Existential meaning-making in the midst of meaninglessness and suffering

Studying the function of religion and religious organizations in the reconstruction and development of existential meaning and psychosocial well-being after the 2011 Great East Japan earthquake and tsunami

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Abstract
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The overall aim of this qualitative study was to explore the function of religion and volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being regarding the 2011 Great East Japan earthquake and tsunami. This study was undertaken from the psychology of religion and approached by focusing on experiences of volunteer workers in different religious organizations who worked in the disaster-affected areas. Empirical data were collected via 27 semi-structured interviews, and the collected data were analyzed using a template analysis style (Malterud, 1998). The theoretical perspectives primarily used in the study were: the existential meaning and existential meaning-making framework developed mainly by DeMarinis (2003, 2008) and a culturally- adapted version (DeMarinis, 2013) of the Adaptation and Development after Persecution and Trauma (ADAPT) model (Silove et al., 2006). In addition, Marsella's (2005) perspective on culture and Kleinman's culturally sensitive perspective on health and well-being further developed by DeMarinis (2003) were employed to analyze the data in relation to the Japanese cultural context. In the results of the study, the five key domains from the ADAPT model were identified as existential and psychosocial resources available for survivors and volunteer workers from the religious organizations. The results indicated that these psychosocial domains interacted with each other, and especially with the domain of existential meaning and meaning-making. The existential domain played an important role in psychosocial well-being for both survivors and volunteer workers from the different religious organizations. The results also showed that the most significant function of volunteer workers in religious organizations was to deal with the survivors' disrupted existential system by engaging in *kokoro no kea* 心 のケア [mental health care or care for the heart] by using religious symbols and rituals, and thereby contributing to the reconstruction and development of the disrupted and lost existential meaning of survivors in the damaged areas.

Keywords: natural disaster, the Great East Japan earthquake and tsunami, trau-ma, mental health, well-being, existential meaning, meaning-making, religion, the Japanese religiosity, the ADAPT model, psychosocial re-sources, kokoro no kea, rituals, interfaith chaplain, volunteer workers

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To Katharina

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Chapter 1 Introduction

1.1. Background

> If we are to search for meaning in all of this, it is probably not meaning we would find but, rather, something close to the darkness of non-meaning - that temporary stillness lodged inside whenever we look directly at things, head on (Wago, 2011, March 16).

March 11, 2011. The day started as usual. I got up around 7:30 a.m. It was Friday. I was in a good mood after long weekdays and excited for a night out in the evening. It was just an ordinary Friday. I sat in front of my iMac and turned it on. I opened my mailbox and checked if I got some important emails. No particularly important mail. I closed the mailbox and started netsurfing while having a cup of breakfast coffee. I opened Twitter. Then I saw tweets from Japan telling a massive earthquake hit Japan. As one who was born and grown up in Japan, where not a few people die every year, all year round, because of natural disasters, I was very much used to hear such news without being too worried. "It's just a usual earthquake." That was my spontaneous reaction to it. It was just an ordinary day for me – living in Sweden and connecting to the Japanese society only through Twitter, Facebook, and YouTube – until I saw pictures and news films of cities and towns along the Northern Pacific coast in Japan. They were something I had never seen before. I saw people ran away from the tsunami waves with all their might for their life. I saw many cars were swollen into the huge waves and then washed away. I saw fires broke out and burning like a bonfire on the sea. It was like watching a movie, a surreal panic movie. Overwhelmed by news films from Japan, it took a while to think of my own family in Japan. I grabbed my phone and called first my father and then my brother in Japan, which resulted in vain, although, a couple of hours after, I could reach first my father and then my brother. Eventually, I knew all my friends in Japan were safe thanks to social media. Being away from home country and unable to do anything but watching over thousands of houses and cars, as well as people swept away, was something beyond words. Anxiety, worry, confusion, irritation, sadness, and powerlessness.

   March 11, 2011. The day became a memorable day for the Japanese regardless of whether they lived in Japan or overseas. At 14:46 JPT, a magnitude 9.0 earthquake hit the Pacific coast of Northern Japan. It was indeed the

biggest earthquake ever recorded in Japan. The earthquake alone was unprecedented, and a huge tsunami followed after the earthquake, which devastated the Pacific coast of Northern Japan known as the Tohoku region and triggered the series of failures at the Fukushima Daiichi nuclear power plant. The 2011 Great East Japan earthquake and tsunami killed more than 15,000 people and more than 2,500 people went missing (National Police Agency, 2018) as a result of the tsunami and fires after the earthquake. Over 400,000 houses were destroyed entirely or partially, which together with releasing of radioactive particles from the Fukushima Daiichi nuclear power plant caused mass evacuation with over 400,000 evacuees at its peak after the triple disaster.

Ten days after the 2011 Great East Japan earthquake and tsunami, there was a graduation ceremony at a junior high school in Kesennuma-shi, one of the severely damaged cities in Miyagi prefecture. The ceremony was initially planned to be carried out on March 12, 2011 – the day after the earthquake and tsunami. In the ceremony, a 15-year-old boy representing students made an address while crying in reply to the principal's address at graduation:

> Human beings' ability was so powerless against the fierce power of nature, which mercilessly took every precious thing that we had. It was too crucial to think it was a trial on us by Providence. It is too painful and mortifying for us to endure…The cost we paid was too enormous and expensive if that was to learn the value of life. However, even though we are placed in such a predicament, we shall not blame Providence but endure our fate and help each other to live, which is our mission (Nakazawa & Oikawa, 2012, p. 235).

Through his short and moving speech, which was broadcasted on news programs in Japan and was soon uploaded on YouTube, we may see what people in the severely damaged areas lost, how they struggled to understand the calamity and how they tried to cope with their traumatic experience. What is most significant in his speech is that he refers to "ten" 天 (heavenly consciousness, predicament, Gods, or transcendent power). Of what can this address do in a country often called *mushuukyou* 無宗教 [non-religious or of no religion] in a late-modern context (Kaneko, 2003; Manabe, 2008; Fukushima, 2011) inform us? Can it be a key to understand how people in Japan in the middle of, and after the traumatic experience tried to search for the aim and meaning of life? His speech echoed in me and touched my pain of existence, my despair in powerlessness, and my hope for human-strength.

The 2011 disaster, the after mass and the young man's speech made me think of life and its hardiness. My being as one who was born and grown up in Japan, who left home decided never coming back, and who lives in Sweden as an outsider stimulates my hope for my old country. I would like to understand the importance of existential resources that may provide with existential meaning after crisis and shed light upon resilience of those who experienced a mass tragedy. As a religious person, who was brought up in a Christian milieu that is still unfamiliar to the majority of the Japanese, I am simply

interested in religion's and religious organizations' role in the individual's and society's well-being and existential meaning. The opportunity for being a doctoral student in Psychology of religion at the Department of Theology, Uppsala University has moved me to study these two interests together. So, what I would like to do in this study? I would like to understand the importance of existential resources that may provide with existential meaning after the crisis. I would like to shed light on both struggle and hope after the tragedy. I would like to explore roles of religious resources in reconstruction and development of existential meaning and psychosocial well-being after the 2011 Great East Japan earthquake and tsunami in particular. These questions drove me to conduct the study.

1.2. Purpose statement and research question

The overall aim of this qualitative study is to explore the function of religion and volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being regarding the 2011 Great East Japan earthquake and tsunami. The topic is explored primarily within the frame of the psychology of religion, approached by focusing on experiences of volunteer workers in different religious organizations who have worked in the disaster-affected areas, and understood from several theoretical perspectives. Though the primary focus of the study is on the volunteer workers' experiences of helping survivors, and as survivors themselves, survivors' experiences also get attention through the volunteer workers' accounts.

The central research question of the current study is:

What perceived roles did volunteer workers in religious organizations play in existential and psychosocial reconstruction and development with regard to the 2011 Great East Japan earthquake and tsunami?

The central research question is specified by the following sub-questions:

1) What specific tasks did volunteer workers in religious organizations perform in relation to the existential and psychosocial reconstruction in the aftermath of the catastrophe?

2) How have the volunteer workers experienced difficulties and problems during their work helping in the damaged areas?

3) What existential and psychosocial resources were available from the perspective of the ADAPT model?

4) How did the systems in the ADAPT model interact in the accounts from the volunteer workers in a Japanese cultural and psychosocial context?

1.3. Definition of terms

In this section, I present central terms used in this study.

Health and well-being

Health is, as defined in 1948 by the World Health Organization (WHO), a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. *Kousei-roudou-shou* 厚生労働省 (the Japanese Ministry of Health, Labor, and Welfare, 2014) explains *kenkou* 健康 [health] as follows:

> Health is not just a matter of being sick on the surface, although it is not unusual that we think of physical things first when we hear the word "health." However, we cannot say we are healthy unless everything is in good condition physically, mentally, and even socially (p. 2).

There is not significant difference between the two definitions. Stifoss-Hanssen and Kallenberg (1996) state that the definition is "a clearly utopian statement, and it touches upon the philosophical question of suffering, and of what the basic character of human life is" (p. 14). Charlier et al. (2017) also claim that the definition is utopian rather than pragmatic, which convinces them that the definition is outdated, although they believe that it must have been revolutionary in 1946 when it was issued because of its reference to somatic, psychological, and social health. This more than 70-year-old definition of health seems to lack some important aspects of health such as "the equilibrium of human mankind [*sic*] within its environment" (Charlier at al., 2017, p. 34) and health's existential dimension. WHO seems to have realized the importance of the existential dimension of health. The WHO Executive Board proposed a new definition of health at a World Health Assembly in 1998:

> Health is a dynamic state of complete physical, mental, spiritual and social well-being and not merely the absence of disease or infirmity (1999, p. 4).

However, reasoning that the 1946 health definition was functioning properly, and the urgency of the deliberation was less than that of other cases, the proposal was removed from the agenda according to *Kousei-roudou-shou* (1999). Even though the 1998 proposal has not been revised and officially adopted yet, the proposed definition is of use for this study because of the inclusion of the

spiritual dimension that may reflect cultural and existential dimensions of health.

As presented, in its constitution in 1948, WHO stresses the important dimension of mental health as a part of health and defines it as follows:

> Mental health is a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (2014, August 15).

Then, what constitutes a state of well-being? What is well-being? Even though well-being has been a growing area of research area in recent decades, the absence of theory-based formulations of well-being is obvious (Dodge et al., 2012), that is, the question of how to define well-being still remains largely unresolved, which "has given rise to blurred and overly broad definitions of wellbeing [*sic*]" (Forgeard, Jayawickreme, Kern, & Seligman 2011, p. 81).

According to Dodge et al. (2012), historically, there are two different traditions regarding the definition of well-being—a hedonic tradition and a eudaimonic tradition. The hedonic tradition highlights "constructs such as happiness, positive affect, low negative affect, and satisfaction with life" (Dodge at al., 2012, p. 223). Meanwhile, the eudaimonic tradition emphasizes "positive psychological functioning and human development" (Dodge at al., 2012, p. 223). These two traditions approach well-being differently, but current studies posit well-being as more complicated and multi-dimensional. In this study, however, well-being refers to subjective psychological well-being with much focus on its meaning dimension and its relevance to existential meaning.

There is much need to understand what well-being means and what constitutes a state of well-being. One aspect that seems to be relevant to well-being with a meaning dimension is quality of life. According to the World Health Organization Quality of Life (WHOQOL) quality of life is

> an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment (WHOQOL Group, 1995, p. 1403).

Some attempts by previous researchers may help to open a view on especially subjective well-being:

> Subjective well-being consists of three interrelated components: life satisfaction, pleasant affect, and unpleasant affect. Affect refers to pleasant and unpleasant moods and emotions, whereas life satisfaction refers to a cognitive sense of satisfaction with life (Diener & Suh, 1997, p. 200).

On the other hand, well-being might be constituted by "autonomy; environmental mastery; positive relationships with others; purpose in life; realization of potential and self-acceptance" Ryff, 1989a, p. 1069).

In short, well-being is multi-dimensional and difficult to define precisely. In this study, however, well-being refers mainly to subjective psychological well-being along with WHO's definition.

Existential meaning and meaning-making

Within the psychology of religion, there have been many different definitions of these terms, definitions which are often based on different traditions. Despite these differences, the theoretical frameworks of existential meaning and meaning-making have, to a certain degree, a common understanding. Existential meaning includes the meaning-making process through which individuals facilitate a sense of order in the world (Reker, 2000). The concept "existential" is most likely "an umbrella term to encompass a wide range of meaning-making operations which provide operational narratives, value structures, and decisional pathways as well as the ritualized expressions of such" (DeMarinis, 2006, as cited in DeMarinis, 2008, p.59). In other words, "existential" refers mostly to meaning that concerns our entire attitude towards life, our way of interpreting phenomena, forming values and making decisions regardless whether it is secular, religious or spiritual (Stifoss-Hanssen & Danbolt, 2011, p. 35). Then, existential meaning and meaning-making here in this study include various ways of expressions that show any meaning-making process and refers to all types of expressions of meaning-making processes including religious, spiritual, and secular existential expressions.

Religion and Shuukyou 宗教

Within the psychology of religion, religion is often understood functionally not substantially, and "the object of the psychology of religion is religiosity rather than religion" (Cetrez, 2005, p. 42). However, there has been difficulty and challenge in defining religion and spirituality as well within the discipline as Pargament (1999) explains:

> Psychologists of religion who have been in the field for a while can agree on one thing: we have never agreed about anything. The point is especially true for the ways we have defined religion. Over scores of years, religion has been called the supernatural, the ultimate, the institutional, the creedal, the ritual, the experiential, the ethical, the temperamental, and the directional. I could go on. Today [*sic*] people continue to assign diverse meanings to the term religiousness (p. 4).

Hence, Pargament (1997) defines religion as "a search for significance in ways related to the sacred" (p. 32), though not all of them are religious. He means

that even though "religion has been defined as a broadband construct, one that encompasses the individual as well as the institutional, the functional as well as the substantive, and the good as well as the bad" (Pargament, 1999, p. 5). Therefore, he means that researchers in the psychology of religion ought to be "much more concerned about the motivational, affective, behavioral, experiential, and cognitive sides of religion than with the institutional" (Pargament, 1999, p. 5). In this study, hence, religion is defined by this functional character. In line with the definition of religion, religiosity is also defined from a functional perspective. Cetrez (2011) observes that within the psychology of religion, religiosity is "understood as a system of meaning, set within a specific cultural context; such as belief systems, rituals, and symbols" (p. 474).

However, these terms of definition need to be explained with regard to the Japanese cultural and social context because the word *shuukyou* 宗教 [religion] is both historically and culturally constructed. In Japanese, it seems to be defined by its institutionalized form and collective character. Therefore, in this study, *shuukyou* is defined in line with the definition by Zinnbauer et al. (1997). According to them, "definitions of religiousness include both personal beliefs, such as a belief in God or a higher power, and organizational or institutional beliefs and practices such as church membership, church attendance, and commitment to the beliefs system of a church or organized religion" (p. 561). Further discussion about the word and concept of *shuukyou* will be presented with regard to the Japanese historical, cultural, and social contexts in the next chapter.

Spirituality and reisei 霊性

The "terms religion and spirituality are often used synonymously but are actually separated, yet related, aspects of life experiences" (Josephson & Wiesner, 2004, p. 16). There are many different positions and ways to define religion and spirituality, which usually depend on disciplines of researchers and studies. Spirituality is often "described in personal or experiential terms, such as belief in God or a higher power or having a relationship with God or a higher power" (Zinnbauer et al., 1997, p. 561). In other words, the terms spiritual and spirituality refer to non-organizational or non-institutional personal beliefs and practices. Then, in this study, spirituality must be defined with regard to the Japanese cultural and social context too. The image of spirituality in Japan is rich in versatility and easy to use, so it has been used in various fields in recent years (Kiji, 2016, p. 96). It suggests that the definition of spirituality in Japan is ambiguous and diverse, and difficult to define what exactly spirituality is in Japan. Therefore, Kiji (2016) suggests defining spirituality as *reisei* 霊性, which is frequently used as a Japanese translation of spirituality.

Nishihira (2007) explains *reisei* in four traits. First, *reisei* has religious character but not religion. Second, a person consists of not only mind and body but also *reisei*. Third, *reisei* is described as the meaning of life, the will to live and beliefs and faith. Fourth, *reisei* turns from an active sense of "I am alive" to a passive sense of "being alive" when one touches and senses a great or sacred thing. Nishihira considers the fourth phase especially crucial for *reisei* 霊性. According to him, the passivity of "being alive" means that an individual exceeds ego, feels a deep connection with nature and finds a sense of unity with nature through the connection. In this sense, *reisei* is defined as a transpersonal experience.

Ritual and gishiki 儀式

As Danbolt and Stifoss-Hanssen (2017) explain, "The impulse to perform rituals as a response to good or bad events in life is probably as old as humankind" (p. 352). In this study, ritual refers to "the activities or expressions of symbolic significance" (DeMarinis, 2006, as cited in DeMarinis, 2008, p. 60) for addressing life experiences. For this study, the disaster experience is in focus. Therefore, ritual is defined based on its functional character, that is, in relation to meaning-making.

Since every "individual has an existential dimension and spiritual nature, the varieties of their expression include many different kinds of meaning systems" (DeMarinis, 2006, as cited in DeMarinis, 2008, p. 60). It also applies to ritual in this study because individuals may "have elements of different systems combined" (DeMarinis, 2006, as cited in DeMarinis, 2008, p. 60). However, rituals as "the traditions are highly culturally dependent and differ with regard to place and time" (Danbolt & Stifoss-Hanssen, 2017, p. 352). Therefore, it is crucial to see what ritual refers to in the Japanese context. In Japanese, ritual is translated into *gishiki* 儀式, which is explained as "events to be performed in accordance with certain manners" (*Daijirin* 大辞林, 2006). Taking into the Japanese definition of ritual, a ritual in this study refers to "the expressions of meaning in relation to how life is and should be lived" (DeMarinis, 2013, p. 207) in accordance with culture and significance.

Kokoro no kea 心のケア (mental health care or care for the heart)

The concept *kokoro no kea* 心のケア [mental health care or care for the heart] emerged after the Great Hanshin Awaji Earthquake, which occurred in 1995 and cost more than 6,000 lives. In the wake of the 1995 earthquake, both mental health care professionals and volunteers engaged in helping aid, through which the concept *kokoro no kea* became a familiar term first among the mental health professionals and then among general people in Japan. The 1995 earthquake evoked interest in the psychological effects of disasters and raised awareness of both the particular need for mental health care and posttraumatic

stress disorder (PTSD) among victims and survivors (Kato, 1998). The Japanese word *kokoro* 心 [heart] refers to mind or emotions but has been used to refer to mental or psychological after the 1995 disaster. Suzuki et al. (2015) explain why *kokoro* has been used:

> The people in Japan tend to be prejudiced against mental health/illness, and mental health literacy, or knowledge on mental health and mental illness, was found low as compared to other countries such as Australia. This may have originated in the usage of the Japanese word *seishin*, that means psychiatry or mental health in the healthcare field, and also means mind or human spirit in colloquial terms. The latter is also expressed by the word *kokoro*, which is a neutral term used more often in daily conversation. To reduce the stigma attached to psychiatry, and to popularize the concept of psychiatry or mental health, a plain and familiar word *kokoro* is now used to express psychiatry or mental health in the healthcare field in Japan (p. 3).

Hence, *kokoro no kea* needs to be understood primarily as mental health care in a Japanese clinical context. However, as the citation above indicates, *kokoro no kea* also refers to a sort of spiritual care in Japan. What is very important for the study is that *kokoro no kea* is translated as "care for the heart" if it is provided within a context of the help work by non-clinicians in general, by inter-faith chaplains, or workers from religious organizations in particular. Therefore, in this study, *kokoro no kea* refers primarily to "care for the heart," but also mental health care in a Japanese mental health context.

1.4. Limits

Among the three most damaged prefectures, Fukushima experienced the 2011 disaster especially hard. As known, the 2011 Great East Japan earthquake and tsunami triggered a series of nuclear accidents. So Fukushima prefecture was damaged by all three disasters, that is, the earthquake, tsunami, and the nuclear disaster. Unlike the earthquake and tsunami, the nuclear disaster is not a natural disaster but a human-maid disaster. On top of that, it is an ongoing disaster, which must have a significantly different impact from what the earthquake and tsunami had on both survivors and volunteer workers in the area. Therefore, in this study, I exclude populations that are affected only by the Fukushima nuclear plant disaster so that I can have more focus on the 2011 natural disaster, namely, the earthquake and tsunami and its impact on existential meaning and psychosocial well-being. I believe that the Fukushima nuclear disaster should be investigated alone and with more space as one of the biggest and most severe incidents in human history in general and human-made disaster in particular.

Regarding the theoretical framework of the study, I conduct the study first and foremost from the discipline of psychology of religion focusing on existential meaning and meaning-making. In the next chapter, I will present previous studies on topics touching upon this study. There are various studies from many different disciplines. It is interesting to study from a discipline other than the psychology of religion such as sociology of religion, clinical psychology, or history of religion to name a few. However, as my interest lies primarily in the functional dimension of religion and volunteer workers in different religious organizations in relation to the reconstruction and development of existential meaning and psychosocial well-being, this study is conducted from the psychology of religion in principle. Behind the decision, there are two additional reasons. First, the researcher of the study has studied and been trained in the psychology of religion. The researcher has no clinical or medical background, which makes her hesitate to engage in clinical research. Secondly, it is also simply due to the limitations of space and time. Thus, this study is a study from the perspective of the psychology of religion. Then, what is the psychology of religion? I describe it in the third chapter.

Without a doubt, the study may become very challenging and exciting if I conduct an inductive analysis considering the character of the data, which put much focus on volunteer workers' experiences. However, this study's central theme is existential meaning, which is initially from Western existentialism, and thus, almost no relevant study exists in a Japanese context. Therefore, this study has a character, to a certain degree, to investigate whether the perspective can be applicable and significant even in a Japanese context.

1.5. Disposition

This study is presented along with the following disposition. In the second chapter, that is, after this introductory chapter, I present and argue Japanese cultural context and religious milieu that are necessary for this culturally sensitive study. Therefore, the part takes much space, but I hope it will be informative and useful. After that, an overall review of previous studies concerning the aims of this study will touch upon several topics: existential meaning, meaning-making, religion, spirituality, well-being, and mental health with regard to the 2011 Great East Japan earthquake and tsunami. Internationally, there are a sufficient number of studies on each theme separately or combined with two or three together. However, the number of studies concerning existential meaning, meaning-making, religion, and spirituality from sociocultural and public mental health perspectives in a post-disaster context is still limited. As is the case with international studies, the number of studies on this topic in the Japanese context both before and after the 2011 disaster is limited. Despite these results from literature searches, there are still a sufficient number of

studies that are relevant to this study because the topics touching upon this study are many.

In the third chapter, this study's common theoretical framework is presented. The project as a whole is built from a framework composed of theoretical sources and a model. Existential meaning and meaning-making are the central theoretical perspectives in this study, and my usage of the term "existential" is primarily in accordance with DeMarinis (2003, 2008). A ground model for the study is DeMarinis's (2013) adaptation of the Adaptation and Development after Persecution and Trauma model (ADAPT model) (Silove et al., 2006), in which the existential meaning system is placed in the center with regard to cultural psychologist Anthony J. Marsella's definition of culture. This chapter is important because this framework is an overall guide for the studies.

In the fourth chapter, I present the methodology and method used for the study. The chapter consists of presentations of research design, ethical review and ethical considerations, data collection procedure, data analysis procedure, and validity considerations.

In the fifth chapter, I present results from the 27 semi-structured interviews. After that follows a presentation of analysis of the results, which is the sixth chapter, where I also answer the research question of this study.

The study's final chapter is for reflections and discussions. I start with an empirical reflection. A reflection on this study's contributions follows. After a critical reflection on theories and their use, a methodological reflection is presented. Finally, some of the findings and new questions that are not given space in the previous chapter will be discussed and presented as a concluding reflection and recommendations for future research.

Chapter 2 Japanese cultural context and previous studies

As already presented in the previous chapter, the overall aim of this qualitative study is to explore the function of religion and volunteer workers from religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being, regarding the 2011 Great East Japan Earthquake and Tsunami. Thus, the Japanese sociocultural context, as well as the religious milieu in Japan, will be given much attention in this study, to understand their existential worldview in a cultural context. Therefore, I begin this chapter by presenting some aspects of religion, religiosity, and spirituality reflected in contemporary Japan. These aspects are essential as background and as existential information for the study. This is followed by a presentation of health and well-being in a Japanese cultural context, using the internationally used cultural analysis model, for understanding both health and illness perceptions in a cultural context by Kleinman (1980) and further developed by DeMarinis (2003).

The second part of this chapter is a literature review. Here, I give an overall review of previous studies concerning existential meaning and meaning-making, religion and spirituality, mental health and well-being, as well as resilience, relevant to the 2011 Great East Japan Earthquake and Tsunami.

2.1. Presentation of Japanese cultural context

2.1.1. Religion and religiousness in contemporary Japan

Regarding the purpose of this study, the Japanese sociocultural context as well as the religious environment in Japan, which is often discussed in relation to secularism and postmodernism (Shimazono, 1995, 2001; Kaneko, 2003; Manabe, 2008), will be given much attention in this study. Here, I will present some aspects of religion and religiosity reflected in contemporary Japan. These aspects are essential as background and existential information for the study.

2.1.1.1. Shuukyou 宗教 [religion]: Problems concerning the concept of religion and religiosity in Japan

Japan is often seen as one of the most secular countries in the world and called the land of *mushuukyou* 無宗教 [non-religious or of no religion] in a late-modern context (Kaneko, 2003; Manabe, 2008; Fukushima, 2011). According to Inglehart et al. (2014), 87.1% of Japanese respondents answered that they did not belong to a religious denomination, when they were asked whether they were active in a Church or religious organization. 49.9% answered that they were not religious and 11.3% answered that they were atheist. Meanwhile, only 20.9% answered that they were religious. Among those who answered that they were religious, 36.6% identified as Buddhist, 2.8% answered that they were not affiliated with any specific religion, and only 1% identified as Christian. However, the results are arguable because the word and concept of *shuukyou* is problematic in the Japanese language. The term *shuukyou* is relatively new and a controversial translation of religion from English. The word *shuukyou* is both historically and culturally constructed, in Christian or Western context, and therefore of limited suitability in measuring Japanese religiosity. As Tanaka (2010) says, "Since Japanese people tend not to find themselves religious in the sense that they believe in a revealed religion like Christianity, difficulties arise in measuring religiousness or spirituality in a measurement developed in terms of Christian or Western theological frameworks (Traphagan, 2005; Ishii, 2007)" (p. 847). She explains further that, "Since cultural uniqueness was not considered in the attempt to develop a measure for religion, major surveys on religious affiliation carried out by various official institutions, newspaper companies, and academics in Japan almost invariably show that Japanese people have low levels of religious belief (Reader, 1991)" (p. 847). In fact, many studies question and examine whether the Japanese are non-religious or not. A study conducted by Hayashi (2006) shows that only 30% of the Japanese have religious faith, but 70% of them think that religious feeling is important.

Manabe (2008) also questions whether the Japanese are non-religious or not. He explains that the results presented in the surveys like the European Values Studies, the World Values Survey or the International Social Survey Program show that religiosity is strongly linked to people's beliefs, values and attitudes in Western countries, but not in Japan. He points out that the generalized use of the phrase "non-religious Japan" is a perspective based on Western religious views. He claims that the Japanese *shuukyousei* 宗教性 [religiosity] is distinct from the Western context. He explains that *shuukyousei* often refers to a religious denomination in the Western context, while in a Japanese context, it refers not only to a denomination but also to both implicit and explicit belief including performing rituals or wearing symbols. Therefore, he believes it is not reasonable to measure Japanese religiosity using the scales and indices developed in the Western context.

Fukushima (2011) explains that *mushuukyou* does not mean that the Japanese reject religion or do not practice religion at all. He posits that it is more likely to express the religious views of the Japanese, who go to the shrine during New Year's, enjoy Christmas and ask the help of Buddhist monks in commemoration of their ancestors. According to him, there needs to be a distinction between religion as active/subjective faith and as customs, because religion and religious beliefs are customs for most Japanese people that can be seen in rites of passage, annual events or in their daily life. He concludes that religiosity seen as such in Japan is hard to measure and understand through statistical surveys.

Hayashi (2010) explored attitudes toward religion among contemporary Japanese people. She used the Japanese National Character Surveys from 1953 to 2008 to see changes of answers for questions relevant to religion. She also compared the findings from the data to many other international comparative surveys. She found that the characteristic of Japanese attitudes toward religion was *shuukyouteki na kokoro* 宗教的な心 [religious mind], which she defined as a feeling towards religions. A cohort analysis revealed that the increase in religiosity of the Japanese was related to age: the older they were, the more religious they became. Further, she also found that young Japanese people were less religious than the older persons, but more interested in *reikon* 霊魂 [spirit] and *anoyo* あの世 [life after death] than the older persons. Besides, the number of young people, who believe the existence of *reikon* and *anoyo*, was larger in 2008 than in 1953, which Hayashi considered to be one of the Japanese attitudes toward something religious and transcendent.

According to Earhart (2014), the Japanese are religious "just as they are social, political, and economical, but these general features of Japanese life must be described and understood in their own terms" (p. 281). He explains that religion in a monotheistic context is unfamiliar to most Japanese people, who grow up with diverse religious traditions. Therefore, most of them cannot identify "exclusively with one religion unless he or she is a Christian or an adherent of some New Religion" (p. 280). Also, most Japanese people associate religion with religious institutions, which leads them to declare that they are atheist or non-religious despite commonly believing in something transcendent. Hence, Earhart (2014) contends that even though most Japanese people cannot consider themselves religious they are religious. He claims that "religion in Japan is not so different from religion in other cultures" apart from the fact that religion in Japan also "consists of symbols, beliefs, and practices that provide an orientation to reality and a means of celebrating participation in that reality-all of which is treasured and handed down from one generation to the next" (p. 281).

To a greater or lesser extent, all of these studies indicated that the concept of *shuukyou* in Japan should be distinguished from religion in a Western context. In short, the English word "religion" was invented and translated into *shuukyou* in Japanese to differentiate it from a monotheistic worldview, in

which One God and human beings have a hierarchal relation. However, the concept of *shuukyou* in Japan has also been developed to include a wider meaning. According to Isomae (2005) the word "Japanese religion"

> did not appear until the end of the Meiji period (1868-1912), considerably later than the emergence of either "Japanese" or "religion" which had already appeared separately at the beginning of Meiji and are Western in origin. The word "Japanese" (namely, "of Japan") denotes things related to the nation-state. "Religion" originated within Christianity but for those following Anesaki's ideas, it has come to mean a psychological towardness to unlimited beings, so it now encompasses non-Christian beliefs found in Buddhism, Islam, and Shinto. Since some of these religions are not confined to the boundaries of the one nation-state of Japan, it became necessary to connect the terms "Japanese" and "religion" as a means to distinguish "Japanese religion" from all other religions (p. 236).

It can be understood that unless the word *shuukyou* combined with "Japanese," it might be enabled to see that *shuukyou* refers to monotheistic religion first and for the most but it also can include non-monotheistic religion including Shinto and Buddhism.

As seen in the previous section, according to Zinnbauer et al. (1997), definitions of religion and religiosity include both personal beliefs, such as a belief in God or a higher power, and organizational or institutional beliefs and practices, such as church membership, church attendance, and commitment to the beliefs system of a church or organized religion. So, in this study, I define *shuukyou* in accordance with both Zinnbauer et al. (1997) and above shown researchers, namely, religion is a way for human beings to connect to transcendent(s), which often occur through symbols, teaching, rituals, and both institutions and private spheres regardless existence of consciousness. The reasons why I define religion and religiosity as such are several. First, most Japanese people do not consider themselves to be religious and say they are not at all religious because they are not familiar with *shuukyou* in principle. It is an invented translation from the English word *religion* to differentiate it from monotheistic religions, in which the God - human beings' relation is hierarchal. In this meaning, *shuukyou* in a Japanese context appears to be equivalent to an institution or organization with dogmatic teaching, which demands both memberships in religious organizations and participation in religious rituals and ceremonies in an institutional and dogmatic framework. However, even if the Japanese say they are not at all religious, it does not necessarily mean that Japanese people are non-religious because, as already seen, being *mushuukyou* for Japanese people often means "a rejection of revealed religion" (Ama, 2005, p. 24). Furthermore, most Japanese people go to the shrine during New Year's, ask the help of Buddhist monks during funerals or the commemoration of their ancestors and talk with their deceased family members through *butsudan* 仏壇 [Buddhist home altar], *kamidana* 神棚 [Shinto

home altar] or *ohaka* お墓 [family grave]. None of these rituals are seen as religious by most Japanese people because these rituals are buried and located in Japanese daily life as customs and traditions that simply are not related to the concept of *shuukyou*.

2.1.1.2. Characteristics of Japanese religion and contemporary Japanese religiosity

According to Bunka-chou 文化庁 (Agency for Cultural Affairs, 2012), about 80% of Japanese people are Shintoists, and 66% are Buddhists. This means that the majority of the Japanese are both Shintoist and Buddhist at the same time. This dual membership can be explained from a Japanese old parish system as Earhart (2014) explains:

> Because (at least in theory) all the families living in the vicinity of a local Shinto shrine may be considered "parishioners" of that shrine, and because most families have some ties to a parish Buddhist temple, the same family may be counted as belonging to both Shinto and Buddhism. Thus, the number of people "belonging" to religious organizations may be almost twice as large as the nation's total population (p. 279).

This means that the number of Japanese people who belong to these religious organizations does not necessarily confirm that they are religious, although, statistically, many Japanese people seem to belong to Shintoism or Buddhism or both. As shown, most Japanese people do not consider themselves religious, probably because they are not familiar with or dislike the definition of religion. In fact, in the study of Hayashi (2006), only 30% of the Japanese people answered that they had religious faith. Nishi (2009) studied religion using data from the International Social Survey Programme in 2008 (n = 1,200) and the results also showed that only 39% answered that they had religious faith. Among those who answered that they had religious faith, 34% declared they were Buddhist, 3% said they were Shintoist and 1% considered themselves Christian.

According to Earhart (2014), there are several persistent themes in the religious history of Japan, which reflect characteristics of religion in Japan. The first one is the close relationship between God(s), human beings and nature. One of the most significant differences between a monotheistic worldview and the Japanese worldview is the relationship between God(s), human beings and nature. The relationship between these three realms in the Japanese worldview is not hierarchal, unlike in monotheistic religions, in which God comes first, human beings follow and nature is in third place. They are rather "on more nearly equal terms: the aim is for humans, gods, and nature to form a triangle of harmonious interrelationships" (Earhart, 2014, p. 10). As an example of such closeness of God(s) and human beings, he shows how closely human beings are related to Buddha or *kami* 神 [God]:

In fact, men and women can rise to the status of a kami or Buddha. The Japanese emperor was considered to be a living kami because he was a direct descendant of a long kami line. Other humans can attain different forms of divinity (p. 10).

Taniyama and Becker (2014) also explain that "Japanese spirituality reveres nature and ancestors" and "People worship distinctive mountains, rivers, trees, swords, and mirrors, believing that those divinities will protect their worshippers and ignore or curse those who defile or offend them" (p. 49). According to them, many Japanese people hold the same kinds of beliefs about their ancestors. For example, people often believe that proper reverence is important so that, not only the ancestor can become a Buddha, but also so the departed can bless and not curse the living. Regarding ancestor worship, results of a cohort survey on 3,170 adult Japanese people conducted by Toukei Suuri Kenkyuujo 統計数理研究所 [the Institute of Statistic and Mathematics] (Nakamura, Tsuchiya, & Maeda, 2015) showed that 65% of all participants answered that they had respect for their ancestors and only 11% answered that they did not bother.

Ancestor worship is, therefore, very much connected to another persistent theme in the religious history of Japan, i.e., the religious character of the family, which consists of both the living and the dead. According to Earhart (2014), the dead are very important, and the family is so important for carrying out rituals to honor family ancestors. Klass and Goss (1999) also explain the Japanese *sosen suuhai* 祖先崇拝 [veneration of the dead and ancestor worship] means that the dead become family ancestors and their spirits merge with the general sense of the family ancestors, "if the proper rituals have been performed" (p. 549). According to them, the relationship between the dead and the living in Japan is symmetrical, unlike the power relationships between the living and God/the saints in Christianity. The proper rituals are considered very important for a family in Japan, and the home is often the center of such familial and religious rituals. Many houses in Japan have *butsudan*. It is a place, where the living give offerings to the family ancestors daily, and perform periodic memorials for specific family ancestors (Earhart, 2014). It has also carried particular significance for the living as the sacred place to make contact with the dead (Suzuki, 2013). Interestingly, despite the low percentage of the believers, there are *kamidana* 神棚 [Shinto home altar] or *butsudan* or both in many houses in Japan, although the number of homes possessing *kamidana* or *butsudan* has decreased over the years. Watabe and Kaneko (2004) conducted a questionnaire survey (n = 4,000) among city and village people in the Kansai region. The results showed that 53% of the respondents in cities and 87.3% of the respondents in villages had *butsudan*, while 38.6% in cities and 80.9% in villages had *kamidana*. According to Nishi's (2009) study result, 51.1% of 1,200 respondents had *kamidana* or *butsudan* or *juujika* 十字架

[Cross]. A survey by Kotani (2010), which 1,000 participants (age range between 40-74 years old) took part in, also confirmed that half of the respondents had *butsudan* at home, 12.2% of the respondents answered that they had *kamidana* at home, and 22.1% answered that they had both at home.

Another favored way of contacting the dead or family ancestors is *ohakamairi* お墓参り [visiting the family grave]. Japanese people often return to their hometowns during the holiday season to see their family ancestors. Visiting the family grave during *obon* お盆 [the summer holiday devoted to this practice] and *ohigan* お彼岸 [Buddhist holiday during both the Spring and Autumnal Equinoxes] enable the living to contact the deceased (Mathews, 2011). According to Nishi (2009), the study showed that 66% visit the family grave regularly and 29% have visited the family grave at least once. Results from a survey study with 5,400 respondents over the age of 16, conducted by Takahashi and Aramaki (2014), also showed that 71% visited the family grave at least once or twice per year. Further, according to Taniyama and Becker (2014), "Although newspaper surveys show that only 20% answer 'Yes' to the question, 'Do you have religious faith?' more than half reported visiting graves, praying at Buddhist and Shinto home altars, and wearing religious amulets" (Yomiuri Shimbun, 2008, p. 15, as cited in Taniyama & Becker, 2014, p. 50). When it comes to prayer, Nishi's (2009) study showed that 49.9% had prayed in front of *kamidana*. Among those who had ever prayed in front of *kamidana*, 11.3% prayed daily, 13.8% prayed often, and 24.8% prayed sometimes. Nishi's (2009) study also showed that 67.2% had prayed in front of the *butsudan*. Among those who had ever prayed in front of the *butsudan*, 23% prayed daily, 22.8% prayed often, and 21.4% prayed sometimes.

2.1.1.3. Characteristics of religion and religiosity in the research sites

The research sites of this study are mainly three prefectures in the northern coastal part of Japan, known as the Tohoku region. The three prefectures are Iwate, Miyagi, and Fukushima, which are quite different from Japanese urban regions like Tokyo or Osaka, especially regarding religiosity. It is surprising that I could not find any specific and legitimate studies on Tohoku religiosity, yet scholars, researchers, and interviewees, whom I met during my fieldwork and my data collection in 2015, confirmed that people in the affected areas were indeed much more religious than people in other urban areas in Japan.

As previously shown, one of the definitions of religion employed in this study equates it with its institutionalized form and collective character. In this sense, the research sites of this study are not religious. As shown earlier, the term *shuukyou* (religion) in Japan has been unfamiliar to most Japanese people, which has raised questions about the credibility of results of religion and faith of surveys, such as the World Value Survey. However, results from Zenkoku Kenmin Ishiki Chousa 全国県民意識調査 [National Prefectural Consciousness Survey], a survey conducted by Nihon Housou Kyoukai 日本放送

協会 [Japan Broadcasting Corporation] (1996), are interesting, not only because they used *shinko* 信仰 [faith] instead of *shuukyou* 宗教 [religion], but also because they analyzed results by prefectures. According to results from the survey, the nationwide average of people of faith (weighted average of prefectural values by population ratio) was 31.2%, and people of no faith totaled 64.0%. However, the average percentage of people of faith in Iwate prefecture was 26.5, in Miyagi prefecture it was 22.2%, and in Fukushima prefecture it was 21.4%, which means the average percentage in the three most 2011 disaster-affected prefectures was far below the national average. Furthermore, what was characteristic of the regions was that Zen-Buddhism was significantly more popular than in other areas, which supports the testimony of several researchers and study participants whom I met during my data collection in 2015. According to Nihon Housou Kyoukai (1996), behind such uneven distributions of religiosity, there might have been differences in geographical conditions as well as a cultural and historical background of Buddhist propagation. It is historical fact that northern Japan, north of the Kanto region, did not appear on the front stage of history until the *Kamakura jidai* 鎌倉時代 [Kamakura era] (1185–1333). Before then it was mainly Nara and Kyoto, where early Buddhism became popular and gradually spread to the other areas. Moreover, during the *Kamakura jidai*, Zen Buddhist-like schools such as the Rinzai School and the Soto school prospered, which could explain why Zen-Buddhism is popular in the Tohoku regions.

The number of people belonging to religious institutions in these three prefectures is smaller than the national average. However, judging from the accounts of researchers and interviewees that I met during my fieldwork and my data collection in 2015, religiosity in the research sites seems to be unique in several ways. First, as explained in the above quotation, *Soutou-shuu* 曹洞宗 [Soto Zen-Buddhism] should be noted as the most popular religious denomination in the three disaster-affected prefectures, especially Iwate and Miyagi. In Fukushima prefecture, *Soutou-shuu* shares first place with one other Buddhist school of thought. However, regarding the fact that *Soutou-shuu* is not at all popular in other regions in Japan, it is notable that it is popular even in Fukushima prefecture.

Secondly, the understanding of death and funeral customs in these areas is unique, too. According to Suzuki (2012), one of the characteristics of funeral customs in Miyagi prefecture is *kotsusou* 骨葬 [bone funeral], which is widely seen in the Tohoku region. In this *kotsusou* custom, the dead are cremated before the funeral or funeral ceremony, and the ashes of the deceased are placed on the altar instead of the corpse. In areas where *kotsusou* is popular, there is a strong sense of obscurity to avoid dead bodies, and the corpse is called *ikibotoke* 生仏 [living Buddha] and considered obscene and unclean. Furthermore, in areas where cremation is carried out after the funeral, the ashes of the deceased are buried 49 days after the death. On the other hand, in *kotsusou* areas, the deceased's ashes are buried soon after the funeral, by which

the funeral proceedings are considered to be completed. The *kotsusou* custom clearly reflects both the view of death and the meaning of a funeral in the *kotsusou* areas in general and in Tohoku regions in particular (Suzuki, 2012).

Thirdly, religiosity in these areas is very much affected by the local and ethnic religiosity. Takahashi (2014) conducted a questionnaire survey among about 1,400 religious people, such as monks, priests, pastors, and clergies belonging to Buddhist temples, Christian churches and Shinto shrines in Miyagi prefecture. The results showed that the spiritual counseling increased six months after the 2011 disaster. The results also showed that those who came to the religious actors for counseling most likely came to them for *oharai* お祓い [exorcism] and *kuyou* 供養 [Buddhist memorial service] because the adverse influence of evil spirits had been pointed out to them by local Shamans. Takahashi believed that, besides survivors' guilt, it seemed that experiences in the morgue and of some life problems outside religion were revealed in religious form. In the background, he assumed that there was a local custom of *kuchiyose* 口寄せ [communication with the spirit] through *miko* 巫女 [a shrine maiden] and local culture based on Tohoku's ethnic Buddhism. The latter is especially significant for understanding religiosity in these areas considering the fact that *Soutou-shuu* is the most popular religious denomination. Dogmatically, there is neither spiritual existence nor soul in Soto Zen-Buddhism. However, it admits that it is impossible to define spiritual existence because of the rich variation of belief in spiritual existence or soul that differs from region to region (Sasaki, 2004, as cited in Fujiyama, 2014). The school *Soutou-shuu* also admits that it is important to accept the thoughts of those who believe that the soul of the deceased will continue to be with the living (Awaya, 2008). In fact, people in the damaged areas seem to believe in the existence of the spirits of the deceased and in ghosts. Aizawa (2015) asked questions regarding the spiritual experiences of religious people, such as monks, priests, pastors, and clergies belonging to Buddhist temples, Christian churches and Shinto shrines in Miyagi prefecture, who engaged in duties at religious facilities in Miyagi prefecture (n = 277). 70 of the respondents (25.3%) replied that they had opportunities to contact survivors who had spiritual experiences after the 2011 Great East Japan Earthquake and Tsunami. 111 respondents (40.3%) replied that they, as religious people, had given consultation on such spiritual experiences. Among the 111 respondents, 94 respondents (84.7%) answered that they had given consultation on such spiritual experiences even before the 2011 Great East Japan earthquake and tsunami. In answer to a question on whether such consultation on spiritual experiences increased or decreased after the 2011 disaster, 31 respondents answered that the number increased. Meanwhile, 71 respondents (64%) answered that the number of consultations did not increase after the 2011 disaster, from which Aizawa concluded that in these areas, belief of the existence of spirits and ghosts existed long before the 2011 disaster.

Regarding the regions' religiosity, Ohmura's (2013) study is worth presenting here. He studied the graduation of the dead, symbolized by giving a diploma to the deceased, after the 2011 Great East Japan earthquake and tsunami, through psychological aspects such as grief work. He also explored the role of memorials and healing at the school site, by investigating the actual situation of awarding a diploma to the deceased at Miyagi prefecture public school so that it could contribute to the restructuring of the meaning of life for survivors of the 2011 Great East Japan earthquake and tsunami. They mailed a semi-structured questionnaire to 95 public school directors in Miyagi prefecture and investigated the actual situation of awarding a diploma to the deceased. The recall rate of the survey was: kindergartens 66.7%; elementary schools 42.4%; junior high schools 54.5%; high schools 48.6%; special support schools 50.0%. The results showed that graduation diplomas were awarded to the deceased at kindergartens, elementary schools, and junior high schools, except prefectural schools, despite the fact that awarding a diploma to the deceased had no legal legitimacy. Regarding the judgment of the award, while considering the intention of the parents as a top priority, teachers, classmates and parents of the deceased students wanted the deceased students to graduate together with their classmates. He assumed that such an act of "awarding diplomas to the deceased" played a role in grief works of those who lost their child, classmate, or student. They also found that students who were not in their graduation year at the time of death were considered "graded" and "graduated" in the fiscal year 2012 (March, 2013). The result indicated that people believed that the deceased students grew up after they died, which reflected a local belief in life after death whereby the deceased would live on in the same way as the living. They conclude that the belief that the deceased live on in the same way as the living in the afterworld led to "awarding a diploma to the deceased," which, as a result, could play a significant role in survivors' grief work.

In sum, the cultural and religious environment and religiosity of the three affected prefectures may be unique and specific, which ought not to be ignored in this study.

2.1.2. Culture, health and well-being in a Japanese context

Culture is both external and internal, through which both individuals and collectives experience the world they live in, form meanings and meaning systems that are further shared collectively and contribute to establishing behavioral patterns and social codes (Marsella, 2005). Marsella and Yamada (2000) define culture as follows:

> Shared learned meanings and behaviors that are transmitted from within a social activity context for purposes of promoting individual/societal adjustment, growth, and development. Culture has both external (i.e., artifacts, roles,

activity contexts, institutions) and internal (i.e., values, beliefs, attitudes, activity contexts, patterns of consciousness, personality styles, epistemology) representations. The shared meanings and behaviors are subject to continuous change and modification in response to changing internal and external circumstances (p. 4).

In short, culture is a product of the interplay between society and the individual's inner world and is, hence, transitional and contextual. Individuals' constant craving for meaning in the world, in which they are located, stimulates them to reflect on and negotiate with this construction, which leads them to form meaning systems including belief and a worldview, that generates patterns of behavior and social codes and norms. The definition of culture shown above confirms that, on an individual level, individuals use culture as a template to see, understand and define, as well as to interpret the world they are situated in and they experience the world differently, due to different cultural contexts. On a collective level, culture is shared meaning through which norms are created and legitimized, which affect individuals' behavior, orientation and cognitive strategies for facing the world.

The theoretical framework used in this study consists of several theories and a model, which seem more applicable to a Western context than to a non-Western context, because most of the concepts and theories were formed in a Western context. Here lies a significant problem, which DeMarinis (2008) addresses:

> The very real dangers associated with preconceived and untested assumptions about what psychosocial effect or effects particular kinds of existential meaning-making expression may have, especially when these assumptions are based on information from other cultural contexts (p. 58).

Thus, the cultural context matters and is crucial, along with the psychological perspective, to this study. As already shown, culture is "shared learned meanings and behaviors that are transmitted from within a social activity context" and "the shared meanings and behaviors are subject to continuous change and modification in response to changing internal and external circumstances" (Marsella & Yamada, 2000, p. 4). Hence, given that culture is contextual, constructed and formed through both internal and external interaction between individuals and societies and may play an important role in the reconstruction and change/development of the individual's existential meaning and existential meaning-making, culture affects both existential dimensions of health and psychosocial well-being. Therefore, a Japanese cultural context about health and well-being will be given much attention in this study. In other words, bringing cultural perspectives into this study is imperative to understanding not only existential meaning and existential dimension of health, in the damaged areas of the 2011 disaster, but also to a Japanese cultural and sociocultural context, in which the participants of the study are located. For

this task, Kleinman's (1980) internationally employed cultural analysis model, further developed by DeMarinis (2003), for understanding both health and illness perceptions in a cultural context, is helpful. Especially considering Kleinman built this cultural-health perspective on a non-western context, namely, in the Chinese context, I believe the perspective guarantees cultural sensitivity and credibility, when used in a Japanese context. Kleinman (1978) claims that health is, in fact, a cultural system and therefore, "health beliefs and behavior, illness beliefs and behavior, and health care activities are governed by the same set of socially sanctioned rules" (p. 86). According to DeMarinis (2003), who developed Kleinman's cultural model further, culture encompasses several different dimensions of health: the biological-physical, the psychological, the social, the ecological and the existential. Because these dimensions are not solely independent but interactive, one dysfunctional dimension affects the others. The model suggests the importance of observation in approaching health, including the existential dimension of health, from these different dimensions and their interactions. It will not be harmful but useful to take full advantage of this cultural perspective on the existential dimension of health and psychosocial well-being, so that this study can shed light on the significance of the cultural context. In other words, these various cultural dimensions need to be understood in accordance with Japanese culture. Bearing this in mind, I will now present these five dimensions, so that I can show some characteristics of health in a Japanese cultural context. However, there is always the risk of generalizing, when trying to approach a specific people and culture. I am aware of the risk as I write about culture and health in a Japanese context. In addition, the five different dimensions are interactive and often dependent on each other. Therefore, some of the descriptions of those dimensions overlap.

2.1.2.1. Biological-physical dimensions

According to DeMarinis (2003), this dimension "includes both the body's biochemical processes as well as the body's way of reacting to and approaching its surroundings" (DeMarinis, 2003, p. 44).

According to Takizawa (2006), there are mixed views on the body in Japan: both relatively newly emerged views and old/traditional views remaining in contemporary Japan. In Japan, *karada ga shihon* 体が資本 [the body is the capital] is a common expression. The body is a tool and a subject of life. This view of the body is present in everyday greetings that take the body into consideration, like *ogenki desu ka?* お元気ですか [Are you healthy? = How are you doing?] or *ogenkide!* お元気で！［Please, keep on being healthy! = See you/Take care!]. Nonetheless, he continues, there is a labor situation that ignores physical health in modern Japan. In this context, there is a spiritualism that ignores the body's needs and physical health and gives priority to the mind, that controls physically tough situations and overcomes hard labor. He claims that the view of the body, which disregards physical health, is one of

the characteristics of the Japanese view of the body. On top of that, he states that there is a highly commercialized body in contemporary Japan. Meanwhile, there is a persistent view of the body as not just a tool but a means of securing an invisible and unstable heart. In this sense, the body is a container of mind and heart. Therefore, in Japan, it is often said that one must "not judge people by their appearance." Traditionally, this perception of the body is called *shinjin ichinyo* 心身一如 [mind-body unity] and is still common in Japan. It is an idealistic and holistic perception of the body, whereby the mind cultivates the body and vice versa. Hence, this perception differs from the body-mind dualism, such that the body is instead differentiated from the mind within a relatively heterogeneous "I." In other words, the word *shin/mi* 身 [body] in Japanese refers to human beings as a whole, from the body to the mind, as a living being. He explains further that, in the Meiji Era, public health and health problems were linked to the national ideology and policy by the Meiji government, in terms like *fukoku kyouhei* 富国強兵 [enrich the state, strengthen the military] and *shokusan kougyou* 殖産興業 [promotion of industries]. They emphasized the importance of the relationship between physical strength, physical structure and health, which has dominated the Japanese perception of the body long after the war.

As Takizawa (2006) explains, the *shinjin ichinyo* is the idea that the mind and the body relate to each other. This idea, combined with the stigma of mental health (explained in the next section), may explain why somatic symptoms are more prevalent in Japan. Results of a cross-sectional study with a population-weighted random sample from a nationally representative panel of 2,113 adults in Japan, conducted by Takahashi and Ohde (2016) showed that the prevalence of depression was 16.2% (n = 343), among whom 80% of participants were undiagnosed. Their results also identified a variety of somatic symptoms, including headache, back pain, diarrhea, nausea and gastric pain, among those with undiagnosed depression. Regarding general somatic symptoms, results of a cohort survey, conducted by Toukei Suuri Kenkyuujo 統計数理研究所 [the Institute of Statistic and Mathematics] in 2013, on 3,170 adult Japanese people over the age of 20, showed that 32% of all participants suffered from migraine and 52% suffered from back pain (Nakamura, Tsuchiya, & Maeda, 2015). Focusing only on the participants in the Tohoku regions, 38% suffered from migraine and 63% from back pain (Nakamura, Tsuchiya, & Maeda, 2015).

As in other developed countries, the thin body is idealized in contemporary Japan. This view on the body shows that Japan has not escaped the objectified and commercialized body either. Notably, the female body is bound by the thin ideal, which sometimes leads to obsessive fasting behaviors, eating disorders or extreme exercise among young girls and women. 41% of Japanese female adolescents aged 6–13 and 68% of Japanese female adolescents aged 16–18 had a negative body image perception and a high desire for thinness, regardless of their actual weight (Ohtahara, Ohzeki, Hanaki, Motozumi, &

Shiraki, 1993). Kousei-roudou-shou 厚生労働省 (The Japanese Ministry of Health, Labour, and Welfare, 2004) undertook a National Nutrition Survey in 2002 and the results indicated that 68.6% of girls aged 15-19, who were categorized as being of healthy weight, and 41% of those who were categorized as underweight, were currently trying to lose weight, while 24.7% of males across all age groups were trying to lose weight.

Despite the perceived body image among women being negative, which may affect their health, the life expectancy of Japanese females is 86.8 years (WHO, 2017), which is counted as the longest life expectancy in the world. The life expectancy of Japanese males 80.5 years (WHO, 2017), which is also quite high.

2.1.2.2. Psychological dimensions

This dimension refers to "the inner world and how the psyche functions and reacts in its surrounding context" (DeMarinis, 2003, p. 44). Japanese people seem not to pay much attention to this relation. There has been a limited number of "community-based epidemiological studies of psychiatric disorders in Japan" (Kawakami, Shimizu, Haratani, Iwata, & Kitamura, 2004, p. 294). Moreover, results from some of the studies on the prevalence of mental disorders in Japan have been inconsistent. According to Kawakami et al. (2004), "cross-national psychiatric epidemiology has revealed a lower prevalence of mood and anxiety disorders among East-Asian countries than in Western countries" (p. 293). They conducted a community-based interview survey of adult residents in an urban community in Japan (n = 1,029) to estimate the lifetime and six-month prevalence of several different psychiatric disorders, according to the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.; *DSM–3*; American Psychiatric Association, 1987) and to compare the prevalence of psychiatric disorders in Japan, in other East-Asian countries and in Western countries. They found that the lifetime and 6-month prevalence of psychiatric disorders (in terms of mood, anxiety and alcohol use) in Japan was low in general, similar to that in East-Asian countries, and lower than that in Western countries. They also found that, in the Japanese samples, alcohol abuse was more prevalent among men than among women, and generalized anxiety disorder and alcohol abuse was more prevalent among younger participants. Ishikawa et al. (2016) also estimated the lifetime and 12-month prevalence, severity and treatment of mental disorders in Japan using data from the World Mental Health Japan Survey (n = 4,130). Their results suggested that the prevalence of mental disorders in Japan was lower than in Western countries. They also found that the lifetime prevalence of mental disorders was greater for males, but the persistence of mental disorders was greater for females, which they considered "a unique feature of Japan, suggesting a cultural difference in gender-related etiology and course of disorders" (p. 217). However, Watanabe (2016) especially questioned the results from Ishikawa et al. (2016), which confirmed that the prevalence of mental disorders was lower

than in the other regions of the world, by analyzing data from the World Mental Health Survey. He questioned whether there were any plausible reasons for Japan to have a lower prevalence of mental disorders because the number of psychiatric beds in Japan is the highest in the world and people with mood or anxiety disorders in Japan are hospitalized more often than in the other countries. In short, he suggested that these kinds of studies might have led to plausible small prevalence rates due to selection bias in the findings in Japan.

The inconsistencies in the results of these studies, that explored whether the prevalence of mental disorders in Japan was low or not, still indicated that there were some hidden numbers of people with mental disorders, undiagnosed and untreated. According to Ando, Yamaguchi, Aoki, and Thornicroft (2013), "Stigmatizing attitudes towards mental illness" (p. 479) in Japan are strong due to a lack of knowledge of mental health among the general public. They also point out that weakness of personality is most often seen as the cause of mental illness, "rather than biological factors" (p. 471), which may be a reason why "almost two-thirds of individuals with mental illness never seek help from a health professional" (pp. 471-472). Griffiths et al. (2006) also confirmed the existence of the mental health related stigma in Japan. They conducted a study and compared attitudes toward mental illness among adults in Australia (n = 3,998) and adults in Japan (n = 2,000). According to them, although they found stigmatizing attitudes towards mental illness in both countries, more negative attitudes were seen in Japan. They speculated that conformity was valued more and individualism was valued less in Japan than in Australia, which might explain their findings. They also believed that public health education in Japan was less available than in Australia, which accounted for the difference in stigmatizing attitudes towards mental illness between the two countries. Like Ando et al. (2013) suggested, they also pointed out that personal weakness seemed to be endorsed among the Japanese. Such stigma in Japanese society may explain why, in Japan, somatic symptoms are common with depression (Nakao et al. 2001c). Furthermore, "so-called masked depression or mild depression, the affective and cognitive symptoms of depression are hidden behind a variety of somatic complaints" (Nakao & Ohara, 2014, p. 51) is not unusual in Japan. The mental health-related stigma in Japan may also explain the low medical treatment rates among people who suffered from mental disorders. According to Kitamura et al. (1999), only 10% of those diagnosed as having mental disorders sought medical treatment. Kanehara et al. (2015) conducted an interview survey, using data from the World Health Organization in Japan, to investigate why the Japanese not accessing mental health services. According to them, "a low perceived need" (p. 524) was a primary reason for not seeking mental health services, and a wish to deal with a mental issue by oneself was the most common reason for not using the mental health care.

Regarding general mental health problems, results of a cohort survey among 3,170 adult Japanese (aged 20 and above) conducted by Toukei Suuri

Kenkyuujo in 2013 showed that 50% of all participants were stressed out, 36% were depressed, and 20 % were suffering from insomnia (Nakamura, Tsuchiya, & Maeda, 2015). Focusing only on the participants in Tohoku regions, 58% were stressed out, 43% were depressed, and 20 % were suffering from insomnia (Nakamura, Tsuchiya, & Maeda, 2015). These percentages were significantly higher than the respective averages.

2.1.2.3. Social dimension

The social dimension refers to "the relational world including social structures, networks, society, and in particular the institutions that function as normative and meaning-giving systems as well as the power system they present" (DeMarinis, 2003, pp. 44). The family is the most basic and important social and relational unit. In fact, according to results of a cohort survey among 3170 adult Japanese (aged 20 and above) conducted by Toukei Suuri Kenkyuujo in 2013, 44% of all participants answered that family is the most important thing in life. Health was placed second, but only 18% answered that health was the most important (Nakamura, Tsuchiya, & Maeda, 2015).

Though the concept of family has changed over the years, it is impossible to ignore the history of *ie-seido* 家制度 [family system] that emerged in relation to modernization. It was a family system prescribed in the Civil Code enacted in 1898. This system placed close relatives in an *ie* 家 [household], as a members of a family, and made authorities *koshu* 戸主 [householder] of the house.

Within the system, families tended to be patriarchal (usually headed by the father or oldest son), with a male *koshu* in charge of decision-making. When an individual makes decisions, s/he tends to think about how her/his choice will affect her/his family and to respect family harmony (Yokoo et al., 1993, p. 35). The *ie-seido* changed over time and was abolished after World War II. Therefore, it no longer has any legal legitimacy and does not function as before in urban areas, though it still functions as an idealized tradition in rural areas. Since male family members often took precedence over female counterparts within the system, it had long lasting effect on gender relations in Japan. In fact, several studies point out that Japanese society is still marked by gender inequality. The patriarchal nature of Japanese marriage traditions characterizes Japanese gender inequality in relation to marriage and health. Lim and Raymo (2016) claim that despite the high rates of female participation in the labor force, the majority of Japanese women are forced to exit it due to marriage and parental leave. There is an implicit expectation in Japan that men work outside the home and women take care of household and family, regardless of whether they work outside the home too, or not. According to the World Economic Forum (2016), Japan ranked 111 among 144 countries in the 2016 edition of the Gender Gap Index. This ranking indicates that the economic disparity between men and women is apparent, which may imply that the role of women as unpaid domestic laborers is implicit but widely

rooted in Japanese society. On the whole, the family is often seen as the first place where children receive their moral education, for which mothers often have all the responsibility. Lim and Raymo (2016) also confirm that there are "normative expectations for a woman to be a "good wife and wise mother" (ryousai kenbo) and to support her husband's career success (naijonokou)" (p. 783).

Furthermore, Lim and Raymo (2016) argue that the patriarchal nature of Japanese marriage traditions can be both harmful and beneficial to women's health in Japan:

> Evidence that husbands' time spent on housework and childcare is not sensitive to wives' employment status and work hours (Tsuya et al., 2005) also suggests that the burdens of the second shift may be substantial for married women who do work in Japan. At the same, however, alternative theories and empirical evidence predict a positive relationship between marriage and women's health in Japan. The institution of marriage remains strong, and family alternatives to marriage are limited, which suggests that Japan is a setting in which the institutionalized benefits of marriage may contribute to better health (p. 783).

Marriage status may be a protective factor in women's health because of its secure character. In other words, the single status may be a negative factor in women's health because "the social pressures and stress associated with not following a "normative" family life course may compromise the health of unmarried women" (DePaulo & Morris, 2005, as cited in Lim & Raymo, 2016). Lim and Raymo (2016) continue:

> Ethnographic evidence that women who remain single beyond prime marriage ages are often viewed as "odd" or having problems (Ogasawara,1998) is consistent with such a scenario. The continued strength of marriage as an institution is also found in a range of structural and normative practices that encourage women's economic dependence and protect housewives. For instance, tax benefits for non-working or low-earning housewives (e.g., part-time workers) and employer-provided "spousal allowances" for dependent housewives exemplify the structural and normative protections of women's domestic roles (Nagase, 2003) and reflect the high societal valuation of housewives and mothers' roles in children's academic success (Hirao, 2001) (Lim and Raymo, 2016, p. 783).

However, these tendencies are observed less frequently in major cities than in rural areas, and there is a difference of view on family among different generations: the older generations most likely respect such values and lifestyles, while the younger generation seem to place less importance on them. Miyagi, Iwate and Fukushima, the three prefectures most damaged by the 2011 Great East Japan earthquake and tsunami, are the sites of this study. They are often considered rural, traditional and conservative prefectures with a depopulation

problem due to declining birthrates, an aging population and a shrinking working age population.

Regarding gender roles and family in Japan, it is interesting to see a broadened definition of family in Japan. Family in Japan usually consists of not only bonds with living relatives but also with deceased family ancestors. The dead become family ancestors, and "if the proper rituals have been performed, their spirit merges with the general sense of the family ancestors" (Klass and Goss, 1999, p. 549). Therefore, carrying out rituals to honor family ancestors is essential (Earhart, 2014). Since such rituals are seen to belong to the household, it is often the mother and wife who is responsible for them.

The local community system in Japan needs to be described here for an understanding of the social dimension of health in Japan. *Chounaikai* 町内会 [neighborhood association] is a characteristic of the local community in Japan. The residents in c*hounaikai* were not supposed to be political entities of the area but a social unit and administrative objects of the state. According to Fujita (1980) c*hounaikai* in Japan has become an object of national policy with modernization. Moreover, it worked well during the War period. After the War, c*hounaikai* lost official importance, but retained certain functions such as work to improve the environment in the areas, friendship, carrying rituals, education, and welfare. In other words, *chounaikai* is no longer important in cities, where people have individual lives, although the system is still one of the most active and influential community systems in Japan, especially in rural areas, where collectiveness has more importance than in urban areas.

2.1.2.4. Ecological dimension

The ecological dimension refers to "the individual's interaction with the natural environment" (DeMarinis, 2003, p. 44) including both natural and constructed structures and spaces. Generally, Japanese people are used to natural disasters because Japan has suffered many kinds of natural disasters in its long history: earthquakes, tsunamis, landslides, volcanic eruptions, typhoons and floods, to name a few. For many Japanese people, nature is something beyond their control, both merciful and cruel, because it nurtures people through its rich resources and devastates people through disasters. In fact, in a cohort survey, conducted by Toukei Suuri Kenkyuujo in 2013, on 3,170 adult Japanese people (aged 20 and above), 48% of the participants answered that humans should obey nature to be happy, while 41% answered that humans should make use of nature. Only 6% answered that humans should conquer nature for their own happiness (Nakamura, Tsuchiya, & Maeda, 2015).

As in many developed countries, a falling birth rate and aging population has led to a problem of depopulation in Japan. The long life expectancy combined with the falling birth rate has accelerated depopulation in rural areas. The hard-hit 2011 disaster areas are no exception. In these areas, depopulation and an aging population had already been problems before the 2011 disaster,

because industries and lives in these areas had been quite dependent on geographical factors. Fishery and agriculture, less attractive to younger generations over time, had been important industries, employing many residents of the three most damaged areas and supplying big cities, such as Tokyo and Yokohama. These industries were destroyed or severely damaged by the 2011 disaster, which made life before the disaster more difficult to reconstruct in the affected areas. In addition to being depopulated, one of the damaged prefectures, Fukushima, lies not only along the coast, but also near the most populated region, namely the Kanto region, including Tokyo. As such, Fukushima was deemed suitable for nuclear plants, used to provide the Kanto region with electricity. Generally, the ambiguous proximity to the Kanto region, both geographically and historically, shows how the three prefectures experienced being of subordinate status to central Japan.

2.1.2.5. Existential dimension

The existential dimension refers to "the individual's understandings of existentiality/spirituality and the way meaning is created" (DeMarinis, 2003, p. 44). As the term existential is rooted in western existentialism, the term itself has generally been foreign to Japanese people. It is difficult to translate the term into Japanese (there is a translated word, but it may not seem precise to most Japanese people). The same is true of *existential meaning* and *meaning-making*. However, in Japan, the term *ikigai* 生きがい denotes a similar concept of existential meaning. The word *ikigai* exists only in Japanese and is specific to a view on life common in Japan (Kamiya, 1980; Mita, 1994; Mathews, 1996, 2001, as cited in Nomura, 2005, p. 62). *Ikigai* is "similar to what Frankl (1955; 1958; 1959; 1960) explains it as meaning" (Kamiya, 1966, as cited in Kumano, 2003, p. 69). There are two types of *ikigai*: (1) a source of motivation or an object of one's life, and (2) emotion and cognition (Kamiya, 1966, as cited in Kumano, 2003, p. 68). In other words, the former is an objective such as "This child is the my meaning of life," and the latter is a mental state (Kamiya, 1966, as cited in Kumano, 2003, p.68), in which one is feeling a sense of life, such as a feeling of happiness, a goal in life, a meaning in life or a process of self-actualization, or feeling a sense of life. In Japan, according to Kumano (2003), the term *ikigai* is often used in everyday life, and in recent years it is considered to be an essential concept in exploring mental health. Indeed, policies on health among older people in Japan emphasize measures to ensure safe and healthy lives, where they can feel *ikigai*. Therefore, in Japan, there are quite a few studies on the relationship between *ikigai*, life expectancy, and health among the elderly. Most of these studies focus on *ikigai* as a source of motivation or an object of one's life, such as family, friends, work, money, health or community, etc. and many of the studies conclude that older persons with *ikigai* are in good health, both mentally and physically (Nomura, 2005; Aoki, 2009). There are still few studies on the relationship between health and *ikigai* as a sense of life, such as

a feeling of happiness, a goal in life, a meaning in life or a process of self-actualization.

Another aspect of the existential dimension is the Japanese view on nature. According to Maebayashi (2016), Japanese people have been convinced that disaster may befall them as fate or punishment. At the same time, they believe in *mujyo* 無常 [immortality]. He explains that the term *mujyo* is a Buddhist term, meaning that nothing in this world stays alive and everything changes, and it is meaningless to cling to worldly things and events; people should live in the present. The continuation of the present is life, and its flow changes constantly. Hence, Japanese people, often said to live in one of the most secular countries in the world, may form their meaning in life through the nature surrounding them (and live with it). They are, quite possibly, also influenced by the idea of *mujyo*, a Japanese view on life whereby life is a gift from *ten* 天 [heavenly consciousness, predicament, Gods, or transcendent power]. It means that *tenmei* 天命 [life determined by Predicament] is determined, not by the selfish desires and wishes of humans, but by the *ten*. This view on life may also affect the Japanese view on health and illness. Sawada (2011) explains that this view has been prevalent in Japan since the *Edo jidai* 江戸時代 [Edo period], in which Kaibara Ekken 貝原益軒 (1630-1714) published *Youjoukun* 養生訓 [*The Book of Life-nourishing Principles*] (1713). According to Sawada, Kaibara insisted that sick people should follow the path of *youjou* 養生 [the curing path] without worrying too much about their sickness. If death was determined by Predicament, there was nothing the sick could do and hastening towards health would only make them sicker. Kaibara emphasized the importance of moderate rest and waiting for healing to occur naturally.

In order to take a closer look at religious dimensions in Japan, which should be included in this section on the existential dimension, we should bear in mind the previous sections on religiousness in Japan. As mentioned previously, the majority of Japanese people consider themselves *mushuukyou* 無宗教 [non-religious or of no religion]. However, rituals and rites bearing religious content have some important components in everyday life, and there are *kamidana* or *butsudan* or both in many Japanese homes, despite the small number believers. Roemer (2010) explored the relationship between religion and psychological distress using data from a new random sample of Japanese adults (n = 330). Results showed that ownership of a *butsudan* was negatively associated (p = .002) with distress, while ownership of a *kamidana* was positively associated (p = .032) with distress. Further, he found that the frequencies of rituals at both the *butsudan* and the *kamidana* were not significantly related. He also found that those who visited their family gravesites more frequently were less likely to report distress. He interprets the results as follows:

Japanese who visit their family gravesites or connect with their ancestors at a household altar are making offerings for, and communicating with, ancestors with whom they have had a human connection. Especially in the case of the recently departed, they may be paying respects to and asking for general guidance or protection from spouses, parents, or close friends and other relatives who have died (p. 578).

He continues:

Unlike kami, ancestors are more often seen as helpful and caring. Here, the altars (not frequency of ritual behaviors) are significantly associated with psychological distress, and the kamidana is a constant reminder that kami are there for them but need to be respected or they might cause harm (p. 578).

According to him, most Japanese people consider their ancestors to be "more compassionate than *kami*" (p. 578), which are regarded as both punishing/revengeful and helpful, as well as craving constant respect and obligatory rituals in their honor. He claims that *kami* 神 [Shinto Gods] are not intimate to most Japanese people because they are too abstract and mystical, compared to imminent ancestors. Therefore, he argues that obligatory rituals often conducted at the *kamidana* 神棚 [Shinto home altar] may not give many Japanese people a feeling of being cared for and protected, but instead appears to do harm to their health. On the other hand, he observes that Japanese people who conduct rituals at the *butsudan* or family gravesites feel less distress, thanks to the close and immanent relationship between the dead and the living.

2.2. Previous research

In this section, I present an overall review of previous studies concerning the aims of this study: existential meaning; meaning-making; religion; spirituality; mental health; and well-being, with regard to the 2011 Great East Japan earthquake and tsunami. As I already stated, my interests are on the function of religion and volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being regarding the 2011 Great East Japan earthquake and tsunami. Internationally, the number of studies concerning the topics from sociocultural and public mental health perspectives in a post-disaster context is still limited. As is the case with international studies, the number of studies on the topics in the Japanese context both before and after the 2011 disaster is limited. Moreover, more than seven years have passed since the 2011 triple disaster occurred in Japan, and more and more research has been introduced and published, which convinced me that I should give the studies about the 2011 disaster more space than the studies before the 2011 disaster. In short, the primary object in this section is to take a closer look at both international and Japanese

studies concerning the topics with regard to a post-natural disaster context. I will start by presenting the literature search process. Thereafter follows a literature review. I present the review along with the categorized topics. Lastly, I end this section by presenting the findings from the literature review.

2.2.1. Literature search

Searches for literature were conducted in three different periods. I conducted the first search from September 2013 to November 2013. To avoid getting relatively old studies, I set a custom range between 1994 and 2013, that is, the past two decades. To find research and studies that were relevant to this topic, I used "natural disaster + mental health" as keywords because I wanted to get a general research overview of the relationship between natural disaster and mental health. I conducted searches in English in the Swedish university and research library catalog (LIBRIS), which resulted in only seven hits. I also conducted searches in English both in Google Scholar, which resulted in about 40,900 hits, and in PubMed, which resulted in around 1,700 hits. To find Japanese studies, I conducted an additional search in Google Scholar with the same keywords "natural disaster + mental health" but in Japanese, which resulted in 370 hits, and a search in Scholarly and Academic Information Navigator (CiNii), which resulted in 110 hits. To find studies and research that were relevant to this study's research questions, I continued searching by combining multiple keywords in English and Japanese in PubMed, CiNii, LIBRIS, and Google Scholar. The keywords were: earthquake, tsunami, natural disaster, Japan, Tohoku, religion, religiosity, spirituality, existential meaning, meaning-making, religious care, spiritual care, mental health, and well-being. The two-month-long search resulted in finding quite a few researches on topics relevant to this study, and it was no wonder because the initial search was conducted after only less than three years since the 2011 Great East Japan earthquake and tsunami.

The second search was conducted in October 2016. The second search aimed to update the research review. Considering that it had been more than five years since the 2011 Great East Japan earthquake and tsunami, it was necessary to search for new studies on the 2011 disasters. I put a custom range between November 2013 and October 2016 so as not to include the same studies from the previous search. Like the previous search, I used "natural disaster + mental health" as keywords. I conducted searches in English in LIBRIS, which resulted in 10 hits. Further, I conducted searches in English in Google Scholar, which resulted in about 17,300 hits, and in PubMed, which resulted in around 660 hits. I also conducted an additional search in Google Scholar with the same keywords "natural disaster + mental health" but in Japanese, which resulted in about 230 hits, and a search in CiNii, which resulted in 52 hits. After that, I continued searching both in English and in Japanese with combinations of multiple keywords in PubMed, CiNii, LIBRIS, and Google

Scholar. The keywords were: earthquake, tsunami, natural disaster, Japan, Tohoku, religion, religiosity, spirituality, existential meaning, meaning-making, religious care, spiritual care, mental health, and well-being. Searches were continued until the saturation was reached.

A new search was conducted in December 2017 as the third search. In the third search, I put a custom range between January 2016 and December 2017 so as not to include the same studies from the previous search, and to find the latest studies. Apart from the previous search, I used "2011 Great East Japan earthquake and tsunami" and "existential meaning" as keywords to find the latest studies on existential meaning in the post-2011 disaster context. I conducted searches in English in LIBRIS, which resulted in 2,412 hits. Further, I conducted searches in English in Google Scholar, which resulted in about 509 hits, and in PubMed, which resulted in no hit. I also conducted an additional search in Google Scholar with the same keywords "2011 Great East Japan earthquake and tsunami" and "existential meaning" but in Japanese, which resulted in about 52 hits, and a search in CiNii, which resulted in no hit.

The number of researches on natural disasters, in general, was huge. Therefore, I took up studies that had a focus on either earthquake or tsunami or both. Because the 2011 Great East Japan disaster is a triple disaster—earthquake, tsunami, and radioactive—it might be strange not to include research on the Fukushima nuclear plant accident. However, in the review, I exclude cases in Fukushima for two reasons. First, it is an ongoing problem, which has a significantly different impact than what the earthquake and tsunami had on survivors. I believe that Fukushima should be investigated alone and get more space as one of the most severe incidents in human history in general, a human-made disaster in particular. Secondly, it is simply due to limitations of space and time. There were also studies suggesting that not only the adult population but also children as well as adolescents could be affected profoundly by natural disasters. However, since my study subjects were adult, I excluded such studies focused on children or adolescents. The findings were sorted and organized into categories.

2.2.2. Natural disaster and mental health

Natural disasters occur suddenly and affect large numbers of people. Many studies have investigated and documented various psychological effects of exposure to natural disasters. Many mass "natural disasters during the past decade have resulted in considerable popular and academic attention being paid to population effects of disasters, particularly regarding mental health effects" (Neria, Galea, & Norris, 2009, p. 1). Results of my literature searches showed that the number of researches on natural disasters and mental health was huge. In the following sections, I present studies that I consider relevant to this study.

2.2.2.1. Japanese studies before the 2011 Great East Japan earthquake and tsunami and international studies

Japan is a land of natural disasters. Historically, Japan has repeatedly been subject to natural disasters such as earthquakes, tsunamis, typhoons, floods, landslides, and volcanic eruptions. Nevertheless, research on trauma and psychological distress in relation to natural disasters does not have a long history in Japan. The psychological effects of natural disasters, the psychological states of survivors of natural disasters, and their impact and effect on mental health had not received much attention even among mental health professionals. Although the more contemporary understanding of posttraumatic stress disorder (PTSD) in Japan grew out of studies of major natural disasters (Goto & Wilson, 2003), it was not until the Hanshin-Awaji earthquake occurred in 1995 that the words trauma and PTSD became well known by mental health professionals as well as researchers. Kato (1998) also explains that the Hanshin-Awaji earthquake evoked interest in the psychological effects of disasters and raised awareness of the need for mental health care and treatment of PTSD among victims and survivors. It explains well why most of the research on this topic before the 2011 Great East Japan earthquake and tsunami had been about the survivors of the Hanshin-Awaji earthquake. There had been, however, initial resistance in accepting professional assistance even after the Hanshin-Awaji earthquake because of cultural differences between the United States and Japan and the unfamiliarity of post-disaster mental health issues (Goto & Wilson, 2003).

If studies on mental health and natural disasters that occurred before the 2011 Great East Japan earthquake and tsunami are included, both in and outside Japan, there have been numerous studies investigating the psychological states of survivors of natural disasters in general—earthquakes or tsunami or both. A list of such studies is extensive—earthquakes in Armenia (Goenjian et al., 2000), in Thai (Tang, 2007), in Italy (Priebe et al., 2009), in Pakistan (Ali, Farooq, Bhatti, & Kuroiwa, 2012), about the Hanshin-Awaji earthquake (Kato, 1998; Nishimoto & Matsumoto, 1998; Fukuda, Morimoto, Mure, & Maruyama, 1999; Kuki, Kakigi, Takamiya, & Maeda,

2001), Niigata-Chuetsu earthquake (Toyobe at al., 2006; Kuwabara et al., 2008; Oyama, Nakamura, Suda, & Someya, 2012), and Noto earthquake (Omote, Naganuma, & Kido, 2010); or Tsunami in Thai (Van Griensven et al., 2006; Tang, 2007), in India (Kumar, Murhekar, Yvan, Subramanian, Ramachandran, & Gupte, 2007; Math et al., 2008), and in Indonesia (Frankenberg et al., 2008).

When comparing the findings and results of studies conducted in Japan with those of studies conducted in other countries regarding the psychological effects of natural disasters, there were many similarities and differences. Risk factors that may cause or increase psychological distress among victims and survivors were not in accordance with these studies. Overall, the severity of exposure to disasters correlated with psychological distress (Nishimoto & Matsumoto, 1998). Other risk factors were the experience of personal injury (Kumar et al., 2007; Kuwabara et al., 2008), the experience of a death in their family (Kumar et al., 2007; Frankenberg et al., 2008), and having felt one's own or a family member's life in danger (Frankenberg et al., 2008). Regarding vulnerabilities, many of these studies found that female victims were more likely to be impaired by psychological distress than male victims (Terada & Matsumoto, 1996; Nishimoto & Matsumoto, 1998; Norris et al., 2002; Kumar et al., 2007; Frankenberg et al., 2008; Kuwabara et al., 2008; Priebe et al., 2009; Ali et al., 2012). When it comes to age, however, the results of these studies were not consistent with each other. The majority of studies found that older persons were not only the most vulnerable to disaster but also more likely to be impaired and to experience increased psychological distress as well as physical health problems (Kuki et al., 2001; Toyobe et al., 2006; Tang, 2007; Priebe et al., 2009; Ali et al., 2012). Personal, economic, and social loss or absences of social life were also identified as a significant risk factor that could increase psychological distress in many studies. Researchers cited dislocation (Fukuda et al., 1999; Van Griensven et al., 2006; Math et al., 2008; Kuwabara et al., 2008; Ali et al., 2012), property damage (Frankenberg et al., 2008; Kuwabara et al., 2008), low socioeconomic status (Kato, 1998; Kumar et al., 2007; Ali et al., 2012; Oyama et al., 2012), weak or deteriorating psychosocial resources (Fukuda et al., 1999; Van Griensven et al., 2006; Tang, 2007; Omote, Naganuma, & Kido, 2010; Oyama et al., 2012).

2.2.2.2. Impact of the 2011 Great East Japan earthquake and tsunami on mental health

More than seven years had passed since the 2011 Great East Japan earthquake and tsunami occurred. Although the number of such studies is still small, some on this topic have already been conducted, and it is reasonable to assume more research will be introduced and published in the next few years. During the literature searches, I found some studies on the psychological impact of the 2011 Great East Japan earthquake and tsunami that had a particular focus on children and adolescents in the disaster-affected areas. However, I excluded

these studies because the subjects of this study are neither children nor minors but the adult population.

Niitsu et al. (2014) conducted a cross-sectional mail-in survey with a random sample of residents from Ichinoseki City, Iwate prefecture, 11 months after the 2011 Great East Japan earthquake and tsunami to examine the impact of the earthquake and radioactive contamination on the prevalence of psychological distress. By logistic regression models with multiple imputation methodology, they analyzed data from 902 respondents (m = 402, f = 498, mean age = 59.32). Their results revealed that house damage because of earthquakes and anxiety about radioactive contamination were significantly associated with psychological distress (p < .05), that the association between house damage and anxiety about radioactive contamination was not significant, and that female gender, middle-to-low educational status, and unemployment were additional risk factors for psychological distress.

Koyama et al. (2014) conducted a cross-sectional survey of residents aged 40 years old or older in the city of Iwanuma, Miyagi prefecture, who were living in temporary housing due to the loss of their homes. The number of participants in their analysis was 281 (m = 128, f = 151, missing = 2). Their study aimed to examine the effects of the resettlement methods and social support on mental health. They assessed survivors' psychological distress by using the Kessler Psychological Distress Scale (K6) that consists of six self-reported items. They conducted cross-tabulation and chi-square analyses to determine the associations between the resettlement approach and social support variables. They also performed multiple log-binomial regression analysis to investigate the relationships between variables and severe psychological distress. They found that respondents who settled to temporary housing together with people in the previous community were more likely both to provide and receive social support when compared with the respondents who allocated to temporary housing (receiving social support: p = .003, providing social support: p = .050). Results also showed that participants without social support had a higher risk of having psychological distress, that those of younger age (younger than 55 years old) were a risk factor for psychological distress, and that having a lower income was also associated with psychological impairment or distress.

Shiotani (2014) conducted an Internet survey six months after the 2011 Great East Japan earthquake and tsunami to investigate the negative impact of received social support on the mental health of survivors of in Miyagi prefecture (n = 1,000, m = 500, f = 500, age range between 18 and 69 years old). He used the Japanese version of the Kessler Psychological Distress Scale (K6) to assess depression and divided participants into two groups—lightly damaged (n = 781) and severely damaged (n = 219). Logistic regression analyses showed that, among participants in the lightly damaged group, those who received "psychological encouragement" more than three times were more

likely to have the depression tendency compared with those who never received it. After controlling for depression in the one month after the 2011 disaster and stressful events like loss of family members, "psychological encouragement" maintained a significant effect on depression six months after the disaster among survivors in the lightly damaged group (received 3-4 times, $p < .01$; more than 5 times, $p < .05$). The results indicated that emotional support such as psychological encouragement might have exacerbated the mental health of lightly damaged survivors and that the mechanism that produced the correlation could relate to the ambiguous identity of lightly damaged survivors.

Nagata, Matsunaga, and, Teramoto (2015) conducted a questionnaire survey among residents aged 20 years old or older who lived in temporary housing complexes from January to March (time 1, n = 320) and from October to December 2012 (time 2, n = 264). They aimed to study their general health status, psychological distress, and feeling of isolation over time. A total of two hundred respondents (m = 39.5%, f = 60.5%, mean age = 63.4) participated in the two studies. The results showed that the percentage of those who participated in activities of the residents' association increased from 22.0% at time 1 to 31.7% at time 2 (P = .03), and the percentage of those who had a sense of isolation had increased from 11.0% at time 1 to 19.0% at time 2 (P = .018). They concluded that a higher percentage of participants felt a sense of isolation at period two even though more participants took part in community activities over time, which itself indicated the prevalence of prolonged psychological distress among the population. They emphasized the importance of monitoring the residents of temporary housing complexes to provide them with long-term care and support because their results showed their prolonged psychological distress and an increasing sense of isolation.

Furukawa, Takeuchi, Yano, and Muto (2015) conducted semi-structured interviews with survivors who were living in their damaged houses (n = 2,773, m = 991, f = 1,782) in the city of Ishinomaki from October 2011 to March 2012 to find factors associated with psychological distress among the population after the Great East Japan earthquake and tsunami. The interview consisted of five sections including questions about demographics, social and community networks, living and working condition, general socioeconomic, cultural, and environmental conditions, and psychological distress. They conducted multivariate analysis controlling for age and economic status. The results showed that female gender, loss of pleasure in life, change in family structure because of the 2011 disaster, and change in working status because of the 2011 disaster related significantly to psychological distress ($p < .001$). According to them, however, the extent of house damage was not related to psychological distress. They considered the explanation for the result might have been that all the participants of the study could continue living in their home despite severe house damage. They conclude that the two modifiable factors—loss of pleasure in life and change in work status because of the 2011

disaster—should be addressed to mitigate vulnerability to psychological distress.

Tsuboya et al. (2016) explored the association between exposures to the 2011 Great East Japan earthquake and tsunami and the changes in depressive symptoms among community-dwelling older adult survivors (65 years old +, n = 3,464, m = 1,513, f = 1,951). They used two waves of data from the Japan Gerontological Evaluation Study (JAGES). One was a baseline survey in 2010, and the other was a follow-up survey in 2013. They used the 15-item Geriatric Depression Scale (GDS) to assess depressive symptoms. They used a linear regression model for investigating the relationship between experiences of the 2011 disaster and change in GDS scores. They categorized disaster exposure according to five types of experiences: loss of family/friends, loss of pets, loss of/damage to property, loss of employment, and disruption in access to medical care. They found that property loss (loss of house, $p < .0001$; loss of the car, $p = .0005$), loss of employment ($p < .0001$), and disruption in access to psychiatric care ($p < .0001$) were significantly associated with a decline in the score of GDS. The effect size of the loss of family members was relatively small ($p = .035$) although it was significantly associated with a decline in the score of GDS statistically. These findings were more pronounced among male survivors than female survivors. They concluded that the loss of homes, cars, jobs, and disruption of access to psychiatric care were significantly associated with worsening depressive symptoms even three years after the Great East Japan earthquake and tsunami, but meanwhile, survivors appeared to have recovered from the loss of family and friends.

Matsuyama et al. (2016) conducted a prospective cohort study by using two waves of survey data in Miyagi prefecture (the first wave in 2012 and the second wave in 2013) to examine whether the 2011 disaster survivors' psychological distress differed among different temporary housing communities and to examine the relationship between individual- and community-level social relationships and survivors' psychological distress. A total 6,034 samples (aged 18 years or older, m = 2204, f = 2698) were eligible for complete case analysis. They used the Kessler Psychological Distress Scale (K6) consisting of six questions that measure nonspecific psychological distress to evaluate survivors' psychological distress. The results of multivariate multilevel linear regression analyses showed that psychological distress 2.5 years after the Great East Japan earthquake and tsunami differed significantly between prefabricated temporary housing communities and between households after adjusting for psychological distress one year prior. They found that individual- and community-level social support and social participation partly explained the difference between prefabricated temporary housing communities. They also found that individual-level social support, individual-level social participation, and community-level social support were significantly associated with having less psychological distress over one year after adjusting for psychological distress at baseline and other covariates.

As already seen, there were many similarities and differences among these studies investigating the psychological effects of the 2011 disaster when comparing the findings and results of studies with each other. In general, the results from these studies were in accordance with previous studies both internationally and in a Japanese post-natural disaster context. According to several different studies, risk factors that may cause or increase psychological distress among survivors of the 2011 Great East Japan earthquake and tsunami were various. Even though there were few studies investigating the impact of the 2011 disaster on mental health, most of them were quantitative research focused mainly on factors of disaster-related psychological distress, or courses of such psychological distress. Their study objectives were, in principle, to find factors that may cause psychological problems, to assess and examine the development, and trace psychological distress so that they could find factors for prevention of disaster-related psychological distress or find factors that may help to develop intervention strategies and models in the disaster-affected areas. A lack not only of qualitative but also longitudinal studies was apparent. Furthermore, most of the studies were conducted in a clinical context, which seems not to pay much attention to the cultural context in which survivors lived.

2.2.3. Existential meaning, meaning-making, religion, and spirituality in the context of natural disaster

The literature searches resulted in finding many international studies on meaning, religion, health, and well-being with regard to traumatic life experiences in general and disasters in particular. In the following sections, I present some of the studies on the topic that I believe relevant to the study.

2.2.3.1. Existential meaning, meaning-making, and natural disaster

The notion of meaning is central to human life. It is a popular one, and meaning appears particularly crucial "in confronting highly stressful life experiences, and much recent research has focused on meaning-making" (Park, 2010, p. 257). Some studies on meaning have been conducted in the context of trauma and loss (Updegraff, Silver, & Holman, 2008) while others have been conducted in the context of trauma and coping based on the assumption that concepts of meaning are relevant to the process of coping with stressful experiences (Park & Folkman, 1997).

Marks, Cherry, and Silva (2009) conducted qualitative interviews to explore how different age groups coped with and made meaning of Hurricanes Katrina and Rita during the storms and their aftermath. Their study sample consisted of 72 adults enrolled in the Louisiana Healthy Aging Study (LHAS). They sorted them into four age groups: (1) younger adults (n = 13, m = 2, f = 11, mean age = 37.7 years); (2) middle-aged adults (n = 17, m = 10, f = 7,

mean age = 54.0 years); older (n = 18, m = 8, f = 11, mean age = 74.3 years); and oldest-old adults (n = 23, m = 10, f = 13, mean age = 91.9 years. They focused on three central themes in contextualizing their findings: crisis, coping, and meaning-making. Results showed that Katrina and Rita could stimulate some participants' actions including reevaluation, revival, and a search for deeper purpose. Most participants in the younger and middle-aged groups regarded the hurricanes as life-altering crises while most participants in the two older groups discussed the hurricanes in reasonable and sanguine ways. They also identified a variety of coping approaches and resources, such as gratitude in the face of loss, optimism as a coping resource, and personal psychological strength. In connection with meaning-making, they found that the participants' individual and collective belief, desire, and effort to prove a self-fulfilling prophecy could provide the meaning and have significant influence in the lives of these survivors.

Danbolt and Stifoss-Hanssen (2011) investigated the personal significance of disaster rituals for bereaved participants in an in-depth interview study. They collected the material from four serious events for which memorial services or rituals were held; there purpose being to explore how participants experienced the memorial services or rituals and what kinds of features were prominent in their ritual memories. Although they had video recordings, participant observations, and written documents including program sheets, manuscripts, and newspaper reports, their main material consisted of qualitative, in-depth interviews with 21 ritual participants. They found that the rituals had emotional intensity; the participants cultivated and invented rituals with consciousness and intention, and the memorial service or ritual was a collective ritual response to the extensive experience of crisis. They argued that even though the design of the ritual looked therapeutic, the ritual was not therapy because ritual behavior, such as funeral services, would not require medical or therapeutic skills. They claimed that the public and non-therapeutic character of the rituals was necessary so that the rituals would not contribute to the medicalization of the post-disaster efforts. They understood that participants' motives for participation in the memorial services or rituals were linked to their wish to ritualize over the catastrophic event rather than religious motives because none of their respondents was actively religious, which indicated that they did not attend these services and rituals to express religious commitment. They also were convinced that the disaster rituals had a public character that was carried out on behalf of the authorities and the community, even though they embedded religious characters, which potentially reflected the secular cultural/religious Norwegian context. They concluded that the religious character came out of the demands of the situation, despite the relative lack of religion in other aspects of Norwegian public life and the probable absence of civil religion.

Rehnsfeldt and Arman (2012) conducted a qualitative interview study to acquire an in-depth understanding of the significance of natural close relationships for survivors (n = 19) of the 2004 tsunami disaster in Southeast Asia in connection with the development of an existential dimension of health and understanding of life in a long-term perspective. They found that the ontological aspects were expressed in data about the existential and relational aspects. In other words, survivors confirmed that their lives were changed entirely. They also found that a change occurred in the way they related to others in their families. Therefore, they understood that human encounters in the aftermath of a disaster were not only about relationships but also affected people's understanding of life both ontologically and existentially. Relationships with others and communion become a way of understanding or defining life. Rehnsfeldt and Arman concluded that their data indicated that relationships and communion with other people helped the survivors to discover a new understanding of life and that natural encounters have had great importance for progress in the existential dimension of health.

Maidment, Tudor, Campbell, and Whittaker (2015) conducted a fieldwork interview study after the Christchurch 2010-2011 earthquakes to identify the role craft and creativity have played in generating meaning, a sense of community, and social connectedness post-earthquake. The study also examines the therapeutic elements of crafting experienced by the research participants (n = 32, m = 2, F = 30). Their findings suggested the participants, who were ordinary people in an extraordinary disaster situation, used crafting to restore spirits, heal the mind, and promote a sense of community and social connectedness. They also found that the earthquake impacted the sense of security and their living conditions, yet they not only attended to respond to the adverse conditions they experienced, they also looked at ways to take meaning from their experiences and found the means to show care and connection to others. They concluded that the results suggested that craft provided for the participants and their relationships by developing shared narratives of their experiences and building social connections and that the pieces of craft themselves served as expressions of commemoration, connection, and hope for the future.

Dursun, Steger, Bentele, and Schulenberg (2016) conducted a study of 57 survivors (m = 25, f = 32, mean age, 39.63 years, non-religious 66.7%, Christian, 33.3%) of the 2013 Colorado floods to investigate the incremental relations between posttraumatic growth (PTG) and dimensions of meaning in life, vitality, and perceived social support. They used the brief screening instrument for posttraumatic stress (PTS) (Brewin et al., 2002), the Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996), the Meaning in Life Questionnaire (MLQ) (Steger et al., 2006), the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988), and the Subjective Vitality Scale (SVS) (Ryan & Frederick, 1997). The result from Pearson product-moment correlations showed that the positive relationship between PTG total scores

and MLQ-S scores was stronger than the relationship between PTG scores and MLQ-P scores. The results also showed that search for meaning and perceived social support were significant factors for the prediction of PTG total scores while controlling for sex and religious status of the participants. However, the presence of meaning did not predict total PTG scores. They concluded that the search for a meaning dimension and perceived social support were shown to explain PTG above and beyond the influence of PTS symptoms and that—even after property loss, occupational or financial problems, and the psychological effect of the destructive power of the flooding—people perceived that they had grown and their lives had meaning.

Results from the literature searches showed that the number of studies on the existential meaning or meaning-making in a post-disaster context, even before the 2011 Great East Japan earthquake and tsunami, was limited. One study that seems to be relevant to the current study was conducted by Aikawa and Matsui (2016). They conducted an exploratory investigation into the sense of mission toward the incident and the behavioral and psychological processes of individuals embracing a sense of mission through content analysis of texts written by victims of The Great East Japan earthquake and tsunami. Their theoretical perspective was from Frankl's (1946) understanding of meaning in life, which they believed to be a core perspective to explore understandings of the meaning of life among survivors of the 2011 disaster. Sample data consisted of 69 texts from eight volumes of reports and direct memorandums from victims who felt a sense of mission in the disaster-stricken region. After extracting the discourse and context unit of each subject according to the purpose of the research, they generated categories and analyzed the contents. In analyzing, they classified texts and gathered many cases by occupation. To explore the relationship between categories and between occupation and categories, they conducted analyses through Hayashi's quantification methods III. Through multiple correspondence analysis, they found four groups of the categories—psychologically resonant, compassionate toward victims, duty-accomplishment, and natural performance—which were identified as characteristics of the sense of mission seen in the data. The psychologically resonant group consisted of people who felt that they had to do what they had to do and was often seen in company presidents and the like. This group also felt that their mission was given by "ten" 天 (heavenly consciousness, predicament, Gods, or transcendent power). The compassionate-toward-victims group consisted mainly of police officers and firefighters who felt that they wanted to give something to the victims. They experienced unhappiness or helplessness when they felt that they could not achieve results they hoped to reach, but they felt satisfied and rewarded when victims thanked them. These people carried out their duties while facing and receiving shock because they were close to victims and survivors. The third group was a duty-accomplishment group consisting mainly of people who worked in the self-defense force, clinicians, and people who worked in local municipalities. They

did not feel specific pain or inconvenience when they were working in the disaster-affected areas because they felt it was their responsibility to work in the 2011 disaster-affected areas. The fourth group—natural performance group—was also like the third group in that they assumed it was natural to work in the damaged areas based on their professional lives as doctors. Although Aikawa and Matsui (2016) found that there were different types of meaning-making after the 2011 disaster regarding jobs and work status, they concluded that the 2011 disaster-affected worldviews and meaning in lives among those workers who were affected by the disaster.

2.2.3.2. Religion, spirituality, and natural disaster

Regarding religion and religiousness, "the relationship between religion, health, and well-being has been the focus of a number of empirical studies over the last 20 years" (Green & Elliott, 2010, p. 150). Psychiatry has been undergoing rapid change in its relationship to religion and spirituality, and clinicians more and more recognize the importance of cultural differences and incorporate spiritual approaches into treatments of the various disorders (Josephson & Peteet, 2004, ix).

Sibley and Bulbulia (2012) examined how a natural disaster of this magnitude affected deeply held commitments and global ratings of personal health, depending on the 2011 earthquake in Christchurch New Zealand exposure. They first investigated whether the earthquake-affected were more likely to believe in God by testing a hypothesis "religious faith increased among the earthquake-affected, despite an overall decline in religious faith elsewhere." The result indicated that secular people turn to religion at times of natural crisis. They further investigated whether religious affiliation was associated with differences in subjective ratings of personal health. Although they could not find evidence for superior buffering from having religious faith, they found a loss of faith was associated with significant subjective health declines in participants who were affected by the earthquake. They conclude that the results indicated that that religious conversion after a natural disaster is unlikely to improve subjective well-being, yet upholding faith might be an essential step on the road to recovery.

Feder et al. (2013) conducted a study three years after the 2005 Pakistan earthquake to find protective psychosocial factors connected with lower PTSD and depressive symptom levels among adult survivors (n = 200, m = 161, f = 39, mean age =37.7 years). They used the Traumatic Stress Symptom Checklist (TSSC, Basoglu et al., 2001) that was designed to identify PTSD and depressive symptoms among earthquake survivors to assess the severity of trauma symptoms. The Positive and Negative Affect Schedule (Watson et al., 1988) was used to measure positive and negative emotions, and the emotional/ informational subscale of the Medical Outcome Study (MOS) Social Support Survey (Sherbourne & Stewart, 1991) to assess perceived social support. They also used Purpose in Life scale (Ryff and Keyes, 1995)

to measure purpose in life, and the six-item Religious Coping Questionnaire (RCOPE) scale (Pargament et al., 2000) to measure religious coping. Results showed that purpose in life was negatively correlated with total TSSC score and negative emotions, and positively correlated with positive emotions. They also found that two negative religious coping—"I express my anger at God" and "I feel God is punishing me for my sins or lack of faith"—were positively correlated with total TSSC scores and negatively correlated with a purpose in life. They concluded that these results indicated that some psychosocial factors were protective and that the use of negative religious coping was associated with poorer mental health outcomes.

García, Páez, Cartes, Neira, and Reyes (2014) investigated the impact of religious coping, social support, and subjective severity on posttraumatic growth (PTG) among survivors of the earthquake in Chile in 2010 (n = 116, m = 54.3%, f = 45.7%, mean age = 44 years), who lost their homes due to the earthquake and were living in transitional shelters three years after the earthquake. They used the Posttraumatic Growth Inventory (PTGI) to assess whether participants perceived the earthquake as traumatic and changed their lives. To assess participants' perceived social support, they used the Multidimensional Scale of Perceived Social Support (MSPSS). They also used the Brief-RCOPE for religious coping. Their results from the multiple linear regression analysis showed that social support and positive religious coping predicted interpersonal relationship and life philosophy changes (p < .001) and negative religious coping was a negative predictor of self-perception (p < .05). They concluded that social support and positive religious coping could reinforce posttraumatic growth (PTG) and positive religious coping would mediate the relationship between subjective severity and facets of PTG, which might imply that positive reappraisal by religious ideology was the significant factor to overcome traumatic impact. However, they also believed that religion had an ambivalent influence as a tool to manage the traumatic event because negative religious coping erodes PTG related to personal growth.

Comparing with international studies, results from the literature searches showed that studies on religion and spirituality in a post-disaster context in general and the 2011 post-disaster context, in particular, were still very much limited. This lack of research seems to be relevant to some issues concerning historical and cultural background and the definition of religion in Japan and the Japanese language.

Horie (2016) explored how "continuing bonds" were expressed among the bereaved in Japan regarding the 2011 Great East Japan earthquake and tsunami. Continuing bonds referred to a relationship between the bereaved and the deceased in the areas affected by the Great East Japan earthquake and tsunami, which emerged as a relationship with the deceased. He conducted a questionnaire survey among survivors who lost their significant others due to the earthquake and tsunami. Study participants (n = 100) were residents in Iwate prefecture (n = 60) and Miyagi prefecture (n = 40). Results showed that

participants' bonds with the deceased were most likely not religious such as "memory" (47%) and "photographs" (27%). Those who contacted the deceased through religious symbols such as "graves" (13%), *ihai* 位牌 [Buddhist ancestral tablet] (3%), and *butsudan* (2%) were not so many. Results also showed that participants felt that the deceased was watching and helping them (33%), was living in heaven/paradise (29%), was existing close to them (21%), was a model for their thinking and living (20%), and sometimes sent messages to them (16%). He also found that if the bereaved felt the presence of the deceased and had communicated with them openly and close, the bond with the deceased would be strong, but if this were not the case, frightening ghost stories about unfamiliar spirits rather than heartwarming stories about familiar spirits would flourish.

2.2.4. Relief/support workers, volunteers, and natural disaster

Before I conclude this chapter, I will take a closer look at previous studies focused on relief/support workers and volunteers in a post-disaster context because the target group in this study comprises volunteer workers in different religious help organizations. In this section, I present such studies along with two categories—(1) disaster's impact on mental health and well-being, and (2) existential meaning, meaning-making, religion, spirituality, mental health, and well-being in a post-disaster context.

2.2.4.1. Disaster's impact on mental health among relief/support workers and volunteers

Internationally, if artificial and human-made disaster is included, many studies emphasize the importance of critical stress management of volunteer workers such as firefighters, police, ambulance personnel, and unaffiliated volunteers (Perrin et al., 2007; Stellman et al., 2008). Rescue workers' stress is conventionally categorized as (1) basic stress, which is increased by changes in one's day-to-day environment when workers are faced with, for example, being away from family without adequate communication, working with new people from different cultures, working in uncertain conditions, and having to assimilate new information; (2) cumulative stress, composed of various stress factors such as a heavy workload, poor communication, the frustration of not being able to meet the beneficiaries' needs, having to cope with situations in which one feels powerless, lack of basic comforts, and inability to rest or relax; and (3) traumatic stress or critical incident stress due to life-threatening events such as witnessing the death of a coworker, or seeing a dead body or other dreadful situations (International Federation of Red Cross and Red Crescent Societies [IFRC]; Geneva: Managing stress in the field). Such risk factors are scrutinized among workers likely to experience critical stress, the primary outcome of which is traumatic stress (Neria, DiGrande, & Adams,

2011). These workers experienced strong psychological stress after perform-
ing their duties, which can lead to various psychological reactions such as
acute stress disorder, posttraumatic stress disorder (PTSD), depression, and
other anxiety disorders (Fullerton, Ursano, & Wang, 2004). Of the various
relief activities, handling dead bodies is considered one of the most difficult,
and many psychological and emotional reactions have been associated with
these missions (Ursano, Fullerton, Vance, & Kao, 1999).

There are several international studies on relief workers and their health in
a post-natural disaster contexts. Chan and Huak (2004) explored the emotional
impact of the Asian tsunami on 22 health care workers in Singapore medical
teams who engaged in crisis intervention sessions (CISD) immediate after the
disaster in Indonesia and Sri Lanka. They used demographic questionnaires,
General Health Questionnaire 28 (GHQ), Impact of Events Scale (IES), and
the CISD feedback form. They analyzed the data using SPSS 12.0. Their re-
sults showed that no participants had GHQ > 5, which indicated that they were
not suffering from any psychiatric disorder before and during their medical
activities. However, their results also showed that 40% of the participants
scored moderate to high, which indicated that 40% of the participants experi-
enced acute stress reactions during their medical relief activities. Furthermore,
two of the participants' scores indicated that they had PTSD, which Chan and
Huak (2004) considered an important finding because it accorded with several
other studies that had shown that acute stress symptoms were predictive of
PTSD seven to 13 months later.

Armagan et al. (2006) explored the frequency of PTSD among 33 partici-
pants (15 doctors, 12 nurses, and 6 logistic workers) of the Turkish Red Cres-
cent Disaster Relief Team who participated in the relief efforts after the 2004
earthquake and tsunami in Asia. They conducted interviews consisting of de-
mographic characters and the Turkish version of Clinician-administered post-
traumatic stress disorder scale -1 (CAPS-1) with the participants of the relief
team one month after the team arrived at the site. Their results showed that
eight of the participants (three doctors and five nurses) had post-traumatic
stress disorder and that the frequency of PTSD diagnosis between genders was
not statistically significant. They also found no statistically significant differ-
ence in CAPS-1 scores among the participants according to age, professional
experience in years, and experience of previous traumatic events as well as
previous experience of disaster rescue participation. However, they found that
female participants had higher CAPS-1 scores than males ($p = 0.013$) and that
the participants with fewer experiences of disaster rescue duty had higher
CAPS-1 scores than the participants with four or more disaster rescue experi-
ences.

Ehring, Razik, and Emmelkamp (2011) conducted a study with a set of self-
report questionnaires to explore the prevalence and predictors of PTSD, de-
pression, anxiety, and burnout among 267 rehabilitation and reconstruction
workers (m = 224, f = 43, mean age = 28.93 years) approximately two years

after the 2005 earthquake in Pakistan. Their results showed that levels of burnout among the participants were low, but more than 40% of them showed clinically relevant levels of PTSD and approximately 20% of participants showed clinically relevant levels of depression and anxiety. They also found that a majority of the participants were exposed to the earthquake and were involved in rescue and relief activities immediately after the earthquake, which they believed to be a reason for the high levels of PTSD symptoms. Furthermore, they found several variables that appeared to be relevant to symptom levels of PTSD, such as high levels of earthquake exposure, work-related stress, low social support, and female gender. They concluded that future research on emotional problems in professionals should involve not only individuals who worked in the acute phase but also rehabilitation and reconstruction workers involved later on.

Wang, Yip, and Chan (2016) conducted a retrospective cohort study by using a set of self-report questionnaires to investigate the well-being of 70 local relief workers who were also survivors in the 2008 earthquake-hit regions in China and its association with suicidal ideation 11 months after the earthquake. They found that suicidal ideation among more than 20% of the participants. They also identified an interaction effect of job burnout and work-family conflict as risk factors, and daily work hour and work engagement as protective factors. They concluded that overwork and losing balance with personal family life could cause the risk of suicidal ideation despite that participating in relief activities could be salutary to the mental health of the local relief workers.

The subjects of the study are mainly volunteer workers in different religious organizations. Therefore, I go further to present studies on the impact of the 2011 Great East Japan earthquake and tsunami on mental health among relief/support workers or volunteers to show the importance and the need for more research regarding predictors of stress and mental health problems among relief/support workers or volunteers.

Nishi et al. (2012) conducted a prospective observational study about the 2011 Great East Japan earthquake and tsunami. They examined the predictive usefulness of the Peritraumatic Distress Inventory (PDI) among rescue workers of disaster medical assistance teams (DMATs) deployed during the acute disaster phase of the Great East Japan earthquake and tsunami. They recruited the DMAT members and assessed a month after the disaster on the PDI and four months after the disaster on the Impact of Event Scale-Revised to determine PTSD symptoms. They found that the PDI predicted PTSD symptoms in rescue workers after the Great East Japan earthquake and tsunami. Peritraumatic emotional distress appeared to be an essential factor to screen for individuals at risk for developing PTSD among medical rescue workers.

Suzuki et al. (2014) conducted a self-administered health survey of all public servants in the Miyagi prefectural two and seven months after the Great East Japan earthquake and tsunami (3,743 workers, 70.6% of all employees).

They examined mental health distress and its risk factors among prefectural public servants who were affected by the disasters by using Kessler's K6 scale (2003) and calculating odds ratios (ORs) and 95% confidence intervals (CIs) for mental distress (defined as K6 ≥ 10). They found that not taking a non-work day each week was the only factor that increased the risk of mental distress among those who had good levels of workplace communication. They also found that not taking a non-work day each week, handling residents' complaints, having dead or missing family members, and living in a shelter more than two months after the disaster increased the odds of mental distress among those with weaker levels of workplace communication. They concluded that all workers should be encouraged to take a non-work day each week.

Harada, Shimpuku, Shigemura, and Yasukata (2014) conducted a question-naire study through an online and paper-pencil survey to investigate the types of relief work and stress perceived by medical volunteers dispatched from a volunteer organization to the disaster-affected areas (n = 52, m = 16, f = 36, mean age 43.4 years). Results showed that 78.8% of the participants (n = 41) reported that the damage to the areas they worked in was beyond their expectations. After their return from the relief work in the damaged areas, 38.5% of the participants (n = 20) experienced self-guilt in relation to their mission, 40.4% of the participants (n = 21) felt irritability, and 46.2% of the participants (n = 24) felt mental exhaustion. However, they also found that none of the participants regretted participating in the relief work. Therefore, the researchers pointed to the need for a mental health care system for volunteer workers who experienced stress and suggested future medical research aimed at disaster relief workers and supporters engaged in long-term local relief activities.

Fukasawa, Suzuki, Obara, and Kim (2015) conducted a self-administered health survey of prefectural public servants (n = 4,331) two months after the Great East Japan earthquake and tsunami in Miyagi prefecture to investigate the effects of work-related factors on the mental health of prefectural public servants working in the devastated area. They investigated relationships between mental health distress, which was defined on the Kessler Psychological Distress Scale (K6) ≥ 13) and work-related variables (i.e., job type, overwork, and working environment) stratified by level of earthquake damage experienced. Results showed that the proportion of participants with mental health distress was 3.0% in the group that experienced less damage and 5.9% in the group that experienced severe damage. They found that handling residents' complaints increased the risk of mental health distress in the severely damaged group, although engagement in disaster-related work decreased the risk, and that in the group that experienced less damage, working >100 h of overtime per month increased the risk. Further, their findings suggest that poor workplace communication increased the risk of mental health distress in both groups. Also, when responding to a major disaster as part of an organization, disaster-related work might produce a sense of belonging to an organization or society or a sense of contributing to the disaster response, factors which

might be more protective of mental health than reducing overwork, particularly for those who have experienced severe disaster-related damage. The finding also showed that public servants who were responsible for contacting community residents often had to hear repeatedly about experiences of the disaster and its impact on residents' lives, which might have served to increase the public servants' distress. Furthermore, poor communication with bosses, colleagues, and subordinates at workplaces increased the risk of mental health distress in both groups, much more than job type or overwork.

Anderson et al. (2015) surveyed to explore the psychological impact of Fukushima medical students (n = 494) involved in volunteering after the 2011 disaster. They used demographic questions, questions regarding involvement with the disaster and the volunteer effort, questions about avoidance of specific disaster-related triggers, an adapted version of the Davidson Trauma Scale (DTS), and the Posttraumatic Growth Inventory (PTGI). Among the participants, 401 students (81.2%) personally experienced or witnessed the 2011 disaster, 132 students (26.7%) participated in voluntary relief work, and 11 students (2.2%) were still involved at the time of the survey. Results showed that students who were involved in voluntarily relief work were more likely to be older students, to have personally witnessed the disaster, to have had their hometowns affected by the disaster, and to have experienced some-one close to them injured due to the disaster. Gender difference, differences in avoidance behavior related to the disaster area, and differences in symptoms of distress between volunteers and non-volunteers were significant in the month after the 2011 disaster. However, among the students who participated in voluntary relief work, female students were more likely to be confused, have a feeling of guilt or sadness, be anxious, have avoidance behaviors, and wish to help more. They also found that the frequency of alcohol or drug use increased among male students who participated in voluntarily relief work.

Sakuma et al. (2015) conducted a cross-sectional study to assess the prevalence of and personal/workplace risk factors for probable PTSD, probable depression, and high general psychological distress in this population. Participants (N = 1,294, overall response rate, 82.9%) were work-ers (firefighters, n = 327; local municipality workers, n = 610; hospital medi-cal workers, n = 357) in coastal areas of Miyagi prefecture. The study was conducted 14 months after the disasters using a self-administered question-naire which included the PTSD Checklist-Specific Version, the Patient Health Questionnaire-9, and the K6 scale. The results showed that the prevalence of probable PTSD, probable depression, and high general psychological distress was higher among municipality and medical workers than among firefighters. According to the researchers, lack of rest was associated with increased risk of PTSD and depression in the municipality and medical workers. They also insisted that lack of communication could be linked to increased PTSD risk in medical workers and depression in the municipality and medical workers.

In a prospective cross-sectional study Fujitani, Carroll, Yanagisawa, and Katz (2016) investigated the prevalence of burnout and psychiatric distress among local health care providers (caregivers) from severely affected areas more than two years after the disaster through interviews and two question-naires—Maslach Burnout Inventory and General Health Questionnaire. Respondents were 34 caregivers (m = 11, f = 23, mean age 42.9 ± 10.88). The results suggested that local caregivers were experiencing a significant mental health burden and burnout because of radiation concerns even though the damaged areas had begun to recover. They found that many of their respondents were burned out, and there were four concerns among them: (1) additional stress due to worrying about the consequences of the disaster, (2) the health and well-being of children, (3) the safety of local food, and (4) sleep difficulties. They claim that long-term psychological support and improvement of caregivers' working conditions are needed to maintain sustainable care in the disaster-affected areas.

In sum, these studies indicated that even people who engaged in relief work in the disaster-affected areas, regardless whether they experienced the disaster, faced many problems and challenges as well as stress situations that caused psychological distress. Most of the studies addressing disaster relief work-related mental health or trauma have focused primarily on specific a population such as professional relief workers, and so far, there was relatively little research that explored volunteer workers in general and religious relief workers in particular. Also, a lack of a qualitative study was apparent and awaited.

2.2.4.2. Existential meaning, meaning-making, religion, spirituality, mental health, and well-being in a post-disaster context

Ghiloni and Shaw (2013) conducted a qualitative interview study to explore how civil religion was manifested with regard to the 2011 Queensland floods in Australia. They gathered data through in-depth, open-ended interviews with 20 faith/religious leaders (m = 13, f = 7) from Buddhism, Bahá'í, Islam, Hinduism, Hare Krishna, Judaism, Sathya Sai, and several different Christian traditions. In addition to the interviews, they also gathered data through a hermeneutical analysis of formal ritualistic documents including sermons, liturgies, lectures, and prayers that were written by leaders in specific reply to the floods. They analyzed the data using a grounded-theory approach. They found that the leaders located faith in the communal sensibilities, considered their work as acting for the common good rather than for traditional religious loyalties, responded to the disaster by providing practical assistance and help rather than theological explanations.

Hugelius, Adolfsson, Örtenwall, and Gifford (2017) conducted a qualitative interview study using the phenomenological hermeneutical method to explore health professionals' experiences of working during and in the immediate aftermath of the 2013 Haiyan typhoon in the Philippines. They interviewed

four medical doctors (m = 2, f = 2), three nurses (m = 2, f = 1), and a paramedic (m = 1) five months after the disaster. They analyzed the interviews using a phenomenological hermeneutic approach. They found one main theme (being professional and survivor), two themes (being a helper and being a victim), and six sub-themes (as a helper: feeling strength and confidence, feeling adjustment and acceptance, feeling satisfaction, as a victim: feeling powerless and fear, feeling guilt and shame, and feeling lonely). They concluded that being a health professional and a survivor at the same time during a natural disaster was a multi-faceted experience within a frame of the response system and influenced their meaning. Personal values, altruistic motives, social aspects, and stress-coping strategies to reach a balance between acceptance and control were significant factors in their experiences.

Japanese studies on the topic were very limited. The literature searches found only a few studies, yet they are interesting enough to present here. Ogiso and Yamada (2013) conducted semi-structured interviews with three reading volunteers in a 2011 disaster-affected area to understand why survivors in an unstable life condition engaged in volunteer work. All three participants were over 60 years old and also survivors of the 2011 disaster. They found that participants engaged in the reading volunteer work for three reasons: (1) request from elementary schools in the affected areas, (2) to comfort children affected by the disaster, and (3) as a mission or to create meaning and purpose of life. They also found that the participants considered the volunteer work a good opportunity for growth after the disaster. They concluded that being helpful for others and being needed by others could help the participants increase self-esteem and discover the meaning and purpose of life.

Aizawa (2015) conducted a survey study to investigate religious teachers' spiritual experiences and roles in the damaged areas in relation to the 2011 Great East Japan earthquake and tsunami. The participants in the study were 277 religious teachers who engaged in duties at religious facilities in Miyagi prefecture. 70 of the respondents (25.3%) answered that they had opportunities for contact with survivors who had spiritual experiences after the 2011 Great East Japan earthquake and tsunami. 111 respondents (40.3%) answered that they had consulted about such spiritual experiences in their life as religious teachers. Among the 111 respondents, 94 (84.7%) answered that they had consulted about such spiritual experiences before the 2011 disaster. Asked whether such consultation about spiritual experiences increased or decreased after the 2011 disaster, 31 respondents answered that the number increased. Meanwhile, 71 respondents (64%) answered that the number did not increase when compared with before the 2011 disaster, convincing Aizawa that there had been belief in the existence of spirits and ghosts in the damaged areas long before the 2011 disaster. He also found that several of the most popular ways to handle these spiritual experiences after the 2011 disaster were to listen to survivors (n = 85) and to perform a memorial service or exorcism for the deceased (n = 72). He concludes that several religious teachers in the damaged

areas worked on spiritual experiences among survivors so that the survivors could overcome the adversity and keep on living.

Saito, Ohmura, Higuchi, and Sato (2016) explored certain cultural phenomena in the aftermath of the 2011 Great East Japan earthquake and tsunami to discuss the significant role of Japanese *shuukyousei* 宗教性 (religiosity) in mental health care practices. They also aimed to suggest the importance of understanding the culturally and contextually sensitive religiosity of survivors and the affected community to mental health care workers who were engaging in relief activities. They presented a report with a case illustration by a Buddhist priest and clinical psychologist who conducted funeral services at a temporary morgue for the victims and their families. They argued that survivors had only a few opportunities to express and heal the spiritual dimensions of their grief and pain in the public sphere, which resulted in experiences of unbearable frustration and a strong wish to comfort the spirits of the deceased. They also found that Japanese *shuukyousei* could emphasize the importance of religious rituals to keep interpersonal bonds between the survivors and the deceased, and the funeral services became support not only for families of the deceased but the rescue workers. Based on their clinical work in the aftermath of the 2011 Great East Japan earthquake and tsunami, they concluded that the mental health care workers had ascertained how to incorporate Japanese *shuukyousei* into their relief work, understand cultural modes of meaning-making among the survivors for interventions, the meaning of the beliefs and feelings as well as the survivors' behavior.

2.2.5. Central points of previous studies and contribution of the current study

To conclude this section of the review, I summarize the previous research relevant to the study. In this way, I hope that I can show contributions to the study.

2.2.5.1. Central points of previous studies

Natural disaster and mental health

Internationally, there have been many studies investigating the psychological states of victims of natural disasters in general—earthquakes or tsunami or both in particular. In Japan, however, it was not until the Hanshin-Awaji earthquake in 1995 that the words trauma and PTSD became well known by mental health professionals as well as researchers. Therefore, most of the research on this topic before the 2011 Great East Japan earthquake and tsunami had been about the survivors of the Hanshin-Awaji earthquake. The number of Japanese studies on the topic about the 2011 Great East Japan earthquake and tsunami was still limited, although it has been increasing significantly in recent years, which is not surprising considering that more than seven

years have passed since the event. Comparing the studies conducted in Japan investigating the psychological effects of natural disasters with studies of the same issues conducted elsewhere revealed many similarities and differences. Risk factors that may cause or increase psychological distress among victims and survivors were not in accordance in these studies. Here is a summary of their findings:

- The severity of exposure to disasters correlated with psychological distress (Nishimoto & Matsumoto, 1998).
- The experience of the death of a family member(s) (Kumar et al., 2007; Frankenberg et al., 2008) and having felt one's own or a family member's life in danger (Frankenberg et al., 2008) related to psychological distress.
- Female survivors were more likely to be impaired by psychological distress than male survivors (Terada & Matsumoto, 1996; Nishimoto & Matsumoto, 1998; Norris et al., 2002; Kumar et al., 2007; Frankenberg et al., 2008; Kuwabara et al., 2008; Priebe et al., 2009; Ali et al., 2012).
- Older persons were not only the most vulnerable to disaster but also more likely to be impaired and experience increased psychological distress as well as a physical health problem (Kuki et al., 2001; Toyobe et al., 2006; Tang, 2007; Priebe et al., 2009; Ali et al., 2012).
- Dislocation due to a natural disaster was one of the major risk factors that could increase psychological distress (Fukuda et al., 1999; Van Griensven et al., 2006; Math et al., 2008; Kuwabara et al., 2008; Ali et al., 2012).
- Property damage such as the loss of a house was also a risk factor for psychological distress (Frankenberg et al., 2008; Kuwabara et al., 2008).
- Low socioeconomic status due to the loss of a job and unemployment might have related to mental health problems (Kato, 1998; Kumar et al., 2007; Ali et al., 2012; Oyama et al., 2012).
- Weak or deteriorating psychosocial resources appeared also related to psychological distress (Fukuda et al., 1999; Van Griensven et al., 2006; Tang, 2007; Omote et al., 2010; Oyama et al., 2012).

Existential meaning, meaning-making, religion, and spirituality in the context of natural disaster

My literature searches resulted in finding many international studies on meaning, religion, and health with regard to traumatic life experiences in general and disasters in particular. There are also many studies on the topic that focused mainly on natural disasters. As international studies implied, the existential meaning seems to play a significant role for those who faced a life crisis. The results of my literature search of international studies on existential

meaning, meaning-making, and the existential dimension of health in a post-disaster context in general revealed limited results for the 2011 post-disaster context. Here is a summary of findings from such studies:

- Older survivors experienced natural disaster more temperately and sanguinely than younger or middle-aged survivors who regarded natural disaster as a life-altering crisis (Marks et al., 2009).
- Meaning after disaster could be provided by individual and collective belief (Corey & Corey, 2003; Covey, 2004, as cited in Marks et al., 2009), relationships, communion with other people (Rehnsfeldt & Arman, 2012), care for and connection to others (Maidment et al., 2015), perceived social support (Dursun et al., 2016) or a sense of mission to do something in the aftermath of a natural disaster (Aikawa & Matsui, 2016).
- The purpose of life was positively correlated with positive emotion (Feder et al., 2013).
- In a post-disaster and secular context, the disaster rituals had emotional intensity and a public character (Danbolt & Stifoss-Hanssen, 2011), and secular survivors appeared to turn to religion at times of natural crisis (Sibley & Bulbulia, 2012).
- The memorial service/ritual was a collective ritual response to the extensive experience of crisis, and the religious character came out of the demands of the situation, despite the relative lack of religion in public life (Danbolt & Stifoss-Hanssen, 2011).
- Negative religious coping was associated with survivors' poorer mental health outcomes (Feder et al., 2013), and a loss of faith was associated with significant subjective health declines among survivors (Sibley & Bulbulia, 2012). Meanwhile, positive religious coping seemed to be a significant factor to overcome traumatic impact (García et al., 2014).

Relief/support workers, volunteers, and natural disaster
When it comes to studies focused on relief workers and volunteers, many international studies emphasize the importance of critical stress management among relief workers. If artificial and human-made disaster is included, many studies emphasized the importance of critical stress management of volunteer workers such as firefighters, police, ambulance personnel, and unaffiliated volunteers (Perrin et al., 2007; Stellman et al., 2008). These workers experienced strong psychological stress after performing their duties, which can lead to various psychological reactions such as acute stress disorder, posttraumatic stress disorder (PTSD), depression, and other anxiety disorders (Fullerton et al., 2004). Here is a summary of findings from such studies:

- Acute stress reactions (Chan & Huak, 2004) and PTSD symptoms (Ehring et al., 2011) were familiar to relief workers who engaged in relief activities or reconstruction work immediately after the disaster and were predictive of PTSD even months or years after the relief activities (Chan & Huak, 2004; Sakuma et al., 2015).
- Severe exposure to a natural disaster is related to psychological distress (Chan & Huak, 2004; Ehring et al., 2011; Suzuki et al., 2014; Fukasawa et al., 2015; Wang et al., 2016).
- Female relief/volunteer workers had a higher risk of posttraumatic stress disorder (Ehring et al., 2011), clinician-administered post-traumatic stress disorder (Armagan et al., 2006), or were more likely to be confused, have a feeling of guilt or sadness, be anxious, have avoidance behaviors, and wish more than males to help (Anderson et al., 2015).
- Less experienced disaster rescue workers had a higher risk of having clinician-administered post-traumatic stress disorder than the experienced workers (Armagan et al., 2006).
- One of the risk factors of mental health distress was work-related stress and problems at the workplace (Suzuki et al., 2014: Fukasawa et al., 2015) including poorer levels of workplace communication (Suzuki et al., 2014; Sakuma et al., 2015).
- The prevalence of psychological distress including PTSD was higher among municipality and medical workers than among firefighters (Sakuma et al., 2015). Likewise, some work types, such as handling residents' complaints and contacting community residents (Suzuki et al., 2014: Fukasawa et al., 2015) were risk factors for psychological distress. A presumable explanation for the results was that they often had to hear repeatedly about experiences of the disaster and its impact on residents' lives, which might have served to increase their distress (Fukasawa et al., 2015).
- Overwork and losing balance with personal family life could cause the risk of suicidal ideation among relief workers who were also survivors (Wang et al., 2016).
- Overwork or lack of rest and a day off were also risks for mental health distress (Suzuki et al., 2014: Fukasawa et al., 2015; Sakuma et al., 2015).
- Low social support appeared to be relevant to symptom levels of PTSD (Ehring et al., 2011).
- Several protective factors for psychological distress were also identified such as a sense of belonging to an organization or society through disaster-related work (Fukasawa et al., 2015), disaster work engagement (Fukasawa et al., 2015; Wang et al., 2016), a sense of mission that may generate meaning (Ogiso & Yamada, 2013; Aikawa & Matsui, 2016), or a sense of contributing (Fukasawa et al., 2015).

- Religious leaders and teachers seemed to consider relief work as acting for the common good rather than for traditional religious loyalties or their religious dogmas (Ghiloni & Shaw, 2013; Aizawa, 2015).
- Religious leaders and teachers, as well as volunteers, seemed to respond to the disaster not by theological/dogmatic explanations but by providing practical assistance with a religious character according to survivors' wishes and needs (Ghiloni & Shaw, 2013; Aizawa, 2015; Saito et al., 2016).

2.2.5.2. The contribution of the current study

In this section, I present what the current study can contribute regarding previous studies. First, despite that there were many studies investigating the impact of natural disaster on mental health, most previous studies aimed principally to assess and examine the development of and trace the psychological distress to identify risk factors that might cause psychological problems or prevent disaster-related psychological distress and possibly help develop intervention strategies and models in the disaster-affected areas. Most of them were quantitative research, and a lack of qualitative studies was significant. As Malterud (1998) says, qualitative studies are suitable when learning about the human qualities or character such as experience, thoughts, expectations, motivations, and attitudes. Therefore, more qualitative studies on the topic are waiting to be done. This interview study hopes to be useful for a better understanding of participants' experiences and the impact of the 2011 disaster on their well-being.

Secondly, most of the studies were conducted in a clinical context, which seems not to pay much attention to the cultural context in which both volunteer workers in different religious organizations and survivors lived. I hope that this study will shed light on the importance of the cultural context regarding existential meaning, health, and natural disaster.

Thirdly, there was no study directly concerning existential meaning and mental health with regard to the 2011 Great East Japan earthquake and tsunami. Similarly, there are few studies on religion and spirituality in the 2011 post-disaster Japan. A significant reason for this lack of research in a Japanese context may be that research on meaning-making is particularly based on Western existentialism (Heine, Proulx, & Vohs, 2006). Research on this topic conducted outside of the Western context is also scarce at this moment. The same is true for studies on religion and spirituality in the 2011 post-disaster Japanese, which are still very much limited. As already seen, studies on this topic in a post-disaster- and Japanese context before the 2011 Great East Japan earthquake and tsunami were scarce. This lack of research seems to be relevant to some issues concerning historical and cultural background and the definition of religion in Japan and in the Japanese language, which this study tries to pay attention to.

Fourthly, there were surprisingly many studies on the impact of the 2011 Great East Japan earthquake and tsunami on mental health among those who engaged in rescue work, relief work, or work for reconstruction. These studies indicated that even people who engaged in relief work in the disaster-affected areas, regardless of whether they experienced the disaster, faced many problems and challenges as well as stress that caused psychological distress. However, most studies addressing mental health or trauma related to disaster relief work have so far focused primarily on the specific population of professional relief workers. There was relatively little research that explored volunteer workers in general and relief workers in religious organizations in particular. This study's focus group is the latter, that is, volunteer workers in religious organizations in Japan, a not-yet well-explored population despite their visibility and efforts in the damaged areas. By exploring their experiences and investigating their work, challenges, health, and well-being, I hope this study can suggest future research on existential meaning, health, and well-being in a post-natural disaster context.

Lastly, but not unimportantly, there is, so far, no study using the adaptation and development after the persecution and trauma model (Silove, Steel, & Psychol , 2006) with existential meaning in the center (DeMarinis, 2013) to explore existential and psychosocial impacts of natural disaster in the Japanese cultural context in general and the 2011 disaster context in particular. The ADAPT model is a pan-theoretical and conceptual model with an aim for prevention and intervention in a post-disaster context. However, the model may be well suited to identify existential and psychosocial resources available to the damaged areas. With the help of the model, I believe I can approach and illuminate the reconstruction and recovery of existential meaning and well-being that are happening in the damaged areas.

Chapter 3 Theoretical framework

In this chapter, I present the theoretical framework for this dissertation and how I use the theories and models to approach existential meaning and psychosocial well-being for existential and psychosocial reconstruction and development in relation to the 2011 Great East Japan earthquake and tsunami. I start by describing the psychology of religion as the standpoint and the primal discipline of the study. After that, I provide an overall theoretical perspective on the existential meaning and existential meaning-making mainly by DeMarinis (2003, 2008). The perspective is the most significant and central perspective for this study. Thereafter, follows a presentation of the Adaptation and Development after Persecution and Trauma model (ADAPT model, Silove et al., 2006) and DeMarinis's adaptation of the ADAPT model, in which the existential meaning system is placed in the center with regard to a culture defined by Marsella (2005). This model is a ground model for the study and a theoretical frame for the qualitative data analysis. In the last section of the chapter, I present a working model of the study to show how these theoretical perspectives relate to and interact with each other.

3.1. Psychology of religion

The psychology of religion may sound like a unified discipline, but it is rather a collective term for a field of research where a variety of psychological theories and methods are used to understand and explain religious phenomena (Geels & Wikström, 2017, p. 15). They insist that the most significant task for the psychology of religion is to study religious experiences and behaviors both historically and contemporarily. They also mean that the focus is on the individual and group experiences of spiritual reality by putting questions such as, "How do these experiences appear?" or "What function do these experiences have for individuals and groups?"

3.1.1. The outlook of meaning-making in the psychology of religion

According to Park (2011), "Meaning in life has long been a topic of research interest among psychologists, and a great deal of research on various aspects of meaning in life has accumulated" (p. 326). Park (2010) explains why, in recent studies, meaning-making has focused on "the notion of meaning as central to human life" and that "meaning appears particularly important in confronting highly stressful life experiences" (p. 257).

According to La Cour and Hvidt (2010), there have been two traditions of conceptualization of existential meaning-making. One is a tradition of religion and spirituality:

> This tradition is predominantly North American with regard to theories and research, especially the concept of religious coping (Pargament, 1997). There is a vast amount of quantitative research represented in the field, but it seems to be difficult to arrive at a common conceptual agenda (p. 1292).

This type of tradition seems to have some difficulties regarding differences in the cultural and religious milieu. La Cour and Hvidt (2010) explain that it may be relevant only in societies like the US "where religious discourse remains prominent in public life" (p. 1293). However, it may not work in secular countries like Scandinavia (and maybe Japan, too) "where only minorities can be called spiritual or religious in a traditional sense" (Inglehart et al., 2000, cited in La Cour & Hvidt, 2010, p. 1293). In this sense, it is no surprise that there is still lack of studies on existential meaning including religion and spirituality in Japan, which is often discussed as a secular country just because of the difficulty in defining religion and spirituality in a Japanese context, as previously noted.

The other is a tradition of existential psychology/philosophy/theology based on European ways of thinking. Historically, it can be said that *Man's Search for Meaning* (1946) by Viktor Frankl, an Austrian psychiatrist who is also a Holocaust survivor, was one of the earliest and the most prominent milestones on existential meaning and meaning in life in psychiatry. His autobiographical book is based on and consists of what he experienced inside concentration camps. He saw people's constant struggles for meaning in life—in a traumatic life crisis—and their desperate efforts to make coherence in their situation. Through scientific observation as a psychiatrist, he found that people were capable of retaining meaning, even in such a harsh situation, not by holding on to the meaning they had before but by changing, adjusting, and reconstructing meaning according to the situation. La Cour and Hvidt (2010) explain that nowadays, this tradition is

very broad and contains both theistic and atheistic trends, but it primarily concerns *secular* existential orientations, such as meaning, the value of life, personal values, freedom, responsibility, loneliness, etc., all concepts that are not centered in the belief in a transcendent reality. These concepts often have the potential for including the spiritual and religious domains, but they rarely do so in any elaborative or concise way (p. 1293).

Even though this notion of the tradition for understanding existential meaning in the field of psychology of religion is still Western-centered, it appears to be of better use for the study than the first conceptualization of existential meaning just because of its inclusiveness. However, it is still challenging to explore existential meaning and meaning-making in a Japanese context from the psychology of religion because there are very few studies on the topic.

3.1.2. Health, meaning-making, and culture in the psychology of religion

The research in the psychology of religion, which at its most fundamental level can be defined as the study of any aspect or dimension of forms and expressions of psychology in religiosity, possibly in a particular folk group, is always guided by the approach that is chosen to close to the research questions. It applies to both the approach to psychology and how to define and understand religion and religiosity (DeMarinis, 2011, p. 7). As a research area and research topic, the psychology of religion is still minor in Japan, and there are limited studies in the psychology of religion in general and research on health in a post-disaster context in particular. On the other hand, there has been a strong focus on health-related factors within research in the field of the psychology of religion in general and in Scandinavia in particular (DeMarinis, 2011, p. 8). A subdivision of this tradition can be the clinical psychology of religion that has a particular focus on the interaction between religiosity and the functioning and dysfunctioning of the physical, mental, and existential dimensions of health (DeMarinis, 2003, as cited in DeMarinis, 2011, p. 18). Moreover, many of the research studies in the psychology of religion that relate to health factors have been preceded by a cultural context (DeMarinis, 2011, p. 8). Thus, in this study, the psychology of religion refers to these traditions. The focuses are on the interaction between religiosity, the physical, mental, and existential dimensions of health, and well-being in relation to a cultural context in which the study has been conducted, as well as the approach to the current culture and how the meaning of observations and results has been interpreted according to the context. Since culture matters in this study, I have already presented a Japanese cultural context concerning health, well-being, and religion in the previous chapter. In the following sections in the chapter, I present theories and perspectives that I use in the study from the psychology of religion.

3.2. Existential meaning, existential meaning-making, and the existential dimension of health

3.2.1. The outlook of existential meaning and meaning-making

Existential meaning refers to attempts to understand how events in life fit into a broader context. Existential meaning includes the meaning-making process through which individuals facilitate a sense of order in the world (Reker, 2000). Reker (2000) claims that existential meaning is multidimensional and constructed by cognitive, motivational, and affective components. First, the cognitive component refers to what provides a sense of meaning in life regarding one's experience:

> Individuals not only construct a belief system or worldview to address existential concerns, but also seek existential understanding of the value and purpose of various life events, circumstances, or encounters (p. 42).

Secondly, the motivational component of existential meaning means the value system that individuals construct:

> Values are essentially guides for living, dictating what goals individuals pursue and how they actualize their goals. Values are determined by individual needs, beliefs, and society. Both the process of pursuing selected goals and their attainment give rise to a sense of purpose and meaning to one's existence. It is the worthwhile ends that keep one going in spite of obstacles, setbacks, and extremely traumatic experiences (p. 42).

Third, he continues:

> The affective component comprises the feelings of satisfaction and fulfillment individuals get from their experiences and from achieving their goals. Although the pursuit of individual happiness may not result in meaningfulness, whatever is meaningful must also provide satisfaction to the pursuer (p. 42).

Even though there seem to be differences among theorists, it may be said that the theoretical frameworks of existential meaning and meaning-making have, to a certain degree, a common understanding. For example, Park (2005) approaches meaning and meaning-making by presenting and using a conceptual model of meaning that has two basic levels of meaning: Systems of global meaning (global meaning) and the appraised meaning of specific events (situational meaning). Global meaning is "the fundamental building blocks of our inner worlds" (Park, 2008, p.972) and "refers to individuals' systems of beliefs about the world and themselves and their overarching goals along with their concomitant subjective sense of life meaningfulness or purpose" (George & Park, 2013, p. 484). Such global meaning consists of global beliefs, global

goals, and subjective feelings of meaning. Global meaning systems are constructed from the environment, the milieu, and the surrounding culture in which the individual is located through the individual's personal experiences. Importantly, the individual is not aware of the global meaning despite its influences on her/his thoughts, actions, feelings, and interpretations of daily occurrences as well as major life events. Such global meaning through which individuals produce subjective feelings of meaning may never be unchangeable and stable. People may constantly be exposed to situations, incidents, and instances that challenge their global meaning even in their daily life but most usually in life crises. By facing and experiencing such a critical situation, they may feel they are vulnerable and powerless. They may feel that such situations are beyond their comprehension and ability to control. What then would happen to their meaning system? When individuals confront life stressors or difficulties, they may assign some meaning to that stressful event. They work to restore their global life meaning. It is a situation in which the individual's global meaning is disrupted, threatened, or violated by stressful life events or traumatic experiences. Such distress efforts, under such circumstances, would be made by the individual to bring global and situational meanings into alignment, which Park calls the appraised meaning of specific events (situational meaning). That is, meaning-making in crises or difficult circumstances. In short, her understanding of the existential meaning and existential meaning-making—although she calls them simply "meaning" and "meaning-making"—is also in line with what Reker (2000) explains. Criticism toward Park's model can be the lack of broader meaning-making dimensions. Therefore, in this study, my usage of the term "existential" is primarily in accordance with DeMarinis (2003, 2008)—"existential" that has a function in focus as well as its dimensional richness rather than defining substantial content.

3.2.2. Existential meaning and existential meaning-making as more inclusive understandings

The concept "existential" is likely "an umbrella term to encompass a wide range of meaning-making operations which provide operational narratives, value structures, and decisional pathways as well as the ritualized expressions of such" (DeMarinis, 2006, as cited in DeMarinis, 2008, p. 59). She explains:

> The existential dimension is focused on the individual's understanding of existentiality and the way meaning is created. This dimension includes worldview conception, life approach, decision-making structure, way of relating, and way of understanding. It also includes the activities or expressions of symbolic significance, such as rituals and other ways of making meaning. As each individual has an existential dimension and spiritual nature, the varieties of their expression include many different kinds of meaning systems. These can be associated with traditional religious systems or with other meaning-

making systems. For the individual, it is also possible to have elements of different systems combined (DeMarinis, 2006, pp. 44-45, as cited in DeMarinis, 2008, p. 60).

Further, DeMarinis (2008) uses the term "existential worldview," that is, in a way, a synonymous term as "existential meaning." The term existential worldview refers to "the narratives about life's meaning and the actions associated with the lived expression of these narratives in the stories of ordinary persons confronted with life's choices, hopes, dilemmas, and decisions" (p. 64). Thus, existential meaning-making can be seen as processes in which individuals and societies/communities go through the situation that is violating their existential meaning. As a result, they are forced to reflect and reevaluate their existential meaning with the intention to reduce the inconsistency that may arise, to regain order in the discrepancy, and to facilitate the renewed existential meaning. This understanding of "existential" is of use because it enables us to see "existential" as a multi-dimensional and multi-perspective process. According to DeMarinis, as Stifoss-Hanssen and Danbolt (2011) summarize briefly, the existential dimension refers mostly to meaning that concerns our entire attitude toward life, our way of interpreting phenomena, forming values, and making decisions and is often associated with existential and spiritual themes, possibly even with religion and philosophy of life, and our way of using rituals and symbolic meanings (Stifoss-Hanssen & Danbolt, 2011, p. 35). Hence, existential meaning-making in this study ought to include various ways of expressions that show any meaning-making process. It would hardly exclude any meaning-making process and activity regardless of whether it is in a secular or transcendental context because the individual and most likely even the society may have a meaning-making system consisting of a combination of several different elements—both secular and traditional religious and other transcendentals. In other words, existential meaning-making in this study refers to all types of expressions of meaning-making processes including religious, spiritual, and secular existential expressions such as atheism, for example.

   This inclusive understanding of "existential" also gives the culture an implicit yet significant space. Traumatic experience—regardless whether it is caused in everyday life stress or because of something not daily but unusual such as a terror attack or natural disaster—could shatter our fundamental assumptions about ourselves and our world (Janoff-Bulman, 2004). In this sense, our searching for and attempts to reestablish existential meaning might be fundamental to human nature. However, we may not reduce such a process into something universal by being away from its cultural context. It is crucial to explore and understand the existential meaning and meaning-making in relation to a cultural context in which the process occurs, because how we find and create our existential meaning, how we form our meaning-making system, and how we express such existential meaning and the meaning-making system

is culturally bound. DeMarinis's understanding of the existential meaning and existential meaning-making appear to be very much of use for this study because of its inclusive character and its implicit culture sensitivity inspired by Marsella's (2005) definition of culture.

3.2.3. Existential meaning, existential meaning-making, health, and culture

As already seen, the concept of "existential meaning" is rooted in the Western way of thinking in general, European philosophy in particular. This notion is very important for this study where research on existential meaning and well-being is conducted not in a context of Western cultures but Japanese culture. Only a few studies in a Japanese context focus on health, well-being, and existential meaning. Hence, it is crucial to explore and understand the existential meaning and meaning-making in relation to a cultural context in which the process occurs, because how we find and create our existential meaning, how we form our meaning-making system, and how we express such existential meaning and the meaning-making system is culturally bound. Therefore, Marsella's definition of culture as "learned behavior and meanings, socially transferred in various life-activity settings for purposes of individual and collective adjustment and adaptation" (Marsella & Yamada, 2004, p. 4) is of importance. If starting with the definition, it is clear that existential meaning and meaning-making are inseparable from a cultural context in which both individuals and collectives form existential meanings and meaning systems. Therefore, I would like to emphasize here again that I will approach a Japanese cultural context by using the definition of culture to get close to the participants' existential meaning and meaning-making.

The definition of culture by Marsella (2005) also confirms that health and well-being are cultural constructions because:

> Cultures can be (1) transitory (i.e., situational even for a few minutes), (2) enduring (e.g., ethnocultural life styles[*sic*]), and in all instances are (3) dynamic (i.e., constantly subject to change and modification. Cultures are represented (4) internally (i.e., values, beliefs, attitudes, axioms, orientations, epistemologies, consciousness levels, perceptions, expectations, personhood), and (5) externally (i.e., artifacts, roles, institutions, social structures). Cultures (6) shape and construct our realities (i.e., they contribute to our world views [*sic*], perceptions, orientations) and with this ideas, morals, and preferences (p. 657).

Culture affects both existential dimensions of health and psychosocial well-being, given culture is contextual, constructed, and formed by both internal and external interaction between individuals and societies and may play an important role in reconstruction and change/development of the individual's existential meaning and existential meaning-making. As already shown in the previous chapter, the internationally used cultural analysis model for

understanding both health and illness perceptions in a cultural context (Kleinman, 1980; DeMarinis, 2003) also postulates that culture encompasses five different dimensions regarding health—biological-physical, psychological, social, ecological, and last—but equally—existential. We need to grip culture by approaching it from these different dimensions and their interactions so that we can holistically see the specific culture, which may also help us to understand individuals' existential meaning, meaning-making, the existential dimension of health and psychosocial well-being. In short, they are by all means influenced by and formed in a specific cultural context.

According to DeMarinis (2013), "An important part of assessing theories of development and psychosocial interactions, as well as for analyzing existential meaning-making constructs and ritual expressions through the lens of cultural analysis, in the globalized contexts in which we live, is understanding trauma experience" (p. 213). She explains that the impact of trauma is related to the internal and external mental health, existential and psychosocial resources that are available. Therefore, according to her, the ADAPT model (Silove et al., 2006) is of use to understand the losses or changes and find the psychosocial systems that are available for people as the resource (DeMarinis, 2013). Therefore, I will present the ADAPT model in the next section, which will help me to understand and find the psychosocial domains that are available for people in the 2011 disaster-affected areas as the resource.

3.3. The ADAPT model (Adaptation and Development after Persecution and Trauma)

The Adaptation and Development after Persecution and Trauma model (Silove et al., 2006) is formed initially regarding a context of post-mass conflicts such as civil war or regional armed conflict and its effect and result such as torture, mass human rights violations, and refugee trauma as well as displacement. The underlying premises of the model are that extremely traumatic experiences may challenge and raise questions about the existing system based on several psychosocial domains in which both individuals and communities maintain stability and the continuity of the society. The model offers "a conceptual framework to underpin existing policies and practices, by demonstrating links extending across the continuum of adaptive and maladaptive psychological responses to mass conflict" (Silove, 2013, p. 237). The model also provides the range of psychosocial and mental health programs for recovery. The model is

> an adaptational framework that highlights the ever-changing ecosocial context which acts as a moderator and gestalt of the foreground sequence of experiences ranging from traumatic events to post-traumatic stressors; how the individual integrates and responds to these experiences is in turn grounded in

biological, psychological, social, cultural and existential aspects that have
enduring although not immutable characteristics (Tay & Silove, 2017, p. 142).

The ADAPT model postulates that five critical psychosocial domains are es-
sential for stable societies, which are often threatened and most likely dis-
rupted by mass conflicts and other major catastrophes. The model further pos-
its that repairing these damaged systems and the institutions may help both
individuals and communities that suffer from such conflicts or disasters to
create a framework for recovery and reconstruction. These five key psycho-
social domains are: safety/security; bonds/networks; justice; roles and identi-
ties; and existential meaning.

Safety/security has essential importance to recovery in the model and is
presented first in the model by Silove (2013) due to its fundamental signifi-
cance for recovery. Safety *is buji* 無事 in Japanese. It refers to a situation in
which there is nothing special, bad or wrong. Security is *anzen* 安全 in Japa-
nese. It refers to a situation in which there is no danger or risk of being harmed.
This Japanese translation of safety/security accords with Silove's definition of
safety/security. According to him, "There is evidence, from a range of socie-
ties exposed to conflict, that prevailing conditions of terror increase the rates
of posttraumatic stress reactions" (Steel et al., 2009, as cited in Silove, 2013,
p. 238). Silove (2013) continues:

> The post-traumatic environment is particularly relevant, especially when
> survivors are exposed to a constellation of adversities, such as: ongoing
> conditions of threat, uncertainty about the future, lack of control over their lives,
> and an absence of social support or resources to achieve recovery (Silove,
> 2002; Hobfoll et al., 2012). A key responsibility for leaders in the mental health
> field is to apprise policymakers, responsible for relief and resettlement pro-
> grammes, of the importance of establishing environmental conditions of safety,
> stability and predictability in order to achieve mental health recovery (p. 241).

In a traumatic situation, individuals and communities will be highly exposed
to insecurity and threat to survival. Such life-threatening experiences can trig-
ger psychobiological mechanisms related to the preservation of safety and se-
curity (Silove, 1999) and hence acute stress response including posttraumatic
stress reaction is a normative survival response to threat (Silove, 2013). Pro-
longed lack of safety/security, however, may lead to mental, physical, and
consequently psychosocial impairment. Safety/security is, therefore, a fore-
most concern for both individuals and communities to face and deal with the
life-threatening experience and to recover, restore, and reconstruct the dam-
aged system as well as to maintain and develop their physical, mental, and
psychosocial health. At the same time, it is essential for any types of
interventions to create a therapeutic environment that encourages a sense of
security, to provide emergency clinical services for those with complicated

acute reactions, and to provide "medium term [*sic*] specialist services for those with chronic PTSD and comorbid disorders" (Silove, 2013, p. 239).

Once the crucial domain, namely safety/security is assessed and met, bonds/networks are the second to be controlled. Bonds/networks refer to a relational attachment or bonding and is "essential to human functioning" (Silove, 2013, p. 239) such as family, kinships, friends, neighbors and local communities. In Japanese, a bond is *kizuna* 絆, which refers to relational bonds such as family, friends, or community. After the 2011 Great East Japan earthquake and tsunami, *kizuna* 絆 drew much attention and became one of the most popular and symbolic words referring to rebuilding, recreating, and also finding new networks of social connections.

Bonds/networks is also an essential domain in the ADAPT model because:

> Communities exposed to mass violence and displacement invariably suffer extensive losses, both material and personal. Yet, until recently, the study of grief has been subordinated to the focus on PTSD in the post conflict [*sic*] field (Momartin et al.,2004, Morina et al., 2010). Grief varies from a normative response to a chronic, dysfunctional reaction associated with comorbid disorders, such as depression. More generally, restoring the integrity of interpersonal bonds and wider social supports is vital to promoting recovery from a wide range of emotional disorders following exposure to conflict (Silove, 2013, pp. 241-242).

Major life-threatening traumatic experience may cause disruptions to bonds/networks among the survivors as well as symbolically through losses. The survivors may experience not only missing and loss of loved ones but also tangible property and possessions. Loss of neighborhoods consequently leads to loss of local communities, too. Especially in a context of displacement, the survivors and refugees may also experience a variety of losses including those of a sense of belonging, of social cohesion, of connection with the land and ancestors, and of culture and traditions, according to Eisenbruch (1991, as cited in Silove, 1999). Prolonged grief due to loss of such human-relational bonds can cause depression and somatic symptoms.

The third psychosocial domain in the model is justice. In Japanese, justice is *seigi* 正義. *Seigi* refers to correct doctrine that human beings should obey (*Daijirin* 大辞林, 2006). *Seigi* also means to respect the rights of others and to properly assign rights and obligations, incentives, sanctions, and so forth to each person (*Daijirin* 大辞林, 2006). In a sense, therefore, justice in Japanese also refers to fairness. As already mentioned, the ADAPT model was formed with regard to a mass-conflict context such as civil wars or regional armed conflicts, and its particular focus is on post-persecution and post-traumatic settings. Mass conflict often forces both individuals and communities to face serious human rights violations, for example, torture. Silove considers that "the sense of injustice is a universal response to human rights violation" (2013, p. 239), and that "anger is the normative emotional response to injustice"

(2013, p. 242). However, "persisting preoccupation with cumulative injustices of the past can play a central role in maintaining psychological symptoms following exposure to persecution and human rights violations" (Silove, 2013, p. 242). Thus, it is important to discard these "cumulative injustices of the past," mitigate the sense of injustice, and forge transitional Justice. Then, the challenge and difficulty are, according to Silove (2013):

> Frustration and disappointment, with a failure to achieve social justice in the form of economic opportunities, social stability and good governance, are all shortcomings that are typical of many post conflict societies and that are likely to constrain the effectiveness of truth commissions in achieving their objective of transitional justice. Realistically therefore, the restoration of a sense of justice will be a slow and piecemeal process, best advanced by a multi-sectoral, grassroots and participatory approach (p. 242).

For this task, it is necessary to be aware of cultural, historical, and social as well as socioeconomic contexts in which "cumulative injustices of the past" (Silove, 2013, p. 242) emerged.

In the model, the category of roles and identities is also an important psychosocial domain. It refers to social roles, such as "parent, worker, student, citizen, social leader, etc." (Silove et al., 2006, p. 123) that is related to individual's identity. Roles in Japanese is *yakuwari* 役割. It refers to a customary way of operation or behavior and social role expected and learned according to a social position and status (*Daijirin* 大辞林, 2006). Identity in Japanese is *douitsusei* 同一性, which refers to a unification of ego that exists as a personality (*Daijirin* 大辞林, 2006).

Roles and identities may be challenged by mass conflicts and displacement because "mass violence and displacement invariably impact established roles within the family and the society, disruptions that demand active accommodation and adaptation" (Silove, 2013, p. 243). Silove (2013) means that the impact can cause identity issues:

> Identity confusion can contribute to a range of adverse psychological and psychiatric outcomes (withdrawal, isolation, depression) that will have negative social consequences, including personal disengagement, family difficulties, deviant behaviour and an overall sense of alienation, in which the person loses any sense of belonging or function (Zhao & Cao, 2010) (p.243).

Hence, it is crucial for the survivors to restore and reestablish roles and to renew and forge new identities. Silove (2013) suggests that it is necessary to promote survivors' rights to pursue education, work, and other opportunities by "actively removing barriers to their participation" (p. 243). Further, he continues that it is also essential to facilitate "role transitions, adaptations that include changes in gender roles, rights and status, and in parental expectations and approaches to child-rearing" (p. 243).

Finally, yet importantly, the ADAPT model presents existential meaning as one of the five key psychosocial domains that is essential for stable societies. As already seen, existential meaning refers to attempts to understand how events in life fit into a broader context. Existential meaning also includes the meaning-making process through which individuals facilitate a sense of order in the world (Reker, 2000). The concept of existential meaning is difficult to translate into Japanese. It is difficult because it is an unfamiliar concept in Japan because the concept of existential is originally rooted in Western existentialism. If translating existential meaning into Japanese, existential is translated as *jitsuzon* 実存, which refers to an individual's subjective way of existing while presenting a self-awareness of her existence as an individual, and meaning is translated as *imi* 意味, which refers to a value or significance that things have in a particular context.

Silove (2013) means that every single individual needs a sense of coherence in life, and significant traumatic experiences including conflicts and displacement may lead to disruption of not only a sense of belonging to a community in which survivors had lived, but also their fundamental worldviews. Therefore:

> There are inevitable challenges in reconciling past customs and mores with those encountered in the new society, an issue that may lead to intergenerational tensions. Ideologically committed refugees, who have been engaged in the struggle to free their homeland, can experience intense feelings of isolation and powerlessness after relocating to a distant resettlement country (p. 244).

Mass conflicts and other major disasters may have a massive impact on their sense of coherence because they may shake their fundamental faith, belief, value, and orientation in life. Facing such an existential challenge may also affect survivors' psychological health in the form of alienation, depression, or suicidal behavior (Silove, 2013) due to loss of coherence and meaninglessness caused by the catastrophe. Such an existential challenge may also affect damaged communities in the form of fragmentation and loss of coherent narrative and guiding principles (Silove, 2013). Therefore, it is vital to restore and reestablish institutions, which can provide individuals' existential meaning and a sense of coherence, regardless of the social, religious, cultural, or political feature.

The model's important posit is that these five key psychosocial domains overlap and interact, "the greater the undermining of several pillars, the more likely that foreground experiences (cumulative trauma and stress) will lead to adverse mental health outcomes" (Tay & Silove, 2017, p. 143). Then, repairing damaged systems and institutions is essential for both individuals and communities so that they can recover from the traumatic experiences. In other words, the model provides a conceptual framework to understand the

interactions between the five psychosocial domains that function interdependently when the individuals and the communities work for recovery and restoration. Such interactions between the psychosocial domains enable us to see the recovery strategies in an integrated and holistic manner.

According to DeMarinis (2013), "An important part of assessing theories of development and psychosocial interactions, as well as for analyzing existential meaning-making constructs and ritual expressions through the lens of cultural analysis, in the globalized contexts in which we live, is understanding trauma experience" (p. 213). She means that multiple trauma experiences may affect various levels (individual, family, group, global), and it is crucial to see the level of the psychosocial domains' functioning and available resources "to address the often multi-level nature of problems" (p. 214). She continues, "Intervention resources aimed at this level can make an extraordinary difference in supporting coping processes at the individual, family, and group levels" (p. 214). She explains "how people respond to trauma, and the impact trauma has is, in part, related to the internal and external mental health, existential and psychosocial resources that are available" (p. 213). She means that the ADAPT model (Silove et al., 2006) is useful in understanding the losses or changes and finding the psychosocial systems that are available for people as a resource. DeMarinis developed the ADAPT model in cooperation with Silove by adapting the model with regard to the definition of culture by Marsella (2005). She placed the fifth psychosocial domain, that is, the existential meaning system in the center (see Figure 1).

Several crucial aspects make DeMarinis's adaptation of the ADAPT model unique and favorable, especially for this study. First, the model is culture-sensitive. Silove (2004) is also aware of the importance of culture in the reconstruction of the five key domains as he states:

> How these reconstruction processes are pursued and how effective they are, will depend on the resources, context, culture, and historical background of the affected society (p. 93).

However, DeMarinis (2013) further stresses the importance of being aware of cultural context because culture is

> not a static entity but a living process. Small or larger cultural changes can come both from inside and outside of the particular cultural context that one is studying. Cultural patterns also influence how a society's institutions are constructed, how societal values are formed, and the codes of conduct and ethics in psychosocial interactions. Looking especially at existential meaning-making constructs and ritualizing activities in a given cultural context, it is possible to make a cultural mapping for the majority and minority populations of these activities (pp. 212-213).

Since the individual's existential meaning and coherence is formed in constant interaction with his/her surroundings and the society they are locating in, restoring and renewing existential meaning should be carried out in a cultural, historical, and socially sensitive manner. Hence, culture plays a significant role not only for individuals in the establishment and development of existential meaning but also for communities in the establishment and maintenance of a stable society. To see cultural context carefully is therefore imperative and this model's cultural awareness is of importance especially for the aim of this study conducted in a specific cultural context, that is, a Japanese context.

Second, in applying the ADAPT model, it is imperative that the system supporting the model should be understood regarding both variability and potential sources of resilience because:

> Psychosocial groups cannot sustain work in disaster areas without adequate funding. Competition for donor funds can inadvertently foster rivalry rather than collaboration between agencies; short-term funding and strict monitoring of outputs and milestones by donors could encourage quick-fix and top-down approaches: and superficial approaches to rapid needs assessment risks highlighting individual vulnerabilities rather than collective strengths and potential sources of resilience (Silove & Zwi, 2005, p. 269).

Resilience is one of the most heuristic and integrative concepts to appear in 21st-century thinking in the social sciences (Reich et al., 2010, p. xi), and its definition varies widely. Even though the definition and conceptualization of resilience vary, resilience is generally defined as a positive adaptation despite adversity (Masten, 2001; Werner, 1989, as cited in Bottrell, 2009). I believe, however, Ungar's (2008) definition of resilience is very useful because of its culture-sensitivity. He defines resilience as "both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community, and culture to provide these health resources and experiences in culturally meaningful ways" (p. 225). Hence, what may constitute a risk in one cultural context may not apply to another or elsewhere may constitute a protective factor or process, based in specific conditions, cultural values, and norms (Ungar, 2006, as cited in Bottrell, 2009). Therefore, researches should be culturally sensitive and be much aware of cultural context regarding resilience perspective, which the ADAPT model with existential meaning in the center can provide.

Third, DeMarinis's adaptation of the ADAPT model placing existential meaning in the central layer is of use for the study because, as DeMarinis and her colleagues (2011) claim, it is imperative to understand health as a cultural construction from an existential meaning-making perspective. In this way, the model enables us not only to focus on the function of existential meaning and meaning-making but also to make it easy to see how the existential meaning domain interacts with the other psychosocial factors and functions. In other

words, the model may help us to see the establishment, reconstruction, and development of existential meaning and its process holistically without losing the cultural context in which interactions between the psychosocial domains occur. Thus, the model is of use for this study, in which it provides much focus on existential meaning and meaning-making from a cultural perspective.
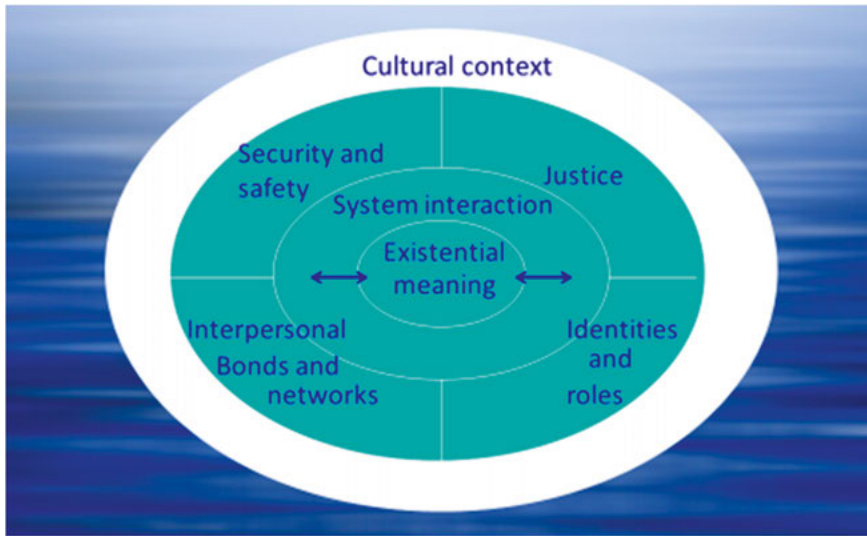
Figure 1. Adaptation by DeMarinis (2013) of Silove's (2015) ADAPT model in co-operation with Silove

Silove et al. (2006) have used the model in a post-disaster context, too. Even though the impact of disasters differs from each other due to, for example, "suddenness and scale of the catastrophe and the social, historical, and cultural context in which they occur" (Silove et al., 2006, p. 121), they have something common with local mass conflicts. They all undermine the existing stable society, threaten individuals' and communities' meaning systems and sense of coherence in the world they live in, and force them to review and renew them. Borrowing Silove's words, they all have "the threat they pose to survival and adaptation" (Silove et al., 2006, p. 121). What we have to be aware of is that these five psychosocial domains are of importance for recovery on both individual and collective levels.

In brief, the ADAPT model with existential meaning in the center is the ground model in this study to explore the function of religion and volunteer workers in different religious organizations in contributing to reconstruction and development of existential meaning and psychosocial well-being in the affected areas. The model is of use not only to locate and identify existential and psychosocial resources available to the volunteer workers and survivors but also to map how they overlap and interact with each other.

3.4. Working model

The primary concern of this study is the function of religion and volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being regarding the 2011 Great East Japan earthquake and tsunami. In this study, my use of the term "existential" is primarily in accordance with DeMarinis (2003, 2008)—"existential" has its function in focus and dimensional richness rather than in defining substantial content. This understanding of "existential" is of use because it enables us to see "existential" as a multi-dimensional and multi-perspective process, which would hardly exclude any meaning-making process and activity regardless of whether it is in a secular or transcendental context. Existential meaning and meaning-making, especially in the time of crisis, are complex, multi-dimensional, and multi-perspective processes. Likewise, psychosocial well-being is a complex and multi-factorial concept; one theoretical model or perspective cannot be enough for catching the overview of the reconstruction and development of existential meaning and psychosocial well-being in the 2011 disaster-damaged areas. Therefore, this study as a whole is built from a framework composed of the theoretical sources and a model that has been presented in this chapter.

The Adaptation and Development after Persecution and Trauma model (Silove et al., 2006) was initially formulated regarding mass conflict settings but then also was used in a disaster context, which may enable me to use the model in this study. Although Silove et al. (2006) also paid attention to the existential dimension's importance on psychosocial well-being and mental health in a conflict or disaster-affected area, it was more likely from perspectives of clinical psychology and with the aim of assessing the intervention policy. In this study, therefore, I use the ADAPT model modified by DeMarinis (2013). The reason is mainly that her model is much more culture-sensitive thanks to her effort to put existential meaning in the center. The model may be more specifically useful for the study to identify existential and psychosocial resources available to the volunteer workers and survivors and to map how they overlap and interact with each other with existential meaning in the center (DeMarinis, 2013).

The ADAPT model (Silove et al., 2006) with existential meaning in the center (DeMarinis, 2013) is the fundamental theoretical model in this study. I use the model not only to identify existential and psychosocial resources available in the damaged areas but also to map and understand how they overlap and interact with each other. The central concern of this study, that is, the function of religion and volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being, will be explored from cultural perspectives because it is crucial to understand the Japanese construction of meaning including functioning worldviews, values, and reactions, in comparison to Western

constructions. Hence, Marsella's perspective on culture and Kleinman's culturally sensitive perspective on health and well-being further developed by DeMarinis (2003) are employed to analyze the data in relation to the Japanese cultural context. The working model of the study is illustrated below.
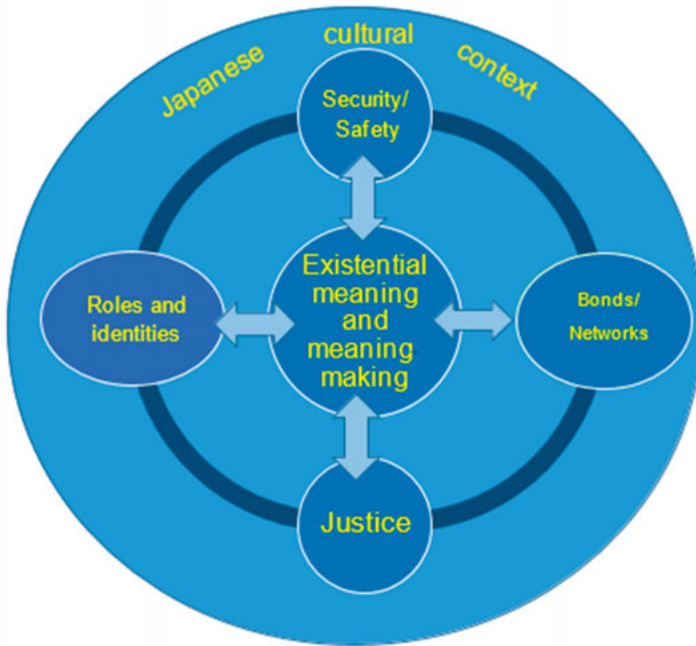
Figure 2. Theoretical working model of the study

Chapter 4 Method

In this chapter, I describe the method of this study. First, I present the study's research design. Thereafter follows a presentation of ethical considerations. After that, descriptions of the data collection and the data analysis procedures are presented. Lastly, the study's validity considerations are described.

4.1. Research design

This study was designed as a qualitative research study and was conducted with qualitative research strategies. According to Creswell (2014), qualitative research is

> an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written reports have a flexible structure. Those who engage in this form of inquiry support a way of looking at research that honors an inductive style, a focus on individual meaning, and the importance of rendering the complexity of a situation (p. 4).

Thus, qualitative research can be defined by its interpretative, inductive, and flexible character. Further, Creswell (2014) points out several core characteristics of qualitative research. In qualitative research, researchers collect data in a natural setting, that is, data collection at the research site/in the research field and collect data themselves. They gather multiple forms of data including interviews, documents, and observations. They begin the data analysis process inductively and work back and forth between the themes but also work with data deductively. They keep focusing participants' meanings and are flexible for changing design because the research process in qualitative research is emergent. They are required to reflect on their role in the study and their background as they may affect their interpretation and data analysis. They try to develop a complex picture regarding research objectives and to have a holistic account.

Malterud (1998) means that qualitative methods are suitable when learning about human qualities or character such as experience, thoughts, expectations,

motivations, and attitudes. She also considers qualitative approaches useful to explore dynamic processes such as interaction, development, movement, and entirety, especially when the knowledge base is limited, when the problem that should be examined is complicated and convoluted, and when we expect a variety of possible answers for research questions. Therefore, I found a qualitative method useful for the study because the study focused on participants' experiences and accounts as religious actor/practitioner, relief worker, and survivor of the 2011 disaster.

The collected semi-structured interview data was analyzed primarily deductively using a template analysis style (Malterud, 1998). *Deductive* referred to a theory-driven approach in this study. The data-processing procedure in this study was deductive in that sense as I worked closely with theories/theoretical perspectives presented in the previous chapter. These theoretical perspectives were my tools to interpret and analyze the data. These theoretical perspectives were also this study's frameworks, in which the data were presented, interpreted, and analyzed. Malterud (1998) points out that the template analysis style is a good starting point for developing new descriptions. However, it may involve a risk for the reproduction of already known knowledge. Bearing the point in mind, I wanted the findings from the interview data not to be excluded from more inductive and theory-generating phases because of its richness. In other words, although the template analysis style is a theory-driven deductive method, it does not necessarily mean to exclude spaces for findings from the interview data to be argued and discussed. The collected data had much potential, which helped not only to avoid the reproduction and reconfirmation of existing theories but also to develop theories used in this study. Further descriptions of the data analysis procedure will be presented later in this chapter.

4.2. Ethical consideration

4.2.1. Ethical review

According to Creswell (2014), "Researchers need to have their research plans reviewed by an institutional review board (IRB) on their college and university campuses" (p. 95). Researchers also need to evaluate "the potential for risk to participants in a study" (Creswell, 2014, p. 95). After discussion with the entire supervisory team, a decision was made to apply for the ethical review in Japan for the following reasons: (1) The subjects of this study would be in Japan, (2) the data collection would be conducted in Japan and the Japanese language, (3) the original Japanese data would be stored in Japan, (4) the transcription of the original Japanese data would be translated into English, and its accuracy would be checked by Professor Fumie Inatani, one of the supervisors of the study living in Japan, and (5) the coding of the

original data would be conducted and all original data stored in Japan, although the translated transcription from Japanese to English was available to the supervisors in Sweden (they could also access the data).

I applied for the ethical review to the Ethical Committee of Kurume University in January 2015 through and with the help of Professor Inatani, who was then a professor in clinical psychology at Kurume University, Japan. The Ethical Committee of Kurume University reviews all general research except some medical research that needs to be discussed by the Ethics Committee on Life. The committee reviewed this study according to their criteria[1] and approved this study (number 249) on February 18, 2015.

4.2.2. Ethical considerations

During research, researchers may face ethical issues that they need to anticipate. The ethical practice of research that involves working with people—for example, to collect data from and about people—"is a complex and demanding responsibility" (King & Horrocks, 2010, p. 103). An interview is a moral enterprise: The personal interaction in the interview affects the interviewee, and the knowledge produced by the interview affects our understanding of the human condition (Kvale, 1997). Researchers need to protect their research participants, develop a trust with them, promote the integrity of research participants, guard against misconduct and impropriety that might reflect on their organization or institutions, and cope with new challenging problems (Creswell, 2014, p. 92). Thus, the ethical considerations that researchers have to anticipate can be extensive and varied. Researchers may face such ethical issues not only at a specific stage of research but during the whole research processes.

Before conducting the study, my initial concern regarding research ethics was how to select subjects and sites for the study. The 2011 Great East Japan earthquake and tsunami were among the worst and largest disasters that Japan has experienced in its modern history. The enormously strong earthquake was devastating enough, and the colossal tsunami that followed, which cost the lives of more than 15,000 people. What was worse, a nuclear power plant in Fukushima prefecture was also damaged by the earthquake and the tsunami, which not only forced residents within 80 km of the plant to evacuate and resettle temporarily or permanently but also made the affected areas attractive research sites. Herein problems arose touching on the research population and ethical considerations. Survivors in the 2011 disaster-affected areas had been

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[1] (1) Relevance of research purpose, (2) information to the study subjects about purpose, method, period, risk, etc., (3) consent of the subjects, (4) consideration for the subject's human rights (self-determination rights, privacy rights, etc.), (5) measures against foreseeable risks and hazards, and (6) other ethical concerns if necessary (Helsinki declarations, articles, etc.)

targeted as a research object immediately after the disaster occurred. The researchers' rush was far more intensive in Fukushima than in the other two earthquake- and tsunami-affected prefectures. In fact, researchers from many different disciplines, such as medicine, healthcare, sociology, psychology, and anthropology, to name a few, rushed into the damaged areas, which not only exhausted people in these areas but also positioned an already vulnerable population in a more vulnerable situation. Under such a circumstance, I contacted Iwayumi Suzuki (professor in literature and practical religious studies, Tohoku University, at the time of the contact) and Fumie Inatani (professor in clinical psychology, Kurume University, at the time of the contact). I got information from them about how researchers all over the world worked in the areas and how tired people in the areas became because of the rush of researchers. Their accounts made me hesitate in choosing them as participants for this study. Therefore, I recruited volunteer workers in different religious organizations as participants in the study and focused on their experiences, through which I hoped I could also shed light on survivors' experiences. Although many of volunteer workers who participated in the study also experienced the 2011 disaster in the most affected areas, and some of them were survivors themselves, they were more accessible thanks to their visible and active help and relief work. On top of that, unlike survivors in the affected areas, volunteer workers had not yet been targeted by researchers despite their visibility.

In this study, issues related to informed consent were especially concerning and accented. Informed consent means that a researcher informs participants in the information letter about the general purpose of the research, its structure, and their right to participate in or withdraw from the research (Kvale, 1997). Creswell (2014) presents some of the elements of informed consent such as "identification of the researcher, identification of the sponsoring institution, identification of how the participants were selected, identification of the purpose of the research, and a guarantee of confidentiality to the participant" (p. 96). Creswell (2014) suggests that researchers should identify a "beneficial research problem" (p. 97) and disclose the purpose of the study. At the initial contact with participants in this study, they were informed in writing through letters or e-mails and orally via telephone conversations about the general purpose of the study, the benefits that they would receive through their participation, the predictable problem that might emerge under their participation, of access to professional help if needed, of the highest possible anonymity, about the researcher and her contact address, and about practical information such as how to conduct the interviews, how the place for the interview would be chosen, or how long the interview would take. At the time of the interview, participants were again informed orally about them. About confidentiality, anonymity was stressed very much. Participants were informed that their interviews would be presented according to a number with the demographic information they supplied and thereby their detailed personal

information would never be revealed. They were also informed that the data could be used for a presentation of the material. Furthermore, they were informed that they could withdraw from the study at any time they wanted.

4.3. Data collection procedure

The search for the participants was conducted over about three months, between late March and the end of June 2015, that is, a month before my leaving for Japan and during a two-month stay in Japan. First, I made two documents in Japanese. One was an outline of the research plan, and the other was an invitation to participate in the study. The formulation and language of these documents were checked and corrected by Professor Iwayumi Suzuki, Tohoku University. They were sent—with a letter in which I introduced myself and provided my contact information—to twenty-three religious organizations, nonprofit religious disaster relief organization, and individual religious actors at the end of March 2015. The initial choice of organizations and individuals was made according to several criteria: (1) They worked in the three most damaged prefectures (Miyagi, Iwate, and Fukushima); (2) they had official contact information; (3) they did not work for missionaries, have an evangelical aim, or recruit new members; (4) they worked voluntarily or in a non-profit manner; and (5) they had no history for at least the preceding two decades of being the subject of a civil or criminal trial or creating conflict and problems in Japanese society reported by Japanese mass and local media.[2] I controlled these criteria through the Internet by checking their official homepage and searching for organizations and individuals by their name. Other criteria were added during the search for participants: (6) They were over 20 years old at the time of the initial contact[3]; (7) they were heterogeneous in the religious denominations, age, and gender as much as possible.

Several organizations and individuals responded via e-mail between the first week of April, a week after I sent a letter, and the second week of May, before I left for Japan. Further contacts with them were made through e-mails and telephone conversations. I called those who did not respond and asked whether they could or would participate in the study and got several consents. During this stage of the search for participants, I was also introduced to several individuals by those whom I initially contacted. I contacted them through e-mails and telephone conversations, which resulted in having several more participants. The biggest problem at this stage was that it was challenging to find Buddhists and people from Shinto due to a lack of information on the Web,

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[2] In the last two decades, there have been several conflicts or problems regarding religious organizations that were reported in the Japanese media. One example is a Supreme Court decision regarding a case of blood transfusion forced on a Jehovah's Witness (Noguchi, 2001).

[3] Age of majority in Japan is 20. "The age of majority is reached when a person has reached the age of 20" (Japanese Law and Government/Civil Law, Article 4)

unlike many Christian organizations. Before I left for Japan, 11 Christians, three Buddhists, and one from Shinto confirmed their participation in the study. During the stay in Japan, I found several participants thanks to those with whom I had initial contacts by sending the letter. To spread information about this study, I participated in a three-day and two-night inter-faith chaplain training held May 19-21 and a two-day and one-night training held June 23-24, which was organized by Department of Practical Religious Studies, Tohoku University. Fortunately, I could meet several Buddhists that were working for the training as instructors and volunteers, who eventually became participants as well as gatekeepers. Through them and with help from Professor Iwayumi Suzuki, Tohoku University, information about the study reached non-Christians, yielding more religiously heterogenic participants. After about three months of' searching, 27 religious actors and voluntary workers from different religious organizations agreed to participate in the study.

In parallel with the search for the participants, I created interview questions for the semi-structured interviews with open-ended questions. I also prepared and created an interview guide so that I could conduct interviews without missing questions and note interviews.

At the time of the semi-structured interviews, participants were again informed orally about the information mentioned above. Regarding confidentiality, anonymity was stressed. Participants were informed that they could withdraw from the study at any time they wanted. When the oral informed consent was obtained, they signed the written form of the consent to participate in the study. They were also asked for an oral approval to record the interview and to use the material for analysis and a presentation. With the permissions of the participants, interviews were recorded by a digital voice recorder. A mobile phone's sound recording function was also used. I prepared interview guides preceding the interviews. During the interviews, notes were taken in the case of a failure of recordings, which happened one time. Recorded interviews were transcribed for qualitative coding.

Most of the interviews were conducted as individual face-to-face interviews with few exceptions. Two interviews were conducted with two persons on the same occasion. In most cases, interviews were conducted at places that were suitable for the participants such as public spaces like a café or restaurant and organizations' facilities including a church, temple, volunteer center, and research institution. These places were chosen with regard firstly to convenience for the participants and, secondly, confidentiality and quietness in order not to be disturbed by, for example, the presence of others. However, two interviews were conducted under unique situations. One was conducted in a car that the participant drove to do a guided tour for a church volunteer group visiting her and at a restaurant with their presence. This situation occurred because the participant thought that it would not be a problem and I would be interested in seeing the damaged areas. The other one was an interview that started in a car on the way to an office that was planned for the interview. The

interviewee picked me up at a station, and we headed for her temple's office in a damaged area that was located several miles from the station. In both cases, recordings of the interviews were not entirely completed, but I managed to record most of them, and notes that I wrote down could cover missing parts from recordings.

4.4. Data analysis procedure

The collected semi-structured interview data were analyzed primarily deductively using a template analysis style (Malterud, 1998), a theory-driven approach. The first step was to transcribe the collected semi-structured interviews and organize the transcribed interview data for the analysis. Because interviews were conducted in Japanese except one in both English and Japanese, the transcription of the interviews was in Japanese. After that, I translated the transcribed interviews from Japanese to English. The translated interview data were controlled regarding language accuracy by Fumie Inatani, professor in clinical psychology, Kagoshima University, and its contents by Valerie DeMarinis, professor in psychology of religion, Uppsala University, and Önver Cetrez, associate professor in psychology of religion, Uppsala University.

The second step was to read through all the data. At this stage, my first goal was to find and identify parts relevant to the research questions in the transcription of data. To reach that goal, I read through the transcript both in Japanese and English several times with no intention to do coding. After that, I tried to highlight parts that I found relevant and helpful in understanding the participants' experiences and accounts regarding the research questions. I also wrote notes and brief comments in the transcripts with an intention to use them to define codes. Then, I controlled over theoretical perspectives used in this study in order to determine codes. After that, I tried to interpret these clusters of codes to find meanings with regard to the research question. I read the transcripts and referred back to the data to find meaning-bearing units and some common meaning among the codes that might imply meanings. After the meaning-bearing units were identified, decontextualization of meaning-bearing units was conducted. Thereby, I identified the predetermined categories from the theoretical perspectives in this study and central themes from the data. The texts were sorted out along with the interpretive codes and the predetermined categories derived from the existing theories. During this procedure, I used five categories. They were taken from a perspective of existential meaning and meaning-making, as well as the ADAPT model: safety/security, bonds/networks, justice, roles and identities, and existential meaning and meaning-making. These categories governed coding process and codes because they were created in accordance with each category. It meant that

some of the predetermined codes had not been identified in the interview data and several codes were added as needed during the coding process.

The final step was to interpret the meaning of themes and description. Further interpretation of the findings and results also was conducted. The analysis was not completed until the results were validated, which was performed through recontextualizing. The recontextualizing was conducted by summarizing the contents of categories and codes. According to Malterud (1998), recontextualizing is one of the most important measures to prevent reductionism and to establish the connection to the field and the participants' realities, which leads to raising the credibility of the study. She explains that it will ensure that the patterns still agree with the context from which they are collected and is important to prevent reductionism and maintain the connections between the field and the informants' accounts of reality (2001, p. 486). I got through the procedure by assessing findings with regard to the contexts as a whole. I summarized the content of the categories and codes and made a list of them. Then, the results were controlled regarding whether they were in accordance with the original context in the interviews.

4.5. Validity considerations

According to Creswell and Miller (2000), validity is one of the strengths of qualitative research and is based on determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account. Creswell (2014) suggests eight validity strategies and recommends using multiple approaches through which researchers can check the accuracy of the findings and increase the validity of the study. Of those strategies, I used three in this study: (1) triangulation, (2) rich, thick description, and (3) clarifying the bias of the researcher. Triangulation refers to triangulating different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes, and if themes are established based on converging several sources of data or perspectives from participants, this process can be claimed as adding to the validity of the study (p. 201). In this study, I used mainly two types of triangulation. First, the data were collected from different sites, and people who worked as both a religious teacher/practitioner and volunteer relief worker. Secondly, the data were analyzed from the different theoretical perspectives, that is, an existential meaning-making perspective and the ADAPT model with existential meaning in the center. Also, cultural perspective played a significant role. These theoretical perspectives were in accordance with and complemented each other as shown in the theory chapter.

Creswell (2014) recommends researchers "to use rich, thick description to convey the findings (Creswell, 2014, p. 202). The purpose of using rich, thick description "is that it creates verisimilitude, statement that produce for the

readers the feeling that they have experienced, or could experience, the events being described in a study" (Creswell & Miller, 2000, pp. 128-129). Therefore, "the process of writing using thick description is to provide as much detail as possible" (Creswell & Miller, 2000, p. 129) including descriptions of "a small slice of interaction, experience, or action; locating individuals in specific situations; bringing a relationship or an interaction alive between two or more persons; or providing a detailed rendering of how people feel" (Denzin, 1989, as cited in Creswell & Miller, 2000, p. 129). By providing such "detailed descriptions of the setting" or by offering "many perspectives about themes, the results become more realistic and richer" (Creswell, 2014, p. 202). To meet this validity criterion, I provided detailed descriptions of the setting, detailed rendering of how participants felt about the topics as well as different perspectives about themes so that the results could be realistic and rich. I described the setting—from data collection procedure and actual interview settings to the data analysis procedure including transcription of the interview data—in as much detail as possible. Also, I believe that the theoretical framework in this study consisted of several different perspectives that could help and manage to add the validity of the findings of the study.

Clarifying the bias of the researcher is related to both the validity and the ethical issue. Kvale (1997) writes that ethical behavior is more than ethical knowledge and cognitive choices and also includes the researcher's personality, his or her sensitivity, and commitment to moral issues and actions. King and Horrocks (2010) explain the morality of researchers by asserting that they "all bring to the research process their morality, which is an accumulation of understandings, feelings, positions, and principles around particular issues" (p. 104). They mean that morality cannot be simply universal because it has been shaped by researchers' diverse experiences that happened in a specific context both socially and culturally as well as historically. Since such a moral compass unavoidably exists in the research, it is imperative for a researcher to reflect on which bias she or he may be embedding while conducting the study. Creswell (2014) also stress the importance of reflectivity. Reflectivity refers to clarifying the bias that the researcher brings to the study and a core characteristic of qualitative research according to Creswell (2014) because "this self-reflection creates an open and honest narrative that will resonate well with readers" (p. 202). Researchers need to identify their "biases, values, and personal backgrounds, such as gender, history, culture, and socioeconomic status" (Creswell, 2014, p. 187) because they may shape and affect researchers' interpretations. Therefore, it is particularly important for researchers to acknowledge and describe their entering beliefs and biases to allow readers to understand their positions and then to bracket or suspend those researcher biases as the study proceeds (Creswell and Miller, 2000). I needed to reflect on the point (see Chapter 7). I took these potential threats to this study into account. In other words, I tried to perform a critical self-reflection by

clarifying and monitoring the bias that I might have as a researcher through all stages of the study.

Chapter 5   Results

In this chapter, I present the results of this current study. I divide the presentation into two sections. In the first section, I present the demographics and background information of the participants. Thereafter, I present the results of 27 semi-structured interviews in relation to the central categories predetermined and derived from this study's theoretical perspectives. Each category has two parts in the results. One focuses on the results about the survivors in the damaged areas from the participants' perspective. The other focuses on the results about the participants themselves. In each category, the results about survivors in the damaged areas from the participants' perspective are presented first. After that follows the results about the participants.

5.1. Demographics and background information

Participants in the semi-structured interview numbered 27. Among these, 19 were men and eight were women. The nationality of the participants was Japanese except for one participant who was from the US and had lived in Japan for 14 years. These participants ranged in age from 21 to 75 years old: 20-29 (n = 1); 30-39 (n = 10); 40-49 (n = 6); 50-59 (n = 5); 60+ (n = 5).

Twelve participants were in the three most disaster-affected prefectures at the time that the 2011 disaster occurred: Miyagi (n = 9), Iwate (n = 2), Fukushima (n = 1). Among these 12 participants, four suffered heavy damage to their house or temple/shrine from the earthquake or the tsunami, three participants experienced milder damage to their house or temple/shrine, and three participants evacuated to a shelter.

Fifteen participants were not in the three most disaster-affected areas at the time the 2011 disaster occurred, but nine participants were physically affected by the 2011 disaster, for example, taking a more than five-hour-long walk home, evacuating temporarily, and spending a night in an evacuation center or stuck in a stopped train. One of those 15 participants lived in one of the most damaged prefectures but was not at home when the disaster occurred. This participant lost her house and shrine because of the tsunami. Further, two participants among those 15, who were not in the areas at the time the 2011 disaster occurred, spent several days anxiously because they were from the damaged areas and they could not reach their family, relatives, and friends.

Religious denominations among the 27 participants were various. 14 participants were Buddhists (M = 12, F = 2): Soutou Zen = 5; Pure Land = 1; Independent = 1; Shingon Buddhism = 1; Shingon Chizan school = 1; Nichiren = 1; Sinnyoen = 4. Eleven participants were Christians (M = 6, F = 5): Catholic = 3; Protestant = 2; Evangelical = 4; Baptist = 1; Independent = 1. Two participants were from Shinto (M = 1, F = 1): Jinja Shinto = 1; Kyouha Shinto = 1.

Their religious backgrounds vary. Parents of 12 participants ran churches (Christian church = 2; Shinto church = 1), temple (Buddhist = 8) or shrine (Shinto = 1). Among these 12, ten took over the church/temple/shrine. Nine participants were from a religious family (Buddhism = 4; Christianity = 5; Shinto = 1), and two of them chose a different religion from their parents (from Buddhism to Christianity = 1, from a Buddhist school to a different Buddhist school = 1). One participant, who was a Christian, had a Christian father and a non-religious mother. Five participants were from a non-religious family (Christian = 3, Buddhist = 2).

Seventeen participants started working in the damaged areas within six months after the 2011 disaster, and ten participants started working later than six months from the disaster. Eleven participants worked/were working as a coordinator/chief/leader within their religious help organization. Their activities differed. During the acute phase, nine participants worked in the damaged areas, and most of them delivered relief supplies to evacuation shelters and cleaned up rubble. In this phase, two Buddhist participants worked on conducting rituals and ceremonies for the deceased, such as funerals, chanting a sutra, and co-memorial ceremony. After the acute phase passed, their work shifted to reconstruction help in a local industry such as the fishery or agriculture and organizing events and meeting places at temporary housing, such as a teatime party, café, karaoke event, or handicraft circle. Teatime parties and café are the most popular activities among the participants, and 25 of them engaged in these activities to some degree. Such parties and cafés were also places where the participants conducted *kokoro no kea* 心のケア [mental health care or care for the heart] activities including active listenings or health counselings. It was also conducted via telephone counseling or door-to-door visits. Twenty-six participants engaged or were engaging in *kokoro no kea* to some degree. A majority of the participants were working without any intention of working as a missionary and in either an interfaith or non-religious context, for example, working with workers from other religious or non-religious organization. Six Christian participants' accounts implied that evangelism was not the primary but somewhat important aim for their help work. Five participants conducted or were doing door-to-door visits for those who did not want to or could not participate in such events and social activities. Especially Christian help workers and organizations also worked or were working to take care of children living in temporary housing. Three participants were providing after-school activities, three participants were helping

with homework, four participants were providing kids with English classes, and 11 participants were working to provide fun events for children.

Table 1

Demographics and Background Information of participants (N = 27)

	Age	Sex	Religious affiliation and title	Place (where the disaster occurred)
1	40+	M	Buddhist, vice chief priest	Miyagi Prefecture
2	30+	M	Protestant, pastor	Tokyo
3	40+	F	Protestant (Evangelical), pastor	Kagawa Prefecture
4	70+	M	Protestant (Independent), vicar	Miyagi prefecture
5	30+	F	Protestant (Evangelical), layperson	Tokyo
6	60+	M	Protestant (Evangelical), pastor	Tokyo
7	20+	M	Catholic, layperson	Niigata Prefecture
8	40+	F	Catholic, layperson	Iwate Prefecture
9	50+	F	Catholic, layperson, ex. nun	Iwate Prefecture
10	30+	M	Buddhist, priest, researcher	Kyoto Prefecture
11	40+	M	Buddhist, vice chief priest	Miyagi Prefecture
12	60+	M	Buddhist, chief priest	Miyagi Prefecture
13	30+	F	Buddhist, vice chief priest	Miyagi Prefecture
14	50+	M	Buddhist (New religion), priest	Fukushima Prefecture
15	40+	M	Buddhist (New religion), priest	Tokyo
16	30+	M	Protestant (Evangelical), vicar	Miyagi prefecture
17	50+	F	Shintoist, chief priest	Akita Prefecture
18	30+	M	Protestant, pastor	Tokyo
19	30+	M	Buddhist, chief priest	Kyoto Prefecture
20	30+	M	Buddhist, vice chief priest	Tokyo
21	70+	M	Buddhist, chief priest	Miyagi Prefecture
22	30+	F	Protestant (Evangelical), layperson	Miyagi Prefecture
23	40+	M	New religious Shintoist, vice chief priest	Tokyo
24	50+	M	Buddhist, chief priest	Miyagi Prefecture
25	50+	M	Buddhist (New religion), priest	Tokyo
26	60+	M	Buddhist (New religion), priest	Singapore
27	30+	F	Buddhist, chief priest	Saitama Prefecture

5.2. Results from the semi-structured interviews: Psycho-social factors from the ADAPT model

In the following section, I will present the results of the 27 semi-structured interviews. The central categories were five taken from theory on existential meaning and meaning-making and the ADAPT model with existential

meaning in the center. These five central categories were as follows: safety/security, bonds/networks, justice, roles and identities, and existential meaning and meaning-making.

5.2.1. Safety/Security

Safety/security is, in the ADAPT model, essential for recovery, and a prolonged lack of safety/security may lead to mental, physical, and consequently psychosocial impairment. Here, safety/security refers to a condition in which people have no acute life-threatening issues. It also refers to a place in which people can have a steady life and establish a routine life, thereby people feel safe psychologically and emotionally. Through participants' accounts, one central theme regarding safety/security was found- safe place.

5.2.1.1. Survivors and damaged areas

A safe place referred to a place where survivors have no acute and direct life-threatening issues. Immediately after the earthquake and tsunami, survivors in the hard-hit disaster areas secured physical safety by evacuating to shelters set up in a school, a community center, or a temple. In some cases, survivors lived in such evacuation shelters for more than three months. Survivors who had lost places to live due to the 2011 disaster moved first to an evacuation shelter, then to temporary housing, and further to reconstruction housing if it was available. Many people in the hard-hit earthquake and tsunami areas in Miyagi and Iwate prefectures still lacked their own houses, but many of them at least had a place to live such as temporary housing or reconstruction housing.

On the other hand, the situation was different in Fukushima prefecture because of the nuclear disaster. After the series of nuclear accidents broke out, survivors in the affected areas near the Fukushima nuclear plant were forced to evacuate to a shelter. Some survivors evacuated to outside of Fukushima prefecture after struggling and consideration because of fear of the radiation. Others decided not to evacuate. One participant, who was also a survivor, described the situation:

> Even if we decided to evacuate, we didn't know whether we were safe in that area. At the same time, we at least had a roof keeping us from rain and wind, but if we evacuated how secure could we be? There was such a risk. Then, where could we go? There was such a dilemma, too. Besides, all my family, siblings, and relatives were here. How many of them could we take with us? It was like that. Some of them were old, too. So, the situation was that we had to decide for the evacuation by ourselves … My family decided to stay here but my elder sister's family, five persons, evacuated to Niigata prefecture (P14, p. 2).

A majority of survivors in the hard-hit disaster areas had already secured physical safety at the time of the interviews. However, having physical safety did

not necessarily mean that they had a psychologically and emotionally safe place. At the time of the interviews, many survivors who lost their place to live due to the disaster were still living in temporary housing. Many of them evacuated first to a shelter, and some of them had to live there for several months. Evacuation shelters were often set up in local schools or community centers, and each survivor had only a small living space where there were partitions made of cardboard, which meant that there was no privacy at all. Therefore, temporary housing was considered a safe place by those who had lived in an evacuation shelter for several months because they could have a certain level of privacy and space, unlike an evacuation shelter, "even though walls of temporary housings were thin" (P5, p. 2). However, for most of the survivors who were still living in temporary housings, it still lacked privacy and a proper living space. Some participants' accounts indicated that having privacy in temporary housings was difficult and that the lack of privacy could have caused stress:

> Since the temporary housing is a tenement house, it seems that there is no privacy. So, people can get to know easily, for example, the neighborhood's lifestyle, family composition, and friendship information … when someone comes back by car during my visit, he or she lets me know what kind of hospital the person is visiting, I mean, which dentist and dermatologist, I mean, everything. They know the circumstances of their neighbors' sons and daughters, sometimes even about neighbors' cousins and their boyfriends. It's like everyone knows such family circumstances and many people get tired of it (P5, p. 2).

> It might be difficult if there is no proper space to some extent. Even if people live in temporary housing or reconstruction housing, even if they say that it is a castle for them, I think that they will be absolutely nuts by living in such narrowness. It is impossible to stay healthy here (P8, p. 5).

Many participants' accounts confirmed that many of the survivors who were still living in temporary housing had their own house before the disaster and that they had never lived in either a multi-family house or a tenement house. It suggested they were not used to living collectively in a small place without proper privacy, which could have caused stress:

> People had lived in a large house until now, they had never lived in a multi-family house, so it is hard to live in temporary housing. The life itself is stressful when people hear sounds from next doors (P14 p. 9).

The above accounts implied that a safe place should secure privacy and physical space so that they could have a stress-free, calm, and steadily life. At the same time, it differentiated among survivors in temporary housing according to whether they considered the lack of space in temporary housing cumbersome and stressful:

> I have known old women who feel they are locked in their room because temporary housings are too small. Meanwhile, I know old women who think it is convenient to live in temporary housing because everything is within their reach (P10, p. 5-6).

These accounts suggested that views about a safe place differed among survivors in temporary housing and that temporary housing could be a safe place for some survivors despite the lack of privacy and space, which implied that privacy and space are not the only prerequisites for a safe place.

Also, having good bonds/networks indicated the existence of an emotionally safe place where survivors could cope with their disaster experiences by opening up and talking with each other about the crisis at, for example, a weekly or monthly tea party in the temporary housing's meeting room.

At the same time, participants' accounts implied that there were still many survivors who lacked such an emotionally safe place. It even applied to those who had the closest interpersonal bonds, that is, family:

> She said, while crying, that her daughter knew her situation, but if she told her about it, she would cry so she could not tell her. She told her husband a lot about her condition and relied on him too much. He also broke down, which she believed was her fault (P5, p. 4).

> When I went to temporary housing, there was a resident who kept talking about March 11th. I wondered why. That person had not talked to anyone since the person came to Sendai. The person said that it was meaningless to talk to people who had not experienced the tsunami because they did not understand. The person couldn't tell the person's son about the same stories many times, again and again, even though he was the person's own family (P24, p. 3).

The above citations about survivors in the damaged areas indicated that there were survivors who did not have an emotionally safe place either at home or within a family. It was also found that such a lack of a safe place where survivors could open up themselves and talk about their disaster experiences candidly and safely related to some mental issues such as depression or suicidal thoughts.

Participants' accounts showed that a safe place for survivors also referred to a place where survivors had a good relationship with neighbors and networks and where survivors could open up themselves and talk about their disaster experience and problems with people around them. For example:

> It can be a living environment, in which you can be relaxed, or a good human relation, in which you can feel relieved by talking with people… I think it's something that makes you realize that you are living in relationship with others … Well, when it comes to mental health, I think that it is important to have persons whom you can talk to honestly, and a place where you can talk to others honestly (P10, p. 7).

In some cities and towns, reconstruction housing where survivors could have decent living space and privacy was already available. However, it appeared to be that reconstruction housing was not considered a safe place for those who lived alone in general and the elderly in particular:

> They are saying, "In temporary housing, I can just open a door of a neighbor's house and say 'Hey!' then everyone comes out, but if I move to reconstruction housing, it wouldn't be like now" (P17, p. 7).

> I know there have already been some cases of isolated death in the reconstruction housing… for example, among elderly living alone, there are people who think it was better to live in temporary prefabricated housing. Well, the walls of the temporary housing are thin both in a good and bad way, so people can see people coming and going. Well, it is hard to protect privacy, but at the same time people can build a network where they can support each other well, I mean a good support network (P2, pp. 5-6).

The above citations showed that, regardless of whether there were privacy and space or not, a safe place could be a place where survivors could feel safe through a good relationship with neighbors and networks with others.

Religious symbols and rituals could provide survivors with a safe place where they could have time for reflection and peace of mind and thereby could open up themselves. Chanting sutra and prayers or hearing them chanted were rituals that could have provided such a safe place:

> I do not know exactly how they look and what they are doing behind me (during chanting sutras), but after all, in a busy life, they close their eyes and sit silently for the time being. I think that I may be able to provide a slow time to think and reflect or something like that … so I guess I am providing a place to relax even just for about 5 minutes, even during a busy hour … After that, they often open their mouth and wonder if their deceased had attained nirvana or rest in peace. Many of them also start to open up themselves like, "I have had an experience like…" or "I have been suffering from this or that" (P10, p. 7).

Because prayers might have provided a safe place for reflection and soothing the mind, religious places and symbols—*kamidana* 神棚 [Shinto altar], *butsudan* 仏壇 [Buddhist altar], or *ihai* 位牌 [Buddhist ancestral tablet] that usually is placed in a *butsudan* and similar furnishings in front of which survivors could pray—could have been a *safe place*, especially for those who were accustomed to praying regularly:

> Until the tsunami came, every morning they had prayed at the Buddhist and Shinto altar, but after the tsunami, the altars and such time for prayers had lost. So, they were feeling that they were living something unordinary. However, if they have an altar, their heart will settle down, because you can pray even for a few seconds of the day. Therefore, they thanked me for the altars (P17, p. 3).

In summary, through participants' accounts, one central theme regarding safety/security was found— safe place. It had four dimensions: 1) physical, 2) psychological and emotional, 3) relational and social, and 4) existential. Even though physical safety was secured for most of the survivors in the damaged areas, it did not necessarily mean that they had a safe place. The results showed that a safe place often meant a place where they could have privacy and enough space to create a stress-free and calm life. The results also indicated that a safe place referred to a place where they had a good relationship with neighbors and community, where they could open up themselves and share their experiences safely, and where they could have time for reflection and peace of mind and thereby could open up themselves. However, the results showed that such a safe place was still lacking in many damaged areas and that the lack of such a safe place could cause different mental issues including depression or suicidal thoughts.

5.2.1.2. Participants from different religious organizations

None of the participants was exposed to a severe life threat with regard to the 2011 disaster. Although several participants experienced heavy or milder damages on their house, temple, or shrine by the earthquake and tsunami, they secured physical safety immediately after the disaster occurred by evacuating to a shelter or a relatives' house. At the time of the interviews, most of the participants had their own house or apartment, and none of them lived either in temporary housing or reconstruction housing.

The results showed that a safe place referred to a place where the participants could feel safe emotionally and psychologically when they faced difficulties or felt stress with regard to their help work. For the participants, such a safe place was not necessarily tangible. For example, prayers created a psychologically and emotionally safe place for the Christian participants where they could meet and consult with God about their problems and difficulties. For the Buddhists participants, the main hall of a Buddhist temple and in front of Buddhist alter were most recognized as such a psychologically and emotionally safe place where they could feel safe emotionally and psychologically:

> When I listen to such painful, heavy stories, I go to the main hall in our temple, light candles, and leave every single sad and terrible story to Buddha. I am working with such feelings (P11, p. 3).

> I always go to the main hall of my temple when I come home because I want to give their feelings to Buddha (P27, p. 6).

A safe place also meant a specific time or place when and where they could be alone and be free from their help and relief activities through just having a day off or even a short time. Taking a day off or resting seemed to be crucial

for workers in religious help organizations to maintain their mental health and well-being and keep on working in the damaged areas:

> After all, I know well, because I've studied about it, that supporters often burn out, in short, I can't support others if I can't protect myself and keep my condition well, so I'm always telling about it to our staff and trying to make them retreat or take some rest occasionally … There's no one but I, who can manage myself. About our staff, I can monitor them and tell them to take a day off (P6, p. 9).

> Well, of course I feel that my feeling is drugged down when I'm listening to their hard experiences. After all, if I take them all, take everything in me, and keep everything in me, I will be depressed … Well, I can't forget them, but well, I try to refresh myself on holidays (P7, p. 4).

> I'm a kind of person who can dissipate stress somehow and somewhere. Nevertheless, there was a difficult time after all, and I had to take a break for two months … I did it for myself so as not to be broken (P9, p. 3).

> It is important to have my own time because I am an introverted person … Everyone can burnout. Here, our staffs get burnout in turns, so I try not to schedule too many events and try to take a rest when I can (P22, p. 5).

> It is not weird to get tired (laughter). It is like I try to soothe my mind on the way home from the activity in I-City in my car. From everyday life to unordinary life and then back to everyday life. So I try to change mind shifts (P24, pp. 3-4).

The above citations also indicated that such a safe place or time could help them maintain their mental health and well-being.

A safe place for the participants also referred to a place where they could share their problems and difficulties regarding their help work in relationship with co-workers or family:

> After all, if I take them all, take everything in me, and keep everything in me, I will be depressed. So I try to have some time to be with other workers and share with others by reporting what had happened (P7, p. 4).

> Well, I sometimes feel that I can't take them anymore, I mean, some stories. I have experienced that I felt they were too dangerous to listen to. At such time, I asked other staff to help me so that I could retreat (P8, p. 3).

> Well, hmm, that kind of … what is that … (long silence). In the end, it is good to talk with someone who has the same goal. Because it is not an activity that is done by one person. The point that we work as a pair is to prevent having such a problem beforehand … how many tough stories we hear, we take them back with us, look back and talk to each other, and discuss whether we worked appropriately. Even though, sometimes, we are like, "You started crying, did

you?" We discuss and analyze such a situation as a working pair so that we can solve the problem together (P10, p. 5).

I have never gotten ill because of listening to survivors. It was rather, human relationship with our staff (laughter) … I talked to core members, often my boss or the staff together with the boss (P22, pp. 4-5).

Participants who were interfaith chaplains belonged to an interfaith chaplaincy association which also could provide a safe place where they could share and discuss difficulties and heavy and depressive feelings regarding their activities:

I often feel I can't take their stories in me, I mean, I just lose a word … I have a place to look back on such experiences like among the interfaith chaplain colleagues (P13, p. 2).

Participants who were working in cities or towns where local governments were organizing cooperative councils between the municipality, faith-based help workers' organizations, and non-religious help workers' organizations, such councils' meetings also functioned as a safe place they could turn to when facing problems and difficulties regarding their help work:

At the meeting organized by the Social Welfare Council, we can report and inform each other about people we talked to over tea. Officers come from the Social Welfare Councils, people from COOP, and various people to the monthly meeting, and we discuss what we should do for people with problems, for example, whether we should ask nurses in the Public Health Center to see them, whether we should contact the police office or clinicians (P6, p. 3).

A lack of such a relational safe place with co-workers could be a risk factor for health and well-being issues:

I have never got ill because of listening to survivors. It was rather, human relationship with our staff (laughter)… because of being too busy or human relationship issue with our staff (P22, p. 5).

However, relationships with local people who were not related to the help and relief activities seemed to help the participants provide a place to be relaxed, which also resulted in subjective feeling good:

Basically, I have had considerable stress. I've used my energy more for the internal human relations rather than for survivors' support. It has been very stressful. My physical condition has not been good. My mental condition has not been good, either. I think it is really important to have a place where I can spit my feeling out. There is a pub nearby, where there are young people who are not related to our activities, so I'm trying to keep the balance there (P18, p. 2).

Also, a family seemed to play an important role in providing a relational and social safe place for the participants:

> It is difficult for my organization to understand what I'm doing, but luckily, my family is understanding (P10, p. 8).

> Yeah, there were times when I thought that I would not make it, but I had my family, so I was pretty sure that my family could help me, for them it could have been hard (laugh). Thanks to them, I can switch on and off (P2, p. 4).

A safe place also referred to a place where the participants could feel safe emotionally and psychologically on an existential level, especially when they faced difficulties or felt stress with regard to their help work. As already presented, the main hall of a Buddhist temple or in front of Buddhist alter were safe places for many Buddhist participants, a place where they could deal with the heavy feeling they experienced from meeting with survivors. In other words, such places were existential safe places for them where they could feel safe emotionally and psychologically in a personal relationship with God or Buddha or gods or goddesses:

> It is really important to give such difficulties to Buddha or God. By doing this, I can keep my balance and take care of sorrows and griefs of others (P11, p. 3).

> So, even if I hear a painful story, I say to myself, "Good!" Because I came here, the person in front of me could talk about his or her painful feeling. Then, I can bring them to Buddha (P27, p. 6).

Rituals and practices also provided the participants with an existential safe place. For the Christian participants, it was time for prayers through which they could have a personal relationship and dialogue with God. For some Christian participants, prayers provided them a safe place where they could deal with their difficulties regarding their activities and reflect on their activities and thoughts to deal with their feelings. One Christian participant explained how she dealt with a relational problem in her organization:

> To have time alone with God and then talk to Him. So, it is really important for me to have time for prayers (P22, p. 5).

For the Buddhist participants, it was chanting mantras or a silent and meditational moment in front of an altar through which they could hand to Buddha what they got from survivors:

> Well, their stories themselves are hard to listen to, but to be with such people is tough. When I face such a situation, I defend myself by reading and chanting sutras. Such techniques are properly conveyed in Buddhism, so I feel I'm saved (P19, p. 3).

In brief, a safe place more likely meant a place where the participants could feel safe in a personal relationship with God/Buddha/gods and goddesses, and where they could share their problems and difficulties regarding their help work. A safe place also referred to a place where participants could feel safe and deal with difficulties or stress regarding their activities on an existential level. The main hall of a Buddhist temple or in front of a Buddhist alter were safe places for many Buddhist participants where, in a personal relationship with Buddha, they could deal with the heavy feeling they got from meeting with survivors. Further, for the participants, such a safe place was not necessarily tangible. Rituals and practices such as prayers for Christian participants or chanting mantras for Buddhist participants could also provide them with an existential safe place.

5.2.2. Bonds/Networks

In the ADAPT model, the domain bonds/networks refers to a relational attachment or bonding such as family, kinships, friends, neighbors, and local communities as well as a connection with the land and ancestors, which are disrupted by major life-threatening catastrophes. Failure to restore such bonds/networks can prevent survivors and the community from recovering from emotional or mental disorders caused by the loss of such bonds. Through the participants' accounts, two themes regarding bonds/networks were found—family/family member(s), and neighbors and community.

5.2.2.1. Survivors and damaged areas

Family/Family Member(s)

In the disaster-affected areas in general, the hard-hit tsunami areas in particular, many people lost their significant other(s) such as family member(s), relatives or close friends. The situation was that "almost everyone lost someone" (P6, p. 2). Among such a loss of significant other(s), loss of family member(s) was identified as the most significant loss that had an impact on survivors' mental and social condition. There was a difference in response to the disaster and in the grief process between those who lost a family member(s) and those who had not. It was found that those whose family member(s) were safe recovered quickly and worked well with grief, even though they lost their house. Among those who lost a family member(s), on the other hand, the process of grief seemed to be prolonged, and some mental issues were identified as a response to the loss. In other words, it was indicated that the loss of a family member(s) caused distress including suicidal thoughts. Some of them had such distress soon after the 2011 disaster:

> Well, in this neighborhood, there was a woman who lost her son. After the disaster, she was walking around here and often thinking about committing

suicide … her husband was working at that time, but she could not even cook any longer. She was in such a situation (P4, p. 9).

A person who lost his father and mother due to the disaster became desperate, became really crazy, he was like taking kerosene with him to the city office and was about setting himself afire,. Anyway, he seemed to be like that anyway. He became crazy (P16, p. 5).

Others had distress even several years after the disaster:

I know an old woman whose husband was washed away by the tsunami, and she often says, "I want to die" (P5, p. 4).

Along with the loss of family member(s), lack of family and living alone was also identified as one of the factors that could cause mental issues:

Everyone, when you go to temporary housings, you'll see they are doing fine, but sometimes, they drop their loneliness with words. Especially those who are living alone. There are people who are depressed (P2, p. 4).

Further, a reference to ancestors often referred to family ancestors in Japan. In this sense, many survivors in the hard-hit disaster areas experienced loss of ancestors symbolically through a loss of family graves, the land passed from generation to generation, or *ihai* 位牌 [Buddhist ancestral tablet]. However, there seemed to be no specific indication that such a loss caused some serious distress among the survivors, although some of them experienced chagrin and being discouraged:

Because they lost or left *ihai* as well as *kamidana* 神棚 [Shinto shrine altar], and there were a lot of people who were a bit discouraged about that (P17, p. 3-4).

In short, the loss of family including ancestral family and the lack of a familial relationship seemed to affect survivors' mental health and well-being.

Neighbors and community

Participants' accounts suggested that neighbors of survivors referred to an interpersonal bond through which they created a community. It meant that a community consisted of a band of neighborhood relationships among people in the damaged areas. Due to the 2011 disaster, many survivors in the hard-hit disaster areas were forced to move into temporary housing and later reconstruction housing or a new house that they built. In most temporary housing and reconstruction housing, survivors were from different areas, and it was seldom that people from the same area moved there together. This suggested that most survivors who lost their place to live due to the disaster also lost their relationship with neighbors. Thus, they also lost the community that they

had before the disaster, although there seemed to be a difference between cities and rural areas. Survivors in cities tended to have a shallow relationship with neighbors even before the 2011 disaster, while survivors in rural towns or villages had both a close relationship with then neighbors and a small but intimate community.

Participants' accounts indicated that recreating or repairing the lost relationship with neighbors and community was an ongoing task for some survivors and that this was a significantly hard task for several reasons. First, the loss of a relationship with neighbors and community happened several times in the 2011 disaster-affected areas:

> Our community has been destroyed three times. First because of the disaster. The second time was when we moved from evacuation shelters to temporary housing. Then now, the third time, to move from temporary housing, where we had constructed networks" (P2, p. 6).

Repeating loss of neighborhood and community, which was one of the characteristic impacts of the 2011 disaster, meant that survivors were forced to go through processes of rebuilding a new neighborhood and community, which itself was a significantly hard task for survivors who had already lost many things they needed to repair and rebuild.

Second, creating a new neighborhood and community was a challenging task not only for survivors who lost a place to live due to the 2011 disaster but also for people who had lived in areas where the survivors moved in. Participants' accounts showed that it was difficult to create a new community by establishing good neighborhood relations between survivors and non-survivors. Economic and material support for survivors could be a hindrance:

> Relief supplies had come to temporary housing, but the [local] residents were not victims even they were in disaster-affected areas, so they got neither support money nor donation money nor supplies. There was an incredible gap between them, so there were troubles and so on, such as jealousy and envy among them (P23, p. 5).

Also, differences of rules for everyday life between them, for example, how to separate garbage, could also hinder community building.

Third, in the hard-hit disaster areas, there were economic and material issues among survivors, which divided survivors and made it challenging to create a neighborhood relationship and thereby a community. In this context, economic and material issues mattered again, for example, how much support money each survivor got from the Japanese national government or local municipality:

> There are also various kinds of delineations that districts cannot harmonize, even between areas and between generations, there are issues such as money

due to various draws, and when money and so on are involved, well, people don't greet each other any longer, even though they had a good relationship before (P14, p. 5).

It also mattered whether they had lost their own house or not:

> The community was torn apart by those whose houses survived. It was like a clear line … your house was totally fine, or totally destroyed and almost nothing in between … So, suddenly, the community you have known for 70 years was suddenly just ripped in half and then people were put together, sometimes within the same group, sometimes random, so… in evacuation shelters, they had to make a new community both with the survivors and with the surrounding bigger neighborhood (P3, p. 5-6).

Alternatively, it mattered whether they could have their own house or not:

> They have been friends in temporary housing for many years, when one of them left there in order to move in a house that her son built in the neighborhood of the temporary housing, then she visited the temporary housing, and nobody talked to her (P5, p.3).

On an individual level, participants' accounts implied that the lack of relationship with neighbors related to the manifestation of psychological disorders such as alcohol abuse or withdrawal:

> There are quite many who stay at home and don't have any connection or neighborhood relationship, what do you say, if people close themselves inside, they drink a lot, or staying at home and doing nothing, or playing pachinko or something like that (P11, p. 4).

Also, failure to create a relationship with new neighbors could also affect survivors' well-being both psychologically and socially in a negative manner:

> There was a person who moved into temporary housing due to the disaster. The person could not get along with neighbors, who also moved into the temporary housing because of the disaster, and felt like depression (P1, p. 7).

> Some people say that "human relationships in temporary housings are too difficult, so I want to die" (I5, p. 4).

Another notable finding concerning neighbors and community was that there was a gender difference when it came to creating a new relationship with neighbors and the community. Generally, female survivors appeared to establish such bonds and networks easier than men. Many female survivors in temporary housing took part in events or tea parties, while male survivors hardly joined:

> Well, even at a teatime event at temporary housing, many women come but no men (P4, p. 11).

> I went to meeting places in temporary housing's areas. Usually, there were around 40 people there. I took a look carefully and realized that most of the people who came to the meeting places were women. Overwhelmingly, only women who were between 50 about 70 years old … Meanwhile, outside of the meetinghouses, there were a few men, about 10 men, reading newspapers or talking with each other. So I went out and talked to them, like, "Why don't you come inside?" Then they said, "No! I don't want to. That's a place for women!" (P10, p. 3).

As already shown, the lack of relationships with neighbors could negatively affect survivors' condition both mentally and socially. This applied especially to men who lived alone:

> They won't talk to neighbors, they won't come to events and meetings where women take initiatives, so what men do is like watching TV all day or drinking alcohol all day (P5, p. 3).

In short, through the participants' accounts, two themes regarding bonds/networks were found—Family/family member(s), and Neighbors and Community.

In the hard-hit disaster areas, the loss of a family/family member(s) was apparent, which might have caused distress such as suicidal thoughts or depression. The lack of family and living alone also seemed to be a factor that caused distress.

In these areas, loss of ritual spaces for reconnection to the deceased or the family ancestors was observed. The loss of ritual spaces referred to loss of a place or a thing through which people could contact the dead or family ancestors, such as, *kamidana* 神棚 [Shinto altar], *butsudan* 仏壇 [Buddhist altar], *ihai* 位牌 [Buddhist ancestral tablet], or *ohaka* お墓 [family grave]. However, there was no discussion of a specific connection to mental distress directly relating to the ritual places.

The results indicated that many survivors in the hard-hit disaster areas lost their relationship with neighbors and community that they had before the 2011 disaster. Repairing such a loss of neighborhood relations and community was an ongoing task in the damaged areas. However, it was a hard task to complete because of repeated displacement and relocation. The complicated relationship between survivors and non-survivors seemed to hinder the reconstruction of the neighborhood relations. An economic gap among survivors also seemed to make it difficult for them to recreate a functioning community.

Furthermore, the lack of neighborhood relations and community was identified as a risk factor for having or developing some mental issues such as depression or alcohol abuse. It appeared that many female survivors could manage to create a new neighbor and thereby community. On the other hand,

it seemed that many male survivors had difficulty making such a relationship. Furthermore, even though at the time of the interviews more than four years had passed since the 2011 disaster, it appeared that repairing the lost neighborhood relations and communities remained a problem that the damaged areas had not yet solved.

5.2.2.2. Participants from different religious organizations

Family/Family Member(s)

None of the participants lost their family in the 2011 disaster. There was no implication that they had issues with their family. For the participants, family referred to a significant other who helped them in decision-making regarding their help activities. One participant hesitated regarding whether to engage in help activities when he was asked by his church's help organization:

> I considered and considered because I had a plan to be a pastor in an orthodox meaning, but in the end, I made up my mind thanks to my wife who said to me that God was calling me for it (P2, p. 3).

Another participant hesitated to inform his wife of his wish to work in the damaged areas because he thought she would disagree with his plan:

> I thought she would say, "You are just excited and influenced by TV news." Therefore I couldn't tell her what I would like to do for a long time. At last, I told her what I thought, and she said she also experienced that God led her. Then my wife said to me that she would move here with me (P6, p. 2).

The family also referred to a significant other to whom they could turn when they experienced stress or difficulties regarding help work. One participant who had been stationed in a city in the damaged areas away from his family stressed that he went to his family so as not to burn out. Another participant experienced trouble among volunteer workers in his organization, which left him exhausted:

> Yeah, there were times when I thought that I would not make it, but I had my family, so I was pretty sure that my family could help me, for them it could have been hard (laugh). Thanks to them, I can switch on and off (P2, p. 4).

In brief, unlike many survivors in the damaged areas, none of the participants experienced the loss of family or family members. Their family played a significant role in their well-being so that they could engage in and continue performing their help activities.

Neighbors and community

As was the case with survivors, neighbors of participants referred to an interpersonal bond in a local community. In that sense, unlike many survivors in

the damaged areas, loss of neighbors and community had not been experienced by a majority of participants because most of them were either from other prefectures than the three most damaged prefectures, or from mildly affected areas in the three most affected prefectures. A few participants, who were from the hard-hit disaster areas or who had experienced the 2011 disaster in such areas lost neighbors and members in their community, but unlike some survivors, none of them showed a presence of distress.

Participants' accounts showed that for them community referred to a societal bundle of human relations that promote survivors' health and recovery. From their point of view, community was essential for human beings in general, survivors in particular because:

> People can't live without communities after all, or if I say more exactly, there is a merit to live as a collective to maintain well-being as well as physical health because they cannot exist separately. Even if people live in pain and trouble, they can somehow get through the situation if they are connected to each other and can help each other, so I think we have to keep such connection among us (P1, p. 7).

> After all, human beings are social, and therefore, I think that it is impossible to be healthy by living alone. Unhealthy means, according to me, that people are lacking such a close relationship with significant others and society, which can lead to physical problems. However, if they can change this situation, they can gain physical strength and their faces shine. In the end, I think, relational status can tell whether a person feels good and healthy (P6, p. 4).

> Forming a new community and finding your place within that … is very important … Or those that don't … it's very *tsurai* (hard) … The ones that struggle the most now are the ones who are not … who are bullied or have *ningen kankei* (relational) problems … But the people who have found a place in the community seem to be recovering (P3, p. 6).

For participants, community also referred to groups and/or networks of help workers, which include not only faith- or religion-based groups such as a religious organization and religious help organizations, but also inter-religious and secular help worker groups and networks. Participants' accounts showed that a group of religious help workers was a useful and available resource for their help activities. For Christian participants, such a religious community was not geographically restricted within an area where they were working but rather a wide and loose network based on Christian faith, which provided them with relief supplies, donations for relief activities, or volunteer workers. Such a religious community in general and a faith-based help organization in particular was also a place participants turned to especially when they had difficulties or problems in relation to their help activities. For example, a community in which participants could share feelings with co-workers regardless of

whether they were secular or religious, whether they shared the same or another faith or religion, was identified as a factor that prevented them from being distressed because of their activities or, more concretely, their listening activities:

> Well, of course I feel that my feeling is drugged down while I'm listening to their hard experiences. After all, if I take it all, take everything in me and keep them in me, I myself would be depressed. So, I try to have some time to be with other workers and share with others by reporting what had happened (P7, p. 4).

> In the end, it is good to talk with someone who has the same goal. Because it is not an activity that is done by one person. The point that we work as a pair is to prevent us from having such a problem beforehand … how many heavy stories we have heard, taken back from them to us, looked back and talked to one another, and discussed whether we worked in an appropriate manner … Well, fortunately, I feel I am stable. I think that most of times I felt very well; of course, I don't know what it will be in the future (P10, p.5).

In sum, a majority of participants had not experienced loss of neighbors and community except a few participants who were from the hard-hit disaster areas or who had experienced the 2011 disaster in those areas. For many participants, community referred to a societal bundle of human relations that promote their health and recovery, and groups and/or networks of help workers, which was a useful and available resource for their help activities.

5.2.3. Justice

Since the ADAPT model was formed with regard to a mass conflict context such as civil wars or regional armed conflicts, justice in the ADAPT model refers to mitigation of a sense of injustice and forging transitional justice. Here, in the post-2011 disaster context, justice refers to how survivors and participants experienced the violation or security of their rights and dignity. Hence, two central themes regarding justice were found: sense of justice, and existential justice.

5.2.3.1. Survivors and damaged areas

Sense of Justice

Sense of justice in the damaged areas referred to, first and foremost, how survivors experienced their rights and dignity secured and respected by government and administrations. Participants' accounts showed that such a sense of justice related to good governance including administrative policy and measures for reconstruction and recovery provided by the government or local governments and administrations. It was found that a lack of good governance related to survivors' sense of injustice and unfairness. In the damaged areas, a

lack of a good governance referred to a lack of survivors' self-determination in policy-making for reconstruction planning in general, relocation, and town planning in particular. Survivors were often excluded from decision-making in relocation planning by local governments. They often were not allowed to decide by themselves where to live, and their wish to live together in a pre-existing neighborhood would not be considered by local governments.

> First of all, people can't move in as a unit like a village or district. People moved into temporary housing selected by lottery. Basically, it is not possible for them to choose where to live (P5, p. 2).

> Citizens in this area have worked hard on reconstruction, but it had not worked well with the city and prefecture's municipality. People understand that the municipality would like to work so that a tsunami would never affect here, but for the locals who had lived with the sea, they want to live in a place where they can see the sea, and they think they can't live without seeing the sea, and in addition, they have to think of tourism (P23, p. 4-5).

Such governmental or local administrative lack of respect and consideration for the needs and wishes of people in the damaged areas regarding policy and decision-making for reconstruction related to a sense of injustice that was expressed in the form of frustration with and distrust of the administrations. One participant, who was also a survivor, showed her frustration toward the local administration:

> Our community asked the local municipality to allow us to move into an area together and we actually found an area, but they said they wanted us to move into areas they had prepared for survivors, but we insisted that we didn't want to live separately. Then they said that they would listen to us if we could gather 50 families. So we gathered 50 families, but they kept telling us "just wait," and we waited and waited, but at last they rejected our wish … Although our town was shed by the tsunami, I think we could have rebuilt 50% of our community if we were allowed to do it, but we were told by the town administration, "You must not rebuild your houses in the area." So, I think it is not the tsunami but the administration that took the community from us (P17, p. 5-6).

Another sense of injustice that several participants confirmed regarding government spending among survivors in the damaged areas had to do with the Olympic games. Because the 2020 summer Olympic games will be held in Tokyo, resources including mainly human resources had been used for the Olympics. This slowed reconstruction work, such as building reconstruction housing. In several towns and cities in the damaged areas, the time limit for building reconstruction housing was extended to 2019, eight years after the disaster, which meant that survivors still living in temporary housing would remain there a few more years:

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It is necessary to bring materials to build reconstruction housing, but the construction of roads to transport such materials has not been planned yet, and besides, there are also shortages of materials and human resources because of the Olympic games. While they are waiting for reconstruction housing, people living in temporary housing are getting older and older. I heard them say, "Three more years to move in? I don't know whether I can make it. Maybe I can't get out of here." Others say, "I don't care if I can move out from here or not any longer. I'm OK with it because I've gotten close to my neighbors here" (P23, pp. 4-5).

The sense of injustice regarding governmental rescue activities was also identified especially among the survivors who experienced the Fukushima nuclear disaster. One participant, who was a volunteer worker in a religious organization and also a survivor, said:

The water supply car of the Self-Defense Force came to a park nearby. Well, I don't mean to blame them, but SDF officers and workers were putting on protective masks and wears. I know it was an order, I think it was an instruction from the top, but they were putting on the masks while residents were standing in a queue to get water without a mask … We stood in a queue for a long time to get water. For several hours. People couldn't leave their children alone, so, the children stood in the queue, too. Then, after a while, we got through a health survey and were asked where we were and how long we were outside when the nuclear accidents broke out. But we all were outside to get water! Well, we all, I mean, couldn't be calm (P14, pp. 3-4).

Sense of justice also related to economic opportunities including economic support. Not having economic opportunities or having a gap in economic opportunities among survivors or between survivors and non-survivors—which was also one of the consequences of a lack of decent and functioning governmental/administrative policy and measures—caused a sense of injustice in the damaged areas. Some examples involved compensation payment or subsidies for survivors from the government and the local governments and supplies and donations from supporters. It was implied that both severely and mildly affected survivors in the damaged areas perceived sense of injustice in relation to such economic opportunities. Such a sense of injustice was the source of troubled human relations or bad neighborhood relations:

When it comes to compensation money, how much money children can get depends of their age at the time of the disaster, whether they were over 18 years old or under, and those who were under 18 years old at that time can get five-times bigger amount of money than over 18 … My niece was just before having her 18th birthday when disaster occurred, but most of her friends were already 18, and they said to her, "You are lucky, I only get this much." … There are issues such as money due to various draws, and when money and so on are involved, well, people don't greet each other any longer, even though they had a good relationship before (I14, p. 5-6).

Relief supplies had come to temporary housing, but the residents were not victims even though they were in disaster-affected areas, so they didn't get either support money or donation money or supplies. There was an incredible gap between them, so there were troubles and so on, such as jealousy and envy among them. It is truly a mistake of the administration, and it is also be lack of consideration by supporters (P23, p. 5).

One participant explained that the economic injustice among the survivors was related to both physical and mental health issues. The participant gave the example of a married couple who ran a shop as self-employed before the disaster and whose shop and house were washed away by the tsunami:

Because they were self-employed, they couldn't join the reconstruction shops association. If they could have money to re-open their shop, they could start to rebuild their lives quickly, but they didn't have enough money. Therefore, it took awhile for them to re-start, which brought them to constant quarrels. They tried to convince themselves that they should not yield to the tsunami. However, the wife suffered from aches all over her body. She went to a clinic, but the doctor just said there was nothing wrong with her body. She was totally dependent on her husband. While the husband thought that he had to support her and run their business at the same time saying, "I am also really in pain to be honest" (P5, p. 4).

In short, a sense of justice for survivors in the damaged areas referred to how they experienced the security of and respect for their rights and dignity. Sense of injustice related to a lack of good governance provided by local governments including considerations for survivors' needs and wishes and their self-determination in policy-making for reconstruction planning. Such good governance was lacking in many cities and towns in the damaged areas. Lacking a decent and functioning governmental/administrative policy and measures to support survivors convincingly seemed to cause a sense of injustice in the damaged areas. Such a sense of injustice could cause stress, anger, somatic, and mental problems, according to participants' observations. A sense of justice also related to economic opportunities including economic support that survivors could have access to. Not having economic opportunities or enduring a gap in economic opportunities among survivors or between survivors and non-survivors related to sense of injustice in the damaged areas.

Existential Justice

Justice in the damaged areas also referred to how survivors experienced the security of and respect for their rights and dignity on an existential level. Putting it more concretely, it referred to the survivors' sense of justice regarding the transcendent, including God, Buddha, or gods in nature. In the hard-hit disaster areas where many people lost their lives, some survivors manifested their sense of injustice by questioning the existence of God, Buddha, or gods in nature:

> One day, when I visited one of the parishioners, his wife said to me while pointing to the shocking sight, "There is neither God nor Buddha in this world, don't you think?" (P17, p. 1).

Others felt indignation toward God that also implied their sense of injustice:

> People often asked me why God, who is supposed to help human beings, killed so many people (P23, p. 6).

Several participants' accounts indicated that many survivors who experienced such a sense of injustice and lost the faith they had before the disaster changed their faith:

> An elderly woman, she is 87 years old, she said, "I had a Shinto alter at home, and I had worshiped for decades, but it didn't help me at the time of the disaster, everyone who came to help me was from Christian churches, so I am going to change my God from now on" (P5, p. 6).

As the citations above have shown, in the hard-hit disaster areas, some survivors felt the disaster was unfair, which led them to question the existence of God, Buddha, or other transcendental beings, which led further to their loss of faith or conversion to another faith. Others experienced neither indignation toward God, Buddha or gods in nature nor loss of faith in God, Buddha, or gods in nature because they had not interpreted the disaster as a failure and injustice caused by such transcendent. For them, God, Buddha, or gods in nature had nothing to do with the disaster. From their perspective, those who blamed God, Buddha, or gods in nature had no faith in the first place. Results indicated no evidence that survivors who experienced this type of existential injustice impaired their health. At the same time, several participants' accounts implied that survivors who kept the same faith as before the 2011 disaster maintained good health despite their prolonged residence in temporary housing.

5.2.3.2. Participants from different religious organizations

Sense of Justice

A sense of justice for participants referred to whether they experienced their rights and dignity secured and protected or violated and limited by government and administrations in relation to their help activities. As was the case with survivors, it was also related to existential dimensions.

The participants' sense of injustice in relation to their help activities related to a lack of a functioning local administration with which religious help workers and organizations could work on behalf of survivors. Such a sense of injustice was expressed in the form of frustration or anger:

The local governments were just all saying, "Oh, we don't need anything," or "We can't use you," or "Go away!" And it's like when people still needed food and you had a trunkful and they were like "Oh, go to the next town!" (P3, p. 12).

I wonder what I could do seriously … and had a contact with our city's office to ask if there was anything I could do, but they said, "No, you don't have to do anything because there is an abundance of support supplies and too many human resources. There's nothing you can do even if you come here." They continued, "We can't take care of you. We don't need anything." But I thought, "What do you mean that you don't need me?" I thought, "What about my feelings? I'm seeing people suffering right here!" (P27, p. 4).

Some participants perceived that their right and wish to work for survivors were limited due to a principle of separation of government and religion in the Constitution of Japan or because they were religious workers:

Freedom of religion is guaranteed in temples by the current constitution of Japan, but it is not guaranteed in the public place, and administrations can't provide a specific religion with preferential treatment, which prevents us from carrying out our activities in public. However, if we act according to the principle, we can't do anything in real life at clinics and in temporary housing (P12, p. 3).

Municipal administration cannot organize "religious events;" they say it is determined by law. I feel sad and indignation. I'm not saying, "Give me money!" I say that we will do everything by ourselves and that we'd like to ask them to help a bit with publicity. But then they say no, and I'm furious! I think really that the city administration is worthless. It makes me realize how they see us religious organizations (P27, p. 7).

These accounts indicated that, as religious persons, the participants experienced difficulty working in the damaged areas due to the secular principle in the Japanese Constitution. These difficulties not only caused frustration and a sense of injustice among the participants but also gave municipalities in the damaged areas an opportunity to consider how to work with the active religious help organizations.

Furthermore, some participants who were survivors showed frustration and a sense of injustice regarding the delay in the construction of reconstruction housing due to the 2020 Tokyo Olympics, as was the case with other survivors:

The construction of reconstruction housing has been delayed because of the Olympic games, and the price of goods and materials is rising too. I feel the damaged areas are forgotten in Japan (P1, p. 7).

Well, the problem is a surge of materials, yes. In addition to that, it seems that it keeps on being delayed, which is related to the lack of both materials and

human resources for the construction of reconstruction housing … After all、 it is the administration that makes such a budget (P8, p. 6).

In brief, for participants, sense of justice referred to how the participants experienced their rights and dignity secured and respected or restricted in relation to their help activities. The lack of a functioning local administration with which they could cooperate and restrictions on activities in public spaces related to the participants' not having a sense of justice.

Existential Justice

Unlike some survivors in the damaged areas, the participants had not experienced their rights and dignity being ignored or violated on an existential level except for one participant who was also a survivor and experienced unfairness on an existential level. She turned to God through prayers and demanded that He explain the meaning of her suffering:

> "Why here?" "Why me?" or "Why do I have to have this suffering?" Then, I felt like I was tied up in my faith, something like that, I mean, I tied myself to my faith, but I couldn't keep my eyes off the reality. Yet I couldn't stop praying. So I asked Him to explain why I needed to get through this (P8, p. 2).

Most of the participants had not connected God, Buddha, gods, or something transcendental with the 2011 Great East Japan disaster and had not felt a sense of injustice to It/Him/Them unlike some survivors in the damaged areas. Two factors were found that hindered the participants from having a sense of injustice on an existential level. First, most of them had not experienced the 2011 disaster to the same extent as survivors:

> Well, I am not a victim who actually suffered from the damage, so I didn't' react like, "There is no God because such a terrible thing happened!" (P18, p. 4).

Second, it related to the participants' philosophical view of natural disaster and attitude toward nature, which were relevant to the fact that Japan had been a land of natural disasters:

> I confirmed about Japan. This place is such a place. I have to live with certain kind of preparedness. After all, I have to think a little more about something like creation or the world of creation. I don't think the tsunami is evil. It is natural disaster, and there's not much we human beings can do (P18, p. 4).

> After all, we live in a land where that kind of thing happens … So, we have to have a feeling of reverence and awe for nature. It is not good to forget such things … For example, if the tsunami would have come to an uninhabited is-

land, it would have been just a natural phenomenon. It became a natural disaster because there happened to be human life and activity. So, we should not forget that human beings are just allowed to dwell in nature (P23, p. 6).

Even a participant, who was also a survivor strongly affected by the tsunami, did not experience a sense of injustice toward God because of her view of nature:

> I mean, before I came back here, I was thinking that I would break down in tears if I went back home and saw the situation. Then, when I went to the sight and stood there, I was like, "Oh well, it truly happened." That was it. It wasn't a feeling of "giving up," but rather I was convinced. How should I say, I mean, "Well, both nature and God are fair, and it should be this way" (P17, p. 8).

In sum, participants who were religious had not experienced existential injustice to the same degree as most of *mushuukyou* 無宗教 [non-religious or of no religion] survivors in the damaged areas. A majority of the participants had not connected God, Buddha, gods or something transcendental with the 2011 Great East Japan disaster. For many of them, the 2011 disaster was understood from their view of natural disasters as beyond human control.

5.2.4. Roles and identities

The category of roles and identities is, in the ADAPT model, comprise a significant psychosocial domain challenged by natural disasters. It is also essential for recovery. In the model, it is seen that a lack of roles can cause identity confusion, and identity confusion would contribute to a range of adverse psychological and psychiatric outcomes. Two central themes were found regarding roles and identities for survivors—roles in family; and roles in community/society. Hence, roles and identities in the 2011 post-disaster context refers to roles or identities in their family or their community/society. For participants from different religious organizations, one central theme was found—social roles as workers from religious organizations.

5.2.4.1. Survivors and damaged areas

Roles in family

For survivors, roles and identities referred to status and position in a familial context such as parent, husband, wife, or son and daughter. Such a familial role also refers to both their already established role before the 2011 disaster and their newly established role after the 2011 disaster, although only a few participants mentioned such roles in the damaged areas.

In the disaster-affected areas, many survivors might have lost their already established family role. Some survivors had lost such a role due to the disaster. For some survivors, such a loss had an impact on them or their family member(s) psychologically because it seemed to cause dysfunctions in families:

> Dad finds it hard to find employment, and re-employment does not go well. Then he hits his wife (P5, p. 2).

> Parents lose their jobs … If parents do not work, there are many children who go off school (P14, p. 8).

Some of the participants' accounts confirmed that some children in some temporary housing suffered from abuses presumably due to a lack of space and their parents' stress caused by the lack of economic security. The researcher also had an occasion at a temporary housing site to play with children suffering from domestic abuse and whose parents lost their jobs due to the 2011 disaster. Thus, children also lost their roles as just children—being protected and having the right to feel secure in their family and in their society.

Female survivors who had not experienced loss of a family/family member(s) seemed not to have lost their already established role as one who had responsibility for the household and care of family members. They often kept such a role, which could have prevented their developing mental issues:

> No matter what happens, women must feed their children and have many things to do … I have not seen women who are suffering from such symptoms (P17, p. 3).

However, it did not necessarily mean that women's' having a role in the family always had a positive effect on them. For some female survivors, their role as mother or care giver in the family could also be a burden for them:

> Mom has to make her children quiet in a tenement in the temporary housing. It is stressful for her (I5, p. 2).

Participants' accounts then confirmed that roles and identities referred, for many survivors, to status and position in a familial context that they already had before the 2011 disaster and that they acquired after the 2011 disaster. In the disaster-affected areas, many survivors might have lost their already established role in the family. For some survivors, such a loss of a role in the family had an impact on mental and social health, as well as well-being. Also, there seemed, in the damaged areas, to be gender-related roles in the family which could affect a survivors' well-being both psychologically and socially.

Roles in community and society
In the disaster-affected areas, many survivors might have lost their already established role in the community or society. Worker, professional, craftsman, fisherman, and farmer were identified as their already established social role in society before the 2011 disaster. Some survivors had lost such a role due to the disaster. For some survivors, such a loss had a psychological impact on their selves or their family member(s):

There was a drawer craftsman, but after all he did not feel like doing the job. Since I had asked him to make things before the tsunami, I asked him to work for me again, but he said, "I have no tools, no, I do not have any workplace either," so I asked him, "Well, if you would get tools, would you work for me? In that case, I'll ask people all over Japan to send me tools you need." His answer was, "No, it's useless, there is no place where I can do my job." He couldn't think positively after all. I thought that he was broken (P17, p. 8).

Further, several participants' accounts indicated that men's identity related to their roles in their society in general, their role as a worker in particular. Hence, loss of a job or work-related status could have meant the loss of identity for some male survivors, which could have caused some distress such as withdrawal and mental issues:

Men, especially those who had worked hard, didn't know what to do after losing their jobs, and there were no places where they could demonstrate who they were. That's why men started suffering from dementia or feeling depressed (P17, p. 3).

Well, even at a teatime event at temporary housing, many women come but no men … really, men are, well, ordinary men, they are, after retirement, can't be just a person (laugh). They cling to their old status or their company's name (P4, p. 12).

On the other hand, it seemed that the loss or lack of a work-related role in society had not affected female survivors to the same extent as male survivors. It seemed to be, as I have already presented, that female survivors' identities more strongly related to their family and their roles in their family than their roles in their working lives.

As already mentioned, only a few participants mentioned such roles in the damaged areas, and only a few accounts pointed out that some survivors managed to find a new role in society after the 2011 disaster. Several roles such as volunteer worker and a chairman or an executive committee member of a residents' association in temporary housing or reconstruction housing were identified as such a new role in relation to reconstruction and recovery in the damaged areas. However, it was not clear how having a new role affected them or whether it could have helped some survivors to recover from distress.

5.2.4.2. Participants from different religious organizations
Social roles as workers from religious organizations
For participants, social roles as workers from religious organizations refer to status and position regarding their help work in the damaged areas. Social roles as workers from religious organizations also refer to both their already established role before the 2011 disaster and their newly established role after the 2011 disaster.

Participants' roles in society before the 2011 disaster were various—religious teacher, pastor, chief or vice-chief priest, office worker, abbot, student, teacher, trainee monk, father, mother, chef, researcher, vicar, administration worker, and so on. Some of them quit their work after the disaster to do help work in the damaged areas. Others kept their already established role even after the disaster.

The participants' new role after the 2011 disaster was first and foremost as a help worker from a religious organization. Three different roles as a religious help worker in the damaged areas were found. First, their role as religious help worker was a supporter for community-building/rebuilding. Religious help workers promoted/were promoting community building. Since the lack of a community was evident in most of the damaged areas mostly because of repeating relocation, the community was considered as something religious workers wished to build/rebuild through their help activities:

> More and more public reconstruction housing will be built in the area in the future. I think that it is necessary to create community by connecting residents living here now and people who move in here … So, we are talking that we have to work in advance, like setting a tea party where survivors who are going to move in this area and residents who have lived here long can meet and talk about how they should organize a neighborhood council or local events (P23, p. 5).

Many participants became actively involved in community-building by organizing and providing events and activities through which people in the damaged areas could meet and know each other. Such events and activities included a tea party, mobile café, karaoke party, a local festival including a Shinto festival, a *bon-odori* 盆踊り [bon festival dance], a dance performed during *obon* お盆 that originates from Buddhism and Confucianism and is a holiday for a family reunion including family ancestors.

Second, their role as a religious help worker was that of a third-party counselor who provided survivors with *kokoro no kea* and a place where survivors could feel safe talking about their disaster experiences and feelings. Many damaged areas lacked a safe place where survivors could open up themselves and talk about their disaster experience and problems. Survivors often had felt it difficult to share their feelings and emotions with their family members, friends, or neighbors for many reasons—how they experienced the 2011 disaster, to what extent they were damaged by the disaster, whether they got support money from the national or local governments, and so forth. From the survivors' perspective, the participants were a third party who had not shared a common concern or interest with the survivors, which made the survivors more comfortable talking about their experiences and feelings:

> Some people know that their heart is broken, and their physical condition is going wrong, but they cannot tell others about it. To me, because I am a

stranger, they can talk to me. I am not born and raised here. I do not have relatives here. I am neither their grandchild nor child. I am not a short-term volunteer. I am not a care worker. These things make me stay in a good position. I hear them say, "I can't say it to my family" or "I can't talk to my wife and my child because my wife is depressed, I think that I am depressed actually" (P5, p 3).

We would like to listen to their disaster experiences and provide them with a place where they can open up. People don't talk to each other even though they live in the same temporary housing area. It seems like they can't talk to each other. There's an atmosphere that it is a taboo to talk about the disasters because almost everyone lost someone (P6, p. 2).

The woman seemed to be in a difficult situation, I didn't know much, but at least she lost her house. So I said, "To be honest, I don't know, but I'm trying to understand your feelings." Then I saw her relax and she said, "Well then, can you listen to me?" and she started talking about herself little by little. At last, she said that she could talk about herself because I was a stranger, a third party. She couldn't talk to her neighbors because she knew their situation (P10, p. 8).

Then, such consultation is, I mean, it's difficult for them to do unless they have trust in us. However, at the same time, it is easy to do counseling, I mean, to listen to our "customers." Of course, it must be hard for them to talk to us unless they feel they can trust us from the bottom of their hearts deeply. At the same time, however, it is also true that they can open up themselves to us just because we are totally strangers (P23, p. 3).

Many participants and their religious organizations worked or were working to provide such a place by conducting house-to-house visits to survivors who withdrew in their room or by organizing tea parties or mobile cafés with the intention of carrying out *kokoro no kea*. Some participants' accounts indicated that the role as a third party gave them satisfaction:

At first, I felt helpless because I thought that a religionist could not do anything. However, I thought that *kokoro no kea* was something, maybe something I could do in that situation, which leads to now (P1, p. 3).

Many of those who came here as volunteer workers often say to me, "I am the one who got many things from survivors," or "I feel better." I'm wondering why, but after all, I guess that working for others makes them healthy mentally and energetic because it makes them feel happy and feel their life is worthwhile (P23, p. 3).

At the same time, many participants confirmed that their feelings were often dragged down by survivors' stories of hardiness, that they felt depressed:

> Talking with and listening to such people's stories makes me feel that my energy is also sucked in, and I feel, "Oh, this is too painful." Well, their stories themselves are hard to listen to, but to be with such people is tough (P19, p. 3).

> Of course, I get tired the day after the work. However, that kind of tiredness, everyone can have it when people listen seriously to others' stories regardless of whether it was about sadness or joyfulness. If I try to do the work with all my energy, I get tired and don't have physical strength (P27, p. 6).

Further, a few participants had some somatic symptoms, such as stiffness of body or severe dullness in the morning:

> I worked in our office for nearly a year, but I sometimes joined the tea salon. I thought it was okay for me to work there, but my body seemed to refuse, I mean my body had been really nervous and tensed, so it was difficult to breathe. However, I hadn't realized it by myself (P8, p. 2).

Third, the participants' role as a religious worker was that of a caregiver who provides *kokoro no kea* through religious responses. Unlike mental health professionals, they were expected to provide survivors whose mental health was impaired with care addressing the survivors' existential suffering and religious or spiritual questions. In other words, their role as a religious caregiver was to respond to survivors through religious symbols, rituals, and faith. Almost all Buddhist participants who worked or were working as caregivers using religious symbols, rituals, and faith without any intention to propagate their faith. For example, one Buddhist participant explained why he did not wear *kesa* 袈裟 [Buddhist stool] when he conducted face to face visits in temporary housing:

> Well, the purpose is important. I mean, the reason why we do our face to face visit. Obviously, if the purpose is propagation, I would have *kesa* on me … However, the purpose of our activities is to make people who are having a tough time at ease even though we can help them only a little bit (P10, p. 4).

Another Buddhist participant explained as follows:

> We explain about our profile saying clearly and repeatedly, "We would never do missionary work or solicitation, although our base is a religious organization," and people understand us, well, it seems like that (P25, p. 4).

Most Christian participants who worked or were working as caregivers using religious symbols, rituals, and faith without any intention to perform missionary work, even though many of them admitted that they hoped their work contributed to letting people know about Christianity:

> We didn't come here for missionary work. We would like to stay close to the locals through support activities. Of course, I would be happy if they believed

in Jesus, but first, being close to them, being with them, staying with them. As words in the Bible, "I cry with the person who cries" (P5, p. 5).

We never work indecently. Then, there's one thing that is really important. Our support activities are not bargaining. We never say, "We help you, so you must believe in God." We support by all means. Then, how we inform the gospel is that we show our way of working and our way of life, and if people come to us, we tell the gospel … We let people see who Christians are and how believers live (P4, p. 4).

Well, I hope that people understand there is a person who works in this way. I hope they wonder, "Why is she working here even though she also was damaged by the disaster?" "Why did she quit her stable job and come to this damaged place?" Then, I hope that they say "that's the reason I choose her" (laugh). I would be glad if they could understand me (laugh). I do not want to have a direct impact on them. However, I'd be happy if they would see that there were some people like me (P8, p. 6).

However, other Christian participants had considered *kokoro no kea* activity as a part of their missionary work:

I also have a strong burden for rural Japan in general, and Japan would have the opportunity to know about Jesus and so God really just put this area, that had no church at the time, in my heart … since there was no local church here either, and I have a strong burden for the rural… so I keep… here to, simultaneously to start a church here because there was none and then, through that a baby church to really work in the community, so the local church, small church, could begin serving its community in Jesus's name and so (P3, p. 2).

I came here with a purpose to build a church, but at the same time I've tried to keep track of both wheels, I think that evangelism is a base for preaching the gospel and fulfilling social responsibility (P6, p. 8).

We had engaged in missionary works around here before the disaster, and we didn't change our stance just because the disaster occurred. However, we worked by being aware of time and place, and we worked by showing our way of life, which we had done before the disaster, and we never hide that we are Christians (P16, p. 3).

Such a missionary intention could cause a problem during the help activities:

One day, I was doing a care work at a temporary housing. There was a person who suffered from anxiety. So I opened the Bible and told the person, "The Bible says…" Then the leader of our group freaked out. She said to me that I was doing missionary work. She told me not to do that. So, I told back to her, "But the person has anxiety!" Then she said to me, "I think you should not belong to our group. I don't think it's God's will." We discussed a lot, and she said, "It's not a right time to bring a gospel." I really understand what she said. I don't want to use survivors' weariness to propagate them. However, I thought

God was salvation, so I had to tell about God to those who needed. After all, I was kicked out of the group (P22, p. 3).

Some participants criticized religious workers and organizations that put missionary work first:

Jehovah's Witness and Mormons as well as some Christian groups that were a bit different from us. For example, Gideon, they showed up with many samples of the Bible and asked us to give them to people in temporary housing. We took some of them from them, and a leader and several people from Gideon came to me and said that they wanted to distribute their Bible at temporary housing. So I said to them not to. I said to them that they had to think about how to do their activities. Moreover, then, they went back to their headquarters to think about that. They made candy bags and visited the temporary housing with them saying, "How are you doing? In this candy bag, there is Bible, so if you feel that you are in trouble, please read it" (P4, p. 7).

One thing I can say is that there are many missionaries entered here … What I really don't like is that Evangelicals are doing the same thing after World War II, when everywhere was burnt down. They are entering the areas to evangelize people when they are in such a shock situation. Some pastors caused some problems in, for example, Tokyo, and went to the affected areas and are pretending that they are doing a wonderful activity (P18, pp. 4-5).

During *kokoro no kea* activities, many of the Buddhist participants experienced being asked by distressed survivors to perform Buddhist rituals such as chanting sutra:

In short, the person said, "I can't accept all this." Then, my monk colleague asked him, "What would you like to do?". He answered, "Well, I'll be very glad if you could chant a sutra for me" (P24, p. 3).

I do not know exactly how they look and what they are doing behind me, but after all, in a busy life, they close their eyes and sit silently for the time being. I think that I may be able to provide a slow time to think and reflect or something like that … so I guess I am providing a place to relax even just for about five minutes, even during a busy hour… After that, they often open their mouth and wonder if their deceased had attained nirvana or rest in peace. Many of them also start to open up themselves like, "I've had an experience like…" or "I've been suffering from this or that" (P10, p. 7).

Further, there were many survivors who had seen ghosts and been possessed by the deceased victim of the disaster. In such cases, people turned to Buddhist workers, and they offered prayer, chanting sutra and exorcism:

It's often said that people who have strong inspiration can see ghosts, but on the contrary, according to me, people see them when their inspiration is weakening. If you are healthy and can sleep well at night or if you have vitality, you

won't see ghosts. It is a person who is distressed that can see them … and prayers can help people to regain vitality (P19, p. 3).

People who died in the disaster possessed survivors, and when listened to, those who were possessed, their stories were detailed and sounded like they were true. My monk colleague chanted mantra for several days and problems were solved (P11, p. 7).

As a part of *kokoro no kea* activities, many participants also offered prayer and objects to pray to such as *Kamidana* 神棚 [Shinto shrine alter], *juzu* 数珠 [Buddhist rosary], *ihai* 位牌 [Buddhist ancestral tablet] or *jizo* 地蔵 [guardian deity of children], and so forth. For example, some survivors lost their *ihai* that usually was placed in a Buddhist altar, as well as *Kamidana* (Shinto shrine altar), which made them discouraged or depressed because:

Until the tsunami came, every morning they had prayed at the Buddhist and Shinto altar, but after the tsunami, the altars and such time for prayers had lost. So, they were feeling that they were living something unordinary. However, if they have an altar, their heart will settle down, because you can pray even for a few seconds of the day. Therefore, they thanked me for the altars (P17, p. 3).

In short, participants' social roles in the damaged areas were very much related to their social identities as religious persons. They were supporters of community-building and rebuilding through their organizational resources. They were third-party counselors who provided survivors with *kokoro no kea* and places where survivors could feel safe talking about their disaster experiences and feelings. They were also religious or spiritual caregivers who provided *kokoro no kea* through religious or spiritual responses. Unlike mental health professionals, they were expected to provide survivors with mental health impairment with care regarding the survivors' existential suffering and religious or spiritual questions.

5.2.5. Existential meaning and meaning-making

Existential meaning is, in the ADAPT model with existential meaning in the center, one of the most critical psychosocial domains for recovery and a stable society disrupted by major disasters. Existential meaning refers to "the narratives about life's meaning and the actions associated with the lived expression of these narratives in the stories of ordinary persons confronted with life's choices, hopes, dilemmas, and decisions" (DeMarinis, 2008, p. 64). Here, in this post-2011 disaster context, existential meaning refers to individual's understanding of life's meaning and experiences in life in relation to their disaster experiences, and existential meaning-making refers to ways and processes through which such meanings are challenged, reevaluated, renewed, or reconstructed. Through participants' accounts, three central themes regarding

existential meaning and meaning-making were found: goal, purpose, and meaning in life; faith and worldview; and rituals as meaning-making acts.

5.2.5.1. Survivors and damaged areas

Goal, purpose, and meaning in life

Among survivors in the hard-hit disaster areas, the disaster's impacts appeared in the form of loss and lack of goal or purpose for life. Such a loss related to, especially among male survivors, tangible or economic loss—loss of work, job, or houses and so forth—which had an impact on the survivors' health and well-being as was the case with some male survivors, who "didn't know what to do after losing their jobs" and "started suffering from dementia or feeling depressed" (P17, p. 3), or the drawer craftsman, who lost his work tools and working space as well as mening of life, "couldn't think positively after all" and was broken" (P17, p. 7). A paricipants also said that

> Cause of depression is … disappointment with the new house and surroundings… another, especially for men, is the loss of a goal in life after moving (P3, p. 4).

For many survivors in the damaged areas, recovery itself might have been their new goal—to rebuild a house, to recreate a community, to find a new job, and so forth. Furthermore, some participants' accounts indicated that having a vision not for recovery but for creating a better situation than that of the time of the 2011 disaster could be a new meaning in life among the damaged areas. However, such a vision seemed to be lacking:

> It is better for Fukushima Prefecture to have a mission, such as being a new model area. As we learned lessons from the disaster, a mission, for example, going ahead with the environment and energy, whatever. What we have lost are the future and pride. So we need a new mission, not just for restoration but a new vision is needed (P14, p. 6).

Such a vision and hope for the future, which seemed to be a critical existential factor especially among children and young survivors, were still lacking in many disaster-affected areas. The problem seemed to relate to a problem that already existed before the 2011 disaster, and young survivors were trying to find a new life other than their hometown:

> In short, I think what is happening here is relevant to problems that the whole of Japan has been experiencing, such as a highly aging society, depopulation, the low birth rate. I think it is important that young people can have a dream for the future (P18, p. 4).

> It would be good if the younger generation could have been active, but the older people have taken too much space and power, so the younger people are running away from the area (P19, p. 5).

There is no vision of reconstruction in T city. Then, young people, they won't come back. Everyone is busy with managing daily life. Young people left and never come back with intentions (P 24, p. 4).

However, it was not only young survivors who had difficulty having hope and a goal. Some elderly living in temporary housing also were still without hope and a purpose for life in their situation in which they lacked a near-future settlement plan:

However, also just for people to think that they have something in the future, especially the elderly may feel, "This is it!"… and lose their purpose, so helping them to find… or them finding themselves… whether a new sense of purpose for the rest of their lives, especially the elderly… because so much is focused on getting to recovery… which, if you symbolize that by moving… However, now, what do you do with the rest of your life, and some people are just sort of waiting … kind of waiting, waiting to die in a way (P3, p. 6).

Having or finding a goal or purpose seemed to have had positive effects on mental health. Some survivors found a new goal in relation to the reconstruction of the damaged areas, which could have helped them to recovery from distress. For example, a man in his 70s had suffered from survivors' guilt for a couple of months, then:

He wanted to do something for children in this affected area to give them hope, so he started organizing events like "message in a bottle" by using his boat, cleaning up shores where had been swimming places before the disaster, and having BBQ parties so that this area can attract tourists (P6, p. 5).

As the citation above showed, working for others was a goal that seemed to have promoted survivors' well-being. For example, a survivor who lost his parents because of the 2011 disaster had much distress but eventually recovered:

He was like taking kerosene with him to the city office and was about setting himself afire, anyway, he seemed to be like that anyway … He had been depressed all the time, but now he is planning to help others (P16, p. 5).

In short, the loss and lack of a goal, purpose, and meaning in life were seen in the hard-hit disaster areas. Especially among male survivors, loss of work or job or houses related to the loss and lack of a goal or purpose, which could have caused some mental issues. Elderly people comprised a group that most likely had a difficulty finding a purpose for life after the disaster. Finding a new goal or purpose, such as working for others, could have prevented them from being distressed or helped them to recover from distress.

Faith and worldview

Survivors' faith referred to religious faith based on Buddhism or Shinto, which were local and traditional religions in the damaged areas, though most people in the damaged areas often believed that they were non-religious. Among some survivors in the hard-hit disaster areas, the disaster's impacts appeared in the form of a loss of faith and the religion that they had before the disaster, which sometimes led to a change of religion:

> One day, when I visited one of the parishioners, his wife said to me while pointing at the shocking sight, "There is neither God nor Buddha in this world, don't you think?" I didn't have words to answer, and I became silent (P17, p. 1).

> An elderly woman, she is 87 years old, she said, "I had a Shinto alter at home, and I had worshiped for decades, but it didn't help me at the time of the disaster, everyone who came to help me was from Christian churches, so I am going to change my God from now on" (P5, p. 6).

It was unclear how such a loss related to their health and well-being. However, some of the participants' accounts indicated that keeping the faith or religion that they had before the disaster related to good health and subjective well-being:

> Although I don't think everything was thanks to their faith, I thought the reason they could keep a good condition and be healthy was that they were able to think positively if they had something solid in their minds (P17, p. 4).

Some survivors found new faith in general, Christianity in particular, and having new faith seemed to have a good impact on their mental health as well as social health:

> A person, who lost his father and mother due to the disaster, became desperate, became really crazy, he was like taking kerosene with him to the city office and was about to start a fire … he decided to become a Christian, and now he is about to make a new way of life … He had been depressed all the time, but now he is planning to help others (P16, p. 5).

> There was a woman who lost her son. After the disaster, she was walking around here and often thinking about committing suicide … Now, she goes to worship every week. She has completely changed from before. She is now encouraging anyone who is still suffering from distress by telling them, "You are going to be all right because I could get through it and now I'm fine" (P4, p. 9).

Another noteworthy accounts regarding existential meaning in the disaster-affected areas mentioned by several participants was a view on a natural disaster. Here I quote one participant's experience with a survivor. The

participant herself was a survivor who was severely affected by the earthquake and tsunami:

> Because my house was washed away, I was at the site of my house hoping to find our belongings in the mud. Then, one of the parishioners came by whistling cheerfully. He asked me what I was doing. I answered that I was searching for our belongings. He said, "It's a waste of time." So I asked him where he was heading. He showed me a potato he was holding in his hand and said, "I'm on the way to a hill up there and borrow space to put the potato in the earth so that I can collect the harvest in the coming fall" (P17, p. 1).

The above quotation shows how the survivors who had lived near nature and in the area had constantly faced a natural disaster.

In short, survivors' faith and worldview referred to religious faith based on Buddhism and Shinto, which were local and traditional religions in the damaged areas. Some survivors in the hard-hit disaster areas had experienced loss of the faith that they had before the disaster. How such a loss related to their health and well-being was unclear, but it was indicated that keeping the faith that they had before the disaster related to good health and subjective well-being. Some survivors found a new faith, and having a new faith seemed to have a good impact on their mental and social health. It was also implied that a view on natural disaster—if a natural disaster happened, there was nothing to do but accept the reality—could help survivors to keep on living.

Rituals as meaning-making acts

For survivors, rituals referred to practices or acts often related to religion or local traditions through which they worked with their existential meaning violated or disrupted by the 2011 disaster.

Many survivors appreciated Buddhist monks chanting sutra for them because it could give them a place and time for reflection on their feelings and thoughts, which enabled them to open up themselves:

> In a busy life, they close their eyes and sit silently for the time being. I think that I may be able to provide a slow time to think and reflect or something like that … After that, they often open their mouth and wonder if their deceased had attained nirvana or rest in peace. Many of them also start to open up themselves like, "I've had an experience like…" or "I've been suffering from this or that" (P10, p. 7).

Many Buddhist participants confirmed that they had experienced being asked by survivors to chant a sutra during their activities such as listening activities at tea parties or mobile cafés in temporary housing, which were basically among elderly and male survivors held in a secular context. Some survivors asked them to chant a sutra to deal with the feeling of the senselessness of the disaster or to regain some sense of security when they faced troubles in their daily life:

> The person was very much in trouble … So I told the person to talk to police … I listened to the person appropriately. So I asked the person what I should do, and the person wanted me to do Shingon mantra, so I did and the person, who was a lay person, got really pleased and said that the person felt relieved in shoulders (P11, p. 7).

> In short, the person said, "I can't accept all this." Then, my monk colleague asked him, "What would you like to do?" He answered, "Well, I'll be very glad if you could chant a sutra for me" (P24, p. 3).

One participant experienced being asked by survivors to chant sutras so that their missing family members could be found:

> They were like "Perhaps they are just missing, maybe my daughter may come home again. So, please chant a sutra for her so that she can come back." In such a situation, a dilemma is whether I can and should do it or not. As long as you have a common sense you cannot do it because, after two or three months after the disaster, the possibility that the missing were dead was high… however, when they asked, "Please chant a sutra so that they can come home," I think my duty as a Buddhist monk is to do it for them, but it was painful (P19, p. 2).

The funeral was also an important ritual especially for survivors who experienced loss of significant other(s). It was a ritual through which they could accept the loss and thereby move forward. Therefore, many survivors conducted funerals even though they could not find bodies of their significant other(s) "in order to cut and break feelings" (P20, p. 2).

Some participants' accounts indicated that a local Shinto festival had vital importance for people in the damaged areas for two reasons. First, the Shinto festival related to local culture and tradition, which were also related to individuals' understanding of the world. Second, the Shinto festival could give survivors in the damaged areas to a new goal, community-rebuilding:

> You know that local Shinto festivals are important here. After all, regardless of whether it is in a reconstruction housing or neighborhood association, if there is an event or festivals that people can participate, there is a possibility that a community can be formed. In the afflicted areas, shrines were washed away due to the tsunami, but people decided to have festivals as usual, which gave them power (P12, p. 4).

In sum, for survivors, rituals referred to practices or acts related to religion or local tradition through which they worked with their existential meaning that was violated or disrupted by the 2011 disaster.

5.2.5.2. Participants from different religious organizations

Goal, purpose, and meaning in life

For participants, goal, purpose, and meaning in life referred to one that they found after the disaster. For some participants, their goal, purpose, and meaning in life were more concrete and related to their help activities—to work for survivors and the damaged areas:

> I am a religious teacher, I want to and can do something useful for living people. I had worked for those who died, but now, after experiencing the event of the earthquake and tsunami, it is clear that I have to do something for those left behind and those [who] survived … at first, I felt helpless because I thought that religious people could not do anything. However, I thought that *kokoro no kea* was something, maybe something I could do in that situation, which leads to now (P1, p. 5).

> From now on, we have to make new relationships because the old community has been gone … we have to create human relationships with people newly moved in here while keeping the former relationships. We shouldn't keep saying, "It was good before," because we can't get it back (P17, p. 7).

These accounts show how they dealt with the 2011 disaster in relation to their lives and their understandings of their missions as religious persons on an existential level.

In brief, for the participants, the goal or purpose related to their help activities for survivors and the damaged areas, such as to do *kokoro no kea* or to rebuild or repair community. Many of them believed that their help work were missions that they need to fulfill as religious persons.

Faith and worldview

For the participants, faith primarily referred to their religious faith. Many participants considered that there was a relationship between their faith as a religious person and their help work in several ways. First, their help work was a practice of their faith:

> There is a teaching that people have to help others because God has no hands nor legs, so God can't force us to work in that sense, but if people who listen to God's wish help others who are suffering, we will be saved, and God also will be saved … So, in that sense, I think that my volunteer activity is a practice of my faith (P23, p. 3).

> I think my understanding of Buddhism according to my school became important through activities. I think it would have been difficult to do activities without it … Speaking of my faith, it is my understanding of doctrine, my belief as a priest, although I try not to think much about doctrinal understanding. Well, it's practice. Buddhism is practice. Religion is practice. Well, it's a practice that depends on faith (P24, p. 4).

In this way, faith was a base for their activities, and was something that they had already, before the disaster, whether they were aware of it or not, which appeared as a reason for them to do help work:

> I've never thought that my faith is of use for the activities, but still I don't think there would show up something that I don't have in me, so I think that I, probably, am working based on some sort of feelings and thoughts that I have. I've thought about it, and I am not so sure, but I think that the activities that I'm doing now are somehow relevant to the fact that I am a religious practitioner. … well, it may be strange to say, but it's like a sense of mission (P1, p. 4-5).

Second, faith affected how to interpret and understand their help work. Many Christian or Shinto participants believed that their help activities were their missions given by God, Gods or Goddesses:

> Well, immediately after the disaster occurred, I got an e-mail from my friend in Tokyo saying he wanted to come here to help us. When I first got his email, I thought "Wow!?" There was no food, there was no electricity and no toilet. Under such situation, I was like, "He wants to come here as a volunteer?!" … Then, I read Proverbs 14:4, "Where there are no oxen, the manger is clean, but abundant crops come by the strength of the ox." It seemed to me "That's it!" I thought this church was a manger. I thought I had to contaminate this church to a certain extent through accepting volunteers. Otherwise, nothing would happen, I thought. If I used this church, I do not know what I say, but I felt I was told that the harvest would come (P16, p. 4).

> About 10 days after the earthquake and tsunami, I read the Bible in the morning, where God spoke to Jacob in Genesis, "Do not be afraid of falling into Egypt"… I got His message clearly through the Bible, which I couldn't refuse to take. I became really sure that I would go up there. I told my family that I would go to Tohoku (P22, p. 2).

> I think there had been something, invisible work, or something invisible, and I think I can call them God's work, and there is God's wish, and I started thinking that I am asked by God to do works based on my faith (P23, p. 4).

Third, faith was a resource for them to carry out their help activities in several ways. In the damaged areas, so many volunteer workers and organizations—both secular and religious—had worked immediately after the disaster, which was described by one participant as "the second tsunami" (P9, p. 2). However, the number of non-religious volunteers had already fallen several months after the disaster, and most of the secular help organizations had dissolved or departed from many of the damaged areas at the time of the interviews (i.e., about four years after the 2011 Great East Japan earthquake and tsunami). As a consequence, there were only religious help workers and organizations still working in many of the damaged areas, which was a tough situation for many participants who worked or were working as volunteers but had an occupation

for a living. In this context, their faith supported some participants to keep on working:

> I am somehow supported by the words of Buddha. If I hadn't had such faith or belief or such backbone, it probably wouldn't be possible to keep on working (P10, p. 6).

Their faith also helped some participants when they had to meet survivors who were suffering:

> If I hadn't had Amitabha (Buddha of Infinite Light) with me, I couldn't have had any courage to see their suffering (P13, p. 4).

Further, for many participants, their faith was a resource that they could use to prevent being distressed when they had difficulties regarding their help work:

> As faith, well, after all, I know that I'm all right, so I feel at ease, quite fine. Well, even if there is something hard or painful personally, basically I think I can throw everything to God, so it is so wonderful, I mean, I feel at ease … I mean, because I have faith, my brain knows that everything is going to be all right, so I don't accumulate distress… I have a sense of security. I guess it is because of my own faith (P7, p. 5).

> When I listen to such painful heavy stories, I go to a main hall in our temple, light a candle, and leave every sad and terrible story to Buddha (P11, p. 3).

Fourth, for many participants, their faith was rediscovered or their understanding of it evolved after the disaster through their help work. Most of the participants confirmed that their faith was not changed by the disaster itself. It was, instead, their help work that influenced their faith. For example, participants experienced that they understood their faith better or that their faith became clearer:

> Well, until I faced the disasters, my faith was vague, and my belief as well, thanks to the fact that I was sent here, it became clear … Well, I know in a sense, traditionally, that He is in our church, but it is not so, after all, God is alive and working in each place, and indeed, it doesn't matter whether one is a Christian or not, regardless I mean, God works solidly at each and every place … I knew it for I learned it at a seminary, but it became vivid and made sense (P2, p. 7).

> I won't say that my faith has changed, but I realized many things … Well, I'd often gone to church, but originally, it was based on a feeling, I mean, it was natural for me to go there … After I came here, first and foremost, I started to think about why I came here, and then I was more and more interested in various things and wondered about my life and faith. Then, there were various

> moments like "Aha, this meant that!" and I started feeling like, "I'm appreciated!" (P7, p. 5).

> Well, it has become clearer. Um, until now, I've thought about the accuracy of the text and what Buddha really wanted to say in my head … after all, as both Buddha and Shinran have always said, it is relationship with others. Now I'm walking around, knocking on doors and listing to people who are suffering. And I realized like, "Ah, this is what Buddha did!" I think I had been shallow … it is like, "Aha, it meant so!" when I read the holy text (P10, 6).

In sum, for the participants, faith referred to religious faith, which was a base and principle for their help work. Their faith motivated them to work for survivors and the damaged areas. It affected their understanding of their help work. It was an important resource they could use for their help activities. It was rediscovered or their understanding of it evolved after the disaster through their help work.

Rituals as meaning-making acts

For participants, rituals primarily referred to religious rituals that were resources they could use especially regarding their help activities. Through their accounts, two rituals were identified as such—prayer and chanting a sutra.

For some Christian participants, prayer was a ritual through which they found what God wanted them to do; they thereby decided what to do or where to go in the damaged areas. For example, one participant said:

> I was a missionary and was training with the desire to go somewhere in the world, so I was waiting to feel God's will while I prayed and read the Bible (P5, p. 6).

Also, another Christian participant confirmed there were many non-religious volunteers in her religious organization that were burnout, but she had not experienced burnout thanks to "time alone with God and then talk with Him" (P22, p.5). Further, one Christian participant, who was also a survivor, used prayer to find the meaning of suffering caused by the disaster:

> "Why here?" "Why me?" or "Why do I have to have this suffering?"… So, I asked Him to explain why I needed to get through this (P8, p. 2).

Many participants, regardless of religion, used prayer when they had difficulties regarding their help work, especially when they felt distressed after listening to survivors' hardships and heavy feelings. One Shinto participant said:

> I am a religious person, so, I pray to God. I pray for them. I pray for those who died (P23, p. 2).

For some Christian participants, prayer was the most important tool for them to keep their well-being:

> Well, of course, I feel that my feeling is drugged down while I'm listening to their hard experiences. After all, if I take it all, take everything in me and keep them in me, I myself would be depressed … well, it's because I'm Catholic, I can be at ease through prayers (P7, p. 4).

Even for some Buddhist participants, a prayer had much importance so as not to be lost in the help activities:

> Definitely, I pray. I think that I shouldn't do this activity if I couldn't take care of myself. I shouldn't fall together with survivors. I have to drag them up to the water surface instead. So, I try to do that by praying (P19, p 2).

The citations above indicated that prayers were used by many participants to prevent being distressed, stressed, and hopeless.

Furthermore, for many Buddhist participants, chanting a sutra was a ritual they performed daily. It was also a ritual that they performed for survivors regularly. Some Buddhist participants chanted sutras especially when they felt distressed after listening to survivors' hardships and heavy feelings. Not many but some Buddhist participants had chanted sutras for purification of survivors who believed their houses were cursed or spelled, and for the exorcism of survivors who were possessed by the deceased due to the tsunami.

In sum, for the participants, rituals referred mainly to prayer and chanting a sutra that were resources they could use regarding their help activities.

Chapter 6 Analysis

In this chapter I present the theoretical analysis. I divide the presentation into two large sections. The first section presents the analysis of the semi-structured interview data using the theoretical perspectives and the working model guiding this study. In the first section, which is further divided into three smaller sections, I present the analysis of survivors in the damaged areas from the participants' point of view first. This is followed by the analysis of the participants from the different religious organizations. I thereafter present the analysis of the interaction and relationship between the five key psychosocial domains in the ADAPT model. In the second section of the chapter, I return to the study's research questions. I start with answering the sub-questions. The central research questions will be answered thereafter.

6.1. Analysis of the semi-structured interview data

6.1.1. Survivors in the damaged areas from the participants' point of views: The five key psychosocial domains in the ADAPT model

6.1.1.1. Safety/Security

In the ADAPT model, safety/security has essential importance to recovery. In the model, safety/security refers foremost to a physically safe place, that is, a state in which individuals and communities are free from life-threatening issues. As shown, safety/security is *buji* 無事/*anzen* 安全 in Japanese, which refers to a situation in which there is nothing special, bad, or wrong, a situation in which there is no danger or risk of being harmed. As the research material in this study revealed, most of the survivors in the hard-hit disaster areas secured physical safety, that is, a condition without life-threatening issues for their survival fairly immediately after the disaster except survivors in the affected areas near the Fukushima nuclear plant, who were forced to evacuate even outside of Fukushima prefecture because of fear of the radiation.

Even though most of the survivors could have a physically safe place, it did not mean that survivors in the 2011 disaster-affected areas had restored safety/security. The results showed that the lack of privacy and proper physical space in temporary housing caused stress. The lack of good interpersonal bonds and networks including family and neighborhood relations in which

survivors could cope with their disaster experiences by opening themselves and talking to each other about the crisis meant a lack of an emotionally safe place. From a social point of view, a good human relationship was indispensable for safety/security for some survivors, especially in some rural disaster-affected areas, according to the results. Compared to some urban disaster-affected areas, these rural areas seemed to have a more thriving neighborhood. As we have already seen, poor human relations and the lack of a network had a negative influence on the mental health and well-being of the affected people. Thus, in temporary housing where people from different regions were randomly collected, it was a challenge to build new relationships with neighbors to provide a psychosocial safe place.

This study's results indicated that a harmonious relationship with networks were indispensable for safety and stability, and it appears appropriate if we try to get closer to the results from the psychological dimension. As seen in the second chapter, it is often regarded as a virtue in Japan to get along well with other people, and collectivism and harmony were often seen as characteristics of Japanese society and individuals (Bell, 1989, as cited in Kuise & Misawa, 2003). In Japan, this characteristic could also explain why some survivors seemed to have a safe place neither at home nor within a family, and why some survivors still lacked such a safe place where they could open up themselves and talk about their disaster experience and problems. In this sense, safety/security in the study referred not only to a place where people had no direct life-threatening issues but also a place where they could have a steady life like before the 2011 disaster and establish a routine life like before and thereby feel safe both psychologically and emotionally. The results strongly support that safety/security cannot be restored in the absence of stable living conditions, amid uncertainty about the future, a lack of control over their lives, and an absence of social support or resources to achieve recovery (Silove, 2002; Hobfoll et al., 2012, as cited in Silove, 2013).

The results also indicated that religious symbols and rituals could provide the survivors with a safe place where they could have time for reflection and peace of mind and could, thereby, open up themselves. The lack of such a safe place seemed to have caused various health issues including stress, depression, and suicidal thoughts. It is not strange because the ADAPT model presupposes that the prolonged lack of safety/security might lead to mental, physical, and consequently psychosocial impairment. According to Silove (1999), the experience of life-threatening circumstances "may trigger fundamental psychobiological mechanisms associated with the preservation of safety" (p. 205). Hence acute stress response including posttraumatic stress reaction is a normative survival response to threat (Silove, 2013). However, a range of pre-existing and surrounding traumatic factors could contribute to the traumatic stress reaction becoming chronic and disabling (Brewin et al., 2000, as cited in Silove, 2013).

Furthermore, safety/security for survivors seemed to relate to a lack of access to medical professionals. As the results showed, some survivors seemed to have needed help from medical professionals, and some participants experienced difficulty connecting them to the professionals. They still lacked a safe place where they could open up themselves and talk about their disaster experience and psychological distress with the medical professionals. An interesting finding was that some survivors preferred to talk with help workers instead. One possible reason was that the help workers were more likely a third party to them, someone to whom they could talk about their experiences and mental issues without being worried about being clinically diagnosed. These results can be understood from the Japanese context regarding a psychological dimension of health in Japan. Stigmatizing attitudes toward mental illness in Japan are strong due to a lack of knowledge of mental illness among the general public (Ando et al., 2013). Therefore, it is not surprising that survivors preferred to talk to persons other than medical professionals.

6.1.1.2. Bonds/Networks

Bonds/networks is relational attachment bonding and "essential to human functioning" (Silove, 2013, p. 239). In the ADAPT model, it refers to family, kinships, friends, neighbors, and local communities. In Japanese, a bond is *kizuna* 絆, which refers to relational bonds such as family, friends or community. On top of that as noted earlier, *kizuna* drew much attention and became one of the most popular and symbolic words referring to rebuilding, recreating, and also finding new networks of social connections. A natural disaster may cause disruptions of bonds/networks among the survivors in real life as well as symbolically through losses. In the disaster-affected areas in general and the areas hit hard by the tsunami in particular, many people lost their significant other(s) such as family member(s), relatives, or close friends.

The results showed that for some survivors, the loss of family member(s) caused mental issues including suicidal thoughts, which implied the absence of psychosocial grief care for those who were suffering from the loss. The results also suggested that widows had distress even several years after the 2011 disaster. These results can be understood from the ADAPT model, too. Grief is a typical response to such loss (Silove, 2013), and widows are among those who suffer "the most egregious losses" (Silove, 2013, p. 242), and prolonged grief due to the loss and no access to the psychosocial program for grieving can cause prolonged mental issues and somatic symptoms.

Further, regarding family and a relational world about this social dimension, veneration of the dead and ancestral worship need to be mentioned here. The results indicated that survivors in the hard-hit disaster areas experienced loss of ancestors symbolically through the loss of family graves, the land passed from generation to generation, or *ihai* 位牌 [Buddhist ancestral tablet], which might have caused them to experience humiliation and depression. It needs to be understood as a loss of family and loss of one of the relational

world because, in Japan, it is often believed that family member(s) who died will become their family ancestors. In this sense, ancestors were families. Therefore, losing the tiles of the ancestor's symbol can mean the loss of the family. At the same time, the loss of *butsudan* 仏壇 [Buddhist altar] and the family grave, which were places to meet the ancestors, can mean a loss of connection with the family's ancestors. Loss of places to worship can also mean the loss of family connections. The loss of those ancestors can mean the loss of the sense of belonging, which caused some health issues as the results indicated. As Silove (1999) points out, the survivors may experience a variety of losses including those of a sense of belonging, of social cohesion, of connection with the land and ancestors, and of culture and traditions (Eisenbruch, 1991, as cited in Silove, 1999).

The results indicated that survivors experienced the loss of relationship with neighbors and thereby the community they had before the disaster. Recreating or repairing the lost relationship with neighbors and community had been delayed because of recurring loss of neighborhood and community due to relocation, and differences existed in the damaged areas regarding economic and material support and rules for everyday life. The results implied that the failure to create a relationship with new neighbors could also affect the survivors' well-being both psychologically and socially in a negative manner, and the prolonged loss of neighbors and community related to distress and psychological disorders such as alcohol abuse or withdrawal that affected some survivors' condition both mentally and socially in a negative manner. Neighbors were considered, then, as an interpersonal bond through which they created a community. It meant that a community consisted of a band of neighborhood relationships among people in the damaged areas. The results were not surprising because "the integrity of interpersonal bonds and broader social supports could be vital to promoting recovery from a wide range of emotional disorders" (Silove, 2013, p. 241-242).

On top of that, as presented in Chapter 2, *chounaikai* 町内会 [neighborhood association] had played a significant role in local communities in Japan. Although it officially lost importance after World War II, significant partial functions such as environmental improvement in the areas, friendship, carrying rituals, education, and welfare remained. In other words, *chounaikai* is no longer important in cities, where people have individual lives, although the system is still one of the most active and influential community systems in Japan, especially in rural areas, where collectiveness has more importance than in urban areas. Such a cultural background cannot be irrelevant to how the loss and lack of such a network affect survivors' well-being.

6.1.1.3. Justice
Since the ADAPT model was formed with regard to the context of mass conflict such as civil wars or regional armed conflicts, justice in the ADAPT

model refers to social injustice including human rights violation and mitigation of the sense of injustice and forging transitional justice. In Japanese, justice is *seigi* 正義. *Seigi* refers to correct doctrine that human beings should obey. *Seigi* also means to respect the rights of others and to assign rights and obligations, incentives, sanctions, and so forth to each person properly. In a sense, therefore, justice in Japanese also refers to fairness. It was challenging how this domain should be addressed and understood in the post-natural disaster and Japanese contexts. Here, in the post-2011 disaster context, justice referred to how survivors experienced their rights and dignity secured or violated. The results showed that some relief activities operated by the government, such as water supply by the Self-Defense Force in the nuclear disaster-affected area, caused distrust, frustration, or shock, which consequently led to a sense of injustice. The results also showed that, in the damaged areas, survivors were excluded from decision-making about a relocation and reconstruction plan, which caused a sense of injustice that was expressed in the form of frustration, anger, and distrust focused on either the government or the local administrations, or both. Such a sense of injustice was also revealed in the results as an economic problem. It was implied that not having economic opportunities and experiencing a gap in economic opportunities among survivors or between the severely affected and mildly survivors caused a sense of injustice in the damaged areas. Such a sense of injustice seemed also to be one of the consequences of the absence of a decent and functioning governmental or administrative policy and measures, which caused the survivors distrust one another and the governments. These accounts can be understood from the ADAPT model. The model considers social injustice as hindrance to recovery. It also considers anger and sensitivity to further injustices as the normative emotional response to injustice (Silove, 2013). Silove (2013) means that we should not see these reactions as deviant because they are adaptive and justifiable. The results did not imply the existence of a relationship between such a sense of injustice and mental/physical disorders with an exception—a case in which a sense of injustice was expressed in the form of disappointment over not having economic opportunities, which seemed to have related to their somatic pain.

One of the unique findings regarding the domain of justice in this study was that a sense of justice in the damaged areas also referred to how survivors experienced their rights and dignity secured or respected on an existential level. The results indicated that in the hard-hit disaster areas, where many people lost their lives, some survivors manifested their sense of injustice by questioning the existence of God, Buddha, or gods in nature. Others felt indignation toward God, which impacted their faith in the form of a loss of faith, changing faith. The ADAPT model does not explain this type of justice on the existential level. However, this result can be understood from the perspective of an existential meaning. When individuals confront life stressor or difficulties, they may assign some meaning to that stressful event and work to restore

their life meaning, which Park (2005) calls the appraised meaning of specific events (situational meaning), that is, meaning-making in crises or difficult circumstances. Hence, it is not strange to interpret the results as that survivors tried to understand and restore a coherence regarding their worldview including faith and belief disrupted due to the disaster by questioning the existence of God, Buddha, or gods in nature, changing faith.

6.1.1.4. Roles and identities

In the model, roles and identities is also the essential psychosocial domain. It refers to social roles, such as "parent, worker, student, citizen, social leader, etc." (Silove et al., 2006, p. 123) that is related to individual's identity. Roles in Japanese is *yakuwari* 役割. It refers to a customary way of operation or behavior and social role expected and learned according to a social position and status. Identity in Japanese is *douitsusei* 同一性, which refers to a unification of ego that exists as a personality. The results supported that a role referred to social roles including status and position in a social context such as a parent, worker, student, citizen, social leader, and so forth. In the disaster-affected areas, many survivors lost their already established role in the family, the community, or society. Worker, professional, craftsman, fisherman, and farmer were identified as their already established social role in society before the 2011 disaster. The results indicated that such a loss and a prolonged lack of a job or work-related status caused impairment of both mental and social health of themselves or their family member(s) in the form of lassitude, withdrawal, domestic violence, or truancy among their children. It is reasonable because major natural disasters may have a considerable impact on the individuals' already established role in their family, in their community and their society because the loss of previous roles and the lack of social and economic as well as cultural status may threaten their identities (Silove, 2013). As Silove (2013) points out, "The threat to these roles within the family and society, in turn, intersects with broader issues of identity" (p. 243), such as identity confusion, which can

> contribute to a range of adverse psychological and psychiatric outcomes (withdrawal, isolation, depression) that will have negative social consequences, including personal disengagement, family difficulties, deviant behavior, and an overall sense of alienation in which the person loses any sense of belonging or function (Zhao & Cao, 2010, as cited in Silove, 2013, p. 243).

Therefore, impairment of both mental and social health among some survivors confirmed by some participants could be understood as an identity confusion caused by the loss of roles in family and/or society in this context. Several participants' accounts indicated that men's identity related to their roles in their society in general, role as a worker in particular, might have caused some distress such as withdrawal and mental issues.

Interestingly, the results implied that the loss or lack of a work-related role in society did not affect female survivors to the same extent as male survivors. Participants' accounts implied that female survivors often kept their established role as one who had responsibility for the household and care of family members, which could have prevented them from having mental issues. One possible reason for the result could be, as Lim and Raymo (2016) pointed out, is a normative expectation for a woman in Japan to accept being a *ryosai kenbo* 良妻賢母 [good wife and wise mother] and to do *naijonoko* 内助の功 [support her husband's career success]. Different from the urban damaged areas, it might be not difficult to guess that the gender role expectation might have been stronger in the damaged rural areas where female survivors took every responsibility when it came to "care for the family." Furthermore, as Lim and Raymo (2016) argued, the patriarchal nature of Japanese marriage could be beneficial for women's health in Japan because of its secure character. It seemed to be reasonable to assume that such a secure marriage status for women and a gender-related role in the family and society such as wife, mother or *ryosai kenbo* was not lost especially in the damaged rural areas, which might have helped enable many female survivors to maintain their health and well-being. However, one participant had known a female survivor who suffered from psychological distress, who told the participant while she was shedding tears that she could not talk about her condition to her daughter because she worried about making her daughter cry. Instead, she told her husband "a lot about her condition and relied on him too much, and he also broke down, which she believed her fault" (P5, p. 4). The case can be understood that the *ryosai kenbo* role might have become a pressure for the female survivor instead of being a protective factor for health and well-being. Further discussion around this gender difference issue will be conducted in the next discussion chapter because the results of the current study indicated clearly that gender played a significant role in recovery and reconstruction of existential meaning and psychosocial well-being.

6.1.1.5. Existential meaning and meaning-making

In the ADAPT model with existential meaning in the center, the existential meaning and meaning-making is the most important key psychosocial domain among the five that are essential for stable societies. It refers to attempts to understand how events in life fit into a broader context. Existential meaning also includes the meaning-making process through which individuals facilitate a sense of order in the world (Reker, 2000). The concept of existential meaning is difficult to translate into Japanese as it is an unfamiliar concept in Japan because the concept of "existential" is originally rooted in Western existentialism. However, if translating existential meaning into Japanese, existential is translated as *jitsuzon* 実存, which refers to an individual's subjective way of existing while presenting a self-awareness of her existence as an

individual, and meaning is translated as *imi* 意味, which refers to a value or significance that things have in a particular context.

Silove (2013) means that every individual needs a sense of coherence in life, and significant traumatic experiences including conflicts and displacement may lead to disruption not only of a sense of belonging to a community in which survivors had lived, but also their fundamental world-views. Therefore, existential meaning is "the narratives about life's meaning and the actions associated with the lived expression of these narratives in the stories of ordinary persons confronted with life's choices, hopes, dilemmas, and decisions" (DeMarinis, 2008, p. 64). In this post-2011 disaster context, existential meaning refers to an individual's understanding of life's meaning and experiences in life about their disaster experiences, and existential meaning-making refers to ways and processes through which such meanings are challenged, reevaluated, renewed, or reconstructed. The results showed that among survivors in the hard-hit disaster areas, some survivors had experienced loss and lack of a goal or purpose for life. Such a loss related to, especially among male survivors, loss of work/job or houses, and seemed to have caused some impairment of mental health such as lassitude, withdrawal, depression, or dementia. At the same time, several survivors found a new goal or purpose for life—to rebuild a house, to recreate a community, to find a new job, to create a better life and community than before the 2011 disaster, and working for others. It is understandable because given an individual makes sense of life in the world one lives in, mass conflicts and other major disasters may have a considerable impact on their sense of coherence because they may disrupt the world with incoherence and shake their fundamental faith, belief, value, and orientation in life. Having or finding such a new goal or renewed purpose for life seemed to have had positive effects on mental health. It supports Silove's (2013) explanation that facing such an existential challenge may also affect survivors' psychological health in the form of alienation and "the extreme case leading to depression and suicidality" (p. 240).

Some of the participants also witnessed survivors experiencing loss of faith and religion that they had before the disaster and changing faith or religion. The latter seemed to have a good impact on their mental health and well-being. It is also not so strange because existential meaning-making is seen as a process in which individuals go through the situation that is violating his or her existential meaning. As a result, he or she may be forced to reflect and reevaluate his or her existential meaning with an intention to reduce the inconsistency that arose due to the crisis, to regain order in the discrepancy, and to facilitate the renewed existential meaning.

Another interesting finding of the current study was that many survivors in the disaster-affected areas made a living through the fishery or in agriculture and had lived very close to nature, which formed their view on nature and natural disaster. Although nature is cruel and devastates people and their lives through disasters, nature nurtures people through its rich resources including

scenery that attracts tourists, too. Therefore, it is not strange that some survivors preferred to live close to nature like before the 2011 disaster instead of accepting reconstruction plans that focused on future natural disaster prevention. Moreover, even though many survivors had difficulties understanding the meaning of the 2011 disaster, many of them tried to deal with the disaster from their view on nature. The Japanese are familiar with natural disasters because Japan has suffered many kinds of natural disasters in its long history—earthquake, tsunami, landslide, volcano eruption, typhoon, and flood to name a few. As already presented in Chapter 2, together with the influence of Shintoism as well as Buddhism, for the Japanese, nature was something beyond their control, where gods and goddesses lived in and engaged actively in their lives along with their plan and will. Such a view of nature also emerged in the results of the study. Some survivors accepted the situation caused by the 2011 disaster as a natural disaster that they hardly controlled. The attitude seen in the results can be understood from *mujyo* 無常 [immortality] shown in Chapter 2. *Mujyo* is a Buddhist term meaning that everything in this world does not stay alive but continuously changes (Maebayashi, 2016). Therefore, it is meaningless to cling to worldly things and events. People should instead live now without wondering about the meaning of a natural disaster. The continuation of "now" is life, and its flow changes constantly. The results indicated how strongly (yet unconsciously) the idea of *mujyo* lived among survivors in the damaged areas.

Another notable finding regarding existential meaning was the significance of rituals. The results implied that rituals for survivors referred to practices or acts often related to religion or a local tradition, such as sutras being chanted by Buddhist monks, prayers, ceremonies including funeral or memorial services, or a Shinto festival. The result is unique because of its existential characters. The result suggested that such rituals impacted their existential meaning, which is not at all strange because as Silove (2013) says, all individuals require a coherent narrative, whether implicit or explicit, to make sense of their lives. A disaster especially causes a major disruption of the sense of continuity of life, compelling survivors to re-appraise and, at times, to revise fundamentally their worldviews and systems of belief (Silove, 2013). Under such a post-disaster situation, therefore, there is a challenge in reconciling past customs related to their existential meaning. As DeMarinis says, rituals are related to meaning-making under the circumstance because existential meaning relates to understanding of life through which such meanings were challenged, reevaluated, renewed, or reconstructed.

6.1.2. Participants from different religious organizations: The five key psychosocial domains in the ADAPT model

The underlying premises of the ADAPT model is that extremely traumatic experiences may challenge and raise questions about the existing system based on several psychosocial domains in which both individuals and communities maintain stability and continuity of the society. Although several participants in this study were also survivors, the majority of the participants had not experienced the 2011 Great East Japan earthquake and tsunami in the same manner as people whom they helped. It means that most of the participants had not experienced trauma directly caused by the disaster. However, it does not necessarily mean that they had not experienced trauma at all, because relief workers can have a risk to develop secondary traumatic stress or some mental issues regarding their relief work, as some previous studies pointed out. Hence, in this section, an analysis of results from participants' accounts about themselves will be different from the previous section where survivors' experiences were in focus. Here, the focus is on participants' own experiences as a religious person and a help worker from a religious organization. The five key psychosocial domains from the ADAPT model are approached as resources for the participants about their help work.

6.1.2.2. Safety/Security

As it was the case with survivors, the central theme regarding safety/security found among the participants was a safe place. Almost none of the participants was exposed to severe life threat with regard to the 2011 disaster, although several participants experienced heavy or milder damages to their house, temple, or shrine by the earthquake and the tsunami. In this sense, safety/security in the ADAPT model refers to a safe place—in which individuals and communities are free from a life-threatening circumstance— was secured for all participants. However, even though the participants could have a physically safe place, it did not necessarily mean that safety/security was available to them. The results suggested that safety/security referred to a safe place where participants could share their problems and difficulties regarding their help work with others. Having such a safe place was found to be one of the preventive factors for distress. At the same time, it was also found that for some participants there was a lack of such a safe place because of internal relational trouble among the workers in a religious organization or difficulty cooperating with secular help organizations and medical professionals, which affected their health and well-being. The results strongly support that safety/security cannot be restored if there is a lack of control over their lives and an absence of social support or resources (Silove, 2002; Hobfoll et al., 2012, as cited in Silove, 2013).

The results also showed, the participants and their religious organizations worked to provide *kokoro no kea*, which gave them satisfaction but also stress

at the same time. Their feelings were often dragged down by survivors' stories of hardiness. Many participants felt depressed, and several of them had some somatic symptom, such as stiffness of body or severe dullness in the morning. The existence of psychological distress, such as depressive humor or insomnia, and somatic symptoms indicated that they lacked safety/security in relation to their activity to some extent. It is not strange that the lack of a safe place regarding their help activities affected their health and well-being because a prolonged lack of safety/security may lead to mental, physical, and consequently psychosocial impairment (Silove, 2013). Furthermore, as Silove (2013) says, "Creating a therapeutic environment that encourages a sense of security underpins all intervention" (p. 239). The results implied that it applied not only for survivors but also help workers because some of them lacked such a therapeutic environment.

Regarding the result that some participants still lacked a safe place where they could feel safe in relation to their help work in general and *kokoro no kea* in particular, there was an interesting finding that they did not consider a possible relationship between their mental issues and their somatic symptoms. It can be understood from the Japanese cultural context regarding the view on health as already mentioned in Chapter 2, the Japanese do not pay much attention to the relationship between mental health and physical health, and in Japan, somatic symptoms are common in depression (Nakao et al. 2001c, as cited in Nakao & Ohara, 2014).

At the same time, many participants' accounts ensured that they could deal with such stressful situations during their help work in general and *kokoro no kea* in particular by having a time and a place to meet with God/Buddha/gods and goddesses. Therefore, for participants, safety/security also referred to a safe place where participants could feel safe emotionally and psychologically in a personal relationship with God, Buddha, or gods and goddesses, especially when they faced difficulties or felt stress with regard to their help work. The results need to be understood from the domain existential meaning in the ADAPT model rather than from safety/security, so here, I mention that the key psychosocial domains in the model are interrelated with each other.

6.1.2.2. Bonds/Networks

The results showed that for participants, family referred to a significant other who helped them in decision-making regarding their help activities, and to whom they could turn when they had stress or difficulties regarding help work. It was implied that having such a familial relation was found to be one of the preventive factors for distress including burnout. A lack of such an inter-relational bond could affect their health and well-being. Therefore, a family that is included in the domain bonds/networks can be seen as a significant available resource for maintaining well-being for some participants. It is understandable because bonds/networks in the ADAPT model is relational attachment bonding and "essential to human functioning" (Silove, 2013, p. 239) that referred

to family, kinships, friends, neighbors, and local communities. Among all such interpersonal bonds, family was especially important from a Japanese cultural and social context (統計数理研究所 [Institute of Statistic and Mathematics], 2013) as shown in Chapter 2. None of the participants lost their family due to the 2011 disaster. There had not been any implications that they had issues with their family, either. Therefore, it was not surprising that many participants-maintained well-being positively despite both their physical and psychological hard work in the damaged areas.

Most of the participants had not experienced loss of neighbors and community except a few participants who were from the hard-hit disaster areas or who had experienced loss of neighbors or members in their community due to the tsunami. The results showed that for participants, community referred to groups and networks of help workers, which include not only a group based on faith or religion, that is, religious organization and religious help organization but also an inter-religious as well as a secular help workers' groups and networks. As results showed, many participants turned to such a community especially when they had difficulties or problems with their help activities, which seemed to have prevented them from being distressed because of their help work. Therefore, groups and networks of help workers that are included in the domain bonds/networks can be seen as a significant resource that is available for participants, and through which they could maintain their good condition. It is also not strange because "the integrity of interpersonal bonds and broader social supports could be vital to promoting recovery from a wide range of emotional disorders" (Silove, 2013, pp. 241-242).

6.1.2.3. Justice

As was the case with survivors, justice was the domain that was hard to identify and understand in the post-natural disaster context in relation to the ADAPT model. What was relevant to justice in the post-2011 disaster context was how participants themselves experienced and perceived their rights and dignity ignored, violated, or limited with regard to their help activities.

The results implied that there was a sense of injustice, which was expressed in the form of frustration or anger toward the local administrations that did not function to organize cooperation among relief workers and organizations including religious help workers and organization. It implies the lack of good governance. It was not surprising because a lack of good governance is one of the shortcomings often seen in a post-conflict society, which can influence people's sense of justice (Silove, 2013). This notion seemed to be true even in the 2011 post-disaster context. Silove (2013) says that "the restoration of a sense of justice will be a slow and piecemeal process, best advanced by a multi-sectoral, grassroots, and participatory approach" (p. 242). It suggests that religious help workers and organizations could have worked better at restoring a sense of justice in the damaged areas if there had been a functioning local administration with which religious help workers and organizations

could carry out cooperative work for survivors. However, judging from the accounts of some participants it was absent in many of the disaster-affected areas. Thus, it is understandable that some of them harbored distrust and felt frustrated toward the government or the local administrations and thereby experienced a sense of injustice.

One of the unique findings regarding the domain justice in this study is that sense of justice needed to be understood on an existential level. Unlike some survivors in the damaged areas, a majority of the participants had neither felt anger and disappointment toward God, Buddha, gods and something transcendental nor manifested a sense of unfairness and frustration for incomprehensibility except one participant. Moreover, none of them converted to another religion and religious faith unlike some survivors in the damaged areas. There was one participant, also a survivor, who demanded God in her prayers to explain the meaning of her suffering. However, the participant had kept her faith despite a sense of injustice toward God caused by the disaster experiences. It is an interesting finding but difficult to interpret from the theoretical perspectives used in the study. It may, however, be understood from three revealed factors. First, most of the participants had not experienced the 2011 disaster to the same extent as survivors. Secondly, unlike many survivors who considered themselves non-religious even though many of them had performed religious meaning-embedded practices and rituals, the participants' religious faith was not only connected to their occupation, it was thereby also related to who they were, that is, their religious identity. Thirdly, as was the case with many survivors, their philosophical view of natural disaster and attitude toward nature seemed to be relevant. The last notion appears to be relevant to the domain of existential meaning. Therefore, further analysis of this existential justice will be done later in a section, in which the interaction and relationship between the five key domains will be analyzed.

6.1.2.4. Roles and identities

As was the case with some survivors in the damaged areas, roles and identities for participants referred to social roles or identities in their family or their community or society. However, a central theme regarding roles and identities for participants was social roles. For participants, a social role refers to both their already established role before the 2011 disaster and their newly established role after the 2011 disaster.

The results showed that the majority of the participants in this study had not experienced such a loss of roles and identities that they had before the 2011 disaster occurred. Unlike the survivors in the damaged areas, none of the participants lost their work and occupations, which in most of the cases related to their religious faith, because of the 2011 disaster. It explains why most of the participants could maintain their subjective well-being. In the ADAPT model, roles and identities (for example, parent, worker, student, citizen, or social leader) would be lost or forced to renew by natural disasters. A loss of

such roles may cause identity confusion, which can "contribute to a range of adverse psychological and psychiatric outcomes" (Silove, 2013, p. 243). Therefore, it is crucial to restore and reestablish roles and to renew and forge new identities, which was the case with some survivors in the damaged areas, whose loss and lack of a social role seemed to lead to issues of identity and mental issues as we have already seen.

One other unique finding in the study was—different from the cases with survivors—that the 2011 disaster provided the participants with several new roles and identities without losing their already established roles. In the 2011 post-disaster context, for participants, a social role referred to status and position regarding their help work in the damaged areas in general and roles that were related to their identity as help workers in religious organizations in particular. As the results showed, three different roles of religious help worker in the damaged areas were found. The first was a supporter of community-building and rebuilding by organizing and providing events and activities. The second was a third-party counselor who provided survivors with *kokoro no kea*. The third was a caregiver who provides *kokoro no kea* through religious response. The results showed that these three roles overlapped each other and played some significant roles with regard to both survivors' and the participants' well-being. In short, the participants provided events and activities including some religious meaning-bearing festivals, through which they provided survivors with *kokoro no kea* through religious response. It suggests that their identities as religious workers connect to and have an influence on their help activities. As already mentioned, "identity confusion can contribute to a range of adverse psychological and psychiatric outcomes" (Silove, 2013, p. 243), and loss or lack of social role may lead to issues of identity as it was the case with some survivors. Therefore, the results indicated the participants had particular social roles and a clear identity as a religious person, which must have helped them avoid having identity issues. Furthermore, the majority of the participants had not experienced impairment of both mental and social health despite that providing *kokoro no kea* was not an easy task to carry out both physically and psychologically. Then again, the result can be understood from the ADAPT model that considered roles and identities as one of the essential psychosocial domains for mental health and well-being in the disaster-damaged areas.

6.1.2.5. Existential meaning and meaning-making
The results showed that in the post-2011 disaster context, existential meaning referred to the participants' understanding of life's meaning and their experiences of the 2011 Great East Japan earthquake and tsunami, through their help work in the disaster-affected areas. For the participants, goal, purpose, and meaning in life referred to one that they found after the disaster related to their help activities—to work for survivors and the damaged areas. Through their activities, they updated their meaning in life by connecting their

occupation as religious actors with a role in which they could work for those who suffered. The participants' accounts showed that the 2011 Great East Japan earthquake and tsunami had impacts on their existential meaning both directly and indirectly. The 2011 disaster made some participants find a new and concrete purpose for life in relation to their help work, such as working for living people, survivors, and contributing to community building in the damaged areas. The 2011 disaster also contributed to their rediscovery, better understanding of, and strengthening of their religious faith, which was a base for their activities for many participants. The results are understandable because "all individuals require a coherent narrative—implicit or explicit—to make sense of their lives" (Silove, 2013, p. 244), and a natural disaster may have a huge impact on their sense of coherence because they may disrupt the world with incoherence and shake their fundamental faith, belief, value, and orientation in life. The results also support DeMarinis's (2003, 2008) theory of existential meaning that existential meaning-making referred to ways and processes through which such meanings are challenged, reevaluated, renewed, or reconstructed.

Furthermore, as the results indicated, faith and religious rituals were significant resources and support available for many participants. Faith was a resource and support for many participants to keep on working for survivors in the damaged areas despite a tough situation such as their being almost the sole workers who were still driving help work. Faith and rituals based on participants' faith such as prayers or chanting sutras were also resources that they could use to prevent becoming distressed or when they had difficulties regarding their help work, which helped them not to develop both psychological and physical impairment. It supports DeMarinis's (2008) explanation that the concept "existential" is more likely "an umbrella term to encompass a wide range of meaning-making operations which provide operational narratives, value structures, and decisional pathways as well as the ritualized expressions of such" (DeMarinis, 2006, p. 44, as cited in DeMarinis, 2008, p. 59). Existential meaning also "includes the activities or expressions of symbolic significance, such as rituals and other ways of making meaning" (DeMarinis, 2006, p. 44, as cited in DeMarinis, 2008, p. 59), and "as each individual has an existential dimension and spiritual nature, the varieties of their expression include many different kinds of meaning systems" (DeMarinis, 2006, p. 45, as cited in DeMarinis, 2008, p. 59) including the system of traditional religion.

6.1.3. The interaction and relationship between the existential meaning and the other four key psychosocial domains in the ADAPT model

The five key psychosocial domains in the ADAPT model are not independent against each other. Rather, "they form interdependent components of the foundations needed to restore stability" (Silove, 2013, p. 244) and function interdependently when the individuals and the communities work for recovery and restoration.

According to Silove (2013), "the ADAPT model shares, with other contemporary frameworks, several key elements that are essential to understanding the psychosocial response of survivors" (pp. 244-245). They are recognition of the importance of the eco/social environment to recovery; the need for a culturally and contextually sensitive understanding in judging the border between normative and pathological reactions to stress; and the importance of supporting a balance of interventions (psychosocial, mental health) in a manner that provides an integrated approach to promoting communal and individual recovery (IASC, 2007; de Jong, 2002; Miller et al., 2006, as cited in Silove, 2013, p. 245). Taking these in mind, here in this section, I explore the interaction and relationship between these five psychosocial domains regarding, first survivors in the damaged areas and then the participants in this study, in relation to the ADAPT model with existential meaning in the center.

6.1.3.1. Survivors in the damaged areas

First, the results showed that safety/security referred to a safe place where survivors could feel safe through a good relationship with neighbors and networks with others. The lack of such a safe place itself implied the existence of a lack of good human relations in principle in the damaged areas. As already shown in Chapter 2, collectivism and harmonious human relations are often seen as characteristics of Japanese society, good human relations and networks seem to be very important. The results revealed, harmonious human relations and networks with others were indispensable for safety/security. In this sense, safety/security and bonds/networks were related to each other. In other words, if one is missing, the other can be missing, and if one is available, the other can be available, too.

Given the social aspect, the family is the most important social unit in Japan. It is the closest human relationship. It is the starting point for harmonious bonds/networks. As the results showed, loss of family caused a strong reaction including suicidal thought. It was implied that loss of family related to loss of meaning for life or hope for the future. In this sense, the domain of existential meaning and bonds/networks had an interactive relationship. The interactive relationship was also seen in one survivor's story in which the person lost his parents due to the tsunami. He was so distressed that he became almost crazy

about setting himself afire. Then he found hope for the future by adopting a new faith, which drove him to work for other survivors in distress. The episode suggested the existence of two types of interactive relationship between the psychosocial domains. First, it showed how the loss of bonds/networks affects both well-being and the existential meaning of individuals in the damaged areas. Second, it showed how the gaining of a new meaning in life could play a role in well-being.

The loss of family that some survivors experienced was not just a loss of living family but the connection to their familial ancestors, which made survivors discouraged and depressed. This result regarding the loss of bonds/networks needs to be understood regarding the domain of existential meaning. As described in Chapter 2, religion and religious beliefs are customs for most Japanese that can be seen in rites of passage, annual events, or their daily life (Fukushima, 2011). Given the existential aspect, ancestor worship is a custom in Japan, which become visible through religious rituals and religious symbols such as chanting sutra or prayers in front of *butsudan* and *kamidana*, as the results showed. Thus, the loss of bonds/networks regarding the familial ancestors had a significantly existential character. In other words, the results implied that bonds/networks in the damaged areas included an existential dimension.

Furthermore, the loss of the familial ancestors regarding bonds/networks and existential meaning implied the existence of the relationship with safety/security. As the results indicated, religious symbols and rituals, such as prayers and chanting sutras in front of *kamidana*, *butsudan*, or *ihai*, where they could meet their ancestors and the deceased family member(s), provided especially for those who were accustomed to praying regularly with a safe place where they could have time for reflection and peace of mind and, thereby, could open up themselves. On top of that, losing the connection to the ancestors through losing the ancestor's symbol could not only mean the loss of family but also imply a disruption of one's existentiality historically (Silove, 1999), which also could be related to the loss of a sense of belonging. Hence, it is not reasonable to think that the results of this study indicated the existence of a complicated interaction between safety/security, bonds/networks, and existential meaning.

The results also showed an interactive relationship between the domain justice and bonds/networks. Many survivors in the damaged areas experienced the loss of relationship with neighbors and community repeatedly and had difficulty in recreating such human relations and community because of repeated relocation. However, this was not the only reason that made it difficult for them to repair such relations and networks. As results indicated, a sense of injustice among survivors, which was caused by a gap in economic opportunities in the damaged areas, made the rebuilding of a relationship with neighbors and community difficult. Hence, it also supports the ADAPT model that presumes the five key psychosocial domains related to each other.

As the results indicated, some survivors were dissatisfied with God, Buddha, or gods/goddesses. It was a dissatisfaction with the fact that they felt existential justice was not fulfilled. Some of them became skeptical of the existence of God and Buddha. It might have been a loss of existential Justice. It was also a loss of faith. Others changed faith, and it can be understood as a renewal of existential meaning. In that sense, the domain justice and the existential meaning seemed to be related to each other. The finding—existential injustice—is extra unique to the damaged areas if comparing survivors of a mass conflict or other human-made disasters. Although one can argue that such human-made disaster could trigger a distrust against God or something transcendental, the case of a natural disaster like the 2011 disaster seemed to evoke such distrust and feeling of injustice stronger than some human-made disasters. Here, we can see the characteristic of the 2011 natural disaster— "nature" is something beyond human control and thereby related to "a transcendental plan and will," which human beings will never understand but accept it as it is.

Further, as the results showed, for some male survivors, the loss of a role in society as a worker or the loss of one's occupational status were related to the lack and loss of a goal and purpose for life. The results indicated an interactive relationship between the domain roles and identities and existential meaning. The loss of a role in society as a worker or the loss of one's occupational status also seemed to have caused some mental distress among some male survivors such as withdrawal, which indicated a lack of relationship with neighbors and community. Thus, the domain roles and identities and bonds/networks seemed to be interdependent.

In sum, as the ADAPT model posits, the study's results showed that all five psychosocial domains together constituted the areas that need to be considered for recovery and reconstruction. It appeared that they functioned interdependently when survivors and the communities in the damaged areas worked for recovery and restoration. As we have seen the above, it is noteworthy that this interaction is complicated and multidirectional. Hence, it is clear that the deficiencies in some domains can still cause disruptions that lead to health issues, regardless of whether the other domains are restored.

6.1.3.2. Participants of the study

Participants' accounts showed that safety/security referred to a safe place where participants could feel safe emotionally and psychologically in a personal relationship with God/Buddha/gods and goddesses especially when they faced difficulties or felt stress with regard to their help work. It indicates that their faith is an essential existential resource available to them to secure a safe place, which helps them to maintain their mental health. Further, it is noteworthy that such a safe place where they could meet God/Buddha/gods and goddesses was also created through rituals such as prayers or chanting

sutras. These findings illustrate well how safety/security and existential meaning interact and relate to each other for the well-being of help workers.

For participants, a safe place also referred to a place where they could share their problems and difficulties regarding their help work. As the results showed, such a place for participants were groups and/or networks of help workers, which include not only groups based on faith or religion, i.e., religious organization and religious help organization they belonged to, but also inter-religious as well as a secular help workers' groups and networks they worked with. It suggests an existence of a significant relationship between safety/security and bonds/networks. As already shown, collectivism and harmonious human relations are often seen as characteristics of Japanese society, and the participants' accounts revealed that harmonious human relations and networks with others were indispensable for safety/security. For some participants, such a safe place was also provided by their family, to whom they could turn when they had stress or difficulties regarding help work. These findings suggest the existence of a relationship between safety/security and bonds/networks and describe how safety/security and bonds/networks interact for the psychosocial well-being of help workers.

The results also showed an interactive relationship between the domain justice and existential meaning. As the results showed, justice referred to how participants themselves experienced their rights and dignity secured and protected or violated and limited by the government or local administrations regarding their help activities. Working for survivors and the damaged communities was not only a goal and purpose that many participants found after the 2011 disaster but also existential resources through which the participants found satisfaction and meaning for life. Hence, it is no wonder they expressed a sense of injustice in the form of frustration or anger toward local administrations, which turned down their offer to work as volunteers. Thus, the results implied the existence of a relationship between justice and existential meaning. Furthermore, the results also implied that the participants' view of a natural disaster and attitude toward nature helped them not experience a sense of existential injustice, except for one participant. The participant questioned the intention of God, unlike survivors in the damaged areas, who felt anger and disappointment toward God, Buddha, gods and something transcendental or manifested a sense of unfairness and frustration for incomprehensibility.

As the results showed, participants as religious help workers had three roles in the damaged areas: (1) supporter for community-building/rebuilding by organizing and providing events and activities, (2) a third-party counselor who provided survivors with *kokoro no kea*, and (3) caregiver who provide *kokoro no kea* through religious response. These roles were related to many factors included in existential meaning, such as goal and purpose, sense of mission, faith, religion, and rituals. This illustrates well how the domain roles and identities and existential meaning function interdependently.

In sum, as the ADAPT model posits, the study's results showed that all five psychosocial domains functioned interdependently to provide participants with resources, which they could use for their help work, through which they could maintain their health and well-being.

6.2. Answering the research question and sub-questions

To conclude the chapter, I return to the study's research questions. I start by concluding the analysis in relation to the sub-questions. After that, the attempt to answer the main research question follows.

6.2.1. Answering sub-questions

6.2.1.1. What specific tasks did volunteer workers in religious organizations perform in relation to the existential and psychosocial reconstruction in the aftermath of the catastrophe?

In the damaged areas, many volunteer workers and organizations—both secular and religious—had worked from immediately after the disaster, which was described by one participant as "the second tsunami" (P9, p. 2). Accounts from participants of the study confirmed the situation that was described by the tsunami metaphor. Many religious organizations and religious help organizations started engaging in relief activities in the early stage of the post-disaster situation.

During the acute phase, religious help workers and organizations engaged in assistance and support for urgent needs in the damaged areas, such as delivering relief supplies to evacuation shelters, or cleaning up rubbles, and so on. In this phase, many religious people, mainly Buddhist monks, contributed as a volunteer to religious rituals and ceremonies such as funerals, chanting a sutra, and so on. Conducting religious rituals and ceremonies continued to be one of their voluntary works even after the acute phase passed, along with delivering relief supplies to temporary housing, but eventually, their work shifted to help for reconstruction and recovery in many different ways, such as a support for a local industry like the fishery or agriculture. Other work includes, for example, organizing events and meeting places at temporary housing such as a teatime party, mobile café, karaoke event, handicraft circle, and so on. The teatime party and mobile cafe were the most popular activities, in which many help workers from many different religious organizations engaged. Such a party and café were also places where many help workers from many different religious organizations used for conducting *kokoro no kea* 心のケア [mental health care or care for the heart] activities including active listening or health counseling. Participants' accounts showed that majority of

the participants and their religious organizations engaged in such care activities without an intention of working as a missionary, although several Christian participants' accounts implied that evangelism was not the primary but somewhat important aim for their help work. Many participants had been engaging in such activities in either interfaith or non-religious contexts, for example, working together with workers from other religious organization and non-religious organization.

6.2.1.2. How did volunteer workers experience difficulties and problems, during their relief work in the damaged areas?

Participants' accounts indicated that help workers including themselves and religious help organizations encountered many different challenges, problems, and difficulties during their help work in the damaged areas. These challenges, problems, and difficulties were on different levels—physical, psychological, social, and existential—which were often overlapping.

As the results showed, 26 participants engaged in *kokoro no kea* 心のケア [mental health care or care for the heart] to some degree. Hence, some of the challenges, problems, and difficulties they faced were related to *kokoro no kea* work. Their feelings were often dragged down by survivors' stories of hardiness, which often made them feel depressed and have a somatic symptom, such as stiffness of body or severe dullness in the morning.

Not a few participants experienced a difficulty regarding confidentiality when they encountered survivors with mental issues. Many of them were aware of the stigmatization of mental illness, which they believed the reason why such survivors came to talk to them instead of seeing medical professionals. Therefore, it was a challenge for them to decide whether they should connect them to medical professionals or not, to find out how to introduce them to medical professionals if they decided to do so.

Cooperation with their secular counterparts including local administrations, the Council of Social Welfare, medical professionals, and clinics was a challenging task, too. Some of the participants experienced being refused by local administrations to work in public spaces. In this secular versus religious context, as already seen, many participants engaged in *kokoro no care* in an interfaith or non-religious context, which was one way for them to work in public spaces.

Interestingly, however, as the results showed, many participants experienced being asked by survivors to perform religious rituals in the public spaces, for example, at a tea party. It was a challenge for many participants to see how far their activities in general, *kokoro no care* in particular, could be religious or spiritual, and how far they could work as religious persons.

Further, not only the relationship with other secular counterparts but also genuine human relations within their own religious help organizations were troublesome for some participants, which sometimes led to having both mental and physical issues.

6.2.1.3. What existential and psychosocial resources from the perspective of the ADAPT model were available?

Existential and psychosocial resources regarding the five key domains in the ADAPT model that were available for survivors were still limited. Regarding safety/security, a safe place, where survivors could have privacy and a proper living space, where survivors had a good relationship with neighbors and networks, where survivors could open up themselves and talk about their disaster experience and problems, and where they could have time for reflection and soothing their mind and thereby could open up themselves, were still missing in many of the damaged areas.

Regarding bonds/networks, many survivors experienced loss of a family/family member(s), relationships with neighbors and thereby community due to the 2011 Great East Japan earthquake and tsunami, but recreating or restoring such lost bonds/networks had been delayed for several reasons already mentioned. However, generally, female survivors were better at restoring human relations than male survivors and thereby had better availability to this domain. Those who were available to social gatherings or events were also often available to this psychosocial resource.

Regarding justice, survivors in some damaged areas were excluded from decision-making regarding relocation plans and reconstruction plans. In some damaged areas, a gap of economic opportunities was apparent. These observances by the participants indicated there was a lack of functioning local government and administration thereby a lack of functioning local administrative policy and measures that could promote a sense of justice among survivors in the damaged areas.

Regarding roles and identities, the prolonged lack of a job or work-related status was seen in some damaged areas, which affected some male survivors' mental and social health. Female survivors, who had their already established role as one who had responsibility for the household and care for family members, had kept such a role even after the disaster if they had not lost family or family member(s), which might have prevented them from having mental issues. In this sense, such female survivors had better availability in this psychosocial domain too.

Regarding existential meaning and meaning-making, in the hard-hit disaster areas, loss and lack of goal or purpose for life were seen especially among elderly and male survivors who experienced loss of work/job or houses. Those who could find a new goal or purpose, such as working for others, could regain their good health condition. Some survivors in the hard-hit disaster areas had experienced loss of faith that they had before the disaster. Others found a new faith, and having new faith seemed to have a good impact on their mental health as well as social health. Further, rituals were existential resources through which they worked with their existential meaning that was violated or disrupted by the 2011 disaster.

I go further with the participants' own experiences. Different from survivors in many damaged areas, participants accounts indicated that there were quite sufficient existential and psychosocial resources available to them with regard to their help activities. Regarding safety/security, many participants had a safe place where they could feel safe emotionally and psychologically in a personal relationship with God/Buddha/gods and goddesses, especially when they faced difficulties or felt stress with regard to their help work, and where participants could share their problems and difficulties regarding their help work.

Many participants had functioning bonds/networks, such as family, groups, and networks of help workers, which include not only groups based on faith or religion, i.e., religious organization and religious help organization but also an inter-religious as well as secular help workers' groups and networks. Such bonds/networks were resources, which they could use when they had difficulties or problems in relation to their help activities, and a factor, which seemed to have prevented them from being distressed because of their help work.

Regarding justice, some participants perceived a sense of injustice that was expressed in the form of frustration or anger toward local administrations that failed to organize cooperation among relief workers and organizations, which turned down religious help workers' and organizations' offers for voluntary work. It could mean that there was a lack of functioning local government and administration and thereby a lack of a functioning local administrative policy and measures that could promote a sense of justice among religious help workers.

Regarding roles and identities, three different roles of religious help worker in the damaged areas were found—supporter for community-building/rebuilding by organizing and providing events and activities, a third-party counselor who provided survivors with *kokoro no kea*, and caregiver who provide *kokoro no kea* through religious response. Participants' accounts indicated that these roles related to their identity as a religious person, that these roles gave them a goal or purpose for life, meaning in life, or a sense of mission.

Regarding existential meaning and meaning-making, faith and religious rituals were significant resources and support available to many participants. Faith was a resource and support for many participants to keep on working for survivors in the damaged areas. For many participants, faith and rituals, such as prayers or chanting sutras, were also resource that they could use to prevent being distressed or when they had difficulties regarding their help work.

6.2.1.4. How did the systems in the ADAPT model interact in accounts of volunteer workers in a Japanese cultural and psychosocial context?

The results of the current study showed that all five key psychosocial domains together constituted the areas that need to be considered for recovery and reconstruction, and that they functioned interdependently when survivors and the communities in the damaged areas worked for recovery and restoration.

The interaction between the five psychosocial domains was complicated and multidirectional. It was clear when there were deficiencies in some domains; it could still cause disruptions that could lead to health and well-being issues and hinder them from recovery regardless of whether the other domains were restored.

Regarding the participants' experiences, the results of the study showed that all the five psychosocial domains functioned interdependently to provide participants with resources, which they could use for their help work and through which they could maintain their health and well-being. The interaction between the five psychosocial domains was complicated and multidirectional. As was the case with survivors in the damaged areas, it was clear when there were deficiencies in some domains, it could still cause disruptions that could lead to health and well-being issues, regardless of whether the other domains were restored.

6.2.2. Answering the central research question

What perceived roles did volunteer workers in religious organizations play in existential and psychosocial reconstruction and development with regard to the 2011 Great East Japan earthquake and tsunami?

In the damaged areas, many religious organizations and religious help organizations had started engaging in relief activities from the early stage of the post-disaster phase up till now. Their help work was various, but some of the most crucial help work by religious help workers and organizations related to *kokoro no kea* 心のケア [mental health care or care for the heart]. As results showed, both existential and psychosocial resources regarding the five key domains in the ADAPT model available to survivors for recovery and reconstruction were still limited. Under this situation, religious help workers and organizations had played significant roles in repairing, restoring, or replacing existential and psychosocial domains that were still not available to many survivors and were still lacking in many damaged areas. Religious help workers and organizations had contributed—as a supporter for community-building/rebuilding, a third-party counselor who provided survivors with *kokoro no kea*, and a caregiver who provided *kokoro no kea* through religious response—to promoting of reconstruction of existential meaning and psychosocial well-being in the damaged areas.

Last but not least, in the damaged areas, so many volunteer workers and organizations—both secular and religious—had worked from immediately after the disaster, and not a few secular volunteer workers and organization had also engaged in *kokoro no kea* and community-building/rebuilding. The most significant difference between help workers in many different religious organizations and their secular counterparts was related to existential meaning. The former could deal with survivors' existential questions

regarding death and life, religious faith, and spirituality as a religious person, through religious symbols and rituals, and thereby they contributed to the reconstruction and development of the disrupted and lost existential meaning of survivors in the damaged areas.

Chapter 7   Discussion

In this final chapter, I reflect on the study results and discuss what could not be included in the previous chapters. I start with an empirical reflection by comparing the findings of the current study with the findings of the previous studies presented in Chapter 2. A reflection on this study's contributions follows thereafter. After a critical reflection on theories and their use, a methodological reflection will be presented. Finally, some of the findings and new questions that were not given a space in the previous chapter will be discussed and presented as a concluding reflection and recommendations for future research.

7.1. Empirical reflection

In this section, I will compare the results of the study with previous studies presented in the literature review—some similarities as well as differences. Before I continue, however, I have to make one point clear. A majority of the previous studies presented in Chapter 2 were quantitative studies, which made the results possible to generalize. However, the current study was a qualitative study, which made the results not suitable for generalization. Here, one problem shows up regarding whether it is reasonable to compare the results of the quantitative studies with the results of the current qualitative study. I am aware of the problem. At the same time, I do the task not only because the majority of the previous studies available to this study were quantitative studies, but also I believe it is still interesting to see how and to what degree the results of the current qualitative study can relate to the previous studies.

The results of the current study support several previous studies. The study results showed that there was a loss or lack of bonds/networks in the damaged areas and such a loss or lack could affect physical, mental, and psychosocial well-being. Firstly, a loss or lack of family identified in the study had a significant impact on well-being. For survivors who lost a family member(s), the process of grief seemed to be prolonged, and some mental issues were identified as a response to the loss. It was indicated that the loss of a family member(s) caused mental issues including suicidal thoughts or withdrawal. The result is in accordance with the previous studies—the experience of the death of a family member(s) (Kumar et al., 2007; Frankenberg et al., 2008) and having felt one's own or a family member's life in danger (Frankenberg

et al., 2008) related to psychological distress, such as PTSD symptoms (Kumar et al., 2007; Frankenberg et al., 2008).

The results of the study also indicated the existence of a loss or lack of a neighborhood relation and local community caused by evacuation or moving to temporary housing as well as to reconstruction housing. Many survivors in the damaged areas suffered from the loss or lack of neighborhood relation and the local community, which related to the manifestation of psychological disorders such as alcohol abuse or withdrawal. Failure to create a relationship with new neighbors could also affect survivors' well-being both psychologically and socially in a negative manner. Hence, the result supports several previous studies, which claim that dislocation due to a natural disaster is one of the significant risk factors that could increase psychological distress, such as PTSD symptoms (Fukuda et al., 1999; Van Griensven et al., 2006; Ali et al., 2012) or adjustment disorder, depression, panic disorder, PTSD, anxiety disorder (Math et al., 2008), impairing psychological recovery (Kuwabara et al., 2008).

Kyutoku and colleagues (2012) found that posttraumatic stress symptoms were significantly more present in people in the primarily affected area than in those in secondary or non-affected areas. The result of this study is in accordance with the results of their study because the majority of the participants of the study who experienced the 2011 disaster outside of the most damaged areas seemed to show no specific indication of having posttraumatic stress symptoms. In other words, the degree of the exposure to a disaster relates to health and well-being.

According to the previous research, property damage such as loss of the house is also a risk factor for psychological distress (Frankenberg et al., 2008; Kuwabara et al., 2008). It is also supported by the findings of the current study because the results of the present study indicated the existence of mental issues among the survivors in the damaged areas who lost their house, while the majority of the participants of the study, who did not lose their house, showed no indication that they suffered such.

The previous studies showed how survivors' demographic characteristics related to a degree of how they were affected by a disaster. One significant point argued by the previous studies was age. Older persons were not only the most vulnerable to a disaster but also more likely to be impaired and increase psychological distress as well as physical health problem (Kuki et al., 2001; Toyobe at al., 2006; Tang, 2007; Priebe et al., 2009; Ali et al., 2012). The results of this study confirm this notion. The results of the study implied that some older persons still living in temporary housing were lacking hope and a purpose for life under the situation, thereby leading to psychological distress. At the same time, the finding of the study also showed that younger survivors suffered from a loss or lack of hope in the damaged areas. It can be related to a result of a study by Marks, Cherry, and Silva (2009). They found that older survivors experienced a natural disaster more temperately and sanguinely than

younger or middle-aged survivors who regarded natural disasters as life-altering crises (Marks, Cherry & Silva, 2009). At the same time, it can also be understood from the resilience perspective. Resilience is "both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community, and culture to provide these health resources and experiences in culturally meaningful ways" (Ungar, 2008, p. 225). There seems to be a problem that many of the Japanese rural areas have suffered even before the 2011 disaster, namely depopulation and a devastating decline in the birth rate. It may be not so strange to interpret the results of the study that the older survivors in the damaged-areas had already been familiar with the problem and difficulties regarding the hope for future development of their community, which might have moderately affected them.

According to the previous studies, low socioeconomic status due to loss of job and unemployment might have related to mental health problems (Kato, 1998; Kumar et al., 2007; Ali et al., 2012; Oyama et al., 2012). It is also supported by the results of the study that indicated clearly that the loss or lack of jobs and works caused not only their economic hardship but also their loss of roles and identities in family and society, which also might have affected their well-being.

The results of several previous studies suggested that weak or deteriorating psychosocial resources related to psychological distress (Fukuda et al., 1999; Van Griensven et al., 2006; Tang, 2007; Omote, Naganuma, & Kido, 2010; Oyama et al., 2012). The study results also support the result, because the results of this study implied that single lack of the psychosocial domains in the ADAPT model affects well-being in the damaged areas and among the participants of the study.

Other notable findings of this study when it comes to the survivors' demographic characteristics involve a gender issue and a power relation. The previous studies pointed out that female survivors were more likely to be impaired by psychological distress than male survivors (Terada, & Matsumoto, 1996; Nishimoto, & Matsumoto, 1998; Norris et al., 2002; Kumar et al., 2007; Frankenberg et al., 2008; Kuwabara et al., 2008; Priebe et al., 2009; Ali et al., 2012). The results of the current study, however, showed quite the opposite results when it comes to the gender difference. In this study, female survivors seemed to have more access to resources to rebuild a new relationship with others under the dislocation; thereby they seemed to maintain or recover their psychosocial well-being. The results of this study also implied that a female gender helped female survivors to maintain or recover their well-being because of their not-lost roles in family and society as a wife, mother, and caregiver. It should be understood from a gender-related power and status issue, which different effects could be argued regarding different cultural and social contexts. Of course, we have to argue whether the gender and the gender-specific roles in a Japanese society affected the results

because we have seen a case in which a woman was trapped in the gender-specific role as a wise mother and a good wife.

If focused on the results of the study regarding existential dimensions, the study by Feder and colleagues (2013) can be helpful. They found that the purpose in life was positively correlated with positive emotion (Feder et al., 2013). Although the study used a qualitative approach, the results of this study support their result because the results of this study also indicated that a goal, purpose, or meaning in life might renew and recreate existential meaning among both survivors and the participants from the different religious organizations. The results of the study also supports several previous studies—meaning after a disaster could be provided by individual and collective belief (Corey & Corey, 2003; Covey, 2004, as cited in Marks, Cherry & Silva, 2009), relationships, communion with other people (Rehnsfeldt & Arman, 2012), care and connection to others (Maidment et al., 2015), perceived social support (Dursun et al., 2016), or sense of mission to do something in the aftermath of a natural disaster (Aikawa & Matsui, 2016). In fact, the results of this study implied that the relationship with others through a co-memorial ceremony, efforts to create a new inter-relational bonds, or working for others who were suffering, helped many of the survivors as well as the participants to reconstruct their meaning in life.

According to Sibley and Bulbulia (2012), a loss of faith is associated with significant subjective health declines among survivors. The results of the study imply the existence of such a loss of faith in the form of a sense of injustice, although the results did not clearly show a relationship between such a loss and health issues. However, the results imply that holding faith and finding a new faith relate to a positive mental health outcome.

Danbolt and Stifoss-Hanssen (2011) mean that in a post-disaster and secular context, the disaster rituals had the emotional intensity and a public character, and the memorial service/ritual was a collective ritual response to the extensive experience of crisis, and the religious character came out of the demands of the situation, despite the relative lack of religion in public life. The results of the current study support them. The results of the study indicate that in the damaged areas, many survivors appreciated getting support through rituals such as being chanted sutra by Buddhist monks, funerals, co-memorial services, or prayers. As the results of the study showed, such rituals seem to help survivors to reflect over the 2011 disaster, deal with grief and a sense of meaninglessness, accept their loss, and move forward. Further, according to Sibley and Bulbulia (2012), secular survivors appeared to turn to religion at times of natural crisis. The results of the study support their result to some degree. I mean, "to some degree," because there seems to be a space to discuss whether many of the survivors were "secular survivors" if considering the religiosity in Japan in general and the damaged areas in particular.

When comparing the results of this current study with the previous studies focused on relief workers and volunteers, several findings are relevant to

them. Acute stress reactions (Chan & Huak, 2004) and PTSD symptoms (Ehring, Razik & Emmelkamp, 2011) were familiar to relief workers who engaged in relief activities or reconstruction work immediately after the disaster and were predictive of PTSD even months or years after the relief activities (Chan & Huak, 2004; Sakuma et al., 2015). Since this study did not aim to assess or diagnose PTSD among the participants from the different religious organizations, it is difficult to see whether there are participants who had PTSD, although the majority of them started working immediately after the 2011 disaster. However, the results indicate that some of the participants experienced distress, thereby some somatic symptoms. Among those who experienced such symptoms, several still had such symptoms at the time of the interviews, which implies that distress can be prolonged.

Regarding risk factors for mental health issues including psychological distress, some previous studies show that severe exposure to a natural disaster related to psychological distress (Chan & Huak, 2004; Ehring, Razik & Emmelkamp, 2011; Suzuki et al., 2014; Fukasawa et al., 2015; Wang, Yip & Chan, 2016). The results of the study, however, are ambivalent. Indeed, there were some severe-exposed participants who experienced psychological distress hard, but there were also some severely exposed participants who did not experience such distress. What made the difference between them is unclear, so it is an interesting theme to be explored in the future.

Another risk factor, according to some previous studies, is female gender (Armagan et al., 2006; Ehring, Razik & Emmelkamp, 2011; Anderson et al., 2015). The results of the study partially support their results. By "partially" I mean that the results implied that more female participants expressed stress or somatic symptoms such as insomnia, stiffness of the body, or severe dullness in the morning than male participants. Although the number of the participants in the study was limited, which make it difficult to generalize the result, it is an interesting result, especially if considering the fact the number of female participants was much fewer than the males.

According to Armagan and colleagues (2006), less experience of disaster relief work is also a risk factor for impairment of psychological distress. When it comes to the results of the study, it is difficult to assess whether the prior experience of the disaster relief related to the impairment of psychological distress because all participants had no prior disaster relief experience.

Another risk factor for mental health issues, according to some previous studies, are disaster work-related issues, for example, problems at the workplace (Suzuki et al., 2014: Fukasawa et al., 2015) including more reduced levels of workplace communication (Suzuki et al., 2014; Sakuma et al., 2015), frequency of handling residents' complaints and contacting community residents (Suzuki et al., 2014: Fukasawa et al., 2015), frequency of listening to survivors' disaster experiences (Fukasawa et al., 2015), and low social support regarding help activities (Ehring, Razik & Emmelkamp, 2011). The results of the study support them.

Furthermore, according to some previous studies, losing balance with personal family life due to the help activities (Wang, Yip & Chan, 2016), and overwork with lack of rest/day off (Suzuki et al., 2014: Fukasawa et al., 2015; Sakuma et al., 2015) were risk factors for mental health issues. Since the results of the study indicate that family played an important role in the participants' well-being and several participants mentioned that they considered rest and a day off essential to prevent burnout, the results of the study also support the previous studies.

Regarding protective factors for psychological distress, several previous studies identify such, for example, a sense of belonging to an organization or society through disaster-related work (Fukasawa et al., 2015), disaster work engagement (Fukasawa et al., 2015; Wang, Yip & Chan, 2016), a sense of mission that may generate meaning (Ogiso & Yamada, 2013; Aikawa & Matsui, 2016) or contributing (Fukasawa et al., 2015), which the results of the study confirm, too, as already shown.

It is interesting and important to reflect on the results of the study, especially on the participants' religious character. According to several previous studies, religious leaders and teachers seemed to consider relief work as acting for the common good rather than for traditional religious loyalties or their religious dogmas (Ghiloni & Shaw, 2013; Aizawa, 2015). Religious leaders and teachers, as well as volunteers, seemed to respond to the disaster not by theological/dogmatic explanations but by providing practical assistance with a religious character according to survivors' wishes and needs (Ghiloni & Shaw, 2013; Aizawa, 2015; Saito et al., 2016). The results of the current study show that almost all participants who worked as a caregiver using religious symbols, rituals, and faith did so without any intention to propagate. Therefore, we may understand that the results support the results of the previous studies. However, it is also important to mention here that several participants, namely some Christian participants, confessed that they regarded their activities as a part of their missionary work or they hoped their work contributed to letting people know about Christianity. The results of the study implied that for some Christian participants, the mission came first, or at least there was implicit intention to do missionary work. This may relate to the local religious context. As we have seen, Buddhism, especially Soutou-Buddhism, and Shinto have established belief in most of the disaster-affected areas. On the other hand, Christianity is still a foreign religion, stranger to many survivors in the damaged areas. The results of the study indicated that many survivors in temporary housing in the damaged areas turned to Buddhist participants for the first hand (then Shinto participants), not to Christians. In other words, the Buddhist participants were not questioned and did not need to explain their work. More research is needed on the finding, and because such a missionary intention could cause a problem during the help activities according to the results of the study, it is longed to explore and argue the finding.

7.2. Theoretical reflection

Considering the theoretical framework of the study, I have to admit that there are some capacities for the study to improve on the theoretical level. This study as a whole is built from a framework composed of a model, namely the ADAPT model (Silove et al., 2006) with existential meaning in the center (DeMarinis, 2013). The model is the fundamental theoretical model in this study. Although the model is a conceptual model with an aim for prevention and intervention mainly in a post-mass conflict context, the model has been used in the post-natural disaster context, and it worked in the study on a satisfactory level. I used the model not only to identify existential and psychosocial resources available in the 2011 disaster-damaged areas but also to map and understand the interactions between the five key psychosocial domains. The model provides not only a good picture of the resources available to both survivors and the participants but also a good picture of how these resources overlap and interact with each other to reconstruct and develop existential meaning and psychosocial well-being. I am aware that the model may not explain everything that needed to be explained, I believe they helped me to explore and understand how and to what extent volunteer workers in religious organizations functioned with regard to the reconstruction and development of existential meaning and psychosocial well-being in the affected areas.

However, as already mentioned, the ADAPT model is a pan-theoretical and conceptual model with an aim for prevention and intervention. Therefore, it is preferable to have some theoretical backups so that the model can explain the results of the study on a convincing, theoretical level. Since the central concern of this study is the function of religion and volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being, I employed a theory of existential meaning. Then, my usage of the term "existential" is primarily in accordance with DeMarinis (2003, 2008)—"existential" that has its function in focus, as well as its dimensional richness, rather than defining substantial content. This understanding of "existential" is of use because it enables us to see "existential" as a multi-dimensional and multi-perspective process, which would hardly exclude any meaning-making process and activity regardless of whether it is in secular or transcendental context. This inclusive understanding of existential meaning provides a good picture of both survivors' and the participants' complex and multi-facial disaster experiences regarding their existential meaning and meaning-making. However, one critical reflection over the employment of the perspective on existential meaning needs to be presented here. As we knew, existential meaning and meaning-making, especially in the time of crisis, are involved, multi-dimensional, and multi-perspective processes. Likewise, psychosocial well-being is a complex and multi-factorial concept, one theoretical model or perspective cannot be enough for catching the overlook of the reconstruction and development of existential

meaning and psychosocial well-being in the 2011 disaster-damaged areas. In this sense, I believe that the study has possibility and space for employing several more perspectives that touch upon existential meaning, such as the theory of Sense of coherence so that the study can put light upon the complexity and multi-dimensional character of existential meaning.

One specific advantage of the ADAPT model with existential meaning in the center is its culture sensitivity. As the "reconstruction processes are pursued, how effective they are will depend on the resources, context, culture, and historical background of the affected society" (Silove, 2004, p. 93). Because culture influences not only construction of existential meaning but also "how a society's institutions are constructed, how societal values are formed, and the codes of conduct and ethics in psychosocial interactions" (DeMarinis, 2013, p. 212), it is crucial to understand the cultural context, in which this study took place. Moreover, since the individual's existential meaning and coherence is formed in constant interaction with his or her surroundings and the society they are locating in, restoring and renewing of existential meaning should be carried out in a cultural, historical, and socially sensitive manner. Therefore, I employed Marsella's perspective on culture and Kleinman's culturally sensitive perspective on health and well-being developed by DeMarinis (2003) in the study. They are tools to approach the Japanese cultural context and of much use for the data analysis that culture plays an important role. The usage of these perspectives, however, could be improved regarding the theoretical working model. One of the critical reflections is that these perspectives could be combined with the ADAPT model in a more integrative manner. More effort on integration between these cultural perspectives, the ADAPT model, and existential meaning and meaning-making would have helped the analysis of the study be more in-depth and more transparent.

Last but not least, there are some spaces for development regarding the theoretical perspectives of the current study. First, the results of the study suggested a possibility to employ the perspective of resilience for more in-depth analysis. Since resilience is "both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community, and culture to provide these health resources and experiences in culturally meaningful ways" (Ungar, 2008, p. 225), it might have been useful for more culturally sensitive analysis of the study results. Even though the ADAPT model is aware of the significance of the resilience in a context of psychosocial work (Silove & Zwi, 2005), and DeMarinis's adaptation of the ADAPT model could bring an important aspect of resilience into the study to some extent, the resilience perspective could have been used in a better way, for example, by combing with the ADAPT model.

Secondly, the results of the study might also be analyzed from the theory of the Post Traumatic Growth. According to Southwick, Satodiya, and Pietrzak (2016), "the field of disaster mental health has focused on identifying and treating psychopathology" (p. 1364), but "in recent years, there has been increasing emphasis on resilience building, individual and community preparation, and posttraumatic growth in this field" (p. 1364). Silove (2013) also admits that "posttraumatic growth and positive change are possible, even in the most adverse circumstances" (p. 238) because "survivors can learn invaluable lessons from their experiences, gaining insights and motivation to achieve a higher order of adaptation for themselves and their communities" (p. 238). Hence, this perspective is relevant to the key psychosocial resources in the ADAPT model, well-being, and recovery and reconstruction. Therefore, I believe that the perspective could have been employed by combing with the ADAPT model together with the perspective of resilience.

7.3. Methodological reflection

This study was designed as a qualitative research and was undertaken from the psychology of religion. According to Malterud (1998), a qualitative approach fits in the study of the human qualities or character such as experience, thoughts, expectations, motivations, and attitudes. Concerning the aim of the study, this advantage is relevant to this study. It enables me to approach experiences of survivors and the participants. It also provides a good picture of survivors' and participants' existential meaning and psychosocial well-being. However, qualitative research has a weakness, namely, difficulty in generalizing the result. The weakness touches upon the current study, too. As the number of the participants of the study is limited, the results of the study are hardly generalizable.

According to Kvale (1997), the advantage of interviews is that they may capture a variety of people's opinions about a topic and provide a picture of a varied and controversial human world. Creswell (2014) points out the advantages of the interviews that participants can provide historical information and that interviews allow a researcher to control the line of questioning. Participants in this study gave rich, and diverse information regarding the five key psychosocial domains focused on this study. Open-ended questions enabled participants to speak about the topics and their experiences as freely as possible. The semi-structured interview style kept the interviews in line without impeding participants' narratives. However, there were several difficulties in conducting interviews. For example, participants understood the same questions in different ways due to the definition of terms, such as region, faith, or belief. My concern is, therefore, that it could have been much better if I could show and explain to them clearly and precisely to what these terms refer. Another difficulty was that for some participants, the interviews were

too short timewise. Some participants preferred to talk more about their worldviews, their childhood memories, or long life history rather than answering the questions. Although such stories were interesting and insightful and gave me some critical background information, they took much time, and as a consequence, some of the answers to the interview questions were not fully developed.

Regarding the data collection, as a whole, I consider the choice of data collection procedure proper if considering that I could gather enough sufficient data for the study. Nevertheless, I think the study could have been better if I could have invited more heterogeneous participants—from more different religions, for example, more from Shinto, more female participants, and more heterogeneous age groups.

When it comes to the data analysis procedure, I used template analysis style in the study. This type of analysis is a good starting point for developing new descriptions (Malterud, 1998). I consider its theory-driven character as one of the most prominent advantages for the data analysis procedure in the study. In this study, the data analysis procedure was facilitated by sorting out the material into five main categories deprived of the ADAPT model with existential meaning in the center, which became a good starting point for the analysis. However, according to Malterud (1998), template analysis style may involve a risk for the reproduction of already known knowledge, which I consider a disadvantage of the style that I tried not to ignore during my work. To avoid such a risk, I tried the findings from the interview data not to be excluded from more inductive and theory-generating phases because of its richness. In other words, although the template analysis style is a theory-driven deductive method, it does not necessarily mean to exclude spaces for findings from the interview data to be argued and discussed. Furthermore, the collected data in the study had much potential, which may help in avoiding the reproduction and reconfirmation of existing theories and be a help in developing theories used in this study instead.

The current study employed some validity criteria as introduced by Creswell (2014). As he says, it is essential to use multiple approaches so that researchers can check the accuracy of the findings and increase the validity of the study. Therefore, in this study, I adopted three strategies out of his eight validity strategies. First, the validity of the study was added through triangulation by using data collected from different sites and people and analyzing data from different theoretical perspectives: existential meaning-making perspective, and the ADAPT model with existential meaning in the center. Also, cultural perspective played an important role. Second, the validity of the study was added through rich, thick description by providing detailed descriptions of the setting of the interviews, detailed rendering of how participants felt about the topics as well as different perspectives about themes so that the results could be realistic and rich. Third, the validity of the study was promoted through clarifying the bias of the researcher. I used this strategy as a critical

self-reflection by identifying the bias that I might have in order to be more self-aware of this potential threat to this study. As one growing up in a Christian milieu, in a small church with its roots in a Charismatic movement, I might have more understanding of or a sense of closeness to Christian remarks expressed by the study's participants. At the same time, as one brought up in Japan who was familiar with different religions and traditions, such as Buddhism and Shinto, I believe I could have brought broader perspectives into the study. My gender might have affected my interpretation and the analysis of the data especially when it came to issues around female gender. I took these potential threats to this study into account. In other words, I tried to perform a critical self-reflection by clarifying and monitoring the bias that I might have as a researcher through all stages of the study.

My religious background, my gender, and my status as a researcher could affect not only the interpretation and analysis of the data but also the whole interview process. My being religious seemed to help the majority of participants to speak out their experiences as a religious person. On the one hand, this may be understood as a failure of control biases. However, this resulted in enriching interview data, which I consider an advantage being an "insider" of the study. Furthermore, the transcripts translated from Japanese to English were checked by professor Fumie Inatani in order to improve the credibility of the translated transcription. I believe that these procedures could increase the validity of the study.

7.4. Contribution

When considering contributions of this study, several points come to my mind. First of all, this study shed light on the significance of the existential dimension regarding well-being in a post-disaster and Japanese sociocultural context. Probably, this study is one of the first studies that explored the function of religious people and religion in existential meaning and psychosocial well-being in the Japanese- and the 2011 post-disaster context. Although many studies were investigating the impact of the 2011 Great East Japan earthquake and tsunami on mental health and well-being, most of the previous studies' objects were, in principle, to assess and examine the development and track of psychological distress. As these studies aimed to find risk factors that might cause psychological problems or preventive factors for disaster-related psychological distress, most of the studies were conducted in a clinical context, which paid attention neither to the existential meaning and existential dimension regarding well-being nor the Japanese cultural context.

On top of that, there was no study concerning directly existential meaning and well-being with regard to the 2011 Great East Japan earthquake and tsunami. The same was true for studies on religion and spirituality in the 2011 post-disaster Japanese, which were still very much limited. A considerable

reason for this lack of research on the topic in a Japanese context may be that research on meaning-making is mainly based on Western existentialism (Heine et al., 2006). Research on this topic conducted outside of the Western context is scarce at this moment, too. This lack of research also seems to be relevant to some issues concerning historical and cultural background and the definition of religion in Japan and in the Japanese language, to which this study paid much attention. Therefore, the findings of the current study bring further knowledge regarding these issues.

Secondly, the findings of the current study bring further knowledge regarding the impact of the 2011 Great East Japan earthquake and tsunami among volunteer workers. As shown in Chapter 2, there were surprisingly many studies on the impact of the 2011 Great East Japan earthquake and tsunami on mental health among those who engaged in rescue work, relief work, or work for reconstruction. However, most studies addressing disaster relief work-related mental health or trauma have primarily focused on a specific population, namely professional relief workers so far. There was relatively little research that explored volunteer workers in general and relief workers in religious organizations in particular. Hence, by exploring their experiences and investigating their work, challenges, existential meaning and well-being, this study can suggest for future research on the impact of the 2011 Great East Japan earthquake and tsunami on mental health among volunteer workers in religious organizations in Japan, a not-yet well-explored population despite their visibility and efforts in the damaged areas.

Thirdly, this study also can suggest for future research on the psychological and psychosocial impact of a natural disaster by employing the Adaptation and Development after the Persecution and Trauma model (Silove et al., 2006). At this moment, there is no study using the model to explore existential and psychosocial impacts of natural disaster in the Japanese cultural context in general and the 2011 disaster context in particular.

Last but not least, I would like to conclude the section by taking up a possible contribution of the study to the field of psychology of religion. The study was undertaken from the psychology of religion, which is a collective term for a field of research in which a variety of psychological theories and methods are used to understand and explain religious phenomena (Geels & Wikström, 2017, p. 15). In this study, especially existential meaning and meaning-making are in focus, which has been one of the most important research topics in the field of psychology of religion. As presented in Chapter 2, however, studies on existential meaning including religion and religiosity in a post-disaster and Japanese context before the 2011 Great East Japan earthquake and tsunami were scarce. Therefore, the results of the present study can contribute to a better understanding of- and to creating knowledge about existential meaning in a post-disaster, Japanese context. The results of the study can also bring further knowledge and understanding of the role of religion and

religiosity in reconstruction and development of existential meaning and psychosocial well-being in a Japanese post-disaster context.

7.5. Concluding reflection and recommendations

Concluding reflections for this study are mainly related to the findings of the study and points raised in the analysis chapter. In other words, they are suggestions for future research.

As already stated, it is not possible to generalize the results of the current study due to the size of the target population and the number of the participants. Therefore, it will be interesting to study the topic with a larger target population by adopting a quantitative research strategy. My recommendation for future research on the topic and the target population is, for example, an exploratory sequential mixed methods study (Creswell & Zhang, 2009). The design would consist of two distinct phases: qualitative followed by quantitative:

> In an exploratory sequential design, the intent of the research initially is to explore a construct because it is not adequately addressed in the literature, is poorly measured or conceptualized, or is being studied in a population for which the research questions are unknown. After the initial qualitative exploration, the investigator follows up with a quantitative data collection phase to determine if the qualitative findings can be generalized to a sample of a population (Creswell & Zhang, 2009, p. 614).

The design seems to fit best for research on the topic and the population. The current study may serve as the base for a larger quantitative study to see how existential meaning and psychosocial well-being among survivors of natural disasters in general, and the Japanese natural-disaster survivors in particular, can be understood by using existing scales and instruments. Since studies on the topic in relation to natural disasters are still limited despite that there have been many quantitative studies on the topic regarding other life-stressful and traumatic experiences, such a study can not only add more knowledge about the relationship between the impact of natural disasters, existential meaning and psychosocial well-being, but also make it possible to generalize the results, which this current study could not do. For example, studying the topic in relation to sense of coherence, resilience, and post-traumatic growth, which are often assumed to be related to existential meaning and psychosocial well-being, can bring further knowledge about the relationship between the impact of natural disasters, existential meaning and psychosocial well-being.

One of the compelling findings in this study is related to gender. For example, the results of the study indicated that male survivors seemed to be more vulnerable to mental illness and psychological distress than female survivors, and female survivors seemed to create more comfortable new relationships or

community than male survivors. Regarding these gender differences, research on this topic from gender perspectives and perspectives on power with regard to the Japanese sociocultural context are needed.

About the results of the study regarding the notion about the relationship with the family ancestor(s), it is important to mention a gender issue here, too. As already seen in the second chapter, Japanese society is often characterized by its collectivism, and the family, which is the minimum social and human-relational unit, also seems to be based on the collectivism through *ie-seido* 家制度 [family system]. Within the system, women are considered responsible for taking care of households and the family—both the living and dead. Although I could not include this point in the current study, several researchers and volunteer workers I met in Japan during the data collection, confirmed that this responsibility led to the loss of lives because many women first fled from the tsunami but returned to their house to take their ancestral family symbols with them to the evacuation shelter. Therefore, it is also important to study how gender and the gender-significant sociocultural system are related to the disaster experience and can affect survivors' existential meaning and psychosocial well-being, as well as in this case the actual loss of life.

Regarding the theoretical framework of the study of the existential justice, I would like to suggest further research. When individuals confront life stressors or difficulties, they assign meaning to that stressful event and work to try and restore their life meaning, which Park (2005) calls the appraised meaning of specific events (situational meaning), that is, meaning-making in crises or difficult circumstances. Hence, it is not strange to interpret the results of the study as that of survivors trying to understand and restore a degree of coherence to their worldview that now included faith and belief disrupted due to the disaster. This process involved questioning the existence of God, Buddha or gods in nature, or perhaps changing their faith. The results of the current study also indicated that a majority of the participants did not experience a sense of injustice on an existential level unlike survivors in the damaged areas. As Silove (2013) explained, a natural disaster could have a massive impact on people's sense of coherence in life by challenging their fundamental faith that supposedly created and supported their existential understanding of life. Then, a question shows up: What exactly hindered the participants of the study from experiencing a sense of injustice on the existential level? The answer may be understood through three factors. First, most of them had not experienced the 2011 disaster to the same extent as survivors. Second, unlike many survivors, who considered themselves as non-religious even though many of them had performed religious meaning-embedded practices and rituals, the participants' religious faith was not only connected to their occupation and but also to who they were, that is, their religious identity. Thirdly, as was the case with many survivors, their philosophical view of natural disaster and attitude toward nature seemed to be relevant. However, these are still on the speculative level

because the ADAPT model does not explain this type of justice on the existential level. Hence, it would be important to explore further this topic.

The results of the study show that one of the most crucial helping works conducted by religious help workers and organizations was *kokoro no kea* 心のケア [mental health care or care for the heart]. Among 26 participants who engaged in *kokoro no kea*, eight were trained in *Rinsho Shukyo-shi* 臨床宗教師 [interfaith chaplain], and three were related to *Rinsho Shukyo-shi*. *Rinsho Shukyo-shi* is an interreligious endeavor. Ongoing development of and challenges for the interfaith chaplaincy are very interesting and important to be studied for several reasons. First, not so many researchers explored *kokoro no kea* by *Rinsho Shukyo-shi* at the moment despite its increasing visibility. Second, further research on the relationship between *kokoro no kea* by *Rinsho Shukyo-shi*, existential meaning, and psychosocial well-being may contribute to future disaster interventions because Japan is a land of natural disasters. After the 2011 Great East Japan earthquake and tsunami, Japan experienced several huge natural disasters that caused a large death toll, such as the earthquake in Kumamoto prefecture (2016), where many *Rinsho Shukyo-shi* worked. Third, considering a currently existing problem regarding the super-aged Japanese society, existential concerns around life and death are getting more and more attention. In this situation, *Rinsho Shukyo-shi* has already started working in some clinical and medical contexts. Hence, research on *kokoro no kea* by *Rinsho Shukyo-shi* may inspire secular actors such as medical professionals, clinicians, or workers in local administrations to meet people with such existential concerns.

Summary

March 11, 2011. The day became a memorable day for the Japanese. On that day, a magnitude 9.0 earthquake hit the Pacific coast of Northern Japan. It was indeed the biggest earthquake ever recorded in Japan. A huge tsunami followed after the earthquake and devastated the Pacific coast of Northern Japan known as the Tohoku region. The 2011 Great East Japan earthquake and tsunami killed more than 15,000 people and more than 2,500 people went missing (National Police Agency, 2018) as a result of the tsunami and fires after the earthquake. Being away from my home country and unable to do anything but watch over thousands of houses and cars, as well as people swept away, I experienced anxiety, worry, confusion, irritation, sadness, and powerlessness, which made me to wish to understand the importance of existential resources that might provide survivors with existential meaning after this crisis. This was the starting point of this current study. Also, the subsequent opportunity to be a doctoral student in Psychology of Religion at the Department of Theology, Uppsala University moved me to conduct this study.

   The overall aim of this current study was to explore the function of religion and of volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being following the 2011 Great East Japan earthquake and tsunami. There were many international studies that investigated the psychological state of victims of natural disasters in general—earthquakes or tsunami or both in particular. However, the number of Japanese studies on the topic about the 2011 Great East Japan earthquake and tsunami was still limited at the time that I started conducting the study, although the number of Japanese studies on the topic has increased significantly in recent years. There were also many previous international studies on meaning, religion, and health with regard to traumatic life experiences in general and natural disasters in particular, which implied that existential meaning played a significant role for those who faced a life crisis. However, there was no Japanese study directly concerning existential meaning and mental health with regard to the 2011 Great East Japan earthquake and tsunami at the time when I started conducting the study. When it came to studies on relief workers and volunteers, many international studies had been conducted and these emphasized the importance of critical stress management among relief workers. Surprisingly, there were many Japanese studies on the impact of the 2011 Great East Japan earthquake and tsunami on mental health among those who engaged in rescue work, relief work, or work

for reconstruction, but there was relatively little research that explored volunteer workers in general and relief workers in religious organizations in particular. As a summary of previous studies, it could be said that despite the fact that there were many studies investigating the impact of natural disaster on mental health, most of them were quantitative in nature. These primarily aimed to assess and examine the development of- and trace the patterns of psychological distress to identify risk factors that might cause psychological problems or prevent disaster-related psychological distress and possibly help develop intervention strategies and models in the disaster-affected areas. In addition, most of the previous studies were conducted in a clinical context, which seemed not to pay much attention to the cultural context in which both volunteer workers in different religious organizations and survivors lived. The lack of studies on this topic in a post-2011 Great East Japan disaster- and Japanese cultural context regarding the function of religion and volunteer workers in religious organizations was apparent despite the existence of extensive studies on the impact of natural disasters in health, well-being, and existential meaning internationally.

Research questions

To explore the function of religion and of volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being regarding the 2011 Great East Japan earthquake and tsunami, the central research question of the current study was framed as follows: "*What perceived roles did volunteer workers in religious organizations play in existential and psychosocial reconstruction and development with regard to the 2011 Great East Japan earthquake and tsunami?*" The central research question was specified by the following sub-questions: (1) What specific tasks did volunteer workers in religious organizations perform in relation to the existential and psychosocial reconstruction in the aftermath of the catastrophe?; (2) How have the volunteer workers experienced difficulties and problems during their work helping in the damaged areas?; (3) What existential and psychosocial resources were available from the perspective of the ADAPT model?; and, (4) How did the systems in the ADAPT model interact in the accounts from the volunteer workers in a Japanese cultural and psychosocial context?.

Theoretical perspective

To answer these questions, the current study was designed as a qualitative research study and undertaken from the psychology of religion. In the field of psychology of religion, the focus was on the individual and group experiences of spiritual reality by asking questions such as, "How do these experiences appear?" or "What function do these experiences have for individuals and groups?" In this sense, the focus in the psychology of religion, which at its

most fundamental level could be defined as the study of any aspect or dimension of forms and expressions of psychology in religiosity, in a particular cultural context, always guided the approach to the research questions. As a research area and research topic, the psychology of religion was still minor in Japan, and there were limited studies in the psychology of religion in general and research on health in a post-disaster context in particular. On the other hand, there had been a strong focus on health-related factors within research in the field of the psychology of religion in general and in Scandinavia in particular (DeMarinis, 2011, p. 8). A subdivision of this tradition was the clinical psychology of religion that had a particular focus on the interaction between religiosity and the functioning and dysfunctioning of the physical, mental, and existential dimensions of health (DeMarinis, 2003, as cited in DeMarinis, 2011, p. 18). Moreover, many of the research studies in the psychology of religion that related to health factors had emphasized the important of describing the cultural context in which research had been conducted (DeMarinis, 2011, p. 8). Therefore, the focus of the present study was on: the interaction between religiosity, the physical, mental, and existential dimensions of health; well-being in relation to the cultural context, and, the approach to the current culture and how the study's results were interpreted according to the cultural context.

Existential meaning referred to attempts to understand how events in life fit into a broader context. In this study, my use of the term "existential" was in accordance with DeMarinis (2003, 2008)—"existential" had its function in focus and dimensional richness rather than in defining a specific and static content. This understanding of "existential" was of use because it enabled us to see "existential" as a multi-dimensional and multi-perspectival process, which could capture a wide variety of meaning-making processes and activities including both secular and transcendent expressions. Existential meaning and meaning-making, especially in times of crisis, were approached as complex, multi-dimensional, and multi-perspective processes. Likewise, psychosocial well-being was a complex and multi-factorial concept. Thus, one theoretical model or perspective could not be enough for catching the overview of the reconstruction and development of existential meaning and psychosocial well-being in the 2011 disaster-damaged areas. Therefore, this study as a whole was built from a framework composed of the Adaptation and Development after Persecution and Trauma (ADAPT) model (Silove et al., 2006) together with selected parts of other theoretical perspectives. The ADAPT model was initially formulated regarding mass conflict settings but then also was used in a disaster context, which enabled me to use the model in this study. Although Silove et al. (2006) also paid attention to the existential dimension's importance on psychosocial well-being and mental health in a conflict or disaster-affected area, more focus was given to perspectives from clinical psychiatry- and psychology and with the aim of assessing the inter-

vention policy. In this study, therefore, I used the ADAPT model with development of the existential meaning dimension that was modified by DeMarinis (2013) to identify both existential and psychosocial resources available in the damaged areas. The model was also used to understand how the existential dimension overlapped and interacted with the other dimensions of the model. Culture mattered in this study, because the central concern of this study, the function of religion and of volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being, needed to be understood regarding the cultural context in which occurred. In other words, it was crucial to understand the Japanese construction of meaning including functioning worldviews, values, and reactions, in comparison to Western constructions. Hence, Marsella's (2005) perspective on culture and Kleinman's culturally sensitive perspective on health and well-being further developed by DeMarinis (2003) were employed to analyze the data in relation to the Japanese cultural context. To apply these cultural perspectives, I presented a Japanese cultural context concerning health, well-being, and religion in this study. The Japanese sociocultural context as well as the religious environment in Japan were often discussed in relation to secularism and postmodernism (Shimazono, 1995, 2001; Kaneko, 2003; Manabe, 2008). Japan was often seen as one of the most secular countries in the world and called the land of *mushuukyou* 無宗教 [non-religious or of no religion] in a late-modern context (Kaneko, 2003; Manabe, 2008; Fukushima, 2011). However, many studies questioned and examined whether the Japanese are non-religious or not, because the word *shuukyou* 宗教 [religious or religion] was both historically and culturally constructed, in Christian or Western contexts, and therefore of limited suitability in measuring Japanese religiosity. As Fukushima (2011) argued, *mushuukyou* did not mean that the Japanese rejected religion or did not practice religion at all, but for many Japanese, religion and religious beliefs were customs that could be seen in rites of passage, annual events or in their daily life. Furthermore, I presented characteristics of religion and religiosity in the research sites, i.e., the Tohoku region considering culture's importance on existential meaning and health. What was characteristic of the region was that *Soutou-shuu* 曹洞宗 [Soto Zen-Buddhism] was significantly more popular than in other areas. Although the number of people belonging to religious institutions in these three prefectures was smaller than the national average, *Soutou-shuu* was close to the residents and their daily life in the region. The understanding of death and funeral customs in these areas was also unique, which were seen in the *kotsusou* 骨葬 [bone funeral] custom (Suzuki, 2012) and the region's religiosity that was very much affected by the ethnic religiosity and the local understanding of Buddhism (Takahashi, 2014). I also presented the Japanese culture regarding health and well-being by employing Kleinman's (1980) internationally employed cultural analysis model, further developed by DeMarinis (2003), for

understanding both health and illness perceptions in a cultural context. According to Kleinman (1980) and DeMarinis (2003), culture encompassed several different dimensions of health: the biological-physical, the psychological, the social, the ecological and the existential. Because these dimensions were interactive, one dysfunctional dimension affected the others. The presentation of these five dimensions brought into the Japanese context helped me to illustrate the overlooked characteristics of the Japanese understandings of health and well-being, and to analyze the interview data in the Japanese cultural context.

Method and material
In general, this qualitative study focused on experiences of volunteer workers in different religious organizations who have worked in the disaster-affected areas. Empirical data were collected via 27 semi-structured interviews with open-ended questions. Among these 27 participants, 19 were men and eight were women. The nationality of the participants was Japanese except for one participant who was from the US and had lived in Japan for 14 years. These participants ranged in age from 21 to 75 years old: 20-29 (n = 1); 30-39 (n = 10); 40-49 (n = 6); 50-59 (n = 5); 60+ (n = 5). Religious denominations among the 27 participants were various and so were their religious backgrounds.

The collected semi-structured interview data were analyzed primarily deductively using a template analysis style (Malterud, 1998), a theory-driven approach. The theoretical perspectives primarily used in the study were; the theory of existential meaning and existential meaning-making mainly by DeMarinis (2003, 2008) and the Adaptation and Development after Persecution and Trauma model (Silove et al., 2006) with existential meaning in central focus (DeMarinis, 2013), which was used not only to identify existential and psychosocial resources available in the damaged areas but also to map and understand how they overlapped and interacted with each other. As the study used the template analysis style, categories were predetermined and derived from this study's theoretical perspectives: safety/security, bonds/networks, justice, roles and identities, and existential meaning and meaning-making. The central concern of this study, i.e., the function of religion and of volunteer workers in religious organizations in contributing to the reconstruction and development of existential meaning and psychosocial well-being, was explored from cultural perspectives because both existential meaning and psychosocial well-being needed to be understood from a cultural context.

I divide the presentation of the results into two sections. In the first section, I presented the demographics and background information of the participants. Thereafter, I presented the results of 27 semi-structured interviews in relation to the central categories predetermined and derived from this study's theoretical perspectives. Each category had two parts in the results. One focused on the results about the survivors in the damaged areas from the participants'

perspective. The other focused on the results about the participants themselves. The results of the study showed many interesting findings that could inspire the further research on the topic. The central findings of the study were as follow:

- Safety/security for survivors referred to: a safe place where survivors had no acute and direct life-threatening issues; where they could have a steady life and establish a routine life with privacy and physical space; where they had a good relationship with neighbors and networks that they could open up themselves and talk about their disaster experience and problems with people around them; and, where they could have time for reflection and peace of mind by using religious symbols and rituals.
- Safety/security for the participants from the different religious organizations referred to: a safe place where they could feel safe emotionally and psychologically when they faced difficulties or felt stress with regard to their help work, such as prayers or Buddhist alter; and a specific time or place when and where they could be alone and be free from their help and relief activities
- Bonds/networks for survivors referred to: family/family member(s), and neighbors and community. Many people lost their significant other(s) such as family member(s), relatives or close friends. The situation was that "almost everyone lost someone" (P6, p. 2). Among such a loss of significant other(s), the loss of family including the connection to the ancestors and deceased seemed to affect survivors' mental health and well-being.
- Unlike many survivors in the damaged areas, none of the participants experienced the loss of family or family members. A majority of participants had not experienced loss of neighbors and community either. The participants' families played a significant role in their well-being so that they could engage in and continue performing their help activities. For many participants, community referred to a societal bundle of human relations that promotes survivors' health and recovery, and groups and/or networks of help workers, which was a useful and available resource for their help activities.
- A sense of justice for survivors in the damaged areas referred to: how they experienced the security of and respect for their rights and dignity. Sense of injustice related to: a lack of good governance provided by local governments including consideration for survivors' needs and wishes and their self-determination in policy-making for reconstruction planning. Such a sense of injustice could cause stress, anger, somatic, and mental problems, according to participants' observations. A sense of justice also related to economic opportunities including economic support that survivors could have access to. Not having

economic opportunities or enduring a gap in economic opportunities among survivors or between survivors and non-survivors related to sense of injustice in the damaged areas.

- For participants, a sense of justice referred to: how the participants experienced their rights and dignity secured and respected or restricted in relation to their help activities. The lack of a functioning local administration with which they could cooperate and restrictions on activities in public spaces related to the participants' not having a sense of justice.

- In the damaged areas, some survivors experienced existential injustice. They felt the disaster was unfair, which led them to question the existence of God, Buddha, or other transcendental beings, which led further to their loss of faith or conversion to another faith. Others experienced neither indignation toward God, Buddha or gods in nature nor loss of faith in God, Buddha, or gods in nature because they had not interpreted the disaster as a failure and injustice caused by such transcendental beings. For them, God, Buddha, or gods in nature had nothing to do with the disaster. From their perspective, those who blamed God, Buddha, or gods in nature had no faith in the first place. There was no mention that survivors who experienced this type of existential injustice had impaired health. At the same time, several participants' accounts implied that survivors who kept the same faith as before the 2011 disaster maintained good health despite their prolonged residence in temporary housing.

- Participants who were religious had not experienced existential injustice to the same degree as most of *mushuukyou* 無宗教 [non-religious or of no religion] survivors in the damaged areas. A majority of the participants had not connected God, Buddha, gods or something transcendental with the 2011 Great East Japan disaster. For many of them, the 2011 disaster was understood from the view of natural disasters, as beyond human control.

- For many survivors, roles and identities referred to: status and position in a familial context that they already had before the 2011 disaster and that they acquired after the 2011 disaster. In the disaster-affected areas, many survivors lost their already established role in the family. For some survivors, such a loss of a role in the family had an impact on mental and social health, as well as well-being. Also, there were gender-related roles in the family which could affect a survivors' well-being both psychologically and socially. In the disaster-affected areas, many survivors also lost their already established role in the community or society.

- For participants, roles and identities referred to: social roles as workers from religious organizations, i.e., status and position regarding their help work in the damaged areas. Social roles as workers from

religious organizations also refer to both their already established role before the 2011 disaster and their newly established role after the 2011 disaster. They were supporters of community-building and re-building through their organizational resources. They were third-party counselors who provided survivors with *kokoro no kea* and places where survivors could feel safe talking about their disaster experiences and feelings. They were also religious or spiritual caregivers who provided *kokoro no kea* through religious or spiritual responses. Unlike mental health professionals, they were expected to provide survivors with mental health impairment with care regarding the survivors' existential suffering and religious or spiritual questions.

- The loss and lack of a goal, purpose, and meaning in life were identified among survivors in the disaster hard-hit areas. Especially among male survivors, loss of work or job or houses related to the loss and lack of a goal or purpose, which could have caused some mental issues. Elderly people comprised a group that most likely had difficulty finding a purpose for life after the disaster. Finding a new goal or purpose, such as working for others, could have prevented them from being distressed or helped them to recover from distress.

- For the participants, the goal or purpose related to: their help activities for survivors and the damaged areas, such as to do *kokoro no kea* or to rebuild or repair community. Many of them believed that their help work were missions that they need to fulfill as religious persons.

- Survivors' faith and worldview referred to religious faith based on Buddhism and Shinto, which were local and traditional religions in the damaged areas. Some survivors had experienced loss of the faith that they had before the disaster. Keeping the faith that they had before the disaster related to good health and subjective well-being. Some survivors found a new faith, and having a new faith seemed to have a good impact on their mental and social health. It was also implied that a view on natural disaster—if a natural disaster happened, there was nothing to do but accept the reality—could help survivors to keep on living.

- For the participants, faith referred to religious faith, which was a base and principle for their help work. Their faith motivated them to work for survivors and the damaged areas. It affected their understanding of their help work. It was an important resource they could use for their help activities. It was rediscovered or their understanding of it evolved after the disaster through their help work.

- For survivors, rituals referred to practices or acts related to religion or local tradition through which they worked with their existential meaning that was violated or disrupted by the 2011 disaster. For the participants, rituals referred mainly to prayer and chanting a sutra that were resources they could use regarding their help activities.

The results of the current study showed that all five key psychosocial domains together constituted the areas that need to be considered for recovery and reconstruction, and that they functioned interdependently when survivors and the communities in the damaged areas worked for recovery and restoration. The interaction between the five psychosocial domains was complicated and multidirectional. It was clear when there were deficiencies in some domains; it could still cause disruptions that could lead to health and well-being issues and hinder them from recovery regardless of whether the other domains were restored. Regarding the participants' experiences, the results of the study showed that all the five psychosocial domains functioned interdependently to provide participants with resources, which they could use for their help work and through which they could maintain their health and well-being. The interaction between the five psychosocial domains was complicated and multidirectional. As was the case with survivors in the damaged areas, it was clear when there were deficiencies in some domains, it could still cause disruptions that could lead to health and well-being issues, regardless of whether the other domains were restored.

The main research question of the study was "*What perceived roles did volunteer workers in religious organizations play in existential and psychosocial reconstruction and development with regard to the 2011 Great East Japan earthquake and tsunami?*" The summary of the answer for the question was that many religious organizations and religious help organizations had started engaging in relief activities from the early stage of the post-disaster sequence, but the most crucial help work was *kokoro no kea* 心のケア [mental health care or care for the heart]. They had played significant roles in repairing, restoring, or replacing existential and psychosocial domains that were still not available to many survivors and were still lacking in many damaged areas. Their work as: a supporter for community-building/rebuilding; a third-party counselor who provided survivors with *kokoro no kea*; and, a caregiver who provided *kokoro no kea* through religious response played significant roles in promoting of reconstruction of existential meaning and psychosocial well-being in the damaged areas.

Future research
The results of the study showed many interesting findings that could inspire the further research on the topic.As suggestions for the future research, I want to recommend a study on the topic with a larger target population by adopting a quantitative research strategy, for example, an exploratory sequential mixed methods study (Creswell & Zhang, 2009). This seems to fit best for research on the topic to see how existential meaning and psychosocial well-being among survivors of natural disasters in general, and the Japanese natural-disaster survivors in particular, can be understood by using existing scales and instruments. Since studies on the topic in relation to natural disasters are still

limited despite that there have been many quantitative studies on the topic regarding other life-stressful and traumatic experiences, such a study can not only add more knowledge about the relationship between the impact of natural disasters, existential meaning and psychosocial well-being, but also make it possible to generalize the results, which this current study could not do. I would like to encourage others to study the topic in relation to gender, because one of the compelling findings in this study was related to gender. Regarding these gender differences, research on this topic from a gender perspectives and perspectives on power with regard to the Japanese sociocultural context are needed. Considering the results of the study about gender, I would like to encourage other researchers to explore the relationship between existential meaning and gender regarding life crisis. Further, regarding the theoretical framework of the study of the *existential Justice*, I would like to suggest further research on the topic, too. When individuals confront life stressors or difficulties, they assign meaning to that stressful event and work to try and restore their life meaning, which Park (2005) calls the appraised meaning of specific events (situational meaning), that is, meaning-making in crises or difficult circumstances. This process involves questioning the existence of God, Buddha or gods in nature, or perhaps changing their faith. The results of the current study also indicated that a majority of the participants did not experience a sense of injustice on an existential level unlike survivors in the damaged areas. It would be interesting to investigate why it was so.

The results of the study showed that one of the most crucial helping works conducted by religious help workers and organizations were *kokoro no kea* 心のケア [mental health care or care for the heart]. Among 26 participants who engaged in *kokoro no kea*, eight were trained for *Rinsho Shukyo-shi* 臨床宗教師 [interfaith chaplain], and three were related to *Rinsho Shukyo-shi*. *Rinsho Shukyo-shi* is an interreligious endeavor. On-going development of and challenges for the interfaith chaplaincy were very interesting because they were not yet studied despite its visibility. In this situation, *Rinsho Shukyo-shi* has already started working in some clinical and medical contexts. Hence, research on *kokoro no kea* by *Rinsho Shukyo-shi* may inspire secular actors such as medical professionals, clinicians, or workers in local administrations to meet people with such existential concerns.

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Appendices

Appendix 1

Interview guide

- Name
- Age
- Religious affiliation, position/title
- Current work situation and some past history of work
- Religious background: grown up in a religious family/milieu? Converted? Etc.
- Disaster experience. Where were you/what were you doing when the earthquake and the tsunami occurred, how did you experience the earthquake and the tsunami?
- What was the first thought that came to your mind immediate after experiencing/hearing and seeing the news of the earthquake and the tsunami?
- How and why did you start engaging in the activities?
- Could you tell me what you and your organization have done/are doing?
- About cooperation with another organizations
- About the loss of survivors/damaged areas from their point of view
- About what survivors/damaged areas needed for repair/recovery/reconstruction from their point of view
- About informants' general health during the activities
- Relationship between their faith/belief, their position/status as religious practitioner/leader/volunteer worker and the activities
- Influence of their faith/belief and their position/status as religious practitioner/leader/volunteer worker and the activities
- About exchanges between/relationship with survivors in damaged areas. Impressive/unforgettable episodes?
- About what do they think most valuable for them in participating in the activities?
- About difficulties, problems and challenges that they faced/are facing in general, as religious practitioner or volunteer from religious organizations in particular. About available resources, method and approach to solve such difficulties, problems and/or challenges.

- About contribution to survivors/damaged areas through activities. About how they would like to contribute to survivors/damaged areas through activities in the future (if they are planning to keep on engaging in the activities).
- Effect and impact of their disaster experiences on their faith/belief and existential meanings.
- Lessons learned from the disasters and disaster experiences. Hope for the future.

Appendix 2

Code list

Code	Count	Synthesis
Access to professionals	39	Safety/security
Activities	106	Safety/security, Bonds/networks, Roles and identities
Administration/government	42	Justice
Alcohol	3	Safety/security, Bonds/networks, Existential meaning
Anger	8	Justice
As religious	154	Roles and identities, Existential meaning
Attitude towards life	10	Existential meaning
Belief	54	Existential meaning
Children	13	Bonds/networks, Roles and identities
Colleagues	16	Safety/security, Bonds/networks
Community	114	Safety/security, Bonds/networks, Roles and identities
Compassion	8	Bonds/networks
Comprehensibility	53	Existential meaning
Connection with the land and ancestors	6	Safety/security, Bonds/networks, Existential meaning
Control	10	Existential meaning
Customs	12	Safety/security, Existential meaning
Disappointment	3	Justice
Economical opportunity	14	Justice
Elderly	29	Bonds/networks, Roles and identities, Existential meaning
Existential justice	18	Justice, Existential meaning
Fairness	11	Bonds/networks, Justice
Faith	153	Existential meaning

Code	Count	Synthesis
Family	38	Safety/security, Bonds/networks
Friends	9	Bonds/networks
Frustration	5	Justice
Gender	14	Bonds/networks, Roles and identities
Gender role	9	Roles and identities
Goal	73	Roles and identities, Existential meaning
Home	4	Safety/security
Hope	13	Existential meaning
House	7	Safety/security
Identity	24	Roles and identities
Interfaith	66	Safety/security, Bonds/networks, Roles and identities, Existential meaning
Isolation	11	Safety/security, Bonds/networks
Kokoro no care	102	Bonds/networks, Roles and identities, Existential meaning
Local culture	28	Existential meaning
Meaning in life	54	Existential meaning
Meeting place	6	Safety/security, Bonds/networks
Mission	15	Existential meaning
Missionary intention	39	Roles and identities, Existential meaning
Neighbours/neighbourhood	75	Safety/security, Bonds/networks
Past injustice	3	Justice
Perceived justice	34	Justice
Reconstruction housing	6	Safety/security
Religion	165	Safety/security, Justice, Roles and identities, Existential meaning
Religious practice	43	Safety/security, Bonds/networks, Existential meaning

Code	Count	Synthesis
Rituals	78	Safety/security, Bonds/networks, Roles and identities, Existential meaning
Roles	99	Roles and identities, Existential meaning
Satisfaction/fulfilment	21	Roles and identities, Existential meaning
Sense of safety/security	28	Safety/security, Bonds/networks, Existential meaning
Spiritual	25	Existential meaning
Suicide/suicidal	5	Safety/security, Bonds/networks, Existential meaning
Super natural experiences	12	Bonds/networks, Roles and identities, Existential meaning
Temporary housing	9	Safety/security, Bonds/networks
Third party	14	Safety/security, Bonds/networks, Roles and identities
Tradition	9	Existential meaning
Trust	22	Bonds/networks, Roles and identities
Value	17	Existential meaning
Work	84	Safety/security, Bonds/networks, Roles and identities, Existential meaning
Young/youth	9	Bonds/networks, Roles and identities

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