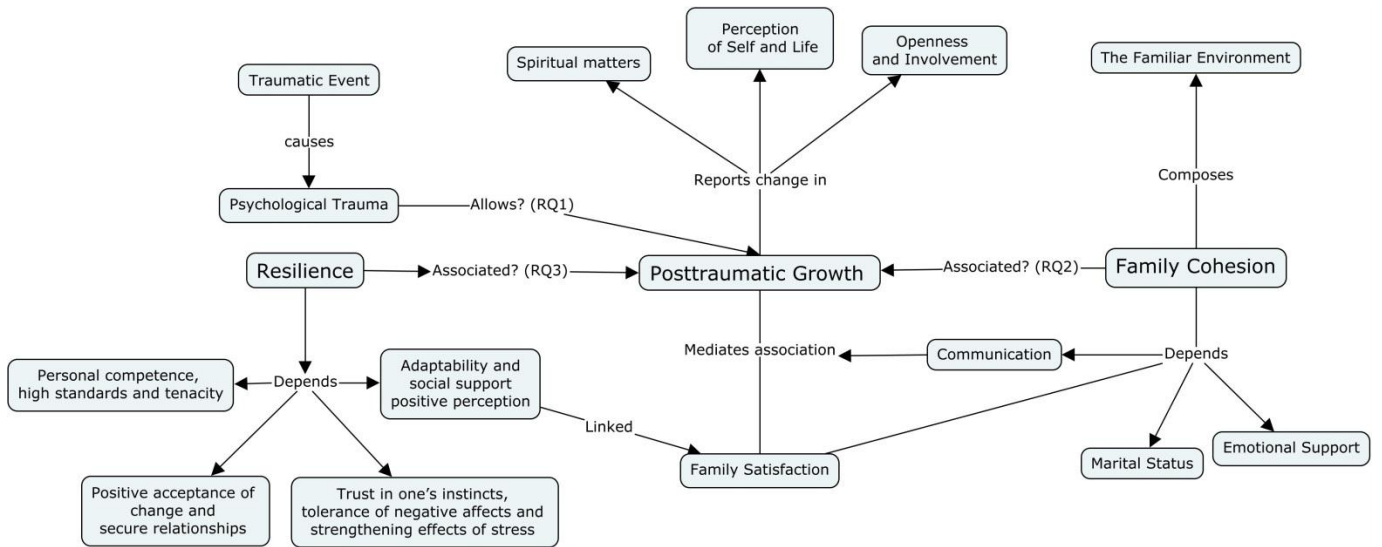


Figure 3. Conceptual map of the present research

### 2.3. Research aims

With this in mind, this investigation presents the following goals:

1. To understand if there are family cohesion dimensions that are positively or negatively correlated to posttraumatic growth or its individual factors;
2. To analyse if any socio-contextual variables are present in posttraumatic growth.
3. To verify if there is a correlation between resilience and posttraumatic growth in the group of individuals studied.

## **2.4. Participants**

Out of the eight individuals that accepted to participate upon first contact, only one dropped out, not showing at the arranged time and place, and not answering further contact attempts. The final number of participants was 7 (N=7), with ages between 27 and 50 (M = 40.57 years, SD = 6.80), 3 females (42.9%) and 4 males (57.1%) (Appendix 6). From these participants all reported a traumatic incident involving the unexpected death of a family member.

## **2.5. Measures**

### **2.5.1. Posttraumatic Growth**

Posttraumatic growth was measured both by qualitative and quantitative methods. Qualitatively by the inclusion of a thematic block in the interview script, so that it is possible to explore the three posttraumatic growth factors found in the Portuguese population (Resende, Sendas & Maia, 2008). This thematic block (named Posttraumatic Growth) presented three goals: “Verify greater openness to new possibilities and greater involvement in personal relations”, “Observe changes in the perception of self and life in general” and “Verify spiritual change”. To ascertain these goals question such as: “Have you been feeling changes in your personal or family relations lately?” or “Would you say that the way you perceive yourself was changed after this incident?” and “Spiritually, do you notice any differences in you?” (Appendix 2). These thematic blocks are part of a widest interview script. It was important to never give any clues towards a positive outcome to avoid bias originated from the question. Quantitatively it was measured by the Portuguese translation and adaptation of the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996; Resende, Sendas & Maia, 2008). This instrument is composed of 21 items that are divided in five

factors: F1: Relating to other; F2: New Possibilities; F3: Personal Strength; F4: Spiritual Change and F5: Appreciation of Life. The answers are given in a 6 point scale as follows: I did not experience this change as a result of my crises (0), I experienced this change to a very small degree as a result of my crisis (1), I experienced this change to a small degree as a result of my crisis (2), I experienced this change to a moderate degree as a result of my crisis (3), I experienced this change to a great degree as a result of my crisis (4) and I experienced this change to a very great degree as a result of my crisis (5). The three factors found in the Portuguese population were: **F1: Greater openness to new possibilities and greater involvement in interpersonal relations; F2: Change to the perception of self and life in general; F3: Spiritual change** carried a Cronbach's Alpha of .95 for the total scale and .94; .89 and .64 for each factor, respectively (Appendix 3). Per suggestion of the author of the Portuguese adaptation it was included a scale of negative emotions, that was previously hypothesised (Tedeschi & Calhoun, 1996) to have a positive correlation with posttraumatic growth. The items of this scale are mixed within the PTGI and are to be subject to the same scoring (7 items, rated from 0 to 5 with a max score of 35).

### **2.5.2. Family Cohesion**

Family cohesion was measured qualitatively through the interview, with particular attention to the components found by Svetina and Nastran (2012): marital status, communication, family satisfaction and emotional support. This variable is assessed through the thematic block that referred to Social support, with the specific goal of assessing family adaptability, emotional support, family satisfaction, marital status and communication (Appendix 2).

### **2.5.3. Resilience**

Resilience will be measured both by the qualitative information found in the interview and the scores of the Portuguese translation and adaptation of the CD-RISC (Faria, Ribeiro & Ribeiro, 2008) (Appendix 4). CD-RISC is composed of 25 items, with a five point scale (0-4) as follows: not true at all (0), rarely true (1), sometimes true (2), often true (3), and true nearly all of the time (4). The CD-RISC possesses very solid psychometric properties (Cronbach's Alpha at 0.89 and a test-retest reliability measure of 0.87) which allow the distinction between individuals which are more or less resilient (Connor & Davidson, 2003). In the Portuguese version there was data supporting four factors instead of the original five (Faria, Ribeiro & Ribeiro, 2008), with internal consistency: Cronbach's alpha for the full scale was 0.88. The internal consistency alpha values of the 4 factors were: 0.84 for Factor 1, 0.80 for Factor 2, 0.70 for Factor 3 and 0.70 for Factor 4.

### **2.5.4. Socio-demographic inventory**

The socio-demographic inventory aims to collect contextual data regarding each participant, specifically: sex, age, educational level, co-habitants, marital status, employment situation, religion, psychological antecedents and substance consumption (Appendix 5).

## **2.6. Data Analysis**

Data collected through the socio-demographic inventory (Appendix 4) and the Posttraumatic Growth Inventory will be analysed using the statistic software SPSS (21.0 version for Windows). Qualitative data collected through the semi structured interview will be subject to a qualitative thematic and content analysis using the software NVIVO (10.0 version for Windows). Overall this study will focus on a qualitative methodology. Each interview was transcribed integrally and using thematic analysis to explore posttraumatic growth, family

cohesion and themes that are identified as relevant to each individual, the categories were found and organised taking into account what was known of each theme. For each theme and each participant the frequency of quotes regarding each theme was translated into a relative frequency in relation to the whole interview. These values, from 0 to 100, are percentages of how prevalent the themes were for each participant. These values of relative frequency will be the ones used to represent the strength of each variable taken from the interviews into the quantitative analyses.

The analyses will be complemented by quantitative methodology, specifically descriptive and correlational statistics.

## **2.7. Procedure**

PTG is a phenomenon that emerges naturally, so it is essential, for a precise and valid measurement, to ascertain the phenomenon without any kind of suggestion or questions that might influence the individual towards indicating growth. In the literature the minimum time after a traumatic event in which posttraumatic growth could be observed was six weeks (Slavin-Spenny et. al, 2011). Therefore the sample for this study was obtained between three and four months after the traumatic event, with individuals that had no previous participation in the on-going research. Participants were contacted through a telephone call – their numbers were in the institution’s archives – and, following a brief explanation of the study that was being conducted, were asked about their interest in participating. Out of the eight contacts, and after being fully informed of the research objectives, procedures and voluntary participation, as well as the option to interrupt the participation at any given point, all agreed to collaborate and a meeting face to face was scheduled. The meetings were conducted in the house of each participant, as they chose that setting (other options were meeting in the office

or in any adequate place that didn't allow for distractions, interruptions or people close by). In this moment they were presented with a new, more in-depth, briefing regarding the research and an informed consent to sign (Appendix 1). After the informed consent, the semi-structured interview was conducted. In the end of the interview the questionnaires were handed to the participants in the following order: CD-RISC, socio-demographic questionnaire and PTGI.

### 3. Results

#### 3.1. Descriptive Statistics and Correlations

Posttraumatic growth was measured both by the use of the Posttraumatic Growth Inventory (adapted and translated to Portugal) and the qualitative assessment through an interview with the participants.. Bivariate Correlation between the values attained through each process showed a significant correlation at the 0.01 level (2-tailed). This indicates that the values of posttraumatic growth found are reliable.

Table 1

*Correlation between PTG measured qualitatively and quantitatively*

		Posttraumatic Growth from Interviews	Posttraumatic Growth from PTGI
Posttraumatic Growth from Interviews	Pearson Correlation	1	,905**
	Sig. (2-tailed)		,005
	N	7	7
Posttraumatic Growth from PTGI	Pearson Correlation	,905**	1
	Sig. (2-tailed)	,005	
	N	7	7

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The mean PTG value was of 39,29 (*SD*: 18,56) for this sample, while the mean PTG found in the Portuguese adaptation sample was of 41,93 (*SD*: 26,53). This means the average Posttraumatic Growth in the sample used is below the average growth found previously, but not in a significant way since it's within one standard deviation, and extremely close in value.

Factor means found in this study were similar with the previous research, F1: 23,05; *SD*: 16,08 (in the adaptation) and 21,71; *SD*: 12,08 (in the current study); F2: 16,09; *SD*: 9,74 and 14,00; *SD*: 4,66; F3: 2,71; *SD*: 2,62 and 3,57; *SD*: 3,55.

Table 2

*Descriptive Statistics of the variables*

		Age	Resilience	Posttraumatic Growth from PTGI	Negative emotional aspects in PTG
N	Valid	7	7	7	7
	Missing	0	0	0	0
Mean		40,57	72,00	39,29	7,00
Median		40,00	73,00	34,00	5,00
Std. Deviation		6,803	10,033	18,563	5,033

Table 3

*Descriptive statistics of each PTG factor*

		Factor 1 - Greater openness to new possibilities and greater involvement in interpersonal relations	Factor 2 - Change to the perception of self and life in general	Factor 3 Spiritual change
N	Valid	7	7	7
	Missing	0	0	0
Mean		21,71	14,00	3,57
Median		19,00	13,00	4,00
Std. Deviation		12,079	4,655	3,552

There were no correlations found between posttraumatic growth and any other variable, including family cohesion and the negative emotional valences. The previous was hypothesized by Resende, Sendas and Maia (2008) as being associated with posttraumatic growth as part of the challenging process of personal development, integration and accommodation of new experiences and interpretations.

Table 4  
*Correlation between PTG and Family Cohesion*

		Posttraumatic Growth from PTGI	Family Cohesion
Posttraumatic Growth from PTGI	Pearson Correlation	1	,076
	Sig. (2-tailed)		,872
	N	7	7
Family Cohesion	Pearson Correlation	,076	1
	Sig. (2-tailed)	,872	
	N	7	7

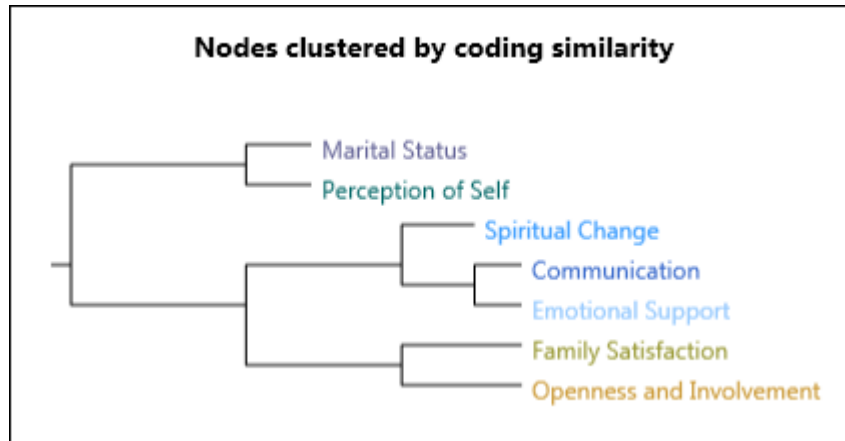
Table 5  
*Correlation between PTG and the negative emotional valences*

		Posttraumatic Growth from PTGI	Negative emotional valences in PTG
Posttraumatic Growth from PTGI	Pearson Correlation	1	-,364
	Sig. (2-tailed)		,422
	N	7	7
Negative emotional valences in PTG	Pearson Correlation	-,364	1
	Sig. (2-tailed)	,422	
	N	7	7

Family cohesion has a mean of 3,34 (*SD*: 2,63).

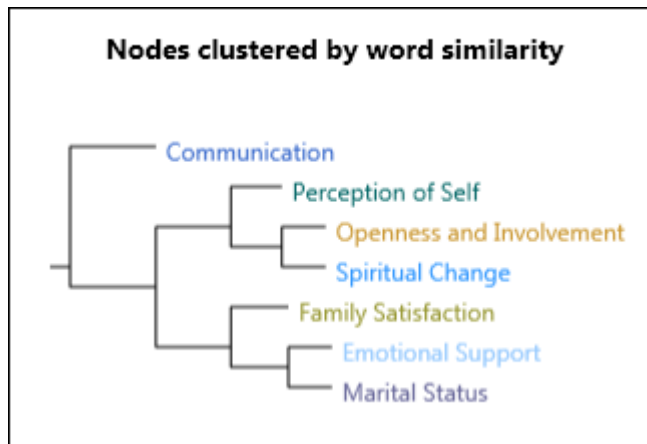
### 3.2. Qualitative Analysis

Performing a cluster analysis of the nodes by coding similarity using the Pearson's Coefficient in NVIVO this is the result:



Here it is possible to note the categories that are clustered together in coding. The category “Family Satisfaction” and “Openness and Involvement” are close in coding, suggesting that these two variables might be what connect Family Cohesion and Posttraumatic Growth. “Communication” and “Emotional Support” are also clustered together. From a logic point of view it makes sense these two variables to be associated, since without the first the second can hardly be present. “Spiritual Change” was related to these two in a more distant way, while “Marital Status” and “Perception of Self” are clustered in an entirely different branch. It makes sense that the marital status has a strong influence in the perception of self, especially if there was a change of status caused by the traumatic incident.

Cluster analyses of the nodes by word similarity using Pearson's Coefficient in NVIVO resulted in the following:



This analysis is based on word similarity used by the individuals across categories. “Emotional Support” and “Marital Status” are clustered together and both are clustered with family satisfaction. This is congruent with the fact that these are three of the four components of family cohesion, being logical that they would be described in a very similar way. “Openness and Involvement” and “Spiritual Change” are also clustered together and both are clustered with “Perception of Self”. These categories represent the three factors of Posttraumatic Growth. Finally “Communication” appears as an individual and independent branch. This might be because it is so transversal to all other nodes that it doesn’t really associate in any definitive way with any cluster of categories.

This analysis lends strength to the validity of the measures, as the categories appear clustered in a consistent manner with the theory framework that was researched and presented in the introduction.

## **3.2. Interviews**

### **3.2.1. Case 1**

This individual was a 39 year old male, in a non-marital relationship, living with his companion and her son. He had secondary education and was currently employed. He

declared to be non-practising Christian and had previous psychological and psychiatric aid for depression. He reported no consumption of substances before or after the traumatic event.

In the first case study the value for family cohesion is 2,48 (percentage value of the prevalence of the variable on the overall interview – Appendix 7) – slightly below the sample mean. However some important quotes can be found that show the impact of this phenomenon in dealing with trauma in the months following the event. Mostly regarding family satisfaction:

*“And we always had a relationship with a lot of respect and simultaneously with a lot of love, a lot of caring for each other.”*

And emotional support:

*“There wasn’t a single day they weren’t there, that they didn’t swallow their own pain... So that I could feel better... Or so they tried...”*

These aspects carried with them a strong emotional relevance in dealing with the stress caused from the traumatic event.

Regarding posttraumatic growth, this individual scored 54 points out of 105 in the Posttraumatic Growth Inventory, both above the mean of this sample (39,29) and the mean from the Portuguese adaptation (41,93). This particular participant seems to have particularly present the first factor, regarding openness to new experiences and involvement in personal relationships:

*“I think I have to give more of me to the people that love me and that I love. Above anything else I need to do this. This is the first, the main change, what I feel the most. I feel a stronger need, stronger than what I already felt and have always felt, I was always a person... I always liked to help.”*

The change in this individual was markedly present, both in his speech and in the way he positioned himself towards life and the traumatic event of the loss of his daughter. He also scored 86 points in the resilience scale of the CD-RISC, from a possible total 100 points (M: 73,4; SD: 12,0).

### 3.2.2. Case 2

This individual was a 45 year old male, widowed, living with his two sons and one daughter. He attained a primary school education and was unemployed at the time of the interview. He declares himself to be a believer but of no particular religion, he never received psychological or psychiatric assistance. He reported consuming alcohol at meals both previously and after the incident, and that he started smoking after the incident.

This participant had the particularity of having a score above the mean in the resilience scale (78) but a low score in posttraumatic growth (27). In the family cohesion variable he scored 3,15, very close to the mean of this sample. Family satisfaction was, once again the main topic:

*“I have. I have. He helps me, helps me. Has been helping, because right now everything is kind of complicated, helps me with some of the things”.*

As previously pointed out, this individual scored very low in the posttraumatic growth scale, with the only prominent quote falling in the first factor:

*“Family mostly from my wife’s side, because my family, my brothers and everyone, we are very close. From my wife’s side, they were very distant and now they are more like...”*

The family support he gets seems essentially connected to his resilience, though it seems that the change regarding the involvement in new family relationships has more effect on his resilience (therefore the high score) than in his posttraumatic growth. This will be later addressed in the discussions.

### 3.2.3. Case 3

This subject was a 27 year old female, single, living with her boyfriend and her son. She concluded secondary education and was employed at the time. She declared herself to be a believer without any specific practice or religion and was at the time being assisted by a psychiatrist and taking medication for depression and anxiety. She reported an increase in smoking habits after the traumatic event she lived.

This participant showed a resilience score of 69 points, scoring below the average 73,4 found in the sample from the general Portuguese population in the psychometric evaluation of the CD-RISC (Faria, 2008). The score in family cohesion was 2,38, also below the sample mean, with the most relevant quote tied to family satisfaction:

*“We could be difficult and stubborn, but if someone from the outside said something about one of the family members... Then we would defend our own!”*

And the marital status:

*“I think that if he didn’t really like me he would have already left...”*

It seems relevant to point that despite the conflict present in this family, satisfaction and pride seem to be the two factors that are more prevalent. The perception of a *new family*, resulting from a marital union, where things can be made different than in the past show up as a main element towards dealing with the aftereffects of the traumatic experience. Scoring 19 out of 100 points in the PTGI, this participant seemed to be particularly affected by spiritual changes:

*“Just what I have told you... I really want to know and there are no answers... I searched a lot and I keep looking... I don’t quit because I really have a lot of interest and curiosity...”*  
[Towards what happens after death and different religious beliefs]

#### **3.2.4. Case 4**

The fourth subject was a 40 year old male, in a non-marital relationship, living with his partner, their son and her grandmother. He had a university graduation and was employed at the time. He declares to be a non-believer regarding religions and that he never had psychological or psychiatric assistance. He reports no substance consumption before or after the incident.

This participant had the lowest score in family cohesion from all the sample, at 0,72. The only relevant reference towards this topic focused on family satisfaction:

*“This may sound like a cliché, but I have a son with two and a half years and it is a thing to forget... Everything, everything spins around him.”*

At a similar low is the PTGI score, at 26 out of 100 points, with the clear quote regarding the second factor “Change in the perception of self and life in general”:

*“Sometimes a less correct decision can jeopardize forty work posts. So... But I was much more secure in the decision making processes than I am now. Now I think, I stop, I reflect.”*

He also shows resilience below the average, but not significantly, at 72 points.

### **3.2.5. Case 5**

This individual was a 46 year old female, married, living with her husband and their son. She concluded secondary education and was employed at the time. She declares herself to be a believer without any specific religion or practice. She was also receiving continual psychological help for the last several years and reported no substance consume before or after the incident.

This participant had one of the highest family cohesion scores, at 6,07 (M: 3,34; SD: 2,63). The main focus was on family satisfaction, with multiple quotes transpiring the importance of this component to this person:

*“The four of us, always together, always kissing each other”*

*“He ran away from everybody. And with his father he started to open up.”*

*“We started going to the movies more often [...] he was delighted, he was so happy.”*

These are intense emotional sentences that focus on the happiness present in the family both prior and after the event death of one of their family members.

Resilience stayed at 53 points out of 100 and posttraumatic growth at 34 (M: 41,93; SD: 26,53). The only factor present was Spiritual Change:

*“Deep down I kept asking myself... “Deep down what does God want to teach me? What do I need to learn? What haven’t I learned the first time that I need to learn the second time?” But that’s in that moment, because I can never look at this loss as a thing of my own. As I’ve been telling you, it affected everyone’s life.”*

### 3.2.6. Case 6

The sixth individual was a 47 year old male, married and living with his wife and their son. He concluded basic education and was employed at the time. He declares himself to be a believer in the Baptist Evangelistic Church, that hasn't practised in several years. He reports moderate alcohol consume at meals, without change after the incident. He never received psychological or psychiatric aid.

In the sixth case study the family cohesion score was the highest from the entire sample at 6,07. The most relevant being the marital status/relationship:

*“ [...] Maybe it was the hardest part, even though we have known each other for over 25 years and we know each other very well, we know how to... Where we can touch, how we can react... [...] She can be extremely down, she can be at the bottom of a well, but if from above I tell her “I'm down”, she will climb the walls to come and help me. This I know. This I know”.*

Resilience score was 73, slightly below the adaptation mean and similar to the mean of this sample (M: 72; S: 10,03). Posttraumatic growth assessed by the PTGI scored 43 points, situated in the mean. The most relevant factor was Spiritual Change:

*“This episode with G made me awake my faith that was slumbering. Made me consider that it is important to keep this relationship lit, that by keeping it strong we really feel stronger and we feel good and sometimes when we are down we go and ask for divine intervention and we feel that it comes to us, even though I know and feel things like that”.*

This factor was extremely prevalent, even though the other two were practically non-existent.

### 3.2.7. Case 7

This participant was a 40 year old female, widowed, living with her daughter. She finished secondary education and was employed at the time of the interview. She declares herself to be a catholic believer, and never received psychological or psychiatric assistance. She reported consuming a moderate amount of alcohol at meals without changes after the incident.

This individual had a family cohesion score below average, at 2,63, with the main component being Family Satisfaction:

*“It was an aunt that warned me, an aunt that lives next to my husband’s parents. It was where we were living at the time. And she was very close, she gave me a lot of support anytime I needed to go out, she stayed there taking care of M.”.*

Resilience score was 73 and posttraumatic growth had the highest score from all the sample of participants, with 72, a full standard deviation above the mean. The most prevalent factor was the change in the Perception of Self:

*“Mostly... The human side of things. The way I look at others. Looking at the side... When I see someone getting out of a car with a wheelchair, especially if I see it’s an older person, I immediately feel the urge to help. In the beginning I missed helping a lot... I even considered volunteering into something, but since I have a job with shifts, it’s hard...”*

It was clear that the change in her was the most prevalent point, both in the amount of references and in the intensity and emotional relevance it was given by the person.

## 4. Discussion

### 4.1. Conclusions

The amount of research with Portuguese population regarding the theme of trauma, resilience and posttraumatic growth is very limited. This thesis aims to shed some light on the matter while using a very specific population: those that received emergency psychological aid from the national emergency system. It is relevant for the continual development of knowledge and good practices to promote research regarding the intervention that is being conducted in Portugal, as well as the characteristics of the population.

The mean posttraumatic growth value – 39,29 (*SD*: 18,56) – when compared to the mean value found in the Portuguese sample drafted for the adaptation – 41,93 (*SD*: 26,53) – is found to carry no significant differences, however, it is always important to note the difference in populations, considering that this sample carries a greater certainty of the high traumatic level of the events, as well as the short time gone by since the incidents, compared to the indication that the subjects had gone through at least one traumatic event in their lifetime found in the adaptation of the PTGI to Portugal (Resende, Sendas & Mais, 2008). These values answer the first of the research questions posed at the beginning, regarding the posttraumatic growth levels to be found in the subjects of this particular sample. It is strongly suggested for future researches that can amass a bigger sample, the verification of this value, as to know for sure if the crisis intervention in Portugal can have an impact on the posttraumatic growth of the victims or if as a phenomenon that is fruit of processing and time such factor carries no impact.

Qualitatively, through a cluster analysis of the node categories by coding similarity, using the Pearson's Coefficient in NVIVO, there is a relation between "Openness and Involvement" (a factor of PTG) and "Family Satisfaction" (a component of family cohesion).

This means that these nodes communicate with each other and work toward a common result. Future research might be able to point to the type of relation there is between these two variables and how can they influence each other in order to promote both PTG and Family Cohesion. One hypothesis that can explain the scarce relation between family cohesion and PTG is the fact that the population used in previous researches on this topic (Svetina & Nastran, 2012) were breast cancer patients. In the context of a serious disease that is, however, being treated and fought, the family support and cohesion might be stronger predictors of the attitudes regarding the whole process. It's likely that this influences not only posttraumatic growth but also resilience and the prevention of psychological symptoms (e.g. depressive or anxious). In the current research the subjects had traumatic events that focused on the irreversible and unexpected loss of loved ones. Even though family cohesion was considered as an important factor across all subjects (even among those that had very little references to its components) it seems that it bears no influence in the posttraumatic score they attain, potentially because that doesn't affect the outcome. Going past the grief won't allow them to recover their loved ones, while in the breast cancer scenario, going past the traumatic feelings towards the decease will help the recovery process and there is a healthy life and a future as the goal in the end of the tunnel.

There was also no correlation between posttraumatic growth and resilience within this sample of individuals. Since posttraumatic growth needs the traumatic event to actually affect the individual in order to promote change through the process of assimilation and integration of new cognitive interpretations (Triplett, Tedeschi, Cann, Calhoun & Reeve, 2012) it makes sense that high levels of resilience, defined as the capacity of certain individuals to deal with potentially traumatic or challenging events without psychopathological reactions or adjustment problems (Hervás, 2009), would inhibit PTG. The association "high resilience –

low posttraumatic growth” can be found in some of the cases (Case 2, Case 3 and Case 4 in particular).

In Case 2 there is a particular disparity between values (PTG: 27; Resilience: 78). Besides the previous explained possibility that resilience is inhibiting growth because it doesn't allow for rumination and for an adaptive process, we could also consider some socio-contextual information from each individual. In this case the individual had a very low socio-economic status, education level and had a very basic and elemental discourse at the abstract and emotional level. This formed a pattern within the sample: most subjects with this discrepancy between resilience and posttraumatic growth showed ultimately low emotional disclosure and some level of a defensive stance. It would be an interesting approach in future researches to try to understand if a statistically relevant relation between ease in emotional disclosure and posttraumatic growth can be found in individuals that have lived a recent traumatic event.

One interesting finding when comparing the qualitative and quantitative analysis of posttraumatic growth is the value of the third factor: spiritual change. Qualitatively there were various individuals that focused mostly in it (Case 3, Case 5 and Case 6), while it was strongly represented in 6 out of the 7 individuals. Quantitatively it was always weaker in comparison with the other two factors and was only present in 4 out of the 7 individuals. One possible explanation for this falls in the cultural and religious context of the country the investigation is being conducted. Portugal is a country where 85% of the population claims to be religious (Instituto Nacional de Estatística, 2011). This might explain the relevance of this factor when in the interview setting, while low scores in the PTGI are to be expected since this factor is only made of two items, being quite limited and generalist in their reach, potentially compromising answers – since Case 3 had one of the major quote volume in the interview but scored 0 in the inventory. In the future it would be relevant to verify if this

factor has such preponderance in religious populations that it would justify specific items for specific cultures, originating adapted versions of the instrument. The major risk is the underassessment of posttraumatic growth due to the unbalanced way factors are distributed.

Case 5 also showed a curious presence of protective factors. This participant referred heavily to family satisfaction, disclosing various episodes of the family life and rituals. Interestingly there was a heavy focus on past memories that seemed to have a protective effect on the current grief process she was going through. Even though this individual presented low resilience and posttraumatic growth scores and was receiving psychological counselling due to on-going depressive symptoms for years, the family cohesion value was one of the highest and the approach to the future was quite optimistic. I hypothesize this is caused by the great positive weight put in the past memories and consider extremely relevant to research this as a factor that can influence the outcome of grief processes.

#### **4.2. Clinical Implications**

First, regarding the connection hypothesized between low emotional disclosure and low resilience and posttraumatic growth. Even though further research is called for, this gives solid and congruent indications for clinical practice. If in a clinical setting a therapist in charge of a case such as these promotes emotional development and ease of assessing, reflecting and verbalizing emotions then he might be promoting a positive outcome of growth and resilience in his client.

Second, in therapy, much as in interviews, the qualitative information that one can assess is extremely rich. Taking into account the culture that the therapist is inserted in might be a valuable strategy for cases such as those present in this sample. Specifically, attending

strong religious beliefs might originate a new body of rapport and therapeutic strategies that will hopefully promote a healthier grief process and personal development.

Third, considering the attachment to the past frequently seen in this sample it is logic to point that this might be a recurrent theme in therapy. Despite the fact that past attachments can stop the client from addressing the here and now and the process he must own in order to find psychological well-being, here we have a clear example of past events being used as a catalyst towards good and positive feelings regarding the future. The task is still challenging, but the focus is on the present through the positive memories found in the past. This is a possible approach from counsellors when dealing with themes such as grief – by focusing on the positive points of past experiences related to the loss he or she might be empowering the client to look at this future with a more positive look.

### **4.3. Limitations**

The major limitation of this research is its sample size. Results and analyses lack the robustness that come with bigger samples. The reasons behind this are connected to the research requisites and the fact that these individuals were selected from a considerably small population – those aided by the Psychological Aid and Crises Intervention Centre (Centro de Apoio Psicológico e Intervenção em Crise - CAPIC). This means these people had without a doubt gone through a potentially traumatic event in the last three to four months, to the point that institutional help was activated to assist them. This doesn't mean however that findings and conclusions taken from these cases aren't valuable – a great deal can be learnt from the way these individuals deal with their grief and the clinical implications are reflection of that.

The Portuguese version of the PTGI also has limitations as its factor analysis bears some low values of items that are kept due to their relevance to the assessment of each factor and posttraumatic growth as a whole concept (Resende, Sendas & Maia, 2008). However, as

have pointed in the above discussion, there is room to question the universality of the relevance of each factor, with data suggesting that in strongly religious countries the factor “Spiritual Change” deserves a more prominent weight into the posttraumatic growth assessment. It might be through such discrete factors and items that PTG rises in different populations.

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## Appendixes

### Appendix 1

#### CONSENTIMENTO INFORMADO

Foi solicitada a sua participação numa investigação realizada no âmbito do Doutoramento em Psicologia Clínica da Faculdade de Psicologia da Universidade de Lisboa, que tem por objectivo investigar como reagimos perante situações exigentes e/ou potencialmente traumáticas.

As suas informações são confidenciais pois os resultados serão codificados e utilizados apenas no âmbito deste estudo.

Gostaríamos de saber se aceita participar nesta investigação respondendo a algumas questões. A sua colaboração é essencial.

A sua participação é voluntária, pelo que poderá interrompê-la a qualquer momento.

A Investigadora Responsável

\_\_\_\_\_  
\_\_\_\_/\_\_\_\_/\_\_\_\_

O Participante

\_\_\_\_\_  
\_\_\_\_/\_\_\_\_/\_\_\_\_

**Appendix 2**

**Thematic Blocks**

<b>Áreas Temáticas</b>	<b>Objectivos</b>	<b>Exemplos de Perguntas</b>
<b>Suporte Social</b>	Adaptabilidade familiar (suporte emocional, satisfação familiar, conjugalidade, comunicação)	Como é que a família está a lidar com o que aconteceu? Têm conseguido apoiar-se uns aos outros?
	Amigos / Vizinhos/ Comunidade	Para além da família há mais alguém que esteja a ser particularmente importante para si neste momento?
	Recursos institucionais	Na altura, tiveram algum tipo de apoio? Apoio psicológico?
<b>Crescimento Pós-Traumático</b>	Verificar maior abertura a novas possibilidades e maior envolvimento nas relações pessoais	Tem sentido alterações nas suas relações pessoais e/ou familiares?
	Observar mudanças na perceção do self e da vida em geral	Diria que houve mudanças na forma como se vê a si mesma após este incidente?
	Verificar mudança espiritual	Espiritualmente nota diferença em si?

### Appendix 3

#### I.C.P.T.

(Tedeschi & Calhoun, 1996; tradução de Sendas, Resende e Maia, 2007)

Em relação ao acontecimento em questão indique, por favor, o quanto sente que mudou em consequência desse acontecimento.

<b>Não Mudei</b>					
<b>Ou</b>					
<b>Mudei mas não</b>	<b>Mudei muito</b>	<b>Mudei</b>	<b>Mudei</b>	<b>Mudei</b>	<b>Mudei muito</b>
<b>foi devido a esse</b>	<b>ligeiramente</b>	<b>ligeiramente</b>	<b>moderadamente</b>	<b>acentuadamente</b>	<b>acentuadamente</b>
<b>acontecimento</b>					

Para as afirmações que se seguem, indique o grau em que essa mudança ocorreu na sua vida como resultado desse acontecimento.

<b>Não</b>	<b>Mudei muito</b>	<b>Mudei</b>	<b>Mudei</b>	<b>Mudei</b>	<b>Mudei muito</b>
<b>Mudei</b>	<b>ligeiramente</b>	<b>ligeiramente</b>	<b>moderadamente</b>	<b>acentuadamente</b>	<b>acentuadamente</b>
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

- 1- Mudei as minhas prioridades (mudei o valor) acerca do que é importante na vida.
- 2- Dou mais valor à minha vida.
- 3- Tenho novos interesses.
- 4- Confio mais em mim próprio.
- 5- Tornei-me uma pior pessoa.
- 6- Compreendo melhor a espiritualidade.
- 7- Percebo mais claramente que posso contar com as outras pessoas nos momentos difíceis.
- 8- Estabeleci um novo rumo para a minha vida.
- 9- Sinto-me mais próximo das outras pessoas.
- 10- Agora sei até que ponto pode chegar a crueldade humana.
- 11- Consigo transmitir mais as minhas emoções.

Ricardo Amaral Felício

---

12- Agora sei que sou capaz de lidar com situações difíceis.

---

13- Sou capaz de fazer coisas melhores com a vida.

---

14- Perdi muito da minha fé e crença em Deus.

---

15- Aceito melhor a forma como as coisas são.

---

16- Agora percebo o quanto o mundo pode ser injusto.

---

17- Aprecio mais cada dia da vida.

---

18- Apareceram oportunidades que não teriam aparecido de outra forma.

---

19- Sinto mais compaixão pelas outras pessoas.

---

20- Percebi que não existem amigos verdadeiros.

---

21- Esforço-me mais nos meus relacionamentos.

---

22- É mais provável eu mudar as coisas que precisam ser mudadas.

---

23- Tornei-me insensível aos pequenos problemas dos outros.

---

24- Tenho uma fé religiosa mais forte.

---

25- Descobri que sou mais forte do que pensava.

---

26- Percebi que há muitos acontecimentos maus que não podemos evitar.

---

27- Aprendi que as pessoas podem ser maravilhosas.

---

28- Aceito melhor o facto de precisar dos outros.

---

Appendix 4

POR FAVOR COMPLETE COM CANETA PRETA.

**Connor-Davidson - Escala de Resiliência  
(CD-RISC)**

iniciais do nome    BI         data  /  /

idade   estado civil  casado(a)  separado (a)  viúvo(a)  
 solteiro(a)  divorciado(a)

sexo  masculino  feminino raça ou origem étnica  caucasiana  asiática  africana  outra

Por favor indique até que ponto concorda com as seguintes afirmações enquanto se aplicam à sua realidade e a si nesta **última semana**. Se alguma destas situações não ocorreu recentemente, responda de acordo com o que pensa que teria sentido caso tivessem ocorrido.

	não verdadeira	raramente verdadeira	às vezes verdadeira	geralmente verdadeira	quase sempre verdadeira
1 Eu sou capaz de me adaptar quando ocorrem mudanças.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
2 Eu tenho pelo menos uma relação próxima e segura que me ajuda quando estou sob stress.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
3 Quando não existem soluções óbvias para os meus problemas, por vezes o destino ou Deus podem ajudar.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
4 Eu consigo lidar com qualquer coisa que aconteça na minha vida.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
5 Os sucessos do passado dão-me confiança para lidar com os novos desafios e dificuldades.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
6 Eu tento ver as coisas com humor quando me deparo com problemas.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
7 Ter de lidar com o stress torna-me mais forte.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
8 Tenho tendência para recuperar rapidamente depois de períodos com doença, ferimentos ou outras dificuldades.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
9 Bem ou Mal, acredito que a maioria das coisas acontece por uma razão.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
10 Eu dou o meu melhor independentemente dos resultados que possa vir a ter.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
11 Eu acredito que posso atingir os meus objectivos, mesmo que existam obstáculos.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
12 Mesmo quando as coisas parecem não ter solução, eu não desisto.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4

# Ricardo Amaral Felício

iniciais do nome    BI         data   /   /   visita

	não verdadeira	raramente verdadeira	às vezes verdadeira	geralmente verdadeira	quase sempre verdadeira
13 Durante momentos de stress / crise, eu sei onde procurar ajuda.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
14 Sob pressão, mantenho-me focado(a) e a pensar com clareza.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
15 Eu prefiro liderar na resolução de problemas, do que deixar que os outros tomem todas as decisões.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
16 Eu não sou facilmente desencorajado(a) pelo insucesso.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
17 Eu penso em mim como uma pessoa forte ao lidar com os desafios e dificuldades da vida.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
18 Eu consigo tomar decisões pouco populares ou difíceis com implicações para outras pessoas, se necessário.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
19 Eu sou capaz de lidar com sentimentos desagradáveis ou dolorosos como a tristeza, o medo e a raiva.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
20 Ao lidar com os problemas da vida, às vezes temos que agir por impulso, sem olhar para o porquê.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
21 Eu acredito fortemente que a vida tem um sentido.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
22 Eu sinto que a minha vida está sob o meu controlo.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
23 Eu gosto de desafios.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
24 Eu trabalho para atingir os meus objectivos independentemente dos obstáculos que encontro pelo caminho.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
25 Eu orgulho-me dos sucessos que alcanço.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4

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Appendix 5

Questionário Geral

Idade \_\_\_\_\_ anos

Sexo Feminino  1

Masculino  2

Residência

Concelho \_\_\_\_\_

Distrito \_\_\_\_\_

Naturalidade: \_\_\_\_\_

Nacionalidade: \_\_\_\_\_

Estado Civil

Solteiro(a)  1

Víuvo(a)  4

União de facto  2

Separado(a)  5

Casado(a)  3

Divorciado(a)  6

O *acontecimento vivido* alterou o seu estado civil?

Não  1

Sim  2

Filhos

Não  1

Sim  2

Número de filhos \_\_\_\_\_

Dos quais, dependentes? \_\_\_\_\_

Outras pessoas dependentes

Não  1

Sim  2

Quantas? \_\_\_\_\_

Actualmente vive com

Pai e mãe juntos  1

Família Adoptiva  7

Pai  2

Namorado(a)/Companheiro (a)  8

Mãe  3

Cônjuge  9

Irmãos  4

Amigos  10

Filhos  5

Sozinho(a)  11

Outros familiares  6

O *acontecimento vivido* alterou as pessoas com quem vive?

Não  1

Sim  2

Habilitações literárias

Até ao 9º ano  1

Bacharelato  6

Até ao 12º ano  2

Licenciatura  7

Frequência de Curso Profissional  3

Pós-Graduação  8

Frequência de Curso Universitário  4

Mestrado  9

Curso Profissional  5

Outro \_\_\_\_\_  10

**Situação Profissional**

- Estudante <sub>1</sub> Trabalhador(a) empregado(a) <sub>3</sub>  
 Estudante e Trabalhador(a) <sub>2</sub> Trabalhador(a) desempregado(a) <sub>4</sub>

Se empregado, qual a profissão? \_\_\_\_\_

O *acontecimento vivido* mudou a sua situação profissional?

- Não <sub>1</sub> Sim <sub>2</sub>

**Relativamente à Religião, considera-se**

- Não crente <sub>1</sub> Crente praticante <sub>3</sub>  
 Crente não praticante <sub>2</sub> Se assinalou 2. ou 3., que religião? \_\_\_\_\_

**Alguma vez teve acompanhamento psicológico ou psiquiátrico?**

- Nunca <sub>1</sub> Tenho actualmente <sub>3</sub>  
 Já tive no passado <sub>2</sub> Nunca tive mas penso/já pensei que me seria útil <sub>4</sub>  
 Com que idade? \_\_\_\_\_ anos

Faz alguma medicação psiquiátrica (ansiolíticos, anti-depressivos,...)?

Qual? \_\_\_\_\_

Quem prescreveu a medicação? \_\_\_\_\_

**Consumo de Substâncias**

O *acontecimento vivido* alterou o seu consumo de substâncias psico-activas?

Quais as substâncias que consumia habitualmente?

	Quantidade por semana
Tabaco <input type="checkbox"/> <sub>1</sub>	
Álcool <input type="checkbox"/> <sub>2</sub>	
Cannabis <input type="checkbox"/> <sub>3</sub>	
Cocaína <input type="checkbox"/> <sub>4</sub>	
Heroína <input type="checkbox"/> <sub>5</sub>	
Outra <input type="checkbox"/> <sub>6</sub>	
Qual? _____	

Quais as substâncias que consumiu na última semana?

	Quantidade por semana
Tabaco <input type="checkbox"/> <sub>1</sub>	
Álcool <input type="checkbox"/> <sub>2</sub>	
Cannabis <input type="checkbox"/> <sub>3</sub>	
Cocaína <input type="checkbox"/> <sub>4</sub>	
Heroína <input type="checkbox"/> <sub>5</sub>	
Outras <input type="checkbox"/> <sub>6</sub>	
Qual? _____	

## Appendix 6

	Sex	Age	Marital Status	Coabitantes	Ed. Level	Employment	Religion	Psych. Antecedents	Substances
Case 1	M	39	Non-marital relationship	Partner and her son	Secondary	Employed	Christian	None	None
Case 2	M	45	Widowed	Two sons, one daughter	Primary	Unemployed	None	None	Alcohol (at meals) and tobacco
Case 3	F	27	Non-marital relationship	Partner, son	Secondary	Employed	None	Depression and anxiety	Tobacco
Case 4	M	40	Non-marital relationship	Partner, son	University	Employed	None	None	None
Case 5	F	46	Married	Husband, son	Secondary	Employed	None	Depression	None
Case 6	M	47	Married	Wife, son	Basic	Employed	Baptist Evangelic	None	Alcohol (at meals)
Case 7	F	40	Widowed	Daughter	Secondary	Employed	Catholic	None	Alcohol (at meals)

**Appendix 7**

<b>Case Summaries<sup>a</sup></b>		
Family Cohesion Value taken from Interviews		
1		2,48
2		3,15
3		2,38
4		,72
5		6,01
6		6,07
7		2,63
Total	N	7

a. Limited to first 100 cases.