Understanding the Role of Religion in Coping after Trauma: Resilience, Post-traumatic Growth and Difference in Coping Mechanisms

by

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Abstract: A qualitative research was done in order to find what role religion has in coping after traumatic event. First a literature review was done. The results were non-consistent and a gap in the literature was found. Case studies were used to gain in-depth knowledge of the exact coping mechanisms and any possible differences in coping between religious and non-religious people. It was discovered that both religious and non-religious people used the same amount of time to recover, even when using different coping mechanisms. No connection between religion and post-traumatic growth, and religion and resilience could be made. Limitations and relevance of results are discussed.

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1 Introduction

A large amount of people go through traumatic events throughout their lives. How an individual adapts to their trauma depends on a great deal of factors; the nature of the trauma, the victim's age, their predisposing personality, and their community's response (Van der Kolk, 2003). There is an immense variety of ways in which a victim can deal with their trauma. In time of stress and disturbance people can experience dissociation, anxiety, depression, post-traumatic stress disorder (PTSD) and even suicidal thoughts (Friedman, 2007). Positive coping mechanisms on the other hand are anything but rare. Often people can rely on friends and family for support, they can rely on their own strengths or seek meaning in religious and spiritual beliefs (Brannon, Feist, & Updegraff, 2013). Most people recover from trauma without needing professional help (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995) and some of them even experience post-traumatic growth (Tedeschi & Calhoun, 2004).

Positive change after trauma is a phenomenon that has been explored in the past decades (Calhoun, Cann, Tedeschi, & McMillan, 2000; Bryant-Davis & Wong, 2013; Ai & Park, 2005). Previous research describes the connection between Post-traumatic growth (PTG) and Post-traumatic stress disorder (PTSD) and explains how PTG occurs (Dekel, Mandl, & Solomon, 2011). Calhoun and Tedeshi (2006) described PTG as positive change that happens after stressful and traumatic event. In certain cases religion seemed to help with that positive change (Bryant-Davis & Wong, 2013).

Religion is an important part of people's life. Often it gives an explanation as to why certain events happen – good or bad. Religion can shape one's view of the world. After a traumatic experience it can provide support, as it can have a positive effect on victims (Bryant-Davis, Ellis, Burke-Maynard, Moon, Counts, & Anderson, 2012). Although the coping process of religious people may help them deal with stress through various religious rituals and beliefs, this is not an option for non-religious people. To go back to the balanced state of mind they were in before the onset of trauma, non-religious people must find their own way to deal with their trauma.

Studies have shown that religion and/or spiritual beliefs may indeed have a positive effect on dealing with trauma (Bryant-Davis & Wong, 2013; Dueck & Byron, 2011; Brewer-Smyth & Koenig, 2014), but how does this happen exactly and what are the most important sources of healing? Does believing in a higher power act as a shield against trauma and does it bring forth better psychological outcomes?

This research will try to answer these questions by reviewing the existing literature. To gain more in-depth knowledge this literature review will be supplemented with several case studies.

First a short overview of the theory will be made. This overview will be followed by a literature review which will give more information about the current findings with conclusions. Any possible gaps in the literature will be discussed. The personal reasoning and views of individuals exposed to some form of potentially traumatic event will be shown in the second part of the study where the study cases are described. A final discussion on the confirmation or rejection of the initial hypotheses and recommendations of further research will be made.

2 Theoretical Framework

2.1 Resilience

Resilience as a term first emerged in Mathematics and Physics. Within these subjects it relates to the ability of an object to return to its previous state after being influenced by a force. Bodin and Wiman (2004) write that resilience is the speed with which a system returns to equilibrium. In this paper however, resilience will be looked at on the individual level where it will be used to describe "*the capacity for successful adaptation, positive functioning, or competence… despite high-risk status, chronic stress, or following prolonged or severe trauma*" (Egeland, Carlson, & Sroufe (1993), as cited in Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). This type of resilience is labeled as "psychological resilience". A difference can be made between resilience and recovery. Bonanno (2004) writes that while *recovery* is more like a trajectory "*in which normal functioning temporarily gives way to threshold or subthreshold psychopathology (e.g., symptoms of depression or posttraumatic stress disorder [PTSD]), usually for a period of at least several months, and then gradually returns to pre-event levels*", resilience is the ability itself to be in balance. Even though here the author makes a clear difference between the two terms it can be argued that resilience is a part of the process of recovery. Wrenn et al. (2011) examine resilience as a factor that helps in the process of recovery after adverse experiences. This is also how resilience will be viewed in this research – as a quality that one may or may not have, that can speed up the recovery after trauma. "Recovery" itself will be understood as described in the Oxford dictionary ("Recovery", n.d.) - "a return to a normal state of health, mind, or strength". Resilience and coping mechanisms will be considered as ways of dealing with the consequences caused by the traumatic event.

Polk (1997) lists four patterns which gather the characteristics that define resilience.

- *Dispositional pattern* – this pattern includes ego-related and physical attributes. Intelligence, temperament, and health are one of them. By physical the author means the inborn and genetic factors which are connected to resilience. Proper self-confidence and self-reliance are some of those in the ego-related subgroup.

- *Relation pattern* – this pattern includes the social network of the individual, the social support he can get, as well as the interests and hobbies, social activities and the openness to look for contacts.

- *Situational pattern* – this pattern describes resilience as "*a characteristic approach to situations or stressors that is manifested as cognitive appraisal skills, problem-solving ability, and attributes that indicate a capacity for action in facing a situation*". Traits like awareness in the changing situation, active problem-solving skills and even curiosity and creativity are part of this cluster.

- *Philosophical pattern* – this construct contains all the personal beliefs and ways in which people explaining events in their life. Believing that one's life has a certain purpose, that everything happens for a reason or that there is always justice in this world are examples of this pattern.

Resilience is not rare; quite the contrary (Bonanno, 2004). Many people are flexible and cope with stress in different ways. Being resilient also could mean being aware of your emotions and being able to balance them. This doesn't mean that the affected individuals will not suffer or experience distress, or even Post Traumatic Stress Disorder (PTSD). They will still be sad or will find it difficult to deal with the situation, but will adapt better to it.

Winfield (1994) writes that resilience is something we foster. Since young age children can be taught how to be more resilient. Starting as early as preschool and reaching as far as college, children can develop their resilience within a protective environment which can be created by building stronger relationships with classmates and teachers, be more open for giving and receiving help, developing lasting life goal and providing students with mentors. Luthans, Vogelgesang, and Lester (2006) also list several strategies to develop resilience – using positive emotions, self-enhancement, optimistic attribution and hardiness.

The American Psychological Association (APA) listed several factors that can promote the development and strengthening of resilience in people. Those factors however, might not influence everyone the same way. Not every strategy works for every person. An individual approach should be taken. Some people prefer to deal with stressful situations on their own, while others manage better in group sessions. Still, the following strategies can be used and are appropriate in many cases: *"making connections*; *avoid seeing crisis and overwhelming problems, accept change as part of living, move towards your goals*, *take decisive actions,*

look for opportunities, nurture a positive view of yourself, keeping things in perspective,
maintaining a hopeful outlook, taking care of yourself"[1] .

2.2 Post-traumatic growth (PTG)

Even though stress and negative emotions are experienced after a traumatic event, people sometimes report positive outcomes. Up to 70% of the people who suffered trauma report that they still see at least one positive outcome of that negative event in their lives (Calhoun & Tedeschi, 1999). PTG has been reported in various situations and types of trauma (McMillen, Zuravin, & Rideout, 1995; Joseph, Williams, & Yule, 1993). Victims of trauma have different reactions to the same event. How they perceive their trauma and whether or not they experience positive growth, or suffering, will most likely depend on their appraisal and not the event itself (Woodward & Joseph, 2003). If the above statement is true this could lead to a logical follow up where the development and change of the self that follows a stressor, no matter how harsh this stressor is, will depend entirely on the perception of the victim. This would also mean that just because someone changes in a positive way from a trauma, does not mean that everybody else will follow the same path.

Post-traumatic growth (PTG) is a psychological change that can be a result of a stressful experience. PTG can include changing one's life goals, better relationship with others, as well as change in religious or spiritual beliefs (Tedeschi & Calhoun, 1996). In that sense PTG is different from just recovering from a trauma. It is not just the restoration of the mental balance of a person but entails an increased level of psychosocial function compared to before the traumatic event.

The relationship between PTG and resilience has been studied for years to determine how the two influence each other. Lepore and Revenson (2006) suggest that resilience helps the development of PTG. At the same time Tedeschi and McNally (2011) say that more resilient people may experience less PTG because of their strong coping skills. Still, they say that PTG and resilience are indeed connected and someone that experienced growth will most likely also become more resilient in the future.

Heckhausen and Schulz (1995) (as quoted in Ai & Park, 2005) state that people under heavy pressure seek the support of a higher power in order to deal with stress. Religious

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[1] A more detailed description of each strategy can be found in the Appendix chapter.

activities and religiosity is found to also be positively related to PTG (Shaw, Joseph, & Linley, 2005).

2.3 Post-traumatic stress disorder (PTSD)

PTSD is a psychiatric disorder that may occur after experiencing a traumatic event. The type of event may vary - from bereavement and being victim of violence, to experiencing a natural disaster or learning about serious illness. PTSD was first added in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980 where it was officially recognized as a psychiatric disorder (American Psychiatric Association, 1980). In order for someone to be diagnosed with PTSD there must be several conditions. In DSM-V there are nine conditions that should be met. First of all, experiencing an event that is considered a stressor must be present. That would mean that the person is *"exposed to a catastrophic event involving actual or threatened death or injury, or a threat to the physical integrity of him/herself or others"* (Friedman, 2007). There should be certain symptoms present which are divided in three major groups**:** hyper arousal symptoms (difficulty falling asleep, concentrating or feeling angry), avoidance symptoms (avoiding people and/or places, lost interest in different activities, no desire to talk about the event), and re-experiencing symptoms (nightmares, flashbacks, intrusive recollection) (Yehuda, 2002). Criteria about the duration of the symptoms are also described – they should be occurring for at least one month.

In recent years the connection between PTSD and PTG was looked into by the researchers. Using Exposure therapy Hagenaars and Van Minnen (2010) found a negative connection between PTSD and PTG. However, Solomon and Dekel (2007) found the opposite – the more adversity the respondents were facing, the more growth they were experiencing. Dekel, Ein-Dor, and Solomon (2012) discussed longitudinal studies which examined the relationship between PTSD and PTG. No consistent results were observed.

In this research that relationship is important because some researchers suggest that PTSD and PTG can have shared predictors. Dekel, Mandl, and Solomon (2011) concluded that among former prisoners loss of control and active coping while captive were common predictors. In another study hyper arousal, as being a symptom of PTSD, was a predictor of

growth (Dekel, Ein-Dor, & Solomon, 2012). At the same time the connection between resilience and PTSD was also explored. L. A. King, D.W. King, Fairbank, Keane, and Adams (1998) determined that when war veterans scored higher on a hardiness scale (control, commitment and challenge), this was related to fewer PTSD symptoms. They were also better at coping by creating relationships. Sutker, Davis, Uddo, and Ditta (1995) had similar findings where in a sample of 775 Persian Gulf War exposed troops, veterans with PTSD also scored lower on the scale for hardiness and had less social support. The same conclusions were made by Benotsch, Brailey, Vasterling, Uddo, Constans, and Sutker (2000) in a longitudinal research where little social support and negative coping predicted PTSD.

2.4 Religion and Spirituality

"Religion" is a set of beliefs about the relationship between humans and the events in their lives and the world around them. Religions also include rules that followers must obey. They can be applied to clothing, eating or allowing women to vote or be present in holy places. It's really hard to define what religion exactly is. In the Oxford dictionary religion is defined as "the belief in and worship of a superhuman controlling power, especially a personal God or gods". Religions are so different from one another, that it's almost impossible to describe all of them in such a short way. In 2012, almost 60% of the population on the Earth was religious (WIN-Gallup International, 2012).

Geertz (1973) writes that religion has to have several features to be qualified as one, as follows:

 "(1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic"

Spirituality in the same manner has again no complete or accurate definition. It can be a personal experience or a group experience. Going to the church or mosque, coming together for a prayer or spending the evening meditating or practicing yoga can be all classified as a form of Spirituality. When talking about Spirituality there is no single God or entity that can be named as the higher power. Just the belief in one such higher power, or the belief that there is something bigger, can make someone spiritual. Spirituality and religion are different by

their nature. Religion is an institution – there is structure, law and command you need to follow. You must pray and visit a place of worship where one asks a higher being for help and protection. One can change his religion, be forced into one or abandon it. On the other hand Spirituality is something private that is from within, more abstract and vague than religion in terms of rules.

Weber, another famous sociologist, says that religion is needed by people in order to provide them with an explanation for the misery and fortune in their lives, the explanation as to why things happen and in general to provide people with a reason for the events they cannot explain for themselves (Christiano, Swatos, & Kivesto, 2008).

Existing research on the influence of religion shows that the rituals and beliefs can help after combat actions (Astin, Lawrence, & Foy, 1993). Some people tend to turn to religion as a coping mechanism in order to overcome a traumatic event in their lives. Beliefs in a higher power can enforce a better sense of control and meaning (Pargament et al., 1990; Tedeschi & Calhoun, 1996). The positive effect of religion and spirituality on trauma victims should be acknowledged as the literature on the topic proves that there is enough data to support that statement (Bryant-Davis, Ellis, Burke-Maynard, Moon, Counts, & Anderson, 2012).

In this paper Religion will be examined at the individual level; how does it change after trauma and how does it influence the way in which a person copes with trauma. The questions that this research tries to answer are: does religion help to deal with trauma and if so, in what way, and are religious people better at coping with trauma than non-religious people.

2.5 Coping and Social support

In our lives we experience numerous unexpected positive and negative events. The process of dealing with all those negative consequences, stress and interactions, is called "coping". This term is rather diverse and does not have a single definition. R. Schwarzer and C. Schwarzer (1996) write that "coping" has three important variables:
>   (a) "Coping need not be a completed "successful" act, but an effort has to be made";
>   (b) "This effort need not be expressed in actual behavior, but can be directed to cognitions as well";
>   (c) "A cognitive appraisal of the taxing situation is a prerequisite of initiating coping attempts".

One can cope in many different ways, depending on age, sex, type of stressor and even culture (Carver & Connor-Smith, 2010). Coping strategies can be divided into positive and negative strategies. A study done by Tobin, Holroyd, Reynolds, and Wigal (1989) specifies certain primary coping strategies. They include two categories – Engagement (positive coping) and Disengagement (negative coping). Engagement includes problem solving, cognitive restructuring, expressing emotions and seeking social support, while Disengagement includes problem avoidance, wishful thinking and self-criticism ("social withdrawal" was listed only as a hypothesized factor, but later on confirmed as an eighth coping strategy). At a secondary level two types of emotion-focused strategies were described and two types of problem-focused ones. Both Folkman (1984) and Lazarus (1993) distinguish those types of coping which are often used depending on the event where sometimes both can be used at the same time. Emotion-focused coping is used to alter and balance the emotions, while problem-solving focused coping will try to change the outcome of a situation. The difference between the two types is that the problem-focused one can be described as an active way to deal with the stressor and remove its influence over the current situation, while the emotion-focused one is a passive approach aimed at altering one's emotions in order to lower negative experiences.

Although both types of coping are applicable in most situations the preferable type would depend on how the person himself assesses the situation.

Since the way of coping can predict changes in resilience, as shown by Campbell-Sills, Cohan, and Stein (2006) the use of coping strategies will be examine. More specifically, the focus will be on seeking social support as a positive coping strategy, as well as positive and negative religious coping.

Social support itself has been described as "support accessible to an individual through social ties to other individuals, groups, and the larger community" (Lin, Simeone, Ensel, & Kuo, 1979). It can take shape as a network of family, friends, neighbors, and community members who provide psychological, physical, and financial help in times of need (Ozbay et al., 2007). As shown in a recent study (Hyman, Gold, & Cott, 2003), social support can help prevent the development of PTSD by building resilience. This was done by using a combination of self-esteem support and appraisal support. By increasing a victim's self-esteem support - the perception that he or she is valued by others, and a victim's appraisal support - the perception that he or she is capable of getting advice when coping with

difficulties, they were able to confer the victim's resilience to stress, therefore protecting the victim from potential stressful events and preventing the onset of PTSD.

Religious coping is different from normal coping, because it includes activities that apply only to religious people. Pargament, Smith, Koenig, and Perez (1998) identified several religious coping mechanisms, both positive and negative. Seeking spiritual support, forgiveness, religious purification and benevolent religious appraisal were all related to less psychological distress and PTG. The negative coping mechanisms - spiritual discontent, demonic or punishing God reappraisal and interpersonal religious discontent, were connected with depression, lower quality of life and psychological symptoms. Positive coping was used more than negative coping, a finding supported by other research (Croog & Levine, 1972).

3 Methods

3.1 Literature review

There are many studies that are interested in how people cope with stressful events in their lives. As we will find out, it appears some of them also include religion and spirituality as a variable. In order to answer the main research question "Does religion/spirituality help the recovery after trauma and if yes, in what way?"

A structured literature review was conducted in order to get an overview of the current state of knowledge concerning resilience, posttraumatic growth, posttraumatic stress disorder and religious coping. The literature is supplemented by a number of case studies. Here people who suffered trauma were interviewed. Half of the interviews were with religious people and the other half with ones with no religious or spiritual beliefs whatsoever. In the following analysis of those cases, we will examine whether the presence of religious beliefs helped victims have a faster recovery or even experience psychological growth in comparison with the non-religious respondents.

Inclusion criteria

In the literature search the following types of literature were included: articles (without books or chapter of books), only studies in English, the studies needed to be focused on religion and/or spirituality and its influence after traumatic events (including natural disasters, criminal acts, war situation, etc.), studies of both men and women, no age requirement and no requirement regarding year of publication.

The search was meant to discover relevant studies that would help to determine if people gave credit for their recovery to their personal beliefs. There was no specific requirement for an article to be an original research article because often a review of selected studies would give a very useful overview of articles. Other non-research papers also provided valuable insight.

Search method

The following key words were used to form the first category: *religion, spirituality,* and *belief.* While the words *trauma, resilience, recovery,* and *survival* were used to form a second category. All of these were subsequently used as a combination of two or three words at the same time (for example: religion OR spirituality OR belief AND trauma OR resilience OR recovery). There was always a word from both categories so more accurate results could be shown. The sites and search engines that were used for the search were Web of Science, Google Scholar, PsycINFO, and PubMed. The search was made using phrases after which short abstract were reviewed. This became necessary as Google Scholar returned too many search results as a result of not being able to narrow down criteria enough.

The total amount of articles found that matched the search was 41. After that, the abstracts and, where necessary, the rest of the articles were read to determent if the texts were fit for the purpose of the study. A total of 17 results were excluded which resulted in a total amount of 24 articles fit for examination.

Since an explanatory approach will be used several propositions will be made that will be based on the research questions and the outcome of the literature review.

3.2 Case studies

The inclusion criterion for respondents participating in one of the case studies was to have suffered a traumatic event in the past which resulted in substantial distress. No requirements for age, sex, ethnicity, nationality, social status, marital status, or religion were made. Both people with and without religious/spiritual affiliation were recruited for the case studies. The respondents had to be able to describe their own emotions and views on the event.

Several non-governmental organizations (NGO's) were contacted. All of them offer help to victims of trauma. Some of the NGO's were focused on a particular group like refugees or drug addicts while others were a place where everyone in need could look for help. In the end, no cooperation between the NGO's and researcher took place as in some cases the victims had no desire to talk about their trauma while in other cases the people did not fit the desired profile.

Eventually a representative of an Adventist church was contacted. A few members of this church agreed to be interviewed after their representative explained the aim of the study. A total of 3 in-depth interviews were made with Adventists as well as one interview with a Protestant.

The non-religious, as well as the non-Adventist religious respondents, were recruited by posting messages on internet forums and different groups in social media. The interviews were semi-structured and were done using a VoIP (voice over internet protocol) program. There was a basic set of questions that the researcher had in mind when doing the interviews. The questions were mostly about the interpretation of the traumatic event by the respondent, the impact of religion, the role of social support in the process of healing, understanding of death, and overall worldview of the respondent.

4 Literature review

4.1 Results

Table 1 represents the studies that were excluded. The author, year and reason for omission were presented. In total 19 studies were excluded. The table can be found in the Appendix section.

In *Table 2* is a structured summary is presented of the included selected literature in the literature review. Here, information can be found that describes the aim of the study, the kind of trauma the respondents endured, the type of data collection, and the size of the sample. *Table 3* describes if the research explores the connection between resilience and religion/spirituality; PTG and religion; the inclusion of PTSD and PTG.

The majority of the studies (15) examined victims of various types of trauma (1, 3, 4, 7, 8, 9, 10, 13, 15, 16, 17, 18, 19, 20, 21 and 22)[2]. The rest (2, 5, 6, 11, 12, 14, and 20) examined survivors of a particular event. Eight of the papers were non-research papers (5, 7, 9, 10, 16, 18, 19 and 21) in which the authors defended their position or examined certain relationships relevant to the article's subject. There were three reviews. One of them reviewed eleven articles (Shaw, Joseph, & Linley, 2005), the second - 13 (Sinha & Rosenberg, 2013), while the third one has no number pointed out (Bryant-Davis & Wong, 2013).

Articles labeled as "Various trauma" in the field of "Type of trauma" had either numerous types of trauma experienced by the respondents or hadn't given a specific description of the type of trauma experienced. Some articles (Peres, Moreira-Almeida, Gladys Nasello, & Koenig, 2007) specified that the trauma was psychological or violent (Connor, Davidson, & Lee, 2003).

Fourteen articles included the influence of PTSD. There were seven papers, that even after reading the abstract, turned out to not include any examination of a connection between religion/spirituality and resilience (1, 3, 12,13, 15, 19 and 20). From those seven, three examined the relation between Post-traumatic Growth and Religion/Spirituality (Calhoun, Cann, Tedeschi, & McMillan, 2000; Shaw, Joseph, & Linley, 2005; Seidmahmoodi, Rahimi,

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[2] When the volume of references is larger, the articles will be represented by a number, which will indicate their place in *Table 2* and *Table 3*

& Mohamadi, 2011). Only two papers from those seven were excluded since they did not explore PTG, PTSD, religion-resilience or religion-PTG connection.

Thirteen studies also included Post-traumatic stress disorder as a variable (3, 4, 7, 8, 10, 11, 12, 16, 17, 19, 20, 21 and 22).

The results from the papers showed inconsistent results on the connection of PTSD with PTG or religion. Mostly it was concluded that spirituality/religion can help deal with PTSD symptoms (Peres, Moreira-Almeida, Nasello, & Koenig, 2007) and that religion was found to increase resilience and lower PTSD symptoms (Ali, Farooq, Bhatti, & Kuroiwa, 2012). At the same time other studies (Connor, Davidson, & Lee, 2003) found that spirituality leads to more PTSD or that religious coping leads to more distress (Thompson & Vardaman, 1997). Ai and Park (2005) wrote that current results on this topic are controversial. The same conclusion can be made looking at the results from the review. A lot of researchers also use a cross-sectional design and even if they find a connection between PTSD and PTG, it's not known if PTG caused less PTSD or the presence of PTSD resulted in limited psychological growth. Further research that can also determine the causation will give much more in-depth knowledge on how religion, PTSD and PTG influence each other. Another reason for those differences can be attributed to the events that led to trauma. It can be argued that the psychological impact of an earthquake will differ from the impact of a sexual assault or taking part of military actions. Although all of them will be labeled as traumatic events they will each have a different influence on their victim.

Ten from the twenty-four papers included PTG (1, 4, 7, 8, 9, 10, 11, 13, 15 and 16) and nine of them examined the religion/spirituality-PTG relationship. Only one (Ai & Park, 2005) left that out. In all the papers, where that connection between religion/spirituality and PTG was examined, positive associations were found, with religion/spirituality associated with more PTG.

Fifteen papers examined the relation between resilience and religion/spirituality. All of them found a positive relationship. Only one paper (Connor, Davidson, & Lee, 2003), as it can be seen, examined both religion/spirituality in relation to resilience, but found no relationship between them. However, it was found that resilience can generate better health outcomes, but at the same time poor health was related to anger and spiritual belief (Connor, Davidson, & Lee, 2003). The author explains that this can occur, since people in poor health can use spirituality as a coping mechanism. Something else that should be noted is that this

particular study uses cross-sectional data, which means that it "does not inform as to the directionality of relationship between the variables and outcomes of interest" (Connor, Davidson, & Lee, 2003)

One of the reviewed papers (Sigmund, 2003), even though no examination of the religion/spirituality-resilience relationship was done, described the role of clergy in relation to trauma and PTDS. It stated that the involvement of clergy is a good way for people to connect to support groups, where they can get help. The author concludes that clergy are indeed helpful for battling PTSD in trauma survivors, but much more research is needed. Examples of groups based on religions which provided religious and spiritual support were given by the author. He did not discuss the possibility that social support and the creation of new relationships could be one of the reasons for the good outcomes from those groups. Social support as a way of coping could be a major factor in recovery. Social support also proved an influential factor according to the studies numbered 4, 6, 8, 12, 13, 14, 15, 16, and 20. Social support can be received from family members, friends, and members of the church or community. As discussed in the theoretical framework, social support can speed up the process of recovery after trauma and can have an overall positive effect.

A trend was noticed (2, 4, 12, 19 and 20) that no matter the conclusions of the authors on the chosen topic, negative religious coping was also considered. In the papers there were respondents who experienced negative religious coping, but the ones who were positively influenced by religious beliefs and rituals were a greater number.

Table 2 - Included studies

Author, year	Aim of study	Type of trauma	Type of data collection	Sample size
1. Calhoun , Cann , Tedeschi, McMillan , (2000)	Examining the connection between religion and PTD	Death of a loved one, robbery, motor viechle accident etc.	Pre-screening for experience, TSS, PTGI[3]	N=54; 35 female and 19 male; M=22,5
2. Singh, Garnett, Williams, (2013)	Examining daily live of victims of sexual abuse during childhood	Sexual abuse	Interview	N=10; all female
3. Falsetti, Resick, Davis, (2003).	Examines the relationship between trauma, PTSD and change in religious beliefs	Sexual assault, natural disaster trauma, assault, witness to a serious trauma of another person etc.	Structured diagnostic interview	N=120
4. Harris, Erbes, Engdahl, Olson, Winskowski, McMahill, (2007).	Exploring the relationship between religion and trauma	Natural disaster, motor viechle accident, war veteran, death of a loved one, assault, being abused (sexually) as a child etc	Questionnaire (TLEQ,PCL,PTGI)[4]	N=327; 95 male,228 female, 1 transgender,3 unknown
5. Dueck, Byron, (2011)	The article describes ways to reconstruct communities after disaster and trauma	Natural disaster, massacre	Non-research paper	N/A
6. Brewer-Smyth, Koenig, (2014)	Overview of religion and spirituality, in relation to resilience after childhood trauma	Childhood trauma in adults	Literature search, containing key words	No articles found; only concepts were included
7. Smith, (2004)	Discussion about the relationship between spirituality and psychological trauma	Various, psychological	Non-research paper	N/A

[3] TSS= *The Traumatic Stress Schedule*; PTGI = *The Posttraumatic Growth Inventory*

[4] TLEQ= *Traumatic Life Events Questionnaire*; PCL= PTSD *Checklist-Civilian Version*

8. Bryant-Davis, Wong, (2013)	Focused on religious and spiritual coping among survivors of interpersonal trauma	Child abuse, trafficking, sexual abuse, torture, refugee trauma, war traumas	Review of selected studies	N/A
9. Bryant-Davis et al., (2012)	Exploring the role of religion/spirituality in the lives of people, who experienced trauma	Various types of trauma	Non-research paper	N/A
10. Ai, Park, (2005)	Describes trends in mental health research, including the role of religion/spirituality	Various types of trauma	Non-research paper	N/A
11. Ali, Farooq, Bhatti, Kuroiwa, (2012)	Asses PTSD in earthquake survivors, identify protective factors, evaluate determinants	Natural disaster (Earthquake)	semi-structured questionnaire	N= 300, 182 male, 118 female
12. Tran, Kuhn, Walser, Drescher, (2012)	Explores the relationship between PTSD, religion and depressive symptoms in veterans	Being a soldier in a war	a battery of questionnaires	N=449, 359 male, 54 female
13. Shaw, Joseph, Linley, (2005)	Review of literature on connection between Post-traumatic growth, religion, spirituality	Various types of trauma	Review of selected studies	N= 11 articles
14. Gunnestad, Thwala, (2011)	Examines the relationship between resilience and religion in children in difficult situations	Having no parents; being in difficult life situation	Retrospective essays and semi-structured interviews	N=29 in Zambia; N=32 in Swaziland; N=217 orphans

15. Seidmahmoodi, Rahimi, Mohamadi, (2011)	Examines the relationship between resilience and religion with PTG	Various trauma, experienced in the past 5 years	Traumatic Life Event Questionnaire, PTGI-I, ROS[5]	N=201; 101 female; 100 male
16. Peres, Moreira-Almeida, Nasello, Koenig, (2007)	Examines the relationship between spirituality and resilience in trauma victims	Various; psychological	Non-research paper	N/A
17. Connor, Davidson, Lee, (2003)	Evaluates the relationship between anger, resilience, spirituality and PTSD	Various; violent	Online survey	N=1200
18. Farley, (2007)	Explores the relationship between resilience, trauma and spirituality	Various types of trauma	Non-research paper	N/A
19. Sigmund, (2003)	Examines the effect of Clergy in PTSD treatment	Various types of trauma	Non-research paper	N/A
20. Thompson, Vardaman, (1997)	Investigates the role of religious coping among family members of homicide victims	Member of the family of a homicide victim	Religious Coping Activities Scales, BSI[6]	N=150
21. Boehnlein (2006)	Examines the future inclusion of religion/spirituality in psychiatric care	Various types of trauma	Non-research paper	N/A
22. Sinha, Rosenberg, (2013)	Examines literature that assesses intervention programs, that include religion/spirituality	Chronic trauma among youth in urban areas (incl. substance abuse in the family, violence, child neglect, aggression)	Review of selected studies	N=13

[5] PTGI-I= *The Posttraumatic Growth Inventory - Iranian version; ROS= The Religious Orientation Scale*
[6] BSI= *The Brief Symptom Inventory; CMS= Civilian Mississippi Scale (measuring PTSD)*

Table 3 - connections explored

Author, year	PTSD included	PTG included	Explored Resilience-religion/spirituality conection	PTG connected to religion/spirituality
1. Calhoun , Cann , Tedeschi, McMillan , (2000)	NO	YES	NO	YES
2. Singh, Garnett, Williams, (2013)	NO	NO	YES	N/A
3. Falsetti, Resick, Davis, (2003).	YES	NO	NO	N/A
4. Harris, Erbes, Engdahl, Olson, Winskowski, McMahill, (2007).	YES	YES	YES	YES
5. Dueck, Byron, (2011)	NO	NO	YES	N/A
6. Brewer-Smyth, Koenig, (2014)	NO	NO	YES	N/A
7. Smith, (2004)	YES	YES	YES	YES
8. Bryant-Davis, Wong, (2013)	YES	YES	YES	YES
9. Bryant-Davis et al., (2012)	NO	YES	YES	YES
10. Ai, Park, (2005)	YES	YES	YES	NO
11. Ali, Farooq, Bhatti, Kuroiwa, (2012)	YES	YES	YES	YES
12. Tran, Kuhn, Walser, Drescher, (2012)	YES	NO	NO	N/A

13. Shaw, Joseph, Linley, (2005)	NO	YES	NO	YES
14. Gunnestad, Thwala, (2011)	NO	NO	YES	N/A
15. Seidmahmoodi, Rahimi, Mohamadi, (2011)	NO	YES	NO	YES
16. Peres, Moreira-Almeida, Nasello, Koenig, (2007)	YES	YES	YES	YES
17. Connor, Davidson, Lee, (2003)	YES	NO	YES - no relation	N/A
18. Farley, (2007)	NO	NO	YES	N/A
19. Sigmund, (2003)	YES	NO	NO	N/A
20. Thompson, Vardaman, (1997)	YES	NO	NO	N/A
21. Boehnlein (2006)	YES	NO	YES	N/A
22. Sinha, Rosenberg, (2013)	YES	NO	YES	N/A

From the results so far, a tentative conclusion can be made, that being religious or spiritual can not only act as a protective factor, as it is positively related to resilience, but can also lead to positive outcomes in the case of post-traumatic growth. None of the papers in the literature review were particularly focused on the difference between religious and non-religious people, but still the finding itself that religious and/or spiritual beliefs can help after trauma, is a basis on which to make predictions on the outcomes of the case studies that will follow. Still, this is a gap in the literature and as mentioned above some of the results are non-consistent. The small sample size, mostly between 100 and 300 respondents and respondent bias should be noted as limitations. No matter if interviews or questionnaires are used, self-reported data cannot be verified. More research is needed as the number of studies which focus particularly on the influence on religion after trauma is not enough. The inconsistent results also do not make a steady base to come to an objective conclusion. Nonetheless, results from the literature review led to the following three hypotheses that will be tested in the next chapter:

1. Religious people will recover faster than their non-religious counterparts.

2. Religion will have a positive effect and may result in PTG.

3. Religious people will have a wide range of sources from which they can receive social support.

5 Case studies

5.1 Introduction

In this chapter case studies of people with and without religious beliefs will be used. This will give a better understanding on the process of coping after trauma. First a short description of every case will be given. After that the common themes and trends will be discussed.

The total number of respondents was 8. Three were female and five were male. Five (5) of them experienced death of a family member or a friend, two (2) of the respondents were talking about losing a precious relationship, one (1) also talked about her hard life situation, one (1) – about a car crash and one (1) about a life-threatening injury (Table 3). The names in the table were changed for ethical reasons.

5.2 Short characteristics of Adventist beliefs

Since three of the four religious respondents are from the Adventist church, a brief description of the most important beliefs will be presented. The aim is to see what the highlights in this branch of Christianity are, as its members have slightly different beliefs than most Christians. The main difference is that Adventists reject the Sunday's holiness, the legitimacy of the Pope and rely much more on the Bible in their everyday life (e.g. not eating certain type of meat or being vegetarian).

The Seventh-day Adventist church was created in the United States of America in 1863 and in 2013 had almost 18 million members (official data from Seventh-day Adventist world church). What is defining for the Adventists is that they accept the Bible (both new and old Testament) as the only reliable source of information, and most of their beliefs are based on it. Moreover the writings in the Bible are taken literally and are undeniable. Therefore, the Adventist church is a religious institution, which radically denies the existence of evolution. They accept the Sabbath as the day of rest, as it is written in the Bible, and church members

never work on Saturday. They perceive the human body as a temple of the Holy Spirit, so drugs, alcohol and tobacco are not being consumed. Also a lot of the members try to eat healthy and avoid certain food as written in the Bible.

Adventists are also waiting for the Second coming when Jesus will come back to Earth and save the true believers. In this sense, death is described as a "dream" in which a man is waiting for the Judgment day. When Jesus comes, all the righteous dead people will be resurrected and alongside with living true believer will be granted eternal life in Heaven. According to the preachers of the Church, the Judgment day is really close and all should prepare for it.

Table 4 - Respondents and type of trauma

Name*	Age	Trauma
Sofia	45	Losing a precious relationship; hard life situation
Alexander	44	Death of a close family member
Maria	58	Death of a close family member
Harry	31	Car crash and death of a family member
Anne	23	Death of a close family member
Steve	22	Death of a close family friend
Daniel	32	Losing a precious relationship
Thomas	58	Life-threatening injury and subsequent surgery

*Names were changed due ethical reasons.

5.3 Cases 1-4 (religious respondents)

Case 1

Sofia is a woman in her mid forties. Since she was little she believed that indeed there is a God. Her mother was a Christian, but that ne**v**er had a big influence on her.

Unfortunately she divorced early in her marriage and had to raise her son alone. Initially, everything was fine, since her parents were helping her out, but in time it became too hard to keep contact with her son. She was working multiple jobs, so they can have enough money to live. This in her opinion has made her connecting with her son really hard. Her friends and family were trying to help her, but it wasn't working out.

She was afraid to lose her son, she felt like going into a hole, where there is no going back from. She saw no way out for her life to get better. After an advice from a colleague at work, she decided to start a religious course. Unexpectedly for her it was really nice, without any pressure and the community members were supportive. *"They were praying for me, I could see their real support for my real needs"* is what she states. The members of the church gave her advice, but this time she felt like the advice was actually helpful. It took her several years to decide to be baptized as a member of the Adventist church.

After that there was a big change in her life and in her habits. Seeing how happy the people in the church were, how their children were sharing with each other, how there were living a healthy life, as well as the pure answers that the Bible gave her, kept her convinced that this is the right choice. She says that the problems she had at first are still there, but now she looks at it in a different way and there is no more stress, but only a rational way of thinking how to solve them.

Case 2

Alexander is a man, born in 1970. He grew up in a really bad family environment. His father was an alcoholic and according to Alexander, his father did nothing good for him his entire life. In his teenage years, Alexander also started to drink extensively, smoked and got into trouble with the law. Years passed and he was getting lower in lower in his life, until

one time, when he was visiting his grandmother, he saw that in the little Christian calendar hanging on the wall, there was a little star on the day Saturday, saying that was the real day when God rested. Being curious how and why that day was changed to Sunday, he found out about the Adventist church of the Seventh day. Alexander kept reading about the church, their beliefs and decided that it fit the most with his own point of view. That's when he stopped drinking, decided to live by the God's will and just be a better person.

Little by little his life started to go into the right direction. He went to work abroad for a couple of years, found a really good job and really good employer. Eventually he got married, had a daughter and now he's working as a welder for a big international company. He says that everything he has and everything he did was because God helped him.

A year and a half ago his niece was killed, while she was on a trip in the United States of America. When he described his feelings and thoughts he said that indeed, as every person he felt real sorrow and pain, but at the same time he knew that his niece, as also a true believer, will be allowed into God's kingdom. For him it was as if she wasn't gone, but awaiting the Second Coming so she can rise again. He also said that that faith was the only thing that keeps her mother and father going. According to him, this is not just a belief, but knowledge and he is certain of it.

Case 3

Maria is a 58 year old woman, who is currently a teacher in an Adventist church. As her father was a priest in the same church, since she was little she believed in God, but a personal experience after her 20th year made her a true believer.

At that age she already faced many losses of friends and family. A few years ago her father died in a horrible accident when their house burned to the ground. After the loss she felt really confused, sad and frightened for a while, but then again she had the feeling she wasn't alone. She had hope that everything would be alright and she believed God is always by her side. That's why even after those hard experiences, she kept thinking that this is how our life is and that is how things go. For her also her father wasn't entirely gone, because his soul was eternal and he was also waiting for the Second Coming.

Her church provided her with great support. She finds speaking with people with the same values and beliefs extremely important for her as it brings comfort, hope and relief from the everyday stressors.

Case 4

Harry is a 31 year old male, who is a Protestant, and a member of the Evangelist church. Since he was little he was raised to believe in God, he went to church regularly and prayed every day, which he still does.

A bit more than two years ago he was in a car accident, where high speed and another driver caused his car to flip, turn in the air and keep rolling more than ten times until it stopped. The car itself was smashed beyond recognition, but he had only a small scratch on his ear and elbow. Even the doctor in the hospital could not believe he was alive and well. He says that this accident for him is another conformation of what he already knows, and that is that God exists and he is watching over him. After that accident he also promised to live his days to the fullest.

Harry also spoke about the death of his future father-in-law, who passed away from a sickness. Even though they weren't close, he still felt the sadness and sorrow, especially watching his girlfriend, who was really devastated by that loss. In that time the church community provided as much support to Harry and his girlfriend as they could, praying and just being there for them. Harry says that the church community was really helpful and he still thinks that without them his girlfriend and he would not have been able to recover.

5.4 Cases 5-8 (non-religious respondents)

Case 5

Anne is a 23 year old girl, who does not believe in any God. She describes herself as atheist. Her parents are Orthodox Christians and the whole family celebrates the Christian holidays, but she perceives it only as a tradition. She doesn't believe in the afterlife or reincarnations.

Last year Anne's aunt died from cancer. For Anne it was a big hit, because she saw her aunt as a second mother, in her words. The whole family knew that her aunt would soon

pass away, but preparing for the event didn't make it easier. Her family, as a christen family, performed all the ceremonies and memorial services as tradition requires, but for Anne those were only sad reminders of the death of her aunt and did not help her at all. It's been 9 months and Anne still thinks about her aunt and gets sad. The only two positive things that she can think of is that now she values her friends and family more, she values her life more, and that her aunt is no longer in pain. Anne did not change her beliefs and still thinks that bad things happen and that's just life.

Case 6

Steve is a 22 year old male. He says that he never believed in a God or any other kind of supernatural power. He says that in a way he wants to believe that there is something bigger, but for now there is no evidence. He describes himself as a person who easily overcomes every event in his life and also copes with trauma in a good way.

Steve lost a really close family friend a year and half ago. Steve didn't believe in any kind of afterlife or reincarnation, but then he started to think that there might be something, that there might be an afterlife or heaven, where his friend would have been sent to. Steve's mother and sister were saying after the death of their friend, that he is in a better place and around them Steve also said he "considered it" to be truth. It took him months to overcome the confusion and sadness. Now when he thinks about his friend, he remembers him with positive feelings and memories, and he feels no negative emotions. At the same time though, he still doesn't believe in any kind of God, but does say that in the time of loss, thinking about the existence of a higher power, did make him feel better.

Case 7

Daniel is a 32 year old male, who describes himself as atheist. He says he does not believe in God, in fate, in the afterlife or any other supernatural experience. He believes that a person is the master of his own life. A few years ago Daniel had a really bad break-up, which almost lead him to depression. He was deeply disappointed in life and he thought he was losing his mind. When the love of his life was gone, he felt like nothing else was in its place. At first he felt pain, panic and despair. Eventually he pulled himself from the hole he was in

with "logic" and "rational thinking". He was closed about his personal life to both his friends and family, so he relied only on himself.

Daniel says that things just happen, either good or bad, and you should not look for a reason why they happened, but you should see how to deal with them. No God, no deity, but only you can be your own saviour. In the end for him every bad event in his life has a positive side, and he learned something from it. Without the bad things, he would not be able to develop and grow as a person. *"Negative and positive are only terms. Every change gives you new possibilities."*

Case 8

Thomas is a 58 years old male. He is describes himself as a pragmatist and non-religious, and says that man makes his own destiny. He believes that if there was God, there wouldn't be any good people suffering. He denies every kind of religious or spiritual doctrine. In 2011 he was "almost on the other side" when a serious internal bleeding occurred, after rupture of blood vessels in the oesophagus. He went into surgery, but after it the doctors thought he would not make it, so they wanted to leave him in the morgue. Only the interference of a good friend of Thomas prevented that. It took 11 operations in the next 3 years for him to fully recover.

Talking about back then, he says that the only thing he felt was an amazing gratitude to his friend, because he owes him his life. He felt that he made the right choice when surrounding himself with certain people. The stress was also there, but it wasn't a leading feeling. Thomas shares that he doesn't think about death at all, since it's inevitable, and thinks that only people who cannot believe in themselves need to believe in a higher power.

5.5 Results

There were several common themes that were present in the responses of the people, who are affiliated with a religion:

    1)   Understanding why good and bad events happen

2)   Influence of personal beliefs after the traumatic event

3)   Change of beliefs after the traumatic event

4)   Role of social support

5)   Time of recovery

All are described below and examples from the interviews are given. What should be kept in mind is that comparisons between the religious and non-religious respondents will be made, but in no way are those differences and commonalities representative.

Understanding why good or bad things happen

All the respondents were asked why they think good and bad thing happen in life. Their answer was used to get a better understanding of their worldview, of how they justify the occurrence of certain events in their life. The interference of God in those events was also part of the question. Understanding the way of interpreting the cause of the events is valuable, because it can show to what extent the respondents were feeling responsible for what happened to them. Feeling responsible and/or feeling guilty can increase stress after an unpleasant event. Sofia says the following about her own views:

"When exploring the Bible again we understand that God created this world with the intention of people to live in a perfect world ... He creates men with a free will ... We are free beings and love can only develop when there is freedom. If God had not put this freedom of choice to choose whether to be near the tree of the knowledge of good and evil, then we would say that God is the Creator who sets the rules - you will live in this place, but you will be doing what I as the Creator tell you to. This would not be an act of love ... God often had explicit solutions for a country or territory, but he has always acted with warnings ... God above all is merciful ... He has always a plan which purpose is either to bring back the man to the Creator, even with a tragic event ... or to stop, let's say, a vicious way that he [the man] is following. It is unnatural to live away from the Creator. Therefore there will always be such tests."

On the other hand, the religious respondents also answered that you yourself as a person are responsible for what happens to you, but without such big consequences. That kind

of explanation was used in order to say, that if you act in a god-like way, God himself will not put you on a trial. At the same time though as Harry says "this [being god-like] would not protect you", because often the lack of God or the acts of the Devil is what causes tragic events in our lives. That kind of justification of events puts the locus of control external to the individual, where the people themselves have little or no control on what happens in their life. At the other hand Daniel as a non-believer has an internal locus. He says that for him, there is no one and nothing that controls our lives. Bad or good things that happen to us are result of our own actions or someone else's actions.

"Most of the things that happen are a pattern of what kind of a person you are. And you do not need to look for the cause and to assess things that happen to us."

This kind of "things just happen" reasoning can be seen in all the other non-religious people. None of them believes in karma, fate or any kind of connection between events, except the logical ones for example *"Why [I went into the hospital]? Because all the medical data was there, but the doctors didn't tell me".*

In this sense, religion helps people to transfer responsibility to God or the Devil, giving less importance to their own actions. Thus a conclusion can be made that whether you behave good or bad – bad things can always happen to you. However, this is true not only for negative events, but also for the positive. Alexander says that even his promotion at work is due to God, and not to his own efforts. In this research though, only traumatic events and their effects were explored, so no data for positive ones was gathered.

An interesting speculation may be made, taking into account locus of control. According to Wiebe and Fleck (1980) people who believe in the existence of a higher power can be both extrinsic and intrinsic. In the case of this research all the religious people, except one, had an extrinsic justification aka external locus of control, and those who do not believe plus one of the religious respondents - internal. Anderson (1977) concluded that after a traumatic event, people with an external locus of control experience greater stress than those with inner locus. This is because according to those with external locus, they have no power to influence events around them. Does God or another force control them, whether it is karma or destiny, they just react to events. People with an internal locus of control on the other hand believe that they themselves control their life.

Influence of the personal beliefs after the traumatic event

Each person was asked to what extend his or her beliefs influenced him/her after the event. All the people who believed in God said that their beliefs had a great impact. Not only that the event is refracted through the prism of religion, but also the subsequent ways of coping with stress are on the same basis. The mere belief that the person they lost one day will be with them again, is perceived as soothing for the relatives. For the religious respondents along with prayer and support of family and friends, these are the three things that are identified as most important for recovery. Maria said:

"When you lose everything, you realize that God is enough in a sense - in Him you find the strength to go on, He is the hope, and you feel Him everywhere. [God] becomes almost tangible - in your thoughts, feelings, in the infinite peace that you have and above all - it changed you with respect to the sensitivity to others' misfortune."

Turning to religion and spirituality was already pointed out as a possible way of coping. It's no surprise that in times of sorrow the belief in God was not only helpful to the respondents, but it was also strengthened by the traumatic event. No negative religious coping was experienced by this particular group.

For non-religious respondents, who generally do not believe in any higher power, this particular question did not give any valuable information. They just did not believe in afterlife. Two of the respondents did believe in the existence of a soul, but they couldn't say what happens to it after death. None of the non-religious people also said that this perspective has a negative or positive effect on them. It was more or less stated as a fact.

It should be noted that one of the non-religious respondents said he did experience depression for a few months and even started drinking, so he could numb his feelings. He had several symptoms, which can be connected to PTSD such as self-medicating, depression and obsessive thoughts. He did not look for any help from friends and family and in 6 months according to him he managed to pull himself together by analyzing the situation and through logical thinking.

Change of beliefs after the traumatic event

When it comes to the respondents who were affiliated with a religion, all of them said that their belief got stronger after the traumatic event. The traumatic event made them turn even more to God, praying or visiting the church. Some just found it as another confirmation that indeed God exists. Harry, who had a horrible car accident, says that he's not "lucky" as he doesn't like that term. To him his miraculous survival without even an injury was all because it wasn't his time yet.

"Coming out of an episode like that, it really makes you believe there is God, I mean for me at least. And there have been numerous accidents, but for me this is the biggest because you see your life flashing in front of your eyes and I've seen many people die from way less, so for me 12th of January 2012 was like..if I needed any further evidence, such of course I already had, that was it for me".

When it comes to the respondents who weren't religious, none of them actually developed a belief in a higher power. Currently they still do not believe in God. A change though was described when talking about the consequences in the way of acting and thinking about life. Three of the four respondents answered that their loss made them appreciate more life and/or be a better person. Anne said:

"There are people who are alive, who I love and you start appreciating them more after something like that".

The fourth non-religious respondent, as an extremely logical and pragmatic person said that the event did not change either his way of living or way of thinking. He was only grateful for the people he has around him, because without them, he could have been dead.

Post-traumatic growth should also be included in this section. After the traumatic event they experienced, respondents in both groups began to appreciate life more, trying to be better people and to be more involved with the misfortune of others. They did not only return to balance – the way that resilience works, but also grew. The respondent, who had PTSD symptoms, also experienced this positive change. Since there was only one person that had that connection between PTSD and PTG, no conclusions can be made on that topic.

Role of social support

Social support as a coping mechanism that can increase resilience was also a subject of discussion. As already mentioned, social support can be a key factor in recovery from trauma. Most of the interviewed in both groups said they indeed relied on other people, often actively seeking their support. For the religious respondents, the church community was of great importance - not only for the praying done together, but also for the gatherings and discussions. Harry said:

"Last year my future father-in-law passed away. Maybe one of the scariest moments in my life, because my girlfriend was super close to her father… It was really difficult, because when eventually happened, I was scared she's gonna lose it... But somehow we contacted our pastor in Nigeria, where she was working, and he got the whole church pray for her… It was a different and difficult experience where I believe the church helped a lot, friends helped a lot, praying and my faith helped us get though it a lot as well".

Even Thomas, who believes strongly in his own will and power to overcome difficulties in his life, indicated that friends and family were a help during his recovery in the hospital - *"Moral support is never useless, if properly implemented",* he says.

Having a big network when it comes to social support is something that the religious respondents do have. During the interviews they said that the church members are not just understanding and caring, but people, to whom they can turn for help. Also the Adventist respondents were having additional gatherings with members of the church every week in someone's home, where they talked, read books or just drank coffee. The non-religious respondents replied that they were mostly relying on family members. Anne says her boyfriend was also a shoulder to lean on. None of them went to any kind of group gatherings, but mostly shared in their inner circle of friends and family. It cannot be concluded if religious people had a bigger social network, since none of them stated an actual number, but there were making new connections, based on faith. Being part of that church community was a source of social support that the non-religious people did not have.

"Yes, this [going to church] is very important - not only the public worship, but also communicating with people with the same values – it enriches you; it refreshes the spirit and strengthens the feeling of belonging to a community of people who seek to recognize God first

in their life; people who seek to know Him better and not the least people who live with Him in good and evil". – Maria shared

Time of recovery

All the respondents were asked about the intensity of their feeling at the moment of the tragic event and after 6 months if they can recollect.

From the four non-religious people – 2 said that in 6 months they more or less overcame the trauma. One respondent said that he didn't perceive his experience as something to recover mentally from and one respondent said that after 10 months, she still feels really stressed.

Three of the religious respondents said that after 6 months they felt definitely a lot better. One respondent as in the non-religious sample said that he didn't really experience much stress in the events.

In overall during the conversations except one non-religious person, all the others had managed to recover in a reasonable time, using different ways of coping. There was no difference in the first emotions experienced – both groups said they felt sad or confused. Believing in a higher power did not numb those feelings. The speed of recovery was substantially equal. Personal beliefs, age or gender did not seem influential.

5.6 Conclusion

The worldview of the all respondents was explored to better understand how their beliefs helped in coping. Social support was an important feature after experiencing traumatic event in almost every case. Help of friends and family is something in which most respondents found solace.

If a general conclusion can be made about the most important points in the recovery after trauma, after the interviews, the very belief in a higher power appeared to be the main tool that supports the coping process. The respondents did not just have a strong belief, but

they were convinced that everything they say is true. When talking the religious respondents were using parts and quotes from the Bible itself to answer questions and prove a point. That gave an impression that they indeed put great importance on the old and New Testament as a source of knowledge in solving everyday life problems. Moreover they said that the reading of the Bible is done in a logical way and that's why no wrong interpretations can be made. The religious respondents were mostly with external locus of control, seeing themselves being only partially responsible for the events in their lives. Their faith and the thought of the Second coming helped them cope; the believe in God increased and got strengthened. Both religious and non-religious respondents labelled social support as important part of their recovery. There was no significant difference in the time of recovery between the two groups, as in six months almost all respondents returned to normal state of mind.

5.7 Limitations

This study has a few important limitations that should be noted. First of all the majority of religious respondents were part of a certain branch of Christianity and even if they can be considered true believers, it is not clear how representative of the religious population they are. A study with more diverse set of practiced religions and or/spiritual belief will be in that sense more representative. Second – because of the small sample size and the qualitative nature of this study, no generalizations can be made. That's why even if all the religious respondents have the same type of reasoning or beliefs about certain event, those results cannot be used to make general assumptions. As in every case study observer bias should also be mentioned, since the research was done only by one person. Another limitation is that two of the respondents had a traumatic event that was described as "losing a precious relationship". Even if for them it led to experiencing strong negative emotions, in general this is not considered a traumatic event.

6 Discussion and Conclusion

The aim of this study was to find out how religious people cope with trauma. Does religion help them and if so, in what way? Are religious people coping better than non-religious? A literature review was done to see the current findings in the field of coping with

trauma and the role of religion. The results were partially inconsistent, but a conclusion could still be made, that religion/spirituality can have a positive effect on coping after trauma and help build resilience. Quantitative research alone would only have shown that there is a connection between religion, resilience and the degree of difference between religious and non-religious people. However, this would not have provided an in-depth understanding of this process. That's why in addition to the literature review a qualitative research was conducted where several case studies were used in order to gain more knowledge about the coping mechanisms that religion provides. This knowledge was gained through the use of interviews. These were semi-structured and were conducted with both religious and non-religious respondents. Semi-structured interviews were the best choice since it was possible to ask questions not included in the initial framework and also to ask respondents to elaborate on a given answer. This allowed the interview to be adjusted to specific needs of the respondents' character and emotional state. This flexibility would not have been possible when using questionnaires, surveys or any other methods without personal contact. The case studies added to the quantitative data by explaining how religious people cope after trauma and what the most important aspects of religious coping are. Not only were the belief in a higher power and the support provided by the church community helpful, but it turned out that psychological growth is also present even in the small number of cases studied.

When talking about resilience and religion results are not definitive because it's hard to make a comparison about "then" and "now" since this study did not follow the respondents during their coping process. The respondents reported their initial feelings after the trauma and how they underwent the process of healing, but whether they became more resilient than non-religious people is a question that cannot be answered. There were two of the respondents, who were indeed resilient and did not need to recover psychologically from the trauma, but one being religious and the other not, no conclusions can be drawn on that matter. In those study cases there was no difference in time and quality of recovery between religious and non-religious respondents, but considering the small sample no generalization can be made. Also a longitudinal study may have better chances to measure the real change in resilience that religion can provide.

As for the difference between the coping of non-religious and religious respondents it was unexpected that both groups seemed to recover in a similar amount of time. Religious people did not recover faster. The non-religious respondents used different coping mechanisms with rationalization and adaptation being used by all of them. Although different

coping mechanisms were used, no difference between the level of resilience of religious and non-religious respondents could be seen. PTSD symptoms weren't reported by the religious respondents. Only one non-religious respondent had those symptoms. Only one case is not enough to make a statement about the connection between PTSD and psychological growth.

The presence of PTG wasn't unique only for the religious respondents. This means that a conclusion that supports the findings in the literature review cannot be made. In this sample religion did not predict psychological growth, as non-religious people also experienced the same.

The personal beliefs before the traumatic event seem to be the most important condition for the following recovery among religious respondents. All the religious respondents said that their faith helped them and in the end it became even stronger. They were relying on readings in the Bible to give them meaning for what is happening in their lives. "Finding meaning" alongside with social support were the two coping mechanisms used by all religious people.

Although more research is needed, results of this results offer a better understanding of the way of coping that religion can provide and the importance of social support. Religion proved itself helpful in the coping process for religious people themselves. Even if no differences were found in the time of recovery between religious and non-religious respondents, on an individual level religion did play a role in the process of coping with trauma. Although it is impossible to draw conclusions about the effect of religious coping compared to non-religious coping, it is clear that for religious individuals, religious coping is a crucial coping strategy.

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8 Appendix

The 11 strategies to increase resilience (APA, 2007):

1) *"Making connections"* – social support is one of the most important factors. A good relationship with the family members, partners, colleagues and people around, can gives the feeling that there is someone to lean on in times of crises, someone you can rely on, and that promotes resilience. Being part of organizations, based on religion, help groups, and even groups based on interests, can be considered of big help.

2) *Avoid seeing crises and overwhelming problems* – Some events in our lives just happen and people cannot do anything about it. What can be done is changing the way of perception of those problems. Seeing them as a problem with a possible solution that needs to be found, rather than a problem that is too heavy to deal with, is a way to focus on the future and not dwell on the helplessness one can feel.

3) *"Accept change as part of living"* – Accepting that some events in our lives cannot be changed and aiming our attention to those that can.

4) *"Move towards your goals"* – Taking little achievable steps towards the goal, rather than going straight for it, will help feel better and look more positive at life.

5) *"Take decisive actions"* – do not just stress out, thinking how life is unfair and wishing problems to go away, but take firm actions to resolve the problem.

6) *"Look for opportunities"* for self-discover – often after a tragedy people discover a different side of themselves. They start to appreciate life more, enjoy their time better or go into new experiences. Some discover religion, others decide to risk more in their lives.

7) *"Nurture a positive view of yourself"* – being confident in yourself that you can solve the problems you face. Trusting your decisions and instincts.

8) *"Keeping things in perspective"* – trying to think about the stressful event as something temporary that will eventually pass. Looking forward at the bigger picture and not at this momentary situation will promote better problem-solving.

9) *"Maintain a hopeful outlook"* – visualizing the desired outcome from a situation and positive thinking will lead to a better mood, that will reflect in the actions and behavior.

10) *"Take care of yourself"* – exercising, keeping your body in good condition, paying attention to your own emotions will prepare you for eventual stressful situations.

11) *"Additional ways of strengthening resilience may be helpful"* – writing about the trauma that was experienced, getting into spiritual practices can help some people to relieve their stress and fear, and find hope and positive outlook again.

Table 1 - Excluded studies

Author,year	Reason for exclusion
1. Resnick, Roberto, Gwyther, (2010)	Book
2. Ní Raghallaigh, Gilligan (2010)	Trauma not included
3. Ramsay, Manderson, (2011)	Book
4. Sherril, Larson, (1988)	Recommendation for more research on religion and trauma
5. Kimweli, Stillwell, (2002)	Trauma not included
6. Masten, Obradovic, (2008)	Religion and/or spirituality not included
7. Ferraro, Albrecht-Jensen, (1991)	Trauma not included
8. Senter, Caldwell, (2002)	Case study
9. Miller, Wickramaratne, Gameroff, Sage, Tenke and Weissman, (2012)	Trauma not included
10. Weaver, Flannely, Garbarino, Figley, Flannely, (2003)	Focuses on the features of the articles, not the their content
11. Walker, Aten, (2012)	Recommendation for future studies on religion and trauma

12. Kasen, Wickramaratne, Gameroff, Weissman, (2012)	Trauma not included
13. Miller, (2008)	Trauma not included
14. Nelson-Becker, (2013)	Guest Editor's Introduction
15. Bruce & Voas, (2004)	Political Analysis
16. Maltby & Hall, (2012)	Single case study
17. Baron, Eisman, Scuello, Veyzer & Lieberman, (1996)	Not about expereinced or witnessed traumatic event
18. Walker, Reese, Hughes, & Troskie, (2010)	Doesn't include PTG, PTSD or resilience
19. Montgomery, (2008)	Doesn't include PTG, PTSD or resilience