Negotiating recovery from alcoholism in the context of the Canterbury earthquakes

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Abstract

This study employs narrative inquiry to document participants' experiences in relation to maintaining sobriety while living through the Christchurch earthquakes. Eight women and one man were recruited via purposive sampling. Of the 9 participants, 4 were in stable recovery (greater than 5 years), 2 were in sustained recovery (between 1 and 5 years) and 3 were in early recovery (less than 1 year). Qualitative data was gathered using semi-structured, in-depth interviews utilising thematic analysis and incorporating an abductive logic.

In the process of recovery from alcohol dependence previous life trauma, environmental conditions, uncertainty about the future and limited resources can be both barriers to recovery from alcoholism and growth opportunities after natural disaster. For some of the participants who contributed to this research, memories of early childhood abuse were recalled and symbolised by the seismic activity during the greater earthquake period. Participants in early recovery or relapsing continued to experience traumatic stress through re-victimisation or trauma re-enactment. Some participants in active addiction identified the earthquakes as both a hindrance and a help with their drinking and self-harming behaviour. For others, a sense of deep personal loss was felt when viewing the devastation of the ruined city which mirrored and reminded them of their life in active addiction.

The research findings extend and complement existing theories of ambiguous loss and Post Traumatic Growth (PTG) within the context of addiction and recovery capital. This research also adds to the addiction, domestic violence and disaster literature that is currently available. Narratives of participants in short or long term recovery, suggested that ambiguous loss, and associated grief stemming from both situational and cumulative trauma, surfaced when viewing the earthquake damage. Living through the earthquakes was a time of adaptation and resourcefulness for all but for alcoholics in recovery extra resilience was needed to attend to addiction recovery within the larger picture of daily disaster coping. For all participants post traumatic growth was both an outcome and a process creating a more robust identity at individual levels, post disaster. Findings indicate that trauma can be instrumental in creating alcohol abuse and dependency and that recovery from alcoholism after natural disaster is a complex process requiring personal, community and political interventions.

With gratitude and loving thanks …

To the participants of this research project, thank you so much for generously spending your time and sharing your story with me. Thank you for your openness and the trust you so freely gave. I feel humbled by the courage you expressed in the telling of your experiences. My greatest wish is that my retelling of your stories has done justice to and reflects the strength you have shown in your journey of recovery through the greater earthquake events.

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WHAKATAUKI

Ma Te huruhuru, Ka rere Te manu

Me Whakahoki mai te Mana ki te

Whanau, Hapu, Iwi

Adorn the bird with feathers so it can fly

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Chapter 1
Introduction

1.1 Background to the Research Question

When the 7.1 earthquake struck Christchurch at 4.35am on 4 September 2010 it caused damage to infrastructure and rattled the residents of Christchurch (Good, Phibbs, Williamson, & Chambers, 2011; Phibbs, Woodbury, Williamson, & Good, 2012). Due to the early hour of the earthquake and the high standard of building in New Zealand, (Le Masurier, Rotimi, & Wilkinson, 2006) there was no loss of life and the recovery process began at an individual level almost immediately amid national and global well wishes and aid (APNZ, 2010; Stevens, 2011).

Aftershocks continued to shake the city over the coming months and although more damage was done to the infrastructure on these occasions, the residents of Christchurch (Cantabrians) continued work to restore the city back to its pre-disaster condition. Cantabrian resilience was a term that if not used in the media, was spoken of in social networks, at cafes and in workplaces. One newspaper article even symbolised the term resilience in the (then) still standing Christchurch structure (Robins, 2012) of the Christchurch Cathedral. However, at 12.51pm on 22 February 2011 a further earthquake travelling at 3 kilometres per second, registering 6.3 in magnitude and just 11 kilometres deep (Rowan, 2011) struck just west of the central business district (CBD) of Christchurch. The M6.3 earthquake, technically an aftershock of the September 2010 M7.3 earthquake, changed the city almost beyond recognition (Wade, 2011) and ending any thoughts of being "back to normal" (Sargent, 2011). In half a minute, 185 people died and others were injured, trapped and broken in spirit (Stevens, 2011).

For Christchurch in the first three months following the 4 September 2010 quake there were more than 27 aftershocks that measured greater than 5.0 on the Richter Scale. In the four months following the devastating 22 February 2011 quake, 10 aftershocks greater than M5.0 were recorded (GeoNet, 2014). By December 2012 insurance claims lodged totalled $30b, with 18,000 properties reported as having repairs completed and over 80,000 still waiting to be looked at. Compounding the repair problem was the realisation that EQC needed Government help to fund the claims (Steeman, 2012b).

Living in broken homes with insurance and land-zoning concerns amid constant and continual aftershocks was considered a key factor affecting the mental health of Cantabrians and cited as

directly impacting “people’s stress levels and resilience and ability to move forward” (Wright, 2012). Another big stressor for many Christchurch residents was the impact of the earthquake on their income. With the February 2011 quake centred in the Central Business District (CBD) many businesses and the incomes they generated from sales and employment, were interrupted. Some Cantabrians could fall back on insurance protection but others were left with little income and loans and mortgages to repay (Clement, 2011). Many Cantabrians could not return to their homes and needed to find alternative accommodation. With demand for rental properties exceeding supply and rental prices left to the free market, rising costs of rents left many living with a lowered standard of living or in overcrowded conditions. By 2013 people’s faith in rebuilding Christchurch was becoming shaky with many losing confidence in the City Council, insurance companies and the Minister in charge of the earthquake recovery (Greenhill & Stylianou, 2012; McCrone, 2012; Steeman, 2012a). Media reports began to comment on rising rates of domestic violence (Lynch, 2011) and alcohol abuse or misuse (Stewart, 2013; Stylianou, 2011a). While a recent survey of 763 Cantabrian residents conducted by the Christchurch Press found more than a third of respondents reported having ‘quite negative perceptions of their quality of life after the earthquakes’ (Pearson, 2013).

I lived in Christchurch when the September 2010 earthquake struck. I had lived there since 1995 and at the age of 51 considered for the first time in my life that Christchurch and my central city apartment were places I could call home. I had a sense of belonging, good friends and family close by as well as a job that provided me with meaning and purpose. Following the September quake I was a little shocked by the amount of damage done to city buildings and infrastructure but all things considered it was ‘business as usual’. However, three days later after sleepless nights and a growing feeling of nervousness I was sitting at the traffic lights when an aftershock hit. While sitting in my car clutching the steering wheel, watching the road writhe like a snake in front of me, I was aware of a sudden and significant feeling of fear and vulnerability as I waited for the rocking to stop. Over the next four months, whether sitting at my desk upstairs or on my couch in my downstairs lounge I often revisited the feelings of fear and uncertainty as an aftershock hit. I would wonder “is this the one where the top floor collapses on me” or “am I going to be hurt today”. In reflecting on how I was feeling in order to reduce my stress levels, the words I used to describe myself were uncertain, fearful and powerless. I stored this awareness away for use in my job if required.

At the time of the September quake I was employed in an addiction treatment facility working with the live-in clients as they began their recovery from addiction process. Over the weeks following the first quake I had many opportunities to enter dialogue with residents, colleagues, friends and other

members of the public about their earthquake experience as it was a topic where we could all meet at some point and share an understanding and camaraderie. Two major themes emerged as I unconsciously disseminated the narratives. The first was that many people told stories about "toughing it out" either by using alcohol to cope or prescription medication, such as sleeping pills. I recall thinking this quite a contradiction in terms. The other theme I noticed amongst those community members who identified as either in recovery from addiction or who were still actively using, was that people who appeared to be coping less well with the earthquakes seemed to have a personal history of trauma. I had earlier noticed trauma as a theme within the stories of some drug and alcohol clients and had initiated several discussions with organisation management about the need to incorporate trauma recovery into our treatment programme.

In November 2010 my position at the treatment facility was disestablished and shortly after I was hired as a Research Assistant at Massey University. Our research project was to document the impact of the September 2010 earthquake on the vision impaired community members. The role provided me with the opportunity to hear further dialogue about earthquake experience and coping mechanisms while developing skills in dialogic interviewing as an early career researcher. When the 22 February 2011 quake hit I was fortunately not at home in the CBD as my apartment building was shattered. I stayed with family for the next two days and became more and more distressed with the aftershocks including sleepless nights and flashbacks to buildings falling. In the rare times I did fall asleep I woke frightened with a vague sense of dreaming of earthquakes. It was at this time that I realised I had internalised the sound of buildings breaking because this would be the memory or sound that reverberated on waking. It was with a sense of relief that I boarded a flight to Palmerston North two days later to attend a campus course at the University.

I had booked the flights weeks earlier and at that stage had always intended to return to Christchurch. On arriving in Palmerston North however I knew I was never going back to Christchurch because I was just too frightened. Although I was secretly grateful to have left Christchurch, for a few days I felt a dreadful guilt for leaving, I wanted to be there with those that I knew to share their experience and yet there was no way I wanted to go back. I realise now that I was emotionally illiterate[1], I could not put into words my thoughts as to how I felt so I could not name my feelings. I could only feel the distress. With, no job, no money, no home, no possessions

[1] Dayton (2000, p. 42) defines emotional literacy is "the ability to convert feelings into words, to decode inner worlds through the use of words". She suggests that at its core it gives the ability to "talk out" rather than "act out" feelings.

and no immediate idea of what to do next, but a newly found passion for research combined with my personal and professional interests in the recovery process from alcoholism led me to this Master's Thesis topic.

1.2 Situating the Research

"Disasters and their subsequent responses are by their very nature unique social problems" (Drabek & McEntire, 2003). When an earthquake strikes in an urban area, it brings with it sudden and traumatic change to the residents at both a psychological and spiritual level (Hussain, Weisaeth, & Heir, 2011), with initial reactions of disbelief or psychological numbness being common (Tedeschi & Calhoun, 2004). It can be said that few people escape their life-span without experiencing bad things (Bonanno, Galea, Bucciarelli, & Vlahov, 2007), but the experience of natural disaster is unexpected, often beyond imagining and with people generally poorly prepared (Good et al., 2011; Phibbs et al., 2012).

Managing one-self through the initial disaster and accessing coping skills to help work through the shock and trauma of the event is the first stage of the recovery process from natural disaster. Boon, Cottrell, King, Stevenson and Miller (2012, p. 386) suggest that "resilience is a dynamic process that develops in individuals with the capacity to adapt and learn in response to a range of stressors over a period of time, allowing them to regain and maintain healthy functioning". Bonnano et al., (2007) discuss resilience as one's ability to maintain stability during disruptive events. He considers resilience is a levelling of self rather than a restoration to equilibrium. Landau and Saul (2004) consider resilience to be a trait, an invoking of one's psychological, biological, social and spiritual resources to cope. Getting through is Tedeschi and Calhoun's (2004, p. 2) definition of resilience, that is "the ability to go on with life … or to continue living a purposeful life after experiencing hardship or adversity". Mooney et al's., (2011, p. 31) broad, strength-based definition of recovery blends personal and environmental factors. They suggest that management of post-disaster recovery includes "assisting people to deal with immediate psychosocial problems and practical problems such as … housing". They believe that disaster recovery requires the facilitating of people's ability to adapt, assimilate and actively manage their current situation but also future demands. Resilience post disaster is about helping people manage themselves by identifying their needs and supporting with the required resources such as practical and psychological support as well as information.

Earlier research has indicated that the recovery from natural disaster process is considered to be complex, multidimensional and nonlinear and has a direct relationship with not just the rebuilding of

infrastructure and the local economy but people's lives (Chou et al., 2007; Paton & Johnston, 2001; Ronan, 2011; Zaidi, Kamal, & Baig-Ansari, 2010). However, almost a year on from the first earthquake Cantabrians were still in response mode as aftershocks were still an ongoing concern in Christchurch, including a magnitude 6.3 on 13 June two hours after an earlier shake of 5.6 in magnitude. Again two days before Christmas on 23 December two aftershocks struck, the first magnitude 5.8 hit followed by a bigger 6.0 two hours later. By August 2012 over 10,000 aftershocks had been reported with 26 registering over 5.0 on the Richter Scale. The continuing aftershocks have created a living situation with many Cantabrians unable to begin their individual recovery process due to being re-traumatised by major aftershocks, living in broken homes, and having limited or no employment prospects that directly impacts their financial resilience and fragmented or ruptured social networks.

People who are sick, disabled or otherwise vulnerable and/or who live in poverty are more likely to be impacted in a natural disaster (Chou et al., 2007; Klinenberg, 2003) and less likely to have access to the social and economic resources necessary for recovery. Mooney et al., (2011) consider the vulnerability aspect of populations and believe there is a requirement for specialised interventions to be provided for a proportion of the population post disaster, for example individuals that have experiences of trauma and related difficulties. Figures on alcohol and drug use post Christchurch earthquakes have been difficult to source, but there are indications of an increase in alcohol consumption with binge drinking becoming quite a major factor. Smoking, domestic violence and divorce have also been reported to be on the rise (APNZ, 2012b; Stylianou, 2011a). The Christchurch media have highlighted incidences of increased alcohol use (The Press, 2011, Stylianou 2011a, APNZ, 2012) examples include one bottle of wine lasting a night compared to a week pre-earthquake (APNZ, 2012a; Leathart, 2011; Mathewson, 2011; Stylianou, 2011b). Alcohol fuelled disruptive behaviour and violence also prompted the introduction of a liquor ban in public places in two Christchurch suburbs (RNZ 2011a, 2011b). Increased drinking has been shown to be worse in those suburbs hardest hit (APNZ, 2012a, 2012b) reiterating findings in the disaster literature suggesting that the need to self-medicate is widely believed to follow in the wake of post-traumatic emotional distress such as that experienced following a natural disaster (North et al., 2010, p. 173), with many using alcohol to mask the quake troubles (Stewart, 2013). It could be said then that drinking as a coping mechanism when used in the short term could be considered to be a form of resilience, as one strives to "get through".

Research into the individual experiences of the disaster recovery process and on personal resilience has been identified in relation to the terrorist attacks of 9/11 (Landau & Saul, 2004) and Hurricane

Katrina (Lawson & Thomas, 2007) that reduced the impact of disasters to a clinical disorder or pathological condition such as anxiety, depression or PTSD (Adams, Boscarino, & Galea, 2006; Mooney et al., 2011; Person, Tracy, & Galea, 2006; Vetter, Rossegger, Rossler, Bisson, & Endrass, 2008). There is a lack of research that focuses on the experience of natural disaster events and the recovery process as told through the perceptions and stories of alcoholics in recovery from alcoholism.

1.3 Research Question

The central research question was "what impact are the earthquakes having on alcoholics in recovery and how are they managing stress and maintaining resilience?"

1.4 Research Aims and Objectives

The initial aim and focus of the research was to identify indicators of vulnerability and to consider factors that enhance personal resilience following the Christchurch earthquakes in the narratives of people recovering from alcohol dependence.

The overall objectives of the research were to firstly document participants' experiences of the Christchurch earthquakes and in doing this, consider what social, economic and environmental issues emerged and impacted participants following the Christchurch earthquakes. I particularly wanted to explore the physical, emotional, psychological and spiritual impact that the earthquakes had on the participants' recovery process. There was a double focus in my intent, firstly I wanted to understand recovery from the disaster events and secondly the process of recovery from their alcoholism and in so doing identify factors that enhance their personal resilience. It was expected that from listening to the stories an outcome would be to identify and document any unmet needs over the first year of the earthquakes.

1.5 Methodology

This is an exploratory research project aimed at capturing the shared interpretations and multiple meanings and representations of the participants. Qualitative data was gathered using semi-structured, in-depth interviews. The type of analysis used is thematic incorporating an abductive logic leading to the possible generation of theory. The thesis does not attempt to develop generalised understandings about how people with a diagnosed alcohol dependency cope following a natural disaster instead it illustrates themes at work in this field through extracts from the narratives of people who contributed to this research. Nine participants were recruited via purposive sampling. Of the 9 participants, 4 were in stable recovery (greater than 5 years), 2 were in

sustained recovery (between 1 and 5 years) and 3 were in early recovery (less than 1 year). One participant was ineligible for the study due to a pre-existing diagnosis of mental illness. The research was approved and conducted following the Massey guidelines for the ethical conduct of research with human participants.

1.6 Overview of the Findings

This study based in a narrative enquiry and documenting the lived experience from the viewpoint of participants adds to the limited addiction, domestic violence and disaster literature that is currently available. Findings suggest that not all participants could sustain recovery from alcohol dependency during the greater earthquake events however a few participants suggested that the seismic activity helped as they feared what might happen should they be drunk or passed out if an aftershock hit. Seismic activity was also a hindrance to recovery for some as it was not only cited as the reason for isolating from recovery networks but also the vehicle for recalling and reflecting historical issues of parental neglect, unmet needs and associated unresolved grief. Participant response to a range of historical emotions and feelings that surfaced during the earthquakes appeared to be through self-medication with alcohol as a coping mechanism. Difficulties experienced in gaining and/or sustaining sobriety during the greater earthquake events were complicated by a participant's circumstances, social status and limited recovery resources. For some participants their ability to cope was negatively impacted by environmental conditions such as alcohol being too readily available in the community as well as negative living situations including domestic violence. Pressure to conform to the requirements and rules of government agencies created additional stressors for participants when living day to day just getting through the earthquakes felt almost too much to manage daily.

The inability to grieve for what has been lost while in active addiction was revisited with the advent of the natural disaster by some participants. For those in stable and sustained recovery, their grief was not so much re-visited but rather acknowledged and re-assessed with the benefit of skills learnt in recovery. The opportunity to deal with what appears to be a delayed grief reaction, provides not so much a sense of emotional equilibrium to be restored but rather one to be re-located with growth and wisdom experienced as a consequence of that realisation.

Rather than stage of recovery, motivation and positive action levelled the playing field for all participants. Over time and through stages of cognitive appraisal participants were presented with opportunities to re-evaluate their beliefs, values, historical coping responses and their life narratives. This research indicates a cyclical recovery process of situational trauma triggering cumulative

trauma, then self-reflection, education, learning and personal action. This cyclical and progressive process eventuated in psychological reframing plus wisdom building. Wisdom created from the integration of past practice, current experience, and new learning, backed up by supportive vocational, social and community networks provided an opportunity to reframe experiences of abuse, neglect and abandonment. This reframing created the opportunity to rupture the old connection with their historical vulnerable persona. The outcome was a redefinition of themselves with stronger recovery identities and more self-reliance and maturity.

Understanding where a vulnerable community member is in their recovery journey and what recovery capital they have available or can access to assist their resiliency process is a key factor in understanding what support is required post natural disaster. Similarly, recognising the stage of recovery from alcoholism as well as understanding the differing impact that earthquakes have over time, viewed within the bigger picture of early life experience may provide a useful form of grief and loss intervention, post natural disaster.

In this research the theory of ambiguous loss, first defined by Boss (1999) is extended to cover psychological forms of loss encountered among people with a diagnosed alcohol dependency following a natural disaster. Extrapolating this idea further, it is also suggested that the concept of ambiguous loss and associated grief as it relates to addiction adds to the concept of rumination in the model of PTG created and defined by Tedeschi and Calhoun (2004). In their model they consider event-related rumination is part of the process of giving up or disengaging from certain goals and basic assumptions. I suggest that rather than rumination it is ambiguous loss and grief as participants' recognise and work through the acceptance of a life lost to the chronic illness of alcoholism which is reflected in the seismic devastation. It is suggested that the application of the model of PTG used in this research to view addiction recovery adds to current disaster and addiction literature by describing the rehabilitation and/or growth process from alcoholism following a natural disaster.

1.7 Defining Terms

Alcohol dependence is operationalized as set out by the Diagnostic and Statistical Manual of Mental Disorders (Text Revision) (DSM-IV TR) as a maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) specific conditions, occurring at any time in the same 12-month period ((APA), 2000).

The concept of addiction is defined as a phenomenon of negative decline with the addict's time, resources and energies becoming more and more focused on acquiring, using and recovering from

drug use, with familial, vocational and social relationships lost because the constant search for elusive euphoria has become all consuming (Miller, 1998). For the purposes of this research study, the terms alcohol dependence and addiction are used interchangeably as it is considered the characteristics of dependence and the behaviours of addiction are the same.

The term resilience when used is conceptualised as a transactional process (Egeland, Carlson, & Sroufe, 1993) encapsulating the learned resourceful of self-righting that enables one to rebound and grow from adversity, strengthened and more resourceful (Paton, Smith, & Violanti, 2000; Walsh, 2003) and is considered as a sub-concept and an aspect of post traumatic growth. Resilience in the disaster literature is defined by Paton and Johnston (2001) as involving the development of people's capacity to anticipate, cope with and adapt to hazards and their consequences.

Vulnerability to disaster is defined by Blaikie, Cannon, Davis and Wisner (2004, p. 11) as the "characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard". Social factors identified by Blaikie et al., (2004, p. 5) that can lead to vulnerabilty include "economic imbalances, disparity in power among social groups, knowledge dissemination, and discrimination in welfare and social protection".

Primal Wounding as defined by Firman and Gila (1997) is a wound created as a result of a violation where individuals are treated as objects, not human beings. Primal wounding is felt as a general sense of anxiety or impending doom or as a sense of estrangement, falseness and lack of meaning in ones life. It can also be manifested as a fear of intimacy and commitment in relationships. These feelings and manifestations of wounding underly actions and behaviours and are considered by Firman and Gila (1997) to be the cause of addiction.

Trauma is defined as "the unique individual experience of an event or enduring conditions in which the individual's … emotional experience is overwhelmed and [they] experience (either objectively or subjectively) a threat to … [individual] life, bodily integrity, or that of a caregiver or family" (Saakvitne, 2002; van der Kolk, 2007, p. x).

Rivera's (2012, p. 802) definition of disasters is used as a reference tool in this study. He defines a disaster as "events that simultaneously affect large groups of individuals in their own habitats and familiar surrounds."

A definition for the construct of recovery as used in relation to addiction is "the experience (a process and sustained status) through which individuals … impacted by severe alcoholism and other

drug problems utilise internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by alcohol … problems and develop a healthy, meaningful and productive life (Dodge, Krantz, & Kenny, 2010). Three recovery categories are pertinent for alcoholism, they are early recovery (less than 1 year), sustained recovery (between 1 and 5 years) and stable recovery (greater than 5 years).

Recovery within the disaster literature differs from the recovery from the addiction definition cited above in that it has a wider focus of community and environmental factors. Recovery from disaster is defined by Romiti, Le Masurier and Wilkinson (2006) as the coordinated efforts and processes to effect the immediate, medium and long-term holistic regeneration of a community following a disaster. They consider that within this definition, recovery requires a concerted approach that will support the foundations of community sustainability and capacity building and which will eventually reduce risks and vulnerabilities to future disasters. The different focus and wider lens implicitly assumes a homogenous community rather than the unique, personal level of experience and needs of the addiction definition.

1.8 Overview of thesis chapters

Chapter One

Chapter one provides a timeline of the greater earthquake events in Christchurch from September 2010 until August 2012 as well as a brief overview of the social and environmental conditions experienced by residents during this time. The background to the living conditions for alcoholics as vulnerable community members post natural disasters is situated within the key disaster literature and examples from local media used to illustrate the rise in domestic violence, alcohol use and stress conditions. This chapter sets out the main aims and objectives of the study, introduces the methodology and provides a definition of terms and an overview of the thesis chapters.

Chapter Two

This chapter reviews the disaster literature and those studies that examine the relationship between the impact of natural disasters and increased alcohol use. Much of the current disaster research aims to identify an expected link between psychopathological conditions as a direct outcome of exposure to disaster and associated maladaptive behaviours that emerge as a result of the trauma and the use of alcohol as a coping mechanism. This literature is predominantly viewed from a vulnerability perspective and conceptualised in stress-coping-resource deficit and pathology models with an implicit wellness versus breakdown paradigm. A small body of literature exists that captures

the nature and scope of the recovery experience from alcohol dependency at an individual level during times of disaster and how or why an individual maintains their recovery process.

Chapter Three

The methodology used in this research is identified in this chapter. The methodology described includes Connelly and Clandinin (2000) use of a narrative inquiry and Blaikie's (2007) abductive strategy based on a constructivist/interpretivist view of social reality. The Posttraumatic Growth (PTG) theory (Tedeschi, Park, & Calhoun, 1998) and the context for Posttraumatic Growth (Schaefer & Moos, 1998) to occur are summarised in this chapter. The theory of ambiguous loss (Boss, 1999) and social recovery capital theory (Cloud & Granfield, 2008) are discussed with particular reference to the application of these theories to the research findings. The research design, data gathering methods and analyses of interview material are described. An example of the transition from the narratives of participants to theoretical analysis is provided to illustrate the move from story to model. The research concludes with a discussion of how the research findings will be disseminated to stakeholders and interested organisations.

Chapter Four

This chapter highlights a participant experience including their recognition that alcohol dependency is a chronic illness and for them, living a life in addiction is traumatic irrespective of a natural disaster. Participants had consistent and continuous trauma from their illness and the environment creating the perception that their addiction felt worse and was more life threatening than the greater earthquake events. The seismic activity was helpful in minimising the amount of alcohol consumed at a particular drinking episode, but was also a hindrance to recovery as the aftershocks were cited as the reason for isolating from recovery networks. For the participants of this chapter it was harder to cope with addiction and to gain sustained sobriety during the earthquakes because of their stage of recovery, their social status and the limited recovery resources available to them. For some participants this meant they had severe limitations on their ability to cope with current environmental conditions and resilience was not about bouncing back but rather holding on. This research chapter study adds to the literature on domestic violence, alcohol abuse/dependency and natural disasters.

Chapter Five

The greater earthquake events were not considered traumatic for participants' of this chapter as the experience did not compare to their life when living in active addiction. The earthquake experience provided an opportunity for cognitive reframing as participant's assimilated acceptance of their past

life trauma as reflected in the earthquake devastation with their current reality. The theory of ambiguous loss is discussed and the model is extended as a vehicle to understand and explain the grief experienced when valued losses amassed during a life of active addiction are recognised by participants. There is also a brief discussion regarding the need to recognise the stage of recovery from alcoholism in order to better understand the earthquake experience. This chapter suggests that identification of grief and loss post disaster within the whole life context could prove beneficial for long term recovery options if used to complement addiction intervention programmes.

Chapter Six

Before the experience of active addiction or natural disaster, participants' had early life trauma that they carried within them. For the participants of this chapter, their early life trauma was recalled in the seismic activity and relived through the earthquake devastation. The greater earthquake events mirrored their feelings of fear, uncertainty and memories of trauma – every day post natural disaster was just another day in their life – no better or worse than what they had already survived. Differences in coping for Sapphire, Aroha and Isabelle lay in the forms of recovery capital which not only protected them generally from the worst of the earthquake impact, but enhanced their existing skills and knowledge. Wisdom created from the integration of past practice, current experience, and new learning, backed up by supportive vocational, social and community networks provided an opportunity to reframe experiences of abuse, neglect and abandonment. The outcome was a redefinition of themselves with stronger recovery identities characterised more self-reliance and maturity, the conditions that Tedeschi and Calhoun (1998) cite as Posttraumatic Growth (PTG).

Chapter Seven

The final chapter of the thesis summarises the key themes and arguments. Concluding comments regarding how the thesis contributes to the literature on recovery from alcoholism after a natural disaster are presented before limitations of the study and suggestions for further research are discussed.

The following chapter provides a synopsis of current disaster literature with a particular focus of the link between psychopathological conditions or negative and positive behaviours that are a direct outcome of exposure to disasters. The impact of disasters and behaviours that emerge as a result of trauma and the use of alcohol as a coping mechanism is a particular focus of the literature review.

Chapter 2
Disaster Literature

2.1 Introduction

There is a wealth of natural disaster research to date concentrated at the macro level but, for the most part, is quantitative in nature with a focus on the recovery of community infrastructure and the physical rehabilitation of the local economy to pre-disaster levels (Blaikie et al., 2004; Chang, 2010; Le Masurier et al., 2006; Rotimi, J. Le Masurier, & S. Wilkinson, 2006). It is acknowledged that food, housing and physical safety are of paramount importance immediately following a disaster event, but these studies lack an interface between local disaster recovery efforts and the impact of the event on the people that live in the disaster area (Cox & Perry, 2011; Williams & Spruill, 2005).

Much of the current disaster research aims to identify an implicit link between psychopathological conditions as a direct outcome of exposure to disaster and associated maladaptive behaviours that emerge as a result of the trauma including the use of alcohol as a coping mechanism (Adams et al., 2006; Beaudoin, 2011; Cerdá, Tracy, & Galea, 2011; Grieger, Fullerton, & Ursano, 2003; McLaughlin, 2011; Shimizu et al., 2000; S. H. Stewart, Mitchell, Wright, & Loba, 2004; Vetter et al., 2008). This literature is predominantly viewed from a vulnerability perspective and conceptualised in stress-coping-resource deficit and pathology models with an implicit wellness versus breakdown paradigm (Mooney et al., 2011). Less literature exists that encapsulates the nature and scope of the recovery experience from alcohol dependency at an individual level during times of disaster and how or why an individual maintaines their recovery process (North et al., 2010).

This review considers those studies that examine the relationship between the impact of natural disasters and increased alcohol use. An exhaustive search for ‘natural disaster’, ‘earthquake’, ‘alcohol dependence’, ‘recovery’ and ‘resilience’ in the academic multidisciplinary databases of Scopus and Web of Science gave a rich and numerous choice of social science literature. However, as these were primarily quantitative in nature, a second search was conducted in Google Scholar to seek out qualitative research studies.

2.2 Current Disaster Literature

Although a large body of disaster literature exists there appears to be a lack of evidence to support a relationship between natural disasters and alcohol abuse or dependence. Part of the problem with current disaster research could be the persistent focus on outcome measures capturing the type and nature of a psychological impact on survivors, relative to the disaster epicentre or related to particular aspects of the disaster event (Chou et al., 2007; Norris, Friedman, & Watson, 2002; Norris, Friedman, Watson, et al., 2002; Paxson, Fussell, Rhodes, & Waters, 2012) such as loss of possessions, anxiety, depression or PTSD symptoms and alcohol use as a coping mechanism. Differing measurement techniques and/or inventories have been used in multiple quantitative studies which appear to have similar goals of measuring alcohol intake by volume or identification of potential stressors and pathological conditions (Armenian et al., 2002; Bödvarsdóttir & Elklit, 2004; Bonnano et al., 2007; Dorahy & Kannis-Dymand, 2012; Hussain et al., 2011; McFarlane, 1998; Person et al., 2006) however they differ for the main part in their analysis of the findings. That is, all the studies mentioned above seek to predict, measure and report on psychological outcomes following a disaster including earthquake, tsunami, hurricane or terrorist attack. Armenian et al., (2002) acknowledge in their research there are different experiences but there is no discussion as to how meaning attributed to disaster experience is reflected. Psychological distress, resilience, coping and reactions are some of the study aims in these studies but all use different instruments, and dis-similar items to measure similar constructs but ultimately citing the same outcomes of depression, PTSD, anxiety or stress.

2.2.1 Disaster experience, PTSD and depression as outcomes

Norris et al., (2002) in their exhaustive review of 160 separate disaster samples cited PTSD and depression as the two most common symptoms to affect disaster survivor populations. Chou et al., (2007) in their study of Chi-Chi earthquake survivors found similar depression and anxiety outcomes to Norris et al., (2002) but noted that the symptoms were associated more with post disaster challenges than the disaster itself. These findings were also noted by Person et al., (2006) who suggest, based on their research findings, that the losses associated with the disaster event were the bigger source of stressors, with the potential to create PTSD and depressive symptoms, rather than the disaster itself.

Hussain et al., (2011) in the findings of their quantitative study of 63 Norwegian tourists affected by the 2004 Tsunami in Thailand point out that PTSD may not be the only or the most prevalent disorder following a disaster event. They suggest that other psychiatric disorders experienced by

survivors include anxiety and depression which are longer lasting than PTSD symptoms. They point out that anxiety and depression are symptoms of trauma per se, and not necessarily the outcome of experiencing a disaster event. Amenian et al., (2000) in their quantitative research found that proximity to the devastation, intensity of loss (including financial and material possessions) and being alone when the disaster struck were better determinants in the measurement and attribution of earthquake impact when assessing the potential for the creation of depression.

Hobfoll's (1989) Conservation of Resources (COR) theory suggests that the loss of resources reduces options resulting in psychological distress. His early definition of resources considered only money, physical possessions and infrastructure such as homes. His later literature however, extrapolates this theory to define resources as "things that are valued" (Hobfoll, 2002, pp. 306-308). In this updated psychology of loss theory Hobfoll (2002) includes loss of one's sense of mastery and social support, what he considers an interplay of both self and the social environment, that can both impact and assist an individual's adaptation to their disaster experience. In relation to psycho-social support Amenian et al., (2000) suggest that improving social networks after a disaster is a protective mechanism against the onset of depression. Quantitative disaster recovery research stemming from the 2010 and 2011 Christchurch earthquakes (Dorahy & Kannis-Dymand, 2012; Johnston, Becker, & Paton, 2012) and the Brisbane floods (Ronan, 2011) also indicates that re-establishing and enhancing existing social supports is an effective psychosocial intervention for anxiety and depression.

Both Hussain et al., (2011) and Chou et al's., (2007) quantitative studies suggest that survivors who experience social network change, financial burden and family loss are at greater risk of developing PTSD. Bodvarsdottir and Elklit (2004) in their research of Icelandic earthquake survivors found that intrapersonal differences such as education level were a determinant for greater symptoms of PTSD. They consider that a lower education level can have an impact on the ability to express feelings or thoughts which could impair an individual's ability to seek support and relief. Armenian et al., (2000, pg 202) found in their study that having reduced coping, skills meant individuals' were at risk of accumulating other adverse life events". Other disaster literature considers the risk/resilience aspect of disaster recovery such as Hussain et al., (2011) who identified that the severity of the disaster impact made conditions worse for community members who were vulnerable before the disaster event. They consider that the loss experienced post disaster "may deprive … individuals further of the material and human means to access social support and human resources provided by the community. It could be said then, that an individual's pre-disaster social capital and intra-personal resources could be mediating factors in disaster recovery. Ronan (2011) considers that the rupture of communication and contact with existing social and/or support groups is a major stressor

in vulnerable groups. Hobfoll (2002) looking wider at the underpinnings of individual well-being considers that it is the individual's ability to access resources within their environment that is a critical component which mediates between one's social resources and resilient self when recovering from disaster.

Chou et al., (2007) in a slightly different take, considers that grief due to family loss following a disaster event is a risk factor in the development of PTSD or major depressive symptoms. This finding is interesting as much of the disaster research assumes a connection between PTSD, depression and post-disaster recovery while only a few consider any other predisposing conditions (Hussain et al., 2011). The concept of grief as a disaster outcome fits well with Hobfoll's (2002) extension of his COR theory as he considers that reversing resource loss may mediate disaster recovery but only where the lost resources can be replaced.

There appears to be conflicting evidence about the relationship between PTSD, depression and natural disaster within the current literature even though both of these symptoms often appear as linked outcomes following disaster events in many studies. Depression and PTSD have different clinical characteristics but were linked in two thirds of all of cases. Chou et al., (2007) consider that major depression is not specific to earthquake impact but is triggered by other stressors not related to the disaster, whereas Hussain et al., (2011) found that depression was the most significant disorder post tsunami. Person et al., (2006) found that depression post disaster was associated with direct exposure to terrorist attack but also earlier life trauma. Loss might be a common mediating mechanism for both PTSD and depression according to Armenian et al., (2002) but Chou et al., (2007) found that PTSD was related to changes in social network whereas Hussain et al., (2011) consider that PTSD was related to disaster exposure.

2.2.2 Trauma experience as a trigger for drinking behaviour following disaster

Other research has looked more closely at what PTSD domains following disaster, if any, are connected with increased substance use as a coping mechanism.

Previous trauma research has examined the relationship between 11 types of traumatic experience and at risk drinking (McFarlane, 1998). In reviewing this literature McFarlane (1998) identified that there was an increase in drinking behaviour by volume, but the increase in consumption was triggered by PTSD symptoms rather than exposure to a disaster event. Stewart, Mitchell, Wright and Loba (2004) found that the PTSD domains of hyper-arousal and re-experiencing were the motivators behind using alcohol as means to self-medicate following exposure to trauma. These researchers consider that it is the frequency and severity of PTSD symptoms rather than the trauma

exposure that was correlated with the increase in alcohol use providing evidence for the argument of alcohol as a self-medication mechanism. Stewart et al., (2004) suggest that PTSD could be instrumental in the development of alcohol abuse (and the potential for dependence) when used as a self-medicating mechanism.

Boscarino, Adams and Galea (2006) like Hussain et al., (2011) found the converse to be the case. Following terrorist attacks of 9/11 their research indicated that the greater the exposure to trauma, the greater the alcohol consumption up to two years after the event. They also concluded that while PTSD was a pathological condition linked as an outcome to the attacks, alcohol use was not associated with this diagnosis but rather the exposure to trauma was associated with problem drinking. North et al's (2010) findings also indicate that post disaster alcohol problems were not linked to PTSD but may be associated with some unmeasured, pre-disaster factor.

Armenian et al., (2000) found in their research that alcohol use was not related to PTSD outcomes, however two years later in their follow-up study, (Armenian et al., 2002) they identified that alcohol use was a protective factor for depression, which, as their earlier research indicated, is more pervasive and sustained following disasters. These studies confirmed intensity of loss as a secondary disaster stressor which can add to the symptomatology of trauma. McFarlane (1998) also discusses the impact of loss for trauma victims. His research findings suggest that there is a gradient effect to the trauma experienced by many. That is, not all people in a disaster zone have the same level of injury, loss or burden as others, but for them the sense of threat or the duration of exposure may predicate alcohol abuse rather than severity of loss.

The relationship between distal factors, (lifetime experiences of economic disadvantage or traumatic events) and proximal factors, that is, exposure to a natural disaster has been addressed by Cerda et al., (2011). Their research considered the impact of traumatic events and alcohol use following two hurricane disasters. They suggest that cumulative adversity led many hurricane survivors to be more exposed to traumatic events and these participants had the highest risk of alcohol use following the disasters, suggesting prior vulnerability could lead to the risk of alcohol abuse post disaster.

There is not a one-to-one relationship between trauma exposure and substance abuse; it appears to be that a complex model of coping with a disaster exists as the literature suggests (Hussain et al 2011). Research by North et al., (2010) found that only 0.3% of their sample developed a new alcohol disorder post disaster. Hussain et al. (2011) also state that "new onset substance abuse disorders rarely emerge after disasters … [but there] may be an increase in use" (Hussain et al., 2011, p. 139).

2.2.3 Alcohol use as a form of resilience

Other disaster research to date has focussed more closely on how people deal with disaster-related trauma, specifically the link between trauma experience and individual coping mechanisms. Boscarino et al., (2006) point out that, from a general stress process model perspective it can be said that when subjected to a challenging environment, individuals respond physiologically, psychologically and behaviourally. Alcohol is a useful means to alleviate the feelings associated with PTSD as research indicates that the neurochemical properties of alcohol are similar to the underlying neurobiology of PTSD (McFarlane, 1998). McFarlane (1998, p.817) in his study found that "the mental state associated with PTSD either discouraged or increased the alcohol consumption … if in the early stage of the disorder", indicating either self-medicating behaviour or a dysphoric effect. Shimizu et al., (2000) found a similar outcome. In their study of quarterly alcohol sales following the Great Hanshin earthquake in Japan they found that the quantity of alcoholic beverages consumed in the heavily damaged areas decreased both immediately and for up to 2 years. Although Shimizu et al., (2000) cite Asian cultural effects for the reduction in drinking behaviour after a disaster Chou et al., (2007) in their Chi Chi earthquake research with Chinese survivors found that drug abuse/dependence increased from 2.3% at 6 months to 5.1% at 3 years post disaster. Their research suggests that personality type and life adjustment ability pre-disaster were predictive for psychological distress and caution researchers to use cultural contexts as an explanation carefully.

The findings of Grieger et al's (2003) research following the terrorist attacks on Washington in 9/11, indicated that people located in the Pentagon building during the attack were diagnosed with PTSD and depressive symptoms six months after the event with indicators of psychological distress still present at seventeen months. They also found that alcohol use increased by 25 percent, five to eight weeks after the attack. A major finding of their study was that a lack of perceived safety was closely linked to the presence of PTSD and increased alcohol use, particularly in women.

Research conducted by Vetter et al., (2008) identified an associated increase in PTSD symptoms and a rise in alcohol use among women in their study of participant survivors of the 2004 Thailand tsunami. However, North et al., (2010, p.177) found the converse, that is, "men were more likely to meet criteria for pre-disaster and post-disaster alcohol abuse/dependence". Their research, based on a series of 10 disaster studies, found that 27% of respondents self-reported using drinking to cope following the disaster. A key finding of their studies was that 83% of respondents with a diagnosis of alcohol use disorder who were in recovery from alcoholism pre-disaster had consumed alcohol post disaster. This rate of alcohol consumption did not differ from those with a diagnosis of alcohol dependence who were not in recovery pre, during or post disaster. This research is uniquely

placed within the disaster literature as it has a focus on a specific population (those that identify with an alcohol disorder), with pre-disaster and post disaster data which enables a clearer picture to be drawn regarding the impact of a trauma event on alcohol use.

McFarlane (1998) suggests that traumatic events can lead to alcohol abuse independent of PTSD. Chou et al., (2007) in their research found an association between an increase in drug abuse/dependence and major depressive symptoms up to three years after a disaster event. Hussain et al., (2011) consider that alcohol abuse is directly related to disaster trauma experience rather than PTSD. Other disaster research findings highlight the trauma experience for some comes on top of pre-existing trauma (Armenian et al., 2000; 2002; Grieger et al., 2003). Boscarino et al., (2006) also suggest that people with a previous history of trauma could be more at risk of a greater impact by traumatic stressors, that is, more at risk of developing full-blown PTSD. Along a similar vein, Norris et al., (2002) suggest that increased alcohol use after a disaster could highlight those individuals that already had a pre-existing drinking problem.

As McFarlane (1998) suggests, the relationship with PTSD and alcohol abuse is complex and prior (distal) trauma experiences and drinking behaviour needs to be considered. His findings are also supported by the Grieger et al's (2003) research, suggesting that it is constant trauma exposure that continues alcohol use. His findings from reviews of combat trauma suggest that alcohol use is a means of coping with "the sense of threat … or … fear" often experienced in military service. However he goes on to suggest that combat trauma and natural disaster trauma are not associated, leaving an unclear relationship.

Powerlessness, fear and uncertainty are themes reiterated in the study of Icelandic earthquake survivors conducted by Bodvarsdottir and Elklit (2004). They suggest that although their participants did not experience death of a close family member or friend during the earthquake event, 67% of their participants were afraid of dying during the earthquake, 54% continued to be very frightened during tremors and 44% were very afraid that another earthquake would strike. As with other research discussed above, Bodvarsdottir and Elklit (2004) also found symptoms of re-experiencing and avoidance to be the two main PTSD symptoms exhibited by participants. They concluded that female gender, low education and recent trauma experience were contributing factors in maladaptive psychological response and emotion-based coping. Like McFarlane (1998) they also suggest that avoidance behaviour may be a consequence of powerlessness in disasters and they suggest that once acceptance of this powerlessness is internalised the avoidance behaviour will become extinct. The powerlessness-avoidance concept has merit as it could explain why some

people don't develop alcohol dependence after disaster but abuse alcohol as a self-medicating coping mechanism briefly while they readjust to the changed conditions.

The studies discussed above have provided valuable information as to what may happen at a psychological and behaviour level following a disaster as well as which community members may be more vulnerable before, during and after a disaster event. On reviewing the disaster literature to date, it appears that disaster research focusses on the general public, with very few studies focussing on select populations, specifically, those that identify with having an alcohol disorder pre disaster (Cerda et al., 2011) or people that have existing alcohol disorders attempting to maintain their sobriety during a stressful time.

2.2.4 Resilience and Post Trauma Growth

Most research studies and writing regarding the construct of post traumatic growth is based in the rehabilitation field although there is a growing body of disaster literature that recognises that any disaster is a stressful experience at any time. This literature considers that not everybody who experiences a disaster will develop a pathological condition, but actually the experience for some may be an opportunity for personal growth (Paton, 2000; Paton et al., 2000; R. G. Tedeschi & L. G. Calhoun, 2004; Xu & Liao, 2011). Bonanno (2004) considers that exposure to loss or trauma can also enable a positive emotional experience to happen. He considers that "resilience is a distinct trajectory from the process of recovery … and that there are … multiple pathways to resilience" (Bonanno, 2004, p.20). The authors' cited above consider not every experience of a disaster is necessarily negative a point reiterated by Fergus and Zimmerman (2005). In their study of adolescent resilience they found that continual and moderate exposure to risk factors actually builds resilience.

2.3 Conclusion

The research on natural disasters appears to be dominated by a disaster-pathology-coping-adaptation focus that looks at the overall effects and impact of disaster but has a limited focus on the meaning or utility behind coping mechanisms for the individual experiencing and living the disaster event. There is empirical evidence and descriptions of behaviour but little discussion as to the reasons behind the behaviour, the purpose of it or a holistic picture of disaster impact on the individual. Qualitative research into the experience of the disaster as told by the individual and their recovery journey within disaster literature is largely absent.

The literature on natural disaster and community or individual recovery is, for the most part, predicated in one-off events (Bodvarsdottir & Elklit, 2004) that is, the natural disaster event strikes and individuals then begin to recover. This was not the case with the Christchurch major earthquake events which at the time of this study numbered over 10,000 aftershocks in just one year, many over 5.5 in magnitude. The residents of Christchurch were living in constant uncertainty and trauma, rather like living in a war zone, therefore current natural disaster literature does not fit well with the lived experience of these people. The present research study is an attempt at documenting the greater Christchurch earthquake disaster experience from the perceptions of recovering alcoholics and to understand how they adjusted to the changing conditions of their environment.

The following chapter discusses the philosophical and methodological underpinnings of this research and the methods used to conduct the study.

Chapter 3
Philosophy, Methodology and Methods

3.1 Introduction

This chapter examines the philosophical and methodological underpinnings of this study and the methods selected to carry out the research. I outline the aims of the research and consider epistemological dimensions guiding the abductive approach to the gathering and analysis of interview material for this project.

The key theories that are used in the substantive chapters to contextualise the narratives of participants are discussed in this chapter. Posttraumatic Growth (PTG) theory (Tedeschi et al., 1998) and the context for Posttraumatic Growth (Schaefer & Moos, 1998) are considered alongside the theory of ambiguous loss (Boss, 1999) and social recovery capital theory (Cloud & Granfield, 2008). The theoretical relevance of these authors' work for this research project in relation to the substantive chapters is also outlined.

The chapter then provides an overview of the method and design of the study, explaining how narrative approaches to research guide data collection, the identification of themes and analysis of interview material within the chapters 4-6 of this thesis. A discussion on the transition from the narratives to theoretical analysis and dissemination of the research concludes the chapter.

3.2 Situating the methodology: Addiction and Narrative Research

I chose a narrative approach as an appropriate methodology because from earlier work experience and familial background I was aware that many who recover from addiction have done so with their healing based in a storytelling culture. This way of doing the research was reinforced by one of the participants who commented that from years of listening to stories of other AA members and the experience and implicit knowledge held within she had come to subconsciously internalise these as a form of positive holding environment. These key points or slogans and tenets of AA philosophy she recalled and recited to herself as positive 'self-talk' during stressful times.

Frank (1995) reminds us that there is a "personal issue to telling stories and the purpose is to give a voice … [there] is the need of ill people to tell their stories in order to construct new maps and new perceptions of their relationship to the world". Narrative inquiry is a powerful vehicle for sharing

experience and providing hope by passing on knowledge from hearing others' discourses. Narrative is useful for cognitive reframing and altering perceptions which in turn can lead to positive behaviour change (Crape, Latkin, Laris, & Knowlton, 2002). Hobfoll (2002) points out that being able to confide and share stories about an experience is a salient and powerful form of support.

Connelly and Clandinin (2000) consider that experience is a platform which provides a context, or window, with which to view an individual's story. They say that the social context within which a participant narrative is located not only influences how their story is told but defines what story is told. Thus from the continual reaffirming, modifying and reinvention of one's story it is possible to understand an individual's process of adaption or change – or lack of it. Participant stories enable researchers to understand their unique position and also how the social environment has shaped their current and future perceptions.

Storytelling is not just for the teller, but also for those listening (Boss, 1999). In this research narrative is used to bring stories to text for analysis, but it also offers the participant a space to find meaning and understanding in their experience as well as providing a storied experience for the researcher to hear (Richardson, 2010) and respond (Frank, 1995). Hearing a story therefore creates obligations for researchers in relation to how those narratives are re-storied in written publications that arise from the research (Frank, 1995).

3.3 Aims of the research

The overall purpose of this study was an attempt to understand indicators of vulnerability post-natural disaster and factors that enhanced the personal resilience for participants in recovery from alcohol dependence. One of the aims of this research was to document participants' experience of the Christchurch earthquakes, recording their stories of disaster impact and recovery. A second aim of this study was to explore the physical, emotional, psychological and spiritual influences on the participant's recovery process from not just their natural disaster but their journey in sobriety too. In documenting this secondary aim a third purpose was to attempt to understand what social, economic and environmental issues emerged following the earthquakes and to record what effect social resources may have on participant recovery from alcoholism following a natural disaster. Tying these aims together it was hoped that the identification of the factors that enhanced personal resilience would be achieved but also identification of the gaps in their recovery needs for the consideration of disaster agencies in future disaster events.

The outcomes of this study will make significant contribution to understanding how people in recovery from alcoholism cope with adverse life events such as a natural disaster as told from their perspective.

3.4 Narrative inquiry

Richardson (2010) points out that a common theme within the narrative literature is a lack of consensus about what narrative is or how research using a narrative inquiry might be undertaken. Connelly and Clandinin (2000) point out that narrative inquiry is a collaboration involving researcher and participant, located temporally and situationally, within a social context defined by the participant's story both as lived and as told by them. Blaikie (2010) considers there is power in using a narrative inquiry because it gives the researcher the opportunity to experience the social world of the participant from their perceptions by being placed inside their world. Therefore using a narrative inquiry is an essential vehicle for this research as it supports my purpose to document the lived experience of the participants' during greater earthquake disaster events and how they coped, as told by them.

3.5 Abductive approach

Blaikie (2007; 2010) identifies abductive research as incorporating the meaning and interpretations as well as intentions and motives of people in their everyday lives that directs their behaviour. Abductive research according to Blaikie (2010, p. 91) adopts a "bottom up" approach, the purpose is to "present descriptions and understanding that reflect the social actors' point of view rather than adopting … the researcher's …". This is possible because of the basic paradigm of the abductive approach, that of accessing the social world through the story of the actor, how they approach their story and the language they use, recognising the tacit knowledge implicit in the discourse. The progression from lay descriptions of social life provided by participants to technical descriptions of social life developed by the researcher forms the process of analysis within an abductive methodological approach (Richardson, 2010). Blaikie (2010) considers an abductive research strategy is useful when there are no clear theoretical leads from the literature, where theory generation is required, as I believe is the case with my research findings. An example of the abductive approach to research and analysis within this thesis is provided in chapter five where Aroha discussed her recognition of the comparison between the seismic devastation of the city of Christchurch and the devastation that her addictive illness has had on her life. Her descriptions of the awareness of a spiral of losses that have compounded in her life are as a result of living in chronic illness. Her grief that is implicit within her recognition of what she considers has now been a

wasted life – much like the wasted landscape of Christchurch - was turned into a technical description of the impact at a personal level of addiction through the application of Hobfoll's (2001) conservation of resource theory.

3.6 Research design

This research is informed by a constructivist/interpretivist epistemology that is, the story as told by the participant comprises their reality as made up of shared interpretations created and recreated as they move through the day. The storyteller's narrative cannot be separated from the listener/researcher, as both are joined in an interactive process of mutual influence (Guba & Lincoln, 1994). The knowledge generated by the storyteller about themselves and their environment is an outcome of a constant process to make sense of their world by constructing and interpreting meaning in a perpetual cycle of reconstruction (Blaikie, 2007; 2010). This research focuses on narrative constructions of recovery from alcoholism within the overarching recovery process from a natural disaster event.

3.7 Interview as method

When the September earthquake struck Christchurch I was working in the field of Alcohol and Other Drug as a treatment provider and studying part time as a post-graduate student. As discussed in Chapter one, I found daily examples of personal and public narratives that implicitly constructed Cantabrians by nature as stoic and resilient. In addition my awareness of what was happening at a social level through my encounters with people in crisis at work as well as in my personal networks contrasted starkly to what people were saying. The question that consistently played in my mind was, "how are the earthquakes really impacting those in recovery from alcoholism and how are they managing their daily stress and maintaining their resilience?" I suspected that some alcoholics may in fact relapse from their recovery with AA sponsors being absent or missing, usual meeting places no longer available and social supports fragmented, but that this would not be the case for all. In fact some alcoholics, I believed, may actually grow personally from the experience of continuing sobriety throughout the trauma experience of the natural disaster events. My professional as well as personal experience, sound, helpful direction from my Supervisor, combined with curiosity regarding how people who self-identified as alcoholics were coping with the earthquakes led the decision to do this as a topic for my Masters' Thesis.

Based on my academic learning about research design and my newly acquired skills in dialogic interviewing techniques from a part time role as research assistant I considered that a semi-structured, face-to-face interview method would be the most appropriate to achieve my research

aims and objectives as defined above. Knight and Saunders (1999) consider that dialogic interviewing is particularly pertinent for use with pilot or exploratory work such as this research project. They also say the style of dialogical interviews is a good choice of method when there is the need to build collaboration between the interviewer and informant. Building collaboration is a key aspect of a narrative enquiry approach, it aids in drawing out the tacit understandings especially when an experience is so familiar to a participant that they take their understandings for granted (Knight & Saunders, 1999).

From recent research assistant experience I was aware that the interview space was both a give and take process of information sharing as suggested by Knight and Saunders (1999). This provided me with the insight to be mindful of the need to create a relationship of trust with the participant, to resist the need to direct the narrative or offer an interpretation of what was being said (Kvale, 2006). Therefore it is the participant's viewpoint that is the purpose of the interview and the participant who has authoritative knowledge including what is told and in what order, not the interviewer. Denzin (2001) points out that for the past century social scientists have exploited interview data. He says the interview is our information gathering tool to understand the societal view, not a mirror of the external world or a window into a person's inner life. In understanding this perspective regarding my role I tried to be alert to the possibility that the interview questions were not opening the space for dialogue, but rather suppressing the participant's story. My aim was to share the participant's story and the same-ness of their experience through dialogue – in a partnership of respect and trust (Denzin, 2001; Kvale, 2006).

3.8 Gaining ethics approval and participant recruitment

The research proposal was submitted to the Massey University Southern Ethics Committee in February 2012 (appendix 4) and final approval was given to proceed with the research in May 2012.

Participants were recruited through two sources, the Familial Trust (a not for profit organisation that specialises in helping those affected by another's addiction) and ARC (Alternative Recovery Centre), both located in Christchurch. With participants' permission, recruiting sources forwarded names of those interested to the researcher and the option of potential participants contacting the researcher directly was also offered.

The target population or participants was defined as people resident in Christchurch who were fluent in English and identified as an alcoholic and/or were rehabilitating from a DSM-IV diagnosis of dependence. All participants were required to be currently in sobriety and to not identify as having a dual diagnosis with mental illness. Participants were also required to have lived in Christchurch

during the time defined as the greater earthquake period - from September 2010 up to and including the research in March 2012.

Any potential participants that were known to the researcher from previous workplace experience were screened out of the list of potential interviewees. Ethnicity was not a selection criteria and the descriptive information was gathered for the sole purpose of reporting the characteristics of the people who contributed to the study, rather than as a main focus for analysis. All participants were advised they could have whanau or a support person present.

Flyers explaining the research plus information sheets (appendix 5 and 6) explaining participant's rights and containing the researcher's contact details were left with both The Familial Trust and ARC to distribute to people who may be interested in participating.

3.9 Participant selection

Eleven participant names were forwarded to the researcher via purposive sampling aimed at capturing a range of experiences related to how people who self-identified as alcoholics were coping following the greater Christchurch earthquakes. One of potential participant was ineligible for the study as he disclosed over the phone when I contacted him that he had previously been clinically diagnosed as being bipolar. I explained that given this diagnosis, he was not eligible for the study. The remaining ten people met the criteria for inclusion in the research and were invited to participate and agreed to contribute to the research. I then made arrangements by phone to meet each of the participants at a location that best suited them. During the first contact phone call I again explained the purpose of my research and outlined their rights as a participant. One participant did not show for the interview and when I was able to finally get hold of him he admitted that he had forgotten that he had agreed to meet with me. Unfortunately this was on the last day of the research trip so I was not able to find a substitute. Of the 9 remaining participants 8 were female and 1 was male. Four were in stable recovery (greater than 5 years); two were in sustained recovery (between 1 and 5 years) and three were in early recovery (less than 1 year).

3.10 The interview

Data was collected by in-depth, semi-structured interviews over a period of one week. Five interviews were held in the homes of participants and 4 were held at the office of the Familial Trust. The interviews took between 1 to 2 hours in duration and were audio-recorded for later transcription by myself.

Before the interview I emailed or posted all participants a copy of the information sheet, flyer, guiding interview questions (appendix 7) and two copies of the consent to disclose form (appendix 8). At the time of the interview I also handed the participant another copy of the information sheet, explained the contents to them and provided an opportunity for them to ask questions. When the participant had signed both copies of the consent form, I handed one back to them to keep. The second copy, once signed was kept with the research for eventual scanning into a secure repository.

From previous experience as a research assistant I found that participants wanted to start talking immediately about their experiences so once the initial documentation was taken care of, the interview started straight away with just a few preliminary questions to gain biographical information.

The interview questions were characterized by open ended questions exploring the experience of the earthquakes and recovery, however I was unprepared for the findings that emerged. That is bright eyed and armed with my research question and a structured interview schedule I assumed that the interview would go according to my plan. However the reality was an all-encompassing theme, disclosed by all participants very early in the interview process, of trauma. This topic was unexpected and came as a personal shock for me to recognise it stemmed from childhood abuse and adolescent violence and/or neglect. That the earthquake experiences paled in comparison due to an abrupt immersion into their childhood memories of neglect, abuse, abandonment and eventual addiction was a profound jolt to my belief system and interview strategy and consequently the cause of much reflection on my values, beliefs and assumptions with which I had based my interview questions. In conversation with my Supervisor it was decided that these unanticipated themes would be incorporated into the interview schedule for the remaining interviews to allow me to explore these experiences more fully.

More important than changes to my interview schedule was the awareness that through listening to the dialogue of participants I recognised an overarching theme of resilience. I recognised that no matter how distressing their stories were for me to listen to, they came from a position of "that was then and now's now". It may seem strange, but every interview had this theme and it was at some point in the interview that I "fell in love" with each participant. I admired their strength, I acknowledged, understood and grieved their loss and distress and I cheered with them at their successes. The sharing of their stories set the tone of my thesis incorporating the concepts of strength based study of recovery with adaptation as a form of resilience. For the participants of this research as discussed by Tedeschi and Calhoun (2004) and Mooney et al., (2011) from distress there is growth. Participants' acknowledged that their reality had changed and they found a way to adapt

(Paton & Johnston, 2006) their recovery from both the natural disaster events and their rehabilitation from alcoholism.

3.11 Data analysis – from oral story to written text

All interviews were transcribed by myself and as the narratives were listened to over and over as I typed up the drafts, the preliminary themes slowly emerged. By conducting all the interviews myself and transcribing the data it was possible to 'hold' much of the narratives in my mind, drawing links and parallels between different storytellers and writing these ideas down in chunks of text. Initially I highlighted text that I recalled as being said by another participant and added in coloured text my thoughts of why a certain statement was made or I related it to a particular theory or piece of literature.

Initially, I believe I glossed over the themes because of my previous experience with alcohol and other drug treatment paradigms. After feedback with my Supervisor it was suggested that this knowledge may be commonplace in the addiction treatment field but it may not be known within the academic literature. I spent quite some time reviewing what I knew about addiction as an illness, the paradigms of rehabilitation and sifted through the transcripts to find evidence of these concepts. I went back to the transcripts and highlighted in the same colours all excerpts around similar themes that appeared in each participant's narrative and collected these themes together in separate documents. After a process of constant review of the narratives I then went to Google Scholar and entered strings of text using keywords that best represented the storylines that I thought I had isolated. When referring to the bodies of literature that the themes tended to have a best fit with, three main themes emerged that solidified my analysis into concrete terms for further research. For example, the topic of traumatic stress was identified as a major theme, that led me to the work of van der Kolk et al., (2007) but it took some time for me to look beyond the trauma of the narratives to understand that the stress actually came from living with the chronic illness of addiction, rather than being generated from constant seismic activity. A number of sub themes were also identified that tended to fall under each thematic heading thus adding a further dimension to the analysis. For example, in Jojo's story, not only was she living with the constant stress of addiction and earthquakes but was also subjected to domestic violence situations and under pressure from governmental agencies to perform to their expectations. Similarly, Phoenix, although terribly ill with her addiction, had a leap of recognition that while she was powerless over the seismic activity she was not powerless (at some level) over what she was doing to herself. Understanding these links between what she could change and what she had no control over strengthened my belief that the narratives reflected the literature on Post Traumatic Growth.

Once the themes were identified I selected narratives that best represented the themes. I then set about explaining why the narratives reflected the point I was making, and my thesis analysis had begun. Following this linking I incorporated my initial analysis with current literature and other research study findings. The final analysis was to locate the themes within current theories or models. For example Aroha's recognition of loss and the grief associated with a new found perception of her life as wasted, was linked with current theories about ambiguous loss in order to explain these findings.

3.13 Within a framework and alongside a theory

This thesis has been guided by the model of ambiguous loss as defined by Boss (1999) as well as the framework of PTG discussed by Schaeffer and Moos (1998)and developed by Tedeschi et al. (1998). The incorporation of recovery capital theory as conceptualised by Cloud and Granfield (2008) is also blended with these models/theories alongside the social model of rehabilitation (Pledger, 2003). These four lenses have been applied in an attempt to understand the impact that the seismic activity and devastation had on current life and when reflecting on past life participant experiences plus the development and integration of their posttraumatic growth process.

Schaeffer and Moos' (1998, p. 100) model of posttraumatic growth (PTG) (appendix 1) conceptualises what they consider are the determinants that comprise a positive outcome from crisis. Within their model they consider "environmental and personal factors shape life crisis and their aftermath". They suggest that through an indivdiual's unique coping response they either find a way forward to a growth opportunity, or can be susceptible to developing a pathological condition.

The concept of PTG (appendix 2) was further developed into a framework by Tedeschi and Calhoun (1998; 2004) and "refers to positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, 2004, p. 1). According to them these challenges are significant and confront one's paradigms and inherent assumptions often enabling the growth opportunities to co-exist with great personal distress. Therefore the same cognitive processes invoked to manage disturbance can also produce positive change. Put another way, it could be said that not everyone who experiences a sudden and unexpected disaster event will develop a pathological condition, some could, in the midst of the trauma, encounter opportunities that positively change their values, belief systems and perceptions of themselves. They may, following a traumatic event, move forward in a conscious, reasoned decision to retain and build on this new knowledge, perceiving themselves and the environmental opportunities differently. This is

certainly the case for all participants of this research project, although there are differing degrees of change and growth.

Posttraumatic growth, according to Tedeschi and Calhoun (2004) describes the experience of an individual's development that has surpassed what was present before a trauma event. PTG then goes beyond rehabilitation, or a return to a previous state of functioning, because it is a profound and transformative improvement in one's life, at least in some areas. What sets this concept apart from similar concepts[2] is the key aspect that it is the struggle with trauma (when coping resources are minimal), or more correctly, the changed reality that accompanies the trauma experience, that creates the growth opportunity. Tedeschi and Calhoun (2004) point out that it is the cognitive restructuring post trauma that incorporates the changed reality that one can define as growth. A new level of perception, set of values and belief systems therefore is positive, robust and includes an affective component which is transformative by its very nature, leading to wisdom building, rather than just being "an intellectual exercise" (Tedeschi & Calhoun, 2004, p. 4). The paradox of PTG is that through surviving trauma one becomes not only a changed person, but much more than one thought one could be, that is, has a changed identity. This opportunity for change occurs within five factors that Tedeschi and Calhoun (2004, p. 6) believe define the domain of growth. They consider these factors to be "greater increased appreciation for life including a changed sense of priorities; warmer, more intimate relationships with others; a greater sense of personal strength; recognition of new possibilities or path for one's life and spiritual development." The data from this research was suggestive of growth rather than resilience and therefore it was considered that this may be a more apt framework within which to analyse the research findings.

In defining the ambiguous loss model (appendix 3) Boss (1999, 2004) considers there are two situations that can create the potential for ambiguous loss. The first situation of ambiguous loss is when an individual is physically absent but psychologically present as in a disaster situation when a loved one is missing but their status is unknown and therefore they are still kept alive psychologically in the minds of their loved ones. The second situation is when a person is physically present but psychologically absent, such as when an alcoholic is in untreated addiction. Boss (2006) considers that both these situations of ambiguous loss can occur concurrently when considering the

[2] Tedeschi and Calhoun (2004, p. 3) point out other terms have been used to describe posttraumatic growth including strength conversion, positive psychological changes, perceived benefits or construing benefits, stress-related growth, flourishing, positive by-products, discovery of meaning, positive emotions and thriving. They point out that three concepts in particular are linked to positive changes as coping mechanisms including positive reinterpretation, drawing strength from adversity and transformational coping.

scenario of a missing loved one. The absence/presence duality is also the case for those living in sustained recovery from addiction, for both those participants new to recovery or in stable sobriety, as well as participants relapsing during the greater earthquake period. In this research the theory of ambiguous loss, first defined by Boss (1999) is extended to cover psychological forms of loss encountered among people with a diagnosed alcohol dependency following a natural disaster. For the purposes of the analysis provided in this thesis the building block of the theory based upon the psychological 'family' is replaced by the psychological 'life of sobriety'. Therefore, the higher the incongruence between one's psychological life of sobriety (their perception of a sober life) and the reality of their sober life, the greater their boundary ambiguity. For the addict in recovery or relapsing, boundary ambiguity then is not knowing if the gains made in having sobriety make up for the losses incurred in a life of addiction.

The social model of disability considers the relational nature of the disabling condition and the environment. That is, the external characteristics (cultural, political and social environments) rather than personal qualities (impairment, functional status or socioeconomic) creates a disabling condition (Pledger, 2003) or handicap. Whiteneck (1994, p. 1073) defines handicap as "a disadvantage for … individual[s] that limits or prevents the fulfilment of a role that is normal … for that individual … include[ing] expected roles such as friend, worker, family and community member and … dimensions such as occupation, social integration and economic self-sufficiency". Cloud and Granfield (2008, p. 1981) point out that the capacity for successfully terminating alcohol dependency is not equally distributed across … society." They consider that it is ones social stature, their social realities, social inequalities and social conditions that create substance misuse and recovery. Alcohol dependency is a personal problem, but with scarce personal capital especially in a post-disaster environment, any assistance from the community to build all dimensions of capital in an individual's life to sustain their sobriety would be beneficial for all (Cloud & Granfield, 2008). The social model of disability examines the relationship between the nature of the disability and the environment within which the recovery process is situated, particularly the socioeconomic context that shape the disability and recovery experience. This research indicates that lack of resources including societal awareness of the nature of addiction and associated social problems, combined with the rigours of chronic illness lead to a downward spiral of reduced social status, capital in any form and hope for the future. Within the substantive chapters of this thesis is an argument for understanding where a vulnerable community member is in their recovery journey. What recovery capital they have available to access to assist their resiliency process is a key factor in understanding what support is required post natural disaster. Within the narrative examples in this thesis, is an indication that

both addiction and recovery are socially constructed being dependent upon contextual as well as environmental factors.

3.14 Disseminating the research

At different stages of the research I presented the analysis and findings at National conferences, specifically the New Zealand National Rehabilitation Conference 2013 and Cutting Edge, the National Addiction Conference 2013. This gave me the opportunity to receive feedback and defend the emerging findings. As my thinking evolved and with feedback also from my Supervisor, my analysis of the stories became more coherent and systematic and I was able to locate other research that added dimension to my analysis. Going forward outputs will be targeted for peer reviewed addiction, rehabilitation and disaster management journals. Findings for this study will also be made available through the research database on the Christchurch earthquakes that is being developed in conjunction with the Joint Centre for Disaster Research at Massey University and GNS Science.

3.15 Summary

This chapter has outlined my rationale for the research question and my choice of research design methodology. I have described the data gathering and analytical processes used to establish the final themes of this thesis and explained the theories that the abductive analysis approach identified as key to contextualising the narratives of participants who contributed to this thesis.

The following three substantive chapters address the three main themes that reflect the participants' narratives relating to their experience of the greater Christchurch earthquake events and how they maintained resilience and managed their recovery from alcoholism during this time.

Chapter 4
Stress, stress everywhere and only earthquakes in sight …

> …I guess, when everyone else around me seemed to be going "eeerhh earthquake" and I was so aware that that was nowhere near as destructive as what I was doing to myself… (Phoenix, August, 2012)

4. Theme 1: The earthquakes were no harder to cope with than current life situation and less threatening than living in addiction

4.1 Introduction

Within the narrative examples provided in this chapter is the recognition that alcohol dependency is a chronic illness and living a life in addiction is traumatic irrespective of a natural disaster, although, add a sequence of earthquake events and these participants had consistent and continuous trauma from their illness and the environment. Participant narratives describe that the stress of living and coping with alcohol dependency required the same skills to respond to and recover from a fatal natural disaster as coping with active addiction. For participants Phoenix and India during this time at least, their addiction felt worse and was perceived by them to be more life threatening than the greater earthquake events.

The seismic activity and devastation was a catalyst to cognitive reframing which also provided an opportunity to review alcohol use and the impact it was creating at all levels on participants' lives.

Not all participants could sustain their recovery from alcohol dependency during the greater earthquake events but during this time the seismic activity was helpful as some participants feared what might happen should they be drunk or passed out if an aftershock hit. Ironically the same seismic activity was also a hindrance to recovery for some as it was not only cited as the reason for isolating from recovery networks but also the vehicle for recalling and reflecting historical issues of parental neglect and unmet needs and associated unresolved grief. Participant response to uncovered emotions and feelings appeared to be self-medication as a coping mechanism.

For the participants of this chapter it was harder to cope with addiction and to gain and sustain sobriety during the greater earthquake events because of their stage of recovery, their social status

and the limited recovery resources available to them. For some participants this meant they had severe limitations on their ability to cope with current environmental conditions such as alcohol too readily available in the community as well as negative living situations including domestic violence issues. Pressure to conform to agency requirements and rules also created additional stressors for participants when just getting through the earthquakes felt almost too much to manage daily.

Disaster response and community recovery, at least in the early days after a disaster event, suggest people stay home but for alcoholics in recovery, imposed isolation from supportive networks is a hindrance to their recovery process. Participants of this chapter either in early recovery or still living with active addiction were faced with multiple stressors and living with considerable losses through the greater earthquake events. For these participants resilience was not about bouncing back but rather holding on. Understanding where a vulnerable community member is in their recovery journey and what recovery capital they have available to access to assist their resiliency process is a key factor in understanding what support is required post natural disaster.

The stories of three participants Phoenix, India and Jojo are used to illustrate the themes at work within this chapter supported by excerpts from participant narratives and supplemented by extracts from a wider range of people who contributed to the research. The following vignettes introduce the three participants whose stories provide the main contribution to this chapter.

4.2 Introducing Phoenix, Jojo and India

In telling her story, Phoenix provides us a brief glimpse of how she battles her alcoholism and a severe eating disorder. She talks about often being in a highly anxious emotional state and feeling unable to cope with the stressors of her life before the greater earthquake events. Phoenix discusses her physiological dependence on alcohol being so great that she fits in with a broken and disordered Christchurch City following a 6.3 magnitude earthquake. For Phoenix, the earthquake devastation was not as frightening to her as her lack of power over her illness, ironically this insight served as a catalyst to assist in getting sober. To Phoenix, the earthquakes were not frightening because her addiction felt more powerful and had a more devastating impact on her. Phoenix has a stock of cultural capital that she is able to draw upon as a form of recovery support - she is well educated and has good job prospects that provide her with a sense of meaning and purpose. She also has financial and social capital in the form of loving, affluent parents who provide her with shelter and a good standard of living. With freedom to move financially, she is able to access community services that support her desire to live sober and defeat her eating disorder.

Following the September earthquake, Jojo was trying to stop her drinking and drugging in an attempt to gain credibility with Child Youth and Family services (CYF) as she had been advised that due to the level of her addiction illness she would face loss of her children if she did not achieve abstinence. Early one morning following the September shake, her partner returned home drunk and attempted to kill her. He was sentenced to prison. Not content to allow her to build a new life, from within the prison system he sourced and hired someone to terrorise her and the children. Following police and social service advice she moved her children from their stable environment and began a new life in a different part of town until the February quake struck and destroyed this home too. Terrified and with very few supportive resources Jojo relapsed back to her alcoholism until her drinking behaviour shocked her back into recovery.

Over the next year Jojo's story that follows shows a slow and painful progress from living in addiction and domestic violence with no human, physical, social or cultural resources to a place where she feels she can better look after her children and herself. Her life is far from perfect and she is constantly hindered by governmental agency decisions that create additional stress and environmental conditions that increase her vulnerability because she has no financial resources to repulse the challenges. At times Jojo discusses that the conditions are so difficult, and her anxiety about her living situation is so great, she feels powerless and lacks any form of hope. She reflects that she often considers living in addiction may have actually been easier and ruminates that her decision to get and stay sober may have been untimely. She has unmet financial needs, dreams for herself and children that go unanswered and she is living with serious stressors daily. However through perseverance (or desperation), recalling the memory of how bad her drinking and drugging had got to and by accessing community support and actively participating, she begins to build social capital and this enables her to take small steps in recreating her identity as a woman and mother following serious trauma events.

In Jojo's story there is an illustration of how, firmly embedded within her addiction and fearful of government agency penalties, living with an untenable domestic situation and a chaotic illness and limited healthy social supports her environment fosters an embedded coping response to self-medicate with alcohol, exacerbating a delicate financial situation. The feelings of terror, panic and loneliness associated with the seismic activity mirrored Jojo's addiction and domestic life. These feelings were constant companions to the uncertainty and fear associated with significant earthquake activity. Jojo was in very early sobriety when the September earthquake hit and although a chilling, violent attack by her partner did not encourage a relapse, the impact of the February quake was so great that Jojo felt a need to drink. She lacked supports to discourage the

decision to pick up a drink to cope. Jojo, like others in this study, was vulnerable before, during and following the disaster due to a lack of power, status, resources and level of illness. Durant (2011) consider that people with multiple disadvantages or multiple jeopardy are exposed to increased risk and therefore at greater vulnerability to disaster.

India has been struggling with alcohol addiction for many years and has brief periods of sobriety but always followed by worsening relapse. During her drinking period India puts herself at physical risk, not just with her health and the volume of alcohol she consumes but also with a violent partner. After years of living in serious addiction her store of human and cultural capital is severely depleted and feelings of shame and depression at her drinking serve to keep her constantly isolated, perpetuating her need to drink. India's ability to continue to survive the serious illness of her addiction provides her with skills to manage daily in a city shattered by earthquakes but her despair at her lifestyle and black moods also limit her ability to access and build a recovery network, already fragmented from the earthquake devastation. India has very limited financial capital and she has a fatalistic belief that she cannot escape her 'poverty trap' which she blames on the post-earthquake environment rather than her chronic illness. For a short period of time, however, the outpouring of goodwill and financial aid following the greater earthquake events provided her with a better standard of living. India often discusses her dream of a better life. Implicit in her narrative is the shining hope that sobriety will provide one; however her years of relapsing and descent into lower order society have left her with few avenues to recovery without considerable community intervention. For India, the constant earthquake devastation was reflective of her life in battling a relapsing chronic illness, that is, it was no worse living in a devastated city than with her addiction.

4.3 Living in addiction is more stressful than a significant earthquake

Living in Christchurch during the greater earthquake period gave some participants a sense of 'déjà vu' as they felt that their lives fitted well with the damaged environment. That is, the level of fear, uncertainty, terror and stress invoked by constant aftershocks mirrored how they felt daily prior to the earthquakes. Living in crisis has a lasting negative effect on the participants' financial position, familial and social relationships as well as employment prospects. It would appear that addiction had torn at the fabric of participants' lives as they became more dependent on alcohol, with their traumatic lifestyle arresting cognitive and emotional development, and potentially their spiritual inner world as well. Outcomes of this type of lifestyle can be limited hope, coping skills and increased resource loss making it more difficult to find meaning and purpose in life. Ironically for some participants, there was recognition that their addictive behaviour and therefore their lives were being mirrored in the earthquake activity and devastation. This recognition was in itself a

pivotal psychological event as they began to see with this association how their drinking was harming them. Old schemas were shattered and present life narratives interrupted, creating an opportunity for new behaviour and thinking to be formed.

A major theme that stood out in the research findings of this study was that both the earthquakes and living in active addiction involved significant levels of traumatic stress. Sapphire for example suggests that any day in addiction was traumatic and a natural disaster event was not only just another thing to cope with, but required the same skills to get through:

> … that year prior to the quake had been a pretty big one for our family so we'd had a pretty major sort of stressful year anyway and the quake was just like the icing on the top for us it's like "oh ok, another thing to deal with" … but the thing is, I'd been through so much anyway in my life that an earthquake was just another thing to get through … it's old thinking, it's old patterns of behaviour to cope with trauma … (Sapphire, August 2012)

For Sapphire the earthquakes were considered just another trauma event in a difficult year of living with the stress associated with active alcoholism. Coping with an addiction (or an addictive environment) involves the development of behaviour to ensure at minimum one's survival long term. These behaviours, predicated in the need to seek, gain and protect one's drug supply in order to continue self-medicating, are developed over time as the addiction problem is perpetuated and becomes normative. Therefore, as Sapphire suggests, living with stress, fear and uncertainty was normal, and considered no better, or worse, than the aftershocks.

For Phoenix however, active using was a much more frightening proposition than anything an act of nature could create:

> … because I had so recently detoxed and … when you're in detox you really are so aware of every nerve ending … and like you're so out of control of your own body with the shaking and hallucinations and … it's devastating, and compared to that, the earthquake was nothing really. It was, it really wasn't as scary, you know your heart's not feeling like it's going to come to a complete stop and … yeah. (Phoenix, August 2012)

The devastation caused by an earthquake was reminiscent for Phoenix of the damage that her addiction was doing to her and by extrapolation her life. At the time of this interview Phoenix had the opportunity to reflect on her addiction journey during the earthquakes. With the benefit of hindsight and eight months of sobriety she comments that the earthquakes in fact mirrored her personal 'style of operating':

> … it's quite strange because at that point, I hadn't really thought about it till now, but it was almost like I fitted in with Christchurch, because I was so like all over

> the place and … so eating disordered and it makes sense that I was in a city that was all over the place … the earthquakes never scared me as much, I guess because it's out of my hands, my self-destruction scared me a lot more than the earthquakes, yeah. For me when everything's going on inside and the panic and the fear and everything is all internal that's so much scarier than when it's happening outside of yourself … for me when I relapse, it's not that I want to be drinking, it's not that I think that I can be drinking, it's not that I think that there's any way back into social drinking, it's when I'm drinking it's just me going "can't cope".. it's more a scream for help really … and so for me almost immediately, I don't have a drink I tend to down a bottle or two or three of vodka, so it's kind of like um a big explosion "help" and then get back off it … people say I drink suicidally when I drink, I guess, if I was a suicidal type as such, um it would probably be an equivalent of me taking an overdose. (Phoenix, August 2012)

The earthquakes emulated Phoenix's behaviour as a functioning addict but they were less life threatening in reality than the act of picking up a drink. What the earthquake experience provides for Phoenix is the awareness that she often feels much worse than any damage created by a significant natural disaster. Implicit in her narrative is that her terrifying inner world is her reason for reaching for vodka and drinking as if she wants to die. As Phoenix points out, she does not consider herself the suicidal type, so it could be that drinking is a means to escape her feelings and a cry for help.

Phoenix has begun to understand a connection between her powerless over the earthquakes and what has been a powerlessness to cope with how she feels. Phoenix can see that she cannot control when an earthquake will hit or what damage it will do and she is aware that when she decides to pick up a drink, this decision has the same impact on her life as the earthquakes have had on Christchurch, if not potentially much worse. Sellman (2007) discusses in his research with alcoholics that the chronically ill addict is so dependent on alcohol and their brain chemistry is so altered that they believe that if they don't drink they will die and yet if they drink they will at some time probably attain this very state. Sellman's (2007) statement is reiterated implicitly in Phoenix's narrative when she talks about the volume of alcohol she consumes – the alcohol "equivalent of … taking an overdose", in a single drinking event which is her coping mechanism to pacify her volatile emotional state.

4.4 Trauma can influence drinking behaviour

When Christchurch's central city and much of its surrounding environs was suddenly and unexpectedly reduced to rubble, the very real threat to lives and environmental havoc it created left many participants feeling physically unsafe as the aftershocks continued. For India the ambiguity and enduring fear surrounding the uncertainty of if or when another earthquake may hit meant that she stayed immersed in a traumatic state.

> … and there was just the fear of the unknown and not knowing if it was going to be bigger or worse or how much damage that was already done to the house that you couldn't see … (India, August 2012)

In India's narrative is the recognition that with each earthquake there was a slow erosion of personal safety associated with the constant emotional and psychological distress of waiting for further aftershocks to occur. Erosion of personal safety has also been discussed by Grieger, Fullerton and Ursano (2003) in their study of survivors of the Pentagon terrorist attack on 11 September 2001. They found that 62% of participants who self-reported a history of trauma pre-disaster, also reported changes in perceived safety and increased alcohol use, post attack.

In the following narrative India although frightened and uncertain, also recognises that with her level of illness she cannot drink safely during the earthquake period because of her inability to stop once she starts. India cannot guarantee with any certainty what may happen to her once she starts drinking and goes into a 'blackout state'. As with Phoenix there is an irony that India drinks to a point where her health and physical safety could be compromised by the very drinking, but is unable to not drink. This fear though is enough that India's inherent survival instincts override her craving to drink and influence her daily consumption:

> … you know because I am a blackout drinker and stuff and I thought "that's pretty terrible that there was quite a major earthquake [September] and I pretty much went back to bed and slept through it" … I was so kind of out of it that I didn't register what it was and that really freaked me out … even though I did crave for drinks, I didn't like the idea of if anything suddenly happened, if I was pissed or out to it, that I might not be able to get out of my house, or help … (India, August 2012)

The aftershocks were stressful enough for India to acknowledge to herself that her drinking was problematic. She also acknowledges that being drunk to the level of incapacity although normative for her is, at least during the earthquake period, unacceptable. The earthquakes then acted as a protective mechanism, obliquely creating an environmental situation that forced India to minimise her drinking consumption, providing some relief from the effects of her illness. Knowledge of the harm consequences of alcohol abuse was not enough for India to stop drinking entirely due to her dependency on the substance as well

as the utility it provided her, but the stress of aftershocks provided a recognition that her drinking behaviour needed to change, at least in the short term.

The earthquakes although distressing were also a protection from further harm for Phoenix too as she reflects on her earthquake experience:

> I think if those earthquakes hadn't of happened, for me I probably would have relapsed more often in that year than I did. Because in that year I relapsed, I went for two months and then four months and then six months, so yeah, just three relapses in a year, which is very minimal for me … I was really scared actually of relapsing in that period because I was so aware that if an earthquake happened and I was drinking the shops would be shut … and I would go into withdrawal and I'd be rogered … so at that time it just felt safer to be sober and that really did help me, the earthquakes kind of helped me stay sober at that time. (Phoenix, August 2012)

As with India, the need to use alcohol for Phoenix is so strong that she requires external help to manage her alcohol intake. Fear of physical withdrawal symptoms, imposed by retail closure and perhaps a powerful but unrecognised desire to live, all worked together to force Phoenix to minimise her drinking volume. At some point in her relapsing chronicle, Phoenix has been jolted into a new realisation. For her, a sudden and to date alien thought based in the earthquake activity was the catalyst for schema reconstruction. The new thinking was such that a significant and lasting change to wellness was elicited with Phoenix realising that she was the entity harming her, not an external event:

> … when everything was around me was out of my control, it felt so important that I just 'man up' and control the things that I pretty well should be able to control **… I guess, when everyone else around me seemed to be going "eeerhh earthquake" and I was so aware that that was nowhere near as destructive as what I was doing to myself,** that was really what kind of made the penny drop to me to go "maybe I really need to sort this out now". Because I'd been pussyfooting around the idea of getting well for a long time but it had always felt like something that was within my control, but this was really a wake-up call that "ok if that doesn't affect you but all this stuff that you're doing to yourself does, then maybe you can stop doing this to yourself" and that kind of almost gave me permission to get well. (Phoenix, August 2012)

The changing of awareness from being powerless over her drinking behaviour to recognition that she created her self-destruction and she could minimise it is acknowledged in the current literature on Post Traumatic Growth (PTG). Tedeschi and Calhoun (2004) consider that the concept of PTG refers to a positive psychological change which is as a result of a struggle with highly challenging life circumstances. Paton, Smith and Violanti (2000) point out that growth may follow from a traumatic event but the events are still profoundly disturbing. Growth and distress outcomes are not mutually

exclusive, but cognitive reconfiguring is necessary to experience growth following trauma. It is the struggle with trauma, they believe, that is the turning point to changes in belief and goals (Tedeschi & Calhoun, 2007).

4.5 Jojo's story - Domestic violence, earthquakes, and addiction

Addiction and earthquakes were not the only stressors following in the wake of a fatal seismic event. As Wilson, Phillips and Neal (1998, p. 9) suggest "disasters expose aspects of social life that are … less visible in less stressful conditions of everyday life when members … fail to receive expected conditions of life from the system". Clemens, Hietala, Rytter, Schmidt and Reese (1999) in their study of flooding and domestic violence found that the disaster event itself did not influence domestic violence. Their study did suggest though that there is a significant difference between genders with regard to emotional symptoms such as depression, anxiety and hostility. Below, Jojo narrates that domestic violence following the first September earthquake created for her an increasingly unsafe environment:

> … he didn't like that I wasn't going to drink anymore, he didn't like that. Um, ended up assaulting me really badly after he'd been out on the booze one night … in front of our son, and got sent to jail, and he was there for … six months, served four, had … paid someone from jail to throw bricks through the kids windows, so we moved … in hindsight I would have stayed put, because it doesn't matter where we move to … because Child Youth and Family recommended it, the Police recommended it, the Police Safety Team recommended it, the Women's Refuge recommended it. We moved up into the house in Cashmere Hills and we'd only been there a couple of months when the earthquake hit … (Jojo, August 2012)

However, in Jojo's experience none of the factors cited in the Clemens et al., (1999) research were what created her living situation of domestic violence. In her opinion, it was her desire to change her life, specifically to give up alcohol that created her partner's violence, leaving her to choose between two equally unpalatable and destructive choices, either stay living in active addiction or risk living in fear and violence for the chance of sobriety.

Jojo's house following the September quake was still liveable but after her ex-partners attack she was faced with pressure from CYF and the Police to move … to hide … and she says, against her better judgement, she went. She discussed with me that she felt, looking back, that it was a wrong decision as it involved moving her children from a stable, well respected school to a new house where they were at least initially, socially isolated.

The need to care for children following a disaster situation Norris et al., (2002, p. 237) conclude, puts women and young children alike in an 'at risk group'. Vulnerability factors they suggest include the need to stay in dangerous living conditions such as domestic violence situations in order to provide adequate housing for children post disaster when other options may be lacking. This research finding appears to fit with Jojo's case but she also felt keeping her children in a place where they had friends and stability was more beneficial, especially, given that no matter where she moved to, her ex-partner would find her and continue his terrorist tactics as the Police had been unable to protect her to date. Also, being socially isolated she would not have someone close by who knew her 'story' to come to her aid if called, increasing her vulnerability.

Enarson (1999) discussed domestic violence and forms of vulnerability of women in her study of three separate disaster events. She says that "… it is not stress but the cycle of violence that is the issue" because it is the viciousness of lack of power and control by others, diminishing self-worth and efficacy, that lead a woman into "increasingly narrow social networks". Clemens et al., (1999, p. 204) suggest that higher levels of social support for women are "a buffer against the effects of the disaster" but Enarson (1999) found that contact with crisis services including counsellors, court protection and law enforcement become unavailable following natural disasters, as Jojo found. She considers that "battered woman … already in emotional crisis before a disaster event … bear the brunt of disaster losses long into the recovery period" (Enarson, 1999, pp. 747-749). As Wilson et al., (1998, p. 116) suggest "an individual's place within the social structure influences the likelihood of … her becoming a disaster victim or experiencing conditions that may worsen … vulnerability". Blaikie, Cannon, Davis and Wisner (2004) and True (2013) also consider that social vulnerability and other forms of risk are the real cause of disasters because the disaster event affects the fabric of social resilience but is tempered by the community and its culture. They suggest that risk and vulnerability equal disaster, not a natural catastrophe happening in isolation.

Jojo's comment above "it doesn't matter where we move to" and her insight as to the power game within her relationship indicates implicitly that she does not expect help to come from the community or know how to access any assistance. By extrapolation her own powerlessness is reflected in the following narrative:

> … it's not about love, with these controlling men, these violent men, it's about control, power and control, so yeah, if I wanted to go, he'd want me back, if I wanted to stay, he'd want me to go. It was a very unhealthy relationship um, and I know because of my drinking and because of my [faulty thinking], I thought he was the best I could get, yeah, so it was a very long process to leave him… (Jojo, August 2012)

Powerlessness over the way she thinks, the uncertainty of aftershocks and the damage they may create but also the recognition that she is not safe from her ex-partner's violence even if he is incarcerated kept Jojo self-medicating. For Jojo, violence, addiction and powerlessness compound into a stressful daily existence during the greater earthquake period. Powerlessness following natural disaster may also be encouraged through environmental conditions and outside a woman's ability to influence. For example True (2013) suggests that if domestic violence is an issue for a woman, she may not be aware of where help is following disaster devastation. Also she may be unable to acknowledge that a problem exists due to fear of reprisal or punishment, especially in the case where her addiction confounds an existing violent situation.

Room (2005, p. 143) suggests "alcohol and drug use … problems are heavily moralised territories often resulting in stigma and marginalisation". She points out that those who are subject to stigma or marginalisation are generally living in poverty or lacking in other resources, as was Jojo's life even before the earthquake events. Fetzner, McMillan, Sareen and Asmundson (2011) in their research looking at the association between traumatic life events and alcohol dependence found that 8.5% of participants in their study that were experiencing domestic violence had an alcohol use disorder (AUD) and 6.9% of participants with AUD had a lifetime experience of domestic violence. Local media reported that during the Christchurch earthquake period the level of domestic violence and alcohol use rose (APNZ, 2012b; NZPA, 2010). Lynch (2011) reports that in the three weeks following the February 22 shake, the Police Safety Team received more than 18 calls of family violence a day, 47% more than for the same period over the last four years. There was limited media coverage about alcohol and drug use following the greater earthquake events but what media articles there were did suggest an increased alcohol use with binge drinking beginning to become a problem especially in the suburbs impacted the greatest by the seismic activity (ODT, 2012; A. Stewart, 2013; Stylianou, 2011a).

The awareness of an existing problem and adequate social services to respond to assist in a meaningful way may not exist in a helpful form post disaster depending on the stage or phase or community recovery (Clemens et al., 1999). In their study of three separate natural disaster sites Clemens et al., (1999) found that if domestic violence was identified as a problem and a concern within the community before a disaster event, it was also seen as a problem and increased post-disaster. They also reported that, domestic violence in communities that did not report any increase following a disaster also had no post-disaster infrastructure in place prior to the event that was able to be mobilised to cope with any potential escalation of domestic violence reports. It appears that in some communities, where there is a lack of awareness or recognition of domestic violence these

communities had no support infrastructure in place to assist in domestic violence situations. It is as if they consider there is no need to establish a priority to act because there is no unmet social need recognised (Wilson et al., 1998).

Wilson et al., (1998) point out that disaster recovery organisations may not consider domestic violence post disaster a problem because they lack the capacity to understand a woman's relationship with her community. Enarson (1999, p. 742) puts it better when she suggests that "the social location of the observer shapes knowledge claims, including … knowledge we have about disasters" but she goes on to point out that to date, "a determinedly gender neutral analysis of disaster renders invisible the … gendered social structure of the communities … and intimate relationships … women as disaster subjects are generally invisible" (Enarson, 1999, p. 743).

There is very little research literature on the topic of domestic violence following natural disasters (Clemens et al., 1999; Wilson et al., 1998). The lack of awareness and recognition of violence as an existing social problem could explain this lack of literature. A more probable reason for the gap in literature about domestic violence following disasters could be that most disaster research and literature is undertaken by men and the focus of their research, the lives, interests and experiences of women in natural disasters is not visible to them and therefore a woman's experience or voice, in effect, is silenced. The story of Jojo in this study adds to the literature on domestic violence, alcohol abuse/dependency and natural disasters.

Jojo's co-dependency, trauma re-enactment with domestic violence and her active addiction has created a serious illness with her wounding evident in her story (Frank, 1995) as indicated below:

> My thinking was fucked. There's really no nice way of putting it, it just was. I remember describing myself as a professional victim. That's what it felt like, that's what I felt like. I was just sooo good at the drama and the misery and I drank and I smoked pot because life was miserable, "if you had my life you'd drink too", I mean it was a real pity party, and it was quite horrible, it really was. (Jojo, August 2012)

Frank (1995) suggests that sooner or later everyone who has an experience of trauma becomes a wounded storyteller, that is, they tell their wounds; their hurts are the story about their life. Jojo's narrative is a good example of wounding, implicit in her dialogue is the identity of herself as a victim and she gives active voice to this by labelling herself as such. Her perception of herself is negative and she identifies in herself a lack of hope to change her situation. With the benefit of sobriety it can be seen that her concept of herself is changing and that she can now see her perception of herself for what it was "a pity party". Frank (1995) reiterates this point, he considers living with a serious illness creates a loss of the "destination and map" of one's life, that is, deprives them of

quality of life, meaning and hope for a future. He says to correct this ill people have to learn to think differently.

4.6 Seismic activity alters thinking and reality

The magnitude and violence of the 6.3 February 2011 earthquake was unanticipated and for Jojo who was in very early sobriety and awakening to a new emotive and cognitive reality, was beyond the realm of her imagining:

> … it was just horrific, the um … it was like you were having a car accident, sitting in the car I just remember holding the steering wheel, and it was that disbelief again, and shock and just there was so much noise from [my friend's] house falling down and … it was unbelievable, and um, yeah, I remember … it was just shock and I just stood there … (Jojo, August 2012)

For Jojo the shock, disbelief and stress of this event was the impetus and reason for relapsing as a coping mechanism, or as she put it, to "calm her nerves":

> So I crawled in traffic … and there was silt and water all over the roads and the traffic was moving really slowly and every single aftershock I thought "oh my God the grounds going to open up and my cars going to fall into it", I was really, really highly anxious and … in my … state, stalled the car and it wouldn't start again … So I got some guys … and I was just shaking, I wanted to get to my kids and I … they helped pushed my car off the road … I managed to get hold of my dad who was trying to um get back to my nana's house which wasn't far from where we were and he said he'd meet me at nana's place … when my dad got there we opened up the door and went inside and I opened up the fridge and there was a cask of red wine in there and I said to dad "could I have a drink?" and he said "yes", cause he knows I've struggled with my drinking for a long time and I just … I needed … I told myself I needed it to calm my nerves … (Jojo, August 2012)

Jojo's need to seek approval for a drink was an interesting comment on her social support network. In her interview narrative Jojo admits she did not relapse following the attack where her partner attempted to kill her, but the violence and resulting terror of the February earthquake was enough to have her reaching for a drink. It would seem that Jojo considered the earthquake was a big enough trauma event to justify a relapse but perhaps the relapse episode could have been avoided if her social network, especially those closest to her such as her father, supported her sobriety journey.

The still vivid and lasting seismic damage has been useful for Jojo to use as a symbol for where she is emotionally located, that is, the state of the city is analogous with how she is feeling. Finally being able to put her feelings to words and using the broken city as a visual anchor, Jojo can now begin to

find words that help her articulate her story, to begin to find her voice that her serious illness has taken from her (Dayton, 2000; Frank, 1995).

> …look everywhere you go in this city, you are constantly, you know we're constantly reminded that it's broken … it's a broken city. It makes you feel even more broken than you already are. (Jojo, August 2012)

Jojo suggests the state of the city and by extrapolation herself, seems to parallel how difficult it is for her struggling to start a life sober, while raising three children alone and coping with a violent ex-partner from whom she cannot escape. Her chaos narrative is reflective of her wounded storytelling. However, as Frank (1995) points out turning one's situation into a story transforms it into an experience, in her words, as her truth, making this meaningful and embedding the changes into a new and at some level, acceptable reality.

4.7 Stress of earthquakes and addiction but no recovery resources

JoJo describes how her emotional and psychological resources are growing with sobriety and the help of newly created healthy social networks. However, her current financial and physical situation is easily eroded by the constant aftershocks, which heighten her emotional distress created by her pre-earthquake drinking and living conditions:

> …we've had to move a lot, um, my car has broken down a lot, damage from the roads, um, it's cost me a thousand dollars this year already, it's just money I don't have, I'm a solo mum with three kids, so yeah, I mean it just costs all the time. Yeah, I've had to move, moving is costly, um, the kids, it's a long way for them to travel to school, but I do feel it's very important for them to stay at the same school 'cause there's been a lot of changes … there's been a lot of changes because of the earthquakes and because of my drinking and drug use and because of my ex-partner … (Jojo, August 2012)

As well as trying to manage what was often a disordered emotional and psychological state in early recovery, Jojo had additional stressors of needing to leave home following domestic violence and then earthquake damage. She comments on the lowering of living conditions as each house that she moved to became smaller and more run down to compensate for the rising rental costs. Seismic damage limited the volume of habitable properties available on the renting market, forcing the price of weekly rents up as demand exceeded supply. The need to move out temporarily for repairs to her rental property created significant distress during her early recovery stage as she sought to find alternative accommodation and move her household possessions on a very limited income. Enarson (1999, p. 749) considers that "the most vital lifeline for battered women … is affordable housing … which is more likely to decline after disaster". Governmental policy introduced to hinder

price rises during this time would have been helpful for many competing for housing stock on limited incomes.

Within Jojo's narrative is the implicit message that recovery from alcoholism is both an outcome and a process. For Jojo, resilience was not only about "getting through" but it was about accepting the situation, specifically her powerlessness to make her life better than it was. Jojo started her recovery journey in a state of loss, with no finances, limited employable skills and education, very low self-esteem and a belief that she had little to offer her community. With a slow improvement in her ability to manage any new situation sober, she built a foundation for a sober lifestyle with the encouragement of a new and growing social network including community services. Jojo has begun to build recovery capital in three dimensions: human, cultural and social, assisting her to stay on track with sobriety despite challenging environmental conditions. Jojo's life is improving to the point that she would not want to go back to drinking, and she is now in stable recovery.

Phoenix was able to see a relationship between the devastation of a significant, fatal earthquake and the impact that her alcoholism was having on her at many levels. She was able to convert this new understanding into knowledge and new behaviour that encouraged sobriety by building 'quality' into her life. I suggest that because Phoenix had access to some forms of resource capital, specifically financial aid, she was able to make an easier transition to wellness. Jojo on the other hand had very limited resources, but had skills for survival honed through her domestic violence experience.

The actions of Phoenix and Jojo built their recovery capital from the dearth of resources they possessed before the September earthquake struck. They got and stayed sober during the earthquake events through acknowledging their chronic illness, their behaviour and environment that was perpetuating their illness, and going beyond their personal resource capacity to widen their social network, accessing and utilising community supports to remedy and change their living situations. Mooney et al., (2011, p. 32) point out that the objective of recovery intervention is to assist people … to regain a sense of control … to facilitate their ability to … effectively functioning and assist them to make sense of their experience … and …future". They suggest that in strength based recovery intervention is sometimes about supporting individuals to meet their own needs by providing empowering settings. For Phoenix and Jojo building a foundation to sustainable recovery was possible, but this was not the case for India whose story is recounted in the following section.

4.8 Being stuck in illness during seismic activity – India's story

In the following narrative India constructs what she thinks is a rational argument to blame the earthquakes as an external force for her isolation, one that justifies not actively seeking positive

social support to continue a sober lifestyle. India had very limited resources and the earthquakes provide both an opportunity to excuse a relapse and to blame the environment for her situation, because the conditions to enable this are out of her control:

> … the only thing that I found hard was that I didn't know where the meetings were because some of them overnight had closed down, you know because of damage so I kind of … I didn't go to meetings … very dry drunk um, so I started to isolate quite a bit which is what I often end of doing when I'm building up to drinking … just really dysfunctional ah just that stinking thinking, um, being in denial um, I was bitchy quite a lot, um, didn't have a lot of tolerance for people, lot of resentment coming up, all stuff that I wouldn't kind of mind manage, you know I'd just um, sit with it, and then I kind of got that way "damn it I just want a drink (India, August 2012)

Distorted thinking or "stinking thinking" was first recognised by the Fellowship of Alcoholics Anonymous (AA) (Twerski, 1997) and the phrase "dry drunk" was used to describe an individual who abstains from drinking but behaves in many other ways much like an active drinker, using projection and rationalisation to support denial in order to continue the status quo. India presents the earthquakes as a rational reason to not engage in sober living and as a means to delude herself (Twerski, 1997). When an addict is able to continue blaming, lasting sobriety is a difficult and tenuous proposition especially in the case of India, as identification of addictive thinking needs to come from an external source (Twerski, 1997). As discussed earlier, part of the rehabilitation process to wellness is a change in one's paradigm and reasoning.

One reading of India's narrative is that extrapolating blame to seismic activity and labelling herself as a "dry drunk" could indicate a desire to perpetuate thinking that reinforces the ability to maintain her drinking (DiClemente, 2003). An alternative reading may suggest that rather than a lack of desire to change the problem her inability to act could lie in a negative self-concept, developed from a life spent in trauma (Miller & Laurie, 2001). When viewing India's narratives through the lens of post trauma growth, it can be said that at this stage of her sobriety journey, she has yet to experience growth outcomes such as recognition of personal strength and an awareness of self-reliance. It would appear that India is unable to activate internal resources to maintain daily routines and tasks that would assist her in sobriety such as going to AA meetings, a tool that aided both Jojo and Phoenix.

In the above narrative India considers the earthquakes were a hindrance to her sobriety, whereas earlier she discussed they were a help because they provided her with a reason to cut down her drinking. For India, management of her drinking consumption needs to come from an external source, either via people supporting her from a recovery community or through seismic activity. As

India acknowledges, without AA meeting attendance and living in social isolation there is no healthy feedback mechanism to support a change in her thinking and behaviour. She cannot go out because of the earthquakes, but staying in makes her feel isolated and depressed so she drinks. It could be said that India is aware of negative attitudes towards alcoholism and is attempting to tell a virtuous story (Williams, 1984) through both telling the story of how it was, and by creating a narrative that suggests that factors outside of her control triggered her drinking relapse.

India is showing that she has a good grasp of the parlance of the medical model and addiction discourse by calling herself a dry drunk, making reference to her dysfunctional behaviour and acknowledging that her thinking is predicated in denial. She acknowledges and can identify this in her behaviour and thinking, for example "… being in denial … I was bitchy … a lot … didn't have a lot of tolerance … lot of resentment coming up …", but it is as if she is an external player in the dialogue, these things are happening to her and within her but beyond her ability to control or manage. India has a clear understanding of the public narratives about alcoholics as damaged people (Humphreys, 2000; Lewis, Matthijsse, & Masson, 2011; Pollner & Stein, 1996) and obliquely overlays the societal message that she is damaged to herself as if her alcoholism is a condition imposed on her and thus unchangeable given her level of personal power.

India's narrative indicates that lack of awareness around her ability to alter or want to change her actions such as verbal abuse, lack of tolerance and resentment that will lead to a drink At some level, India knows she is not coping well but her social isolation and perhaps fear of the expectation of others (Cloud & Granfield, 2008) keeps her trying to manager her life alone. It could be said that India is actively taking a hand in the oppression of her own voice by the implicit acceptance of herself as damaged and blaming the environment for her condition of constant relapse instead of actively seeking supportive networks. She is becoming what Frank (1995, p. 98) calls "a wounded storyteller … a victim of disease and … recipient of care". India's narrative is about a chaotic life that is never going to get better:

> I got depressed about money, being in a financial rut um, yeah, kind of lost confidence to go back out and work and of course …… my … you know illness I was really quite mad in my head (India, August 2012)

When the story events are told from the perspective of personal experience, Frank (1995) considers the teller of wounded stories is not living a 'proper' life but one that is embedded in vulnerability, futility and impotence with only the immediacy of the illness. Chaos narratives are difficult to listen to because of the anxiety inherent in the discourse, the over-determination of problems that extends to all areas of one's life (Frank, 1995) and the lack of resolution and therefore closure or

relief. The lack of reflection to what may be the cause of her illness and living situation and continual use of blame of external factors may be what keeps India embedded in the chaos of her living with no clear way forward. The outcome of blame and denial could be one factor that is compounding India's lack of hope and powerlessness.

Williams (1984) suggests that chronic illness narrative exists in both a routine and reconstructive form. The routine form is general observations and comment of daily life, but the reconstruction of narrative enables the listener, either herself or others, to understand her illness in terms of her past experience. This was the case for Aroha as her following narrative indicates. She went to an Alcoholics Anonymous (AA) meeting the day after the February quake and she describes the sense of togetherness and understanding that she felt when sharing her story and hearing others' tell of how they felt about the destruction of the earthquake that was the mirror to her early life:

> … it's sort of like "oh so now, ok, oh so cool you get it, you understand what I've gone through in my life? (Aroha, August 2012)

Pollner and Stein (1996) consider storytelling is a useful medium for narrative mapping, that is using story to redefine oneself through telling and hearing, discourse as a vehicle to transmit a new world of social values and norms that can shape action and re-present a new social world. According to Aroha, it is seems it is also a useful tool to provide to outsiders an understanding and recognition of her personal pain of illness and what afflicts her (Frank, 1995). Aroha has a sense of community with Christchurch AA members because they not only share an experience of recovering from a chronic illness together, but now they also have a stronger bond through the shared experience of recovering during a significant earthquake experience. By not going to AA meetings, India misses out on this opportunity to create a shared sense of community forged through the collective experience of maintaining sobriety during a natural disaster.

To elicit recovery from addiction, healthy behaviour or tasks reflecting a sober lifestyle need to be undertaken in order to assist changes in thinking about old habits (DiClemente, 2003; Frank, 1995). Within India's narrative (who at the time of this interview had relapsed six days earlier after 8 months sobriety) can be seen a pendulum swing between preparing to change and being in active addiction that reflects feelings of anger at her situation and a sense of fatalism to the outcome of her life:

> … and also there's a real fear around my drinking of where it might take me because I do get into trouble when I have drinks, especially if I've drunk quite a lot because I have blackouts and a lot of anger comes up for me, I get quite angry so it's actually frightening, yeah and last weekend of course I ended up in the police cells you know and upset people that I knew and the regret's just horrible … and

> then I got to the point a couple of times when I was drinking and aftershocks, I just thought "oh if I'm meant to be here I'm meant to be here and if I'm not I'm not", because I was quite depressed and felt quite suicidal at times… (India, August 2012)

The need to use alcohol to avoid feeling was creating health issues for India and impacting her mental wellness with recurring depressive episodes. Feelings of guilt as well as depression associated with powerlessness over her life situation, history and emotional state could be avoided by having a drink. In the following narrative India sounds emotionally exhausted by the stress of her life in active alcoholism during significant earthquake activity. Her low emotional level perpetuates a continual cycle of feeling hopeless:

> … I think a lot of it for me has been circumstances, just how I've ended up living and being away from family, I blame myself a lot that [her daughter] was in prison, I felt guilty about that because I brought her up in not the greatest of situations at times, so that ate away at me a lot, um, yeah, I think a lot of my depression was more just circumstances and stuff that I'd been through I felt emotionally exhausted … yeah um … so that of course yeah, I just continued to drink … there was the kind of side that gets depressed and that and I just thought "stuff it, might as well drink" … I didn't know what the future held here in Christchurch, I felt unsafe here but I felt trapped here. (India, August 2012)

In respecting the narrative of India as her story and her truth, it is also apparent that she was also recreating her reality, sentence by sentence. For example when I pointed out that from listening to her story there did not appear to be a correlation between the aftershocks and her drinking lapses India eagerly acknowledged this as correct. However, she quickly followed this up with naming a pathological condition, her longstanding depression, as a reason for her drinking. It seems that by using her knowledge of others' medicalising her condition she can explain why sobriety is beyond her control. India uses her illness as both a weapon and armour and considers the seismic uncertainty is a fuel that keeps her disheartened and unsettled, becoming mediating factors for her drinking relapses:

> yeah, a lot of it I think is depression for me and there was a number of reasons why I was depressed, it wasn't just the earthquakes … Oh yeah definitely and the not having power and you know everywhere you went there was destruction… I still feel unsettled in Christchurch, not like I did, but it's almost a disheartened feeling about Christchurch for me, not knowing if they'll stop, you know a lot of people talk about we're going to have a big one, you get all those kind of rumours going around so, it is unsettling … (India, August 2012)

Williams (1984) says the purpose of creating one's past from their current reality is to reaffirm for the storyteller the impression that life has a purpose. He says that the narrative needs to be assembled to understand the causes of their misfortune in reference to their illness in an

imaginative reconstruction. India's reiteration of reasons for drinking and itemising the factors beyond her control are attempts to account for the disparity between her environmental reality, the community assistance available and her biopsychosocial need to use alcohol to function. As with Jojo, India needs to drink because she is addicted to alcohol, but the use of a pathological condition as a "useful symbolic resource … employed … to mitigate the feelings of guilt and responsibility … help … maintain some sense of integrity and autonomy in the context of meaninglessness … [and] has a pleasing common-sense plausibility" (Williams, 1984, p. 190).

Williams (1984, p. 192) in considering narrative from a cause and effect model, suggests that "portraying … illness within a socio-psychological interpretation of the relationship between … identity and social role" gives an indication of how identity is defined relative to one's illness. India has located her addiction within a web of stressful events and processes. As Frank (1995, p. 189) suggests, for India her illness is external to her and beyond her ability to control "a genesis arising out of the particular features of her relationship with her world". India puts it more graphically, she says she is trapped.

India, Jojo and Phoenix drink because they are addicted to alcohol and to avoid the memories of, or actual, trauma. Their drinking affects how they are living and their ability to self-manage, they feel shame, guilt and depression which they then drink to avoid feeling, a systemic and cyclic process of self-harm, creating resource loss and no answers (Boss, 2006). This circuitous downward spiral of unwellness and limited resources is what I believe places addicts firmly in the camp of 'vulnerable community members' requiring extra assistance during times of disaster.

4.9 Loss of social resources

For India locked into the relapse cycle, the thought of having family close to be supportive was a constant in her narrative, but the corollary of her discourse was that of a sense of shame, hindering her from asking them for help:

> I didn't want to put it on my family to help me get out of here, I had a lot of shame, I've hidden quite a lot of stuff from them about how bad my alcoholism's been, like my dad knows I'm an alcoholic, but he doesn't realise the extent of it as far as I've ended up in police cells and wanting to kill myself, and I've hidden a lot from them so they wouldn't worry, so I didn't feel like I could kind of contact them so I could lend some money to get out of here …. (India, August 2012)

It appears that being trapped in Christchurch is the answer to explain a lack of social, cultural and financial resources but it is also a useful tool to employ as a scapegoat or catalyst that creates a situation of negative thinking or lack of human capital for some participants. That is, it is clear that

India and Jojo have a deficit of all dimensions of recovery capital and are trapped by the continuation of their living conditions which in turn perpetuate their feelings of shame, guilt and remorse. Enarson's (1999) considered the social context within which women live both pre and post disaster. She states that women's disaster vulnerability is often not simply poverty but other factors such as their citizenship status, social isolation or lack of cultural capital that interact with their economic status to produce inequitable and disadvantaging conditions. Hobfoll (2001) considers that lack of resources hinder disaster victims from seeking external aid, creating a powerful block to coping, predicting symptoms of depression, anxiety and loss of mastery and social support enrichment.

India often suggested that being away from family was a main reason for her feeling isolated and without support, leaving her to often spiral into depression and eventually relapsing with negative consequence of police cells and creating situations of extreme vulnerability:

> I think that being around my family would have been really great having family here, I think it would have been different if I had a family network here … 'cause I see that with other families where they have parents or you know siblings and that here, they really got together and helped each other and I really felt that isolation with not having a family round. (India, August 2012)

India observes how other families come together and support each other, however within her own family this kind of support has never been available to her and implicit in her narrative is grief for the family that she never had. She sees the empathy, support and caring in the community post disaster and compares it to the psychological family she wishes she had. Her awareness and acknowledgement of the lack of this familial environment makes her feel sad. As her story unfolds the parental neglect and shadow of adolescent abandonment became clearer as to the extent that this impacted on the participant's behaviour encouraging a need to drink:

> … because I know my Dad came down last Christmas and he drinks, not heavily but he drinks and I tried to be sober around him and the house and then I ended up drinking yeah, so … I found it very difficult because he was drinking in the house and I didn't feel that I could say to him … I kind of felt that I would ruin his Christmas if he couldn't have his beers because he likes them … um and I just got a bit stressed out … you know there was a few blackout sessions and stuff and I'd go away from here drinking and leave Dad here … and really put myself at risk, walking around at night and I got into a car with a guy I didn't know … because it was the first time I kind of had any family member besides my son actually round through the earthquakes and it was quite good for him to understand what we'd been through … I actually cried at the airport when he left even though he frustrated me and I kind of felt like he's kind of security and it went again … (India, August 2012)

Firman (1997) suggest that a healthy sense of self is based on an empathic relationship with a significant other (such as parent or caregiver) and is essential to selfhood though all life stages. This sense of self that is reflected in a healthy empathic relationship facilitates a meaningful sense of purpose and direction for one's life. The rupturing of the bond between caregiver and child creates profound confusion in children. The lack of mirroring or what Dayton (2000) suggests is "a parent appearing there but not truly present can lead to a child repressing or idealising in an attempt to keep 'a good parent' concept alive". This, she says, occurs at "the expense of authentic connections … and [the child] may feel a deep sense of helplessness and profound disconnection. When parents are emotionally numb through their own need to self-medicate, they are poor role models for emotional literacy." (Dayton, 2000, pp. 61-63)

The need to have a parent present and available for India was, it appears, more important than wanting to be sober even though a life without alcohol was cited as a key life goal. Having a parent that understood what her experience with the earthquakes was like could be a desperate attempt to be validated emotionally or at most, relive adolescent unmet needs. India's parent was unable to fill this void in India's emotional life, leaving her without social resources. India's unmet needs it could be said then motivate her need to drink to avoid the awareness of her losses. As with Jojo, India has a parent who is still considered an authority figure. In both instances the parental inability to provide a supportive sober environment, was a hindrance to choosing not to drink. However, having limited or non-existent resources as well result in a continual struggle for India making it virtually impossible to change her lifestyle circumstances including her sobriety status.

Boss (2006) in discussing ambiguous loss such as with India about her Dad, points out that it is in situations that create trauma and stress such as in a post-disaster environment that most people reach for loved ones, the ones present in hearts and minds, the "psychological family" rather than just the people in a social network, in order to stay resilient and carry on. She also considers that the higher the incongruence between the 'psychological family' and the real family the greater an individual has for boundary ambiguity and the risk of depression, stress and frozen grieving processes.

India could not sustain sobriety - she grieved the loss of a relationship with family, especially during the disaster period and her narrative is littered with reminders of her guilt and shame around her drinking and the effect this had on her children. Warchall and Graham (2011, p. 41) consider that social support is critical to effective coping and necessary to facilitate positive adaptation after a disaster. They consider that recovery support needs to influence unmet needs by "promoting a sense of safety, calmness, a sense of self and collective efficacy, connectedness and hope". India's

recovery from addiction appears to require the same type of input from community or agency to build resources as in the case of Jojo but the type of resources she needs is different. For example, Jojo requires assistance with childcare and financial aid whereas India needs help to understand the genesis of her emotional pain that may be the driver of her initial drinking response. I consider that in addition to offering financial and domestic aid, addressing India's emotional state is critical to support her from self-harming behaviour such as drinking. That is assistance to identify, understand and reframe her feelings of shame, guilt, grief, loss and depression may provide her some relief from her emotional exhaustion, perhaps then providing a space to begin to heal and move forward into recovery.

4.10 The environment is both disabling and supportive

The stories above illustrate that stress is accumulated through situations of adversity and has associated losses. Being able to manage the stress of these conditions without a natural disaster thrown in the mix was often not possible for many in active alcoholism. Alcoholics, particularly women addicts are more vulnerable to disaster conditions and potentially at risk of grater harm than many other members of society because they lack social status, power and recovery resources. Being able to acknowledge who these vulnerable community members are and more importantly identify what their needs might be, is an important consideration following major disaster events if protecting and supporting their recovery from alcoholism within the greater disaster recovery effort is to be a community goal. Being resilient to the shocks of a major earthquake and the challenges post-disaster was a trial for most Cantabrians but for the participants of this chapter with extremely limited resources, getting sober was a proposition that required input from the community physically, emotionally, financially and socially. Restoration to a previous state of functioning is the desired aim of any devastated community and the disaster recovery decision makers, however, a more progressive ideal could be that by supporting all community members in whatever way they need, rather than an homogeneous recovery offering, vulnerable members may be better placed to becoming participating social members long term. Fothergill (1998, p. 11) puts is succinctly when she advises that "disasters are social and political events that link who we are, how we live and how we structure and maintain society".

Resilience has been defined as one's ability to bounce back but as Paton and Johnston (2001, p. 7) point out this implies "a capability to return to a previous state". They suggest that following a natural disaster even if this was a desired outcome from someone, it is not possible as changes to the environment, their social network and changed reality make this unsustainable. Tedeschi & Calhoun (2004, p. 4) define resilience as "the ability to go on with life after hardship and adversity",

a fitting framework to the coping displayed by Jojo, Phoenix and India as their vulnerable social position created by dependency on alcohol, eating disorder and domestic violence was made more untenable by a natural disaster. Bonnano, Galea, Cucciarelli and Vlahov (2007) draw upon the definition of resilience developed by Tedeschi & Calhoun (2004), to suggest that the stress created by cumulative adversity could be alleviated following natural disaster by early intervention in the form of general support within communities. They advise the need to identify and assist vulnerable community members, specifically those with low social support or struggling with chronic disease soon after a disaster event, to prevent further harm.

Harvey, Barnett and Overstreet (2004) in their definition of resilience consider that "a neutral outcome is the most that many people can muster" and discuss the impact on growth when one is faced with a "pileup of losses". They consider that forward movement (or growth) can be impossible in this context, but rather resilience or just going to the next point is enough.

With India, Phoenix and Jojo, rehabilitation to one's previous state of functioning is not a desired outcome, their way forward is in habilitation, a re-learning how to live, making positive decisions to ensure their wellness. Intervention in this case would imply a need to treat the trauma of daily living, rather than just looking to assist with the addiction problem (Boss, 2006). Groshkova, Best and White (2013, p. 187) agree with Boss (2006), they suggest that instead of focussing on treating addiction and reducing the harm that illness causes, a more effective goal to reduce alcoholism in society would be to "offer every support for people to choose recovery as an achievable way out of dependency".

The medicalisation of addiction by the primarily male-oriented scientific community as a product of a disease process is often understood in terms of an objective pathology (May, 2001) with treatment outcomes predicated in acute care (detox) and palliative care (harm reduction strategies). Reducing alcoholism to a single cause or genetic origin enables the medical profession to create an individual susceptibility to an untreatable condition (May, 2001). May (2001) points out there is a key flaw in the medicalisation of addiction in that it evades the subjective and experiential factors in an individual's life, that is, the historic issues that assist in the construction of addiction as a social problem.

Groshkova et al., (2013) agree with May's (2001) assessment of the flaw in medicalising addiction and suggest that intervention treatments that are based around acute and palliative care models means support is withdrawn once alcohol and the person are parted. Burns & Marks (2013) assert

withdrawing resources at the junction of detox and the beginning of the recovery stage is just when the support is most critically needed to avoid the cycle of relapsing.

The perception of addiction as an incurable disease Truan (1993, pp. 489-490) suggests, provides medical and the "lay community with the opportunity to unlimited and never-ending treatment, which has become a lucrative business … without demonstrating that it works". Truan (1993) considers that the addiction-treatment industry failure to successfully treat addiction is reflective in the failure to solve the social problems of the addiction-suffering community. Brady, Back and Greenfield (2009) suggest the same thing, particularly when considering the treatment of addiction with women. They believe the social influences in a woman's life such as stage of life, mental health, familial history and trauma experiences such as sexual abuse and PTSD need to be considered to address all risk factors inherent in presenting conditions such as alcoholism. They also suggest that careful attention to these issues will provide an understanding of alcohol dependency and provide improved treatment. Revisiting the current pervasive use of homogenous intervention programmes predicated in aged models of treatment that were designed specifically for the male community may be a useful step forward in the development of a socially-based programme of alcohol dependency treatment.

Cloud and Granfield (2008, p. 1981) point out that "the capacity for successfully terminating alcohol dependency is not equally distributed across … society." They consider that it is ones social stature, their social realities, social inequalities and social conditions that create substance misuse and recovery. In times of disaster, women are more vulnerable because of their social status, but their vulnerability was a pre-existing condition prior to any disaster event (Fothergill, 1998). This thesis does not dismiss the fact that addiction is a social issue and alcohol dependency is a personal problem, but with scarce personal capital, especially in a post-disaster environment, any assistance from the community to build all dimensions of capital in an individual's life to sustain their sobriety would be beneficial for all (Cloud & Granfield, 2008).

In the following narrative, Brahm, a support service provider in Christchurch during the earthquake events and a recovering alcoholic himself, points out that community recovery could benefit from a more open and egalitarian approach to disaster aid allocation:

> … there's probably some of the bigger organisations which are kind of the go to people when funds are available … will have done extremely well out of the earthquakes … they're always the go-to's and I can understand that, they've got huge public profiles and all that kind of thing but um, they're also not everything. So I'm not denigrating with they do or anything but I think the money, the funding could be spread around a little more … We got a little bit of money out of the

> initial um earthquake response fund but that's kind of finished but then what I found frustrating and I know other organisations have as well is there's a lot of money in the earthquake funds like tens of millions of dollars, very difficult to access for social services … Because the funds are targeted at kind of direct earthquake repair stuff … I believe, and if you've got a ripped up tennis court or something you're more likely to get money. (Brahm, August, 2012)

Economic imbalance and the distribution of aid funds can be a major factor in creating social vulnerability because it can create disparities of power among social groups, causing discrimination in welfare and social protection (P. Blaikie et al., 2004).

Brahm's discussion about disaster aid being used to create infrastructure before caring for and supporting people, highlights a key finding of most disaster literature, that is, disaster recovery efforts are firstly and primarily, aimed at reconstruction of the physical environment and the economy (Rotimi et al., 2006; Le Masurier et al., 2006). It could be assumed then, that those that hold the power and influence to decide how financial aid and personnel are directed value bricks and mortar before people. Blaikie et al., (2004) consider that vulnerability in times of disaster is in fact determined by social influences and power not by the actual disaster event(s) however enduring social, political and economic factors that create risk are difficult to deal with. Boss (2006) believes that with vulnerable communities, remaining resilient is not always helpful because they are often the ones expected to bend. She considers that "people with less privilege and power or agency have become great adapters to the whims of others" (Boss, 2006, p. 58). The fitting in with the status quo Boss (2006) believes is an implicit assumption of those with few resources. Lack of power and inequitable resource funding is the point that Brahm is trying to make and is implicit throughout his interview, indicated by a level of frustration and weariness in dealing with too many clients, needing a great deal of support on too small a budget. Those without influence such as the participants of this research may not gain from the resource allocation by aid agencies.

Sapphire, for example, talks about how, during the earthquake period, she desperately tries to get help from within the mental health field for her daughter. The difficulty of accessing assistance was created by agency systems that were non-transparent making availability of funding for counselling really difficult to access:

> … there's services available but you need to know how to access them and unless you know all the … I mean I know all the weaves and groove and paths now because I've been in the rooms long enough to know "ok there's this available and that available", but having to find that out was a real struggle, not a lot of people seemed to know, what the right path is … (Sapphire, August 2012)

For most people living in Christchurch during the earthquake events was a time of adaptation and resourcefulness but for people recovering from alcoholism extra resilience was needed to attend to addiction rehabilitation within the larger picture of daily disaster recovery. For India and Jojo, the extra resilience needed had to come from the community because they had very limited intrapersonal, financial and social resources:

> … and I also at some stage last year, I started going to Wahine Whai Ora which is run by the City Mission and I found that helpful, I found that really really helpful … oh I got kind of support from places … I know after the February one there was a lot of help with food and blankets and things like that, there was um, the Salvation Army was very good to people and they had a couple of Red Cross grants too that I applied for which helped as well, like for power and stuff like that um, WINZ was quite good to people, like I know that in the February one you could actually ring up from the phone box up the road and just say you needed …. 'cause I was quite worried … like I didn't have lots of batteries and stuff and they would just put money into your account, you didn't have to go and see them so they were quite supportive too … was because I hadn't been working for a while so I was … it was a bit of a poverty kind of line anyway, and I really felt like I wanted to go out and buy some decent torches and stuff anyway I didn't have a lot here even after the September one. (India, August 2012)

Kaniasty and Norris (1995) posit that critical incident disasters such as earthquakes result in support that assists in minimising psychological distress but this support dissipates over time. They consider that minorities and vulnerable community members do not derive benefit from support cycles because they are unlikely to be linked to social support reserves and have limited resources themselves to compensate.

Reiterating Brahm's consideration that vulnerable community members are disadvantaged, Hobfoll (1989, p. 519) points out that "resources are not distributed equally and those people who lack resource are most vulnerable to additional losses". He suggests that initial loss begets future losses and the experience of increasing loss is the creator of stress and "those with greater resources are less vulnerable … and more capable of orchestrating resource gain" (Hobfoll 2002, p. 349). It is the lack of resource gain that is suggested as a major psychological stressor post disaster (Rivera, 2012). In the following narrative Jojo talks about getting some assistance to begin a sober life free from domestic violence from her social networks, but the real assistance she needs, primarily from Governmental agencies is lacking, keeping her stuck in a cycle of daily struggle:

> … I still need help … like moving, it's cost me money to move out temporarily not to mention emotionally. The stress of having to move out for six weeks has been horrific. Um, the cost of fixing my vehicle, I mean these are things that don't get taken into consideration, but I'm not somebody that can afford to be fixing their vehicle every three to four months because the roads of Christchurch are shit …. (Jojo, August 2012)

Jojo's ability to maintain a functioning motor vehicle that was being constantly damaged by broken roads created significant distress due to limited financial resources and transport alternatives. Enarson (1999, p. 749) points out that women in disasters are not just "coping with … abuse [but must] compete with other impacted residents for housing, child care, employment… transportation and health services".

The challenge of rising costs without a subsequent rise in income is taking a serious toll on Jojo's resolution to stay sober. Rising costs without government intervention in a free market post natural disaster has created extreme hardship for those with limited resources. Pelling and Hugh (2005) say that the socio economic context that social networks are located in is an important consideration as this determines individual access to and distribution of resources. Extrapolating this to Jojo's situation it is clear that her financial situation could influence a range of pressures that shape her sobriety choices. More financial assistance at this difficult time for Jojo could stimulate or create adaptive behaviours that could prevent, tolerate or spread loss as was the case for Phoenix. She had resources in the form of emotional, physical and financial support from family and friends although she does point out the dysfunction of these relationships, she could still rely on this network at a stressful time:

> … I just went to other meetings, to be honest at that particular moment I've never been more grateful to be an alcoholic and I really, really mean that, most of the time I'm pissed off that I'm an alcoholic but at that time there were so many people suffering you know, with um, nerves and anxiety and loss of home and family and friends and jobs and all sorts were going on, but I as an alcoholic, could take a bus, granted it took me an hour to a meeting, sit and just talk, most people didn't have that … and hearing other people and just knowing that you're just not by yourself in all that, yeah like I say as alcoholics we had that and the majority of the population just kind of … I don't know what they did, just battled on … things could have been lot worse. It was easier at that time to take the positive out of the negative, if that makes sense. It was just … and I think because going to meetings and seeing how there were people who had lost so much more than I had and people who were affected so much more than I was … it just made me so aware that I was really lucky that for whatever reasons, I had that coping, that they didn't have or that I you know, had my parents' house to stay in … (Phoenix, August 2012)

Phoenix's narrative describes her action and simultaneous resilience to manage her wellness and the difficulties created by the aftershocks. She was protected by governmental income in the form of a sickness benefit and had physical safety provided from her support network as well as resources in the form of higher education and offers of employment. Phoenix' decision to link to existing community groups for additional support also provided reserves that presented a buffer to relapse, encouraging Phoenix on a solid and sustainable sobriety path. The converse is true for India as her

descent into her illness created more social isolation, deprives her of the opportunity to join either an imagined or a physical community group.

Smit and Wandel (2006) suggest the ability to adapt to natural disaster stress is influenced by one's adaptive capacity or resource buffer against vulnerability. This too could be said of recovering from alcoholism, because for Jojo and Phoenix early recovery has them vulnerable with limited external resources, including no experiences 'banked up' of living sober and the skills and resources this requires. For these two participants and for India too, their coping mechanisms can be hindered by pre-disaster experiences and limited coping responses, they cannot rely on their previous knowledge in what is now unchartered territory.

4.11 Conclusion

Irrespective of the stage of recovery that a participant was in when the initial September earthquake and the later February quake hit, participants shared similar experiences of devastation, physical hardship and uncertainty about their future as well as feelings of frustration with their situation.

While living with constant aftershocks, they were also provoked by the recognition that the distress created by daily addiction was being mirrored by their earthquake environment. The reflective effect of the earthquakes with each participant's current situation was a hindrance to sobriety for some as the feelings and memory recall that were aroused perpetuated continual self-medicating. Ironically the seismic activity also provided a harm reduction strategy against continuing alcohol consumption. That is, the fear of how bad it might get was for some participants, such as India, an impetus to drink less, just in case an earthquake struck. For other participants, such as Jojo and Phoenix, the recovery from alcohol dependence within an earthquake environment provided an opportunity for habilitation. That is, they required help from community and government agencies of differing types and amounts to create a new life rather than being restored to a previous state of functioning.

The narratives of participants presented in this chapter suggest that resilience was not about bouncing back to a previous state, but rather, given their level of daily stress and available resources, it was about maintaining the status quo, or rather, just getting through. These participants faced multiple losses in giving up their addiction, old behaviours and former social networks as well as the damage created by multiple aftershocks. To move forward in recovery from disaster and habilitate from illness they required input from the community at a number of levels over several dimensions.

This research contributes to the literature on alcoholism as it documents from a participant viewpoint that addiction is a chronic illness and living in this type of ill health is traumatic and stressful, much worse than any natural disaster event. This study also highlights the participant perception that the seismic activity of a significant earthquake event was a mirror to their daily lives. Jojo's story of domestic violence, addiction and her vulnerability during an earthquake also adds to the current stock of literature on domestic violence during a natural disaster recovery period.

Within this broader theme of this chapter is a subtheme that provides a suggestion that the longer one is unwell, the greater their losses become and the lower they descend within societal structure (Brady et al., 2009). Consequences created by active addiction and the social problems associated with this form of illness indicate that Jojo and India's social positioning have been determined and reflected in their lack of human, physical, social and cultural capital. For Jojo and India resilience was activated and manageable from the aid provided by social organisations, disaster relief agencies or government department. Their particular level of vulnerability had them isolated socially with few financial or intrapersonal resources to meet their changing needs and the demands of a challenging environment. Phoenix had some human capital in that she was well educated and had good employment prospects, therefore if she could heal from her illness her prospects of engaging in a meaningful way within society and creating her own cultural and physical capital, were considerable.

Narratives in this chapter suggest that directing resources at harm reduction for alcoholism, that is, acute and palliative care only predicated in male-oriented alcoholism as a disease paradigm models, treats the 'surface' conditions of alcoholism and will not meet the deeper level treatment needs of women. Groshkova et al., (2013) consider that post-disaster the focus should be on disaster recovery support which is offered to ensure vulnerable community members have access to resources that bolster their personal strengths and inherent personal resources but also will increase their likelihood of personal growth during this time.

The following chapter follows on from the theme of resource loss and recovery from alcoholism. Participants in this chapter had very limited recovery capital that hindered their ability to change their circumstances both with the disaster conditions and their illness. In the following chapter, some participants have some permutation of recovery capital and what dimensions they possess can provide an indication of resource gains made in their sobriety. However, during the greater earthquake events, where a participant is placed within their recovery journey also highlighted different types of impact from the seismic events and devastation and how the dimensions of resource capital that they are lacking and the size of the deficit can be a risk of relapse.

Chapter 5
Ambiguous Loss and grief …

> …I'd be driving around on the munted roads and you know like places, historic places that I grew up with aren't there anymore, and … my whole history's gone. What I grew up with … the Cathedral, places I worked, no longer there, empty sections … so huge amount of grief … because I'm seeing things, buildings coming down, not there anymore, pieces of my life … all of a sudden it's like … I see the devastation that I've caused with my life … (Aroha, August 2012)

Theme 2: The earthquake devastation was a stark reminder of losses from a life spent in addiction and felt like an erosion of any gains made in recovery.

5.1 Introduction

For all participants who contributed to this research the familiarity and comfort of the Christchurch that they knew pre-September 2010 earthquake no longer existed. Personal adjustment through meaning-making about the loss and trauma experience was reflected in their individual resilience process and recovery journey.

Within the stories of Aroha and India in this chapter there are examples of cumulative, covert trauma that are a result of multiple experiences of abuse (Dayton, 2000) which were then compounded by the overt trauma of the disaster experience. These overt and covert trauma experiences may create vulnerability within each individual that works to facilitate trauma re-enactment and re-victimisation (Boss, 2006; Dayton, 2000; Pratchett & Yehuda, 2011). Ambiguous loss and the duality of physical presence/psychological absence is documented in this chapter in an attempt to explain the re-presentation of ambiguity within the experience of a participant, India, who describes moving between staunch recovery and despair in relapse. For India, sobriety is elusive, but she holds an imagined lifestyle of sobriety for herself in her mind. That is, sobriety is physically absent but psychologically present, held cognitively like a beacon of hope. This same duality of absence/presence can also be found in the narratives of those in longer term sobriety as they recognise the psychosocial impact from their early addictive lifestyle. When viewing a city wrecked beyond repair, Aroha draws a parallel between the devastated environment and how she suddenly views her life. She says she has sobriety, it is physically present in her life, but the life she

wanted for herself, what she held as a symbol of a life of sobriety, is psychologically absent. She said the years of living in constant relapse created losses that she feels she cannot regain.

India lacks almost all forms of recovery capital and it is difficult for her to keep a grip on sobriety during the greater earthquake events. Her relapses to alcohol use as a coping mechanism only serve to decrease her emotional and psychological reserves of self-esteem and hope, making it difficult for her to find a meaningful future in post-disaster Christchurch. Aroha, with 8 years of sobriety has resource gains in the form of stocks of social, cultural and human capital. These stand her in good stead when the recognition of her losses accumulated through her earlier life in addiction threatens her hard won sobriety post natural disaster.

5.2 Disaster literature and types of loss

Loss is discussed in much of the literature on disaster recovery is viewed either through the lens of death or is related to material, financial and economic cost from the seismic devastation (Armenian et al., 2000; George A. Bonanno, 2004; Boss, 2004; J. M. Williams & Spruill, 2005). Therefore, in disaster literature terms, loss is external to a person but directed more at the effect on the structure and economy of the environment and as it relates to the individual's physical proximity to the disaster location (Armenian et al., 2000). If there is recognition in the literature of an internal impact of the disaster on individuals, it is focussed on the psychosocial effect of losing a close family member or social and vocational disruption (Armenian et al., 2000; George A. Bonanno, 2004; Boss, 2004, 2006). Grief as a construct is mentioned only rarely and generally in connection with the experience of known death, although Williams & Spruill (2005) discuss grief at both an individual and community level as communities within a devastated area come to terms with their public losses. Generally the disaster literature correlates loss as a determinant of PTSD or a depressive disorder as opposed to an opportunity to view it as part of a resilience process (Armenian et al., 2000; George A. Bonanno, 2004; Boss, 2006).

Another type of loss, ambiguous loss is defined by Boss (1999). She discusses two situations that create this kind of loss, the first situation, often found following a disaster event, is when an individual is physically absent but psychologically present, such as a when a loved one is missing but their body has not been located. Boss (1999, 2004) says the ambiguity is created when those who are missing are kept alive in the minds of those grieving their absence, until certain knowledge of death their death is known such as when their body is finally located.

Boss (1999, 2004) also cites a second situation for ambiguous loss to exist, that is when a person is physically present but psychologically absent. She considers this type of loss happens when an

alcoholic is in untreated addiction - there is grief for the loss of a loved one, but the converse is the case here. In this scenario the individual is alive and their whereabouts known but due to the rigours of their addiction they are not present psychologically or emotionally.

Ambiguous loss is antithesis to the 'clear-cut' financial, physical or material losses that are documented in the disaster literature and typifies a lack of clarity. This lack of clarity Boss (1999) believes, is what defies a 'closure' experience. She refers to this lack of clarity as boundary ambiguity. Boundary ambiguity resides at both a structural and psychological level within each person and varies depending on the individuals perception of their 'loss' situation. At a structural level the effect is the discarding of roles and decision making ability as well as the loss of rituals and social contact. Psychological ambiguity affects an individual at the feeling level with hopelessness, depression and ambivalence leading to guilt, anxiety and emotive immobilisation. Boss (2006) considers the experience of ambiguous loss to be the most stressful kind of loss, with the ambiguity creating blocks to cognition, coping and meaning making that freezes an individual within their grief process.

5.3 Expanding the theory of Ambiguous Loss

Ambiguous loss is a useful lens through which to view the centrally valued losses both distal and proximal that some participants of this research recognised as they manage their recovery from alcoholism during the greater earthquake events. For the purposes of this research, the theory of ambiguous loss is extended to cover psychological forms of loss encountered among people with a diagnosed alcohol dependency following a natural disaster. For the purposes of the analysis provided in this thesis the building block of the theory based upon the psychological 'family' is replaced by the psychological 'life of sobriety'. Therefore, the higher the incongruence between one's psychological life of sobriety (their perception of a sober life) and the reality of their sober life, the greater their boundary ambiguity. For the addict in recovery or relapsing, boundary ambiguity then is not knowing if the gains made in having sobriety make up for the losses incurred in a life of addiction, at least when also recovering from a natural disaster event.

The narrative excerpts of India and Aroha present their memories of abuse that are compounded by the overt, situational trauma created by the natural disaster. Covert trauma, acknowledged by Aroha, Isabelle and Sapphire as stemming from a childhood submerged in abuse, neglect and abandonment was resident at a subconscious level. For Aroha and Sapphire the trauma was symbolically re-presented within the seismic activity of the natural disaster experience. That is, the early life trauma was not so much mirrored or represented in the seismic activity, but it was a re-

presentation of their childhood/adolescent experience. Rather like, as India and Sapphire suggest, the earthquake activity experience was 'the same old thing, just a different day'. As well, overt trauma was graphically presented in the earthquake damage visually present and was a grim reminder daily of the desolation left over after a life in active addiction.

However trauma was created, the narratives of those recovering from alcohol addiction indicate both types of ambiguous loss discussed above are present. Either type of loss has the potential to freeze an individual within their sickness persona or aid their resilience with the disaster experience and their continual recovery from alcoholism. Thus both types of ambiguity have the potential, in the right circumstances, to assist in the creation of a more robust and healthier identity, or diminish a participant, dissolving their stamina and recovery process.

5.4 Physically present but psychologically absent amidst the quakes

When the first major earthquake struck Christchurch in September 2010, some research participants were still embedded in their active addiction and either unaware their behaviour was not within the realm of 'healthy' daily living or trying to maintain a sustained level of sobriety. In the following narrative Jojo acknowledges that prior to the earthquakes she lacked awareness as to the extent of her drinking and drug problem. Being physically present but psychologically absent is an illustration how active addiction can create a form of boundary ambiguity that freezes an individual socially, cognitively and physically:

> …I was drinking and smoking a lot of pot still, I mean I smoked a lot of pot. I smoked a lot of pot, I smoked pot from the moment I got up in the morning until I went to bed and I didn't think I was that bad because I'd only just have you know a couple of puffs on a pipe, but I would do that all day, I couldn't cope without it, I can cope without it I didn't think I could cope without out it … it numbed me to everything, so did the drinking… (Jojo, August 2012)

Within this narrative is a sketch of the reality of daily living conditions when someone is self-medicating to cope. With the benefit of hindsight, Jojo draws a clear link between the use of drugs and alcohol and coping, and that for her, coping correlates to being numb emotionally and psychologically, or 'shut down'.

Boss (2004) considers that being cognitively and/or emotionally numb is a normal coping process for an abnormal situation but she suggests that in actuality by blocking coping or stress management mechanisms, grief as a process is hindered. Boss (2004, 2006) uses the term grief here to describe the outcome of one who is experiencing the ambiguity of not knowing whether their loved family member is living or deceased. I consider that for the addict in active addiction the term grief also fits

as an emotional outcome for their 'using years'. When one is living numb to their world as with Jojo above, they stunt their life process, retard their personal development and are absent from their life. In this stage of illness, their social, vocational and familial roles become frozen, trapping them within their sickness persona (Dayton, 2000; DiClemente, 2003; Twerski, 1997). Even though the active addict is, as shown in the narrative above, blissfully unaware, I further suggest that the loss of a healthy life is stored, albeit not acknowledged, at a subconscious level. The loss associated with addiction is illustrated in the narrative of Phoenix looking back at her pre-sobriety living:

> …I became really aware of my own mortality, really aware that I wasn't likely to achieve anything in life if I kept the way I was going and also that that life wasn't going to be for very long ... I got to the point in my rock bottom where I was just … had lost all sense of hope for want of a better word and I just couldn't see, I couldn't remember a day where I didn't … just … have this black, that's the only way I can describe it, and it was all consuming, yeah. I couldn't remember … not struggling to do the simple things like eat, I couldn't remember just being a real, functioning person, it had all gone … I had just lost everything, it was just awful … (Phoenix, August 2012)

Phoenix and Jojo clearly recall the memory of their depths of non-feeling and by extrapolation non-being that they had lived at while still in active addiction. The disruption of memory and concentration and the emotional numbing are indicative of broader problems in managing and processing day-to-day stimuli (van der Kolk, 2007, p. 4). Firman and Gila (1997, p. 15) suggests that unavoidable trauma experiences such as childhood abuse that dehumanise, are why people initially adopt a strategy of self-medication. He considers that "addictions are not habits gathered over the course of living, they're desperate strategies to avoid the … terror of non-existence", or non-being.

To further support my statement made above that grief (and the loss that perpetuates it) is held within the body and subconscious mind of an active addict is the following narrative as an example. Sapphire's narrative is suggestive of the visceral operating that defines her daily life in addiction:

> …but the thing is I'd been through so much anyway in my life, that an earthquake was just another thing to get through … after the September quake, I went into like a real angry, dangerous mode for a very short period of time … my behaviour just went out the window, it was pretty … it was really ugly it was just like, you know … this … it was almost like schizophrenia really, this odd person … this old … angry [person] turned up and it was really ugly, you know … (Sapphire, August 2012)

In Sapphire's narrative there is the indication that it is her survival personality sustaining her daily activity, utilising rage as a "primal energetic response to the threat of non-being" (Firman & Gila, 1997, p. 174). Firman and Gila (1997) consider the manifestation of rage as experienced by Sapphire (and India in Chapter 4) results from a violation and is an unnatural outcome of energy

flowing from a primal wounding to self. He points out that this energetic response can make it difficult to get below a person's defences to begin to heal the causes that created the wounding and sense of non-being. Firman and Gila (1997) suggest when people are working through unresolved layers of an earlier painful life situation(s) they reveal their underlying primal wounding. For Sapphire, it appears that the seismic activity was a trigger back to her early experiences of trauma. Sapphire was sober at the time the September earthquake struck and had none of her usual self-medication techniques available. For her, the impact of the earthquake was to expose her hidden wounding. Suddenly and unexpectedly experiencing a significant disaster event as well as forced recall of early trauma was enough for Sapphire to revert to her survival instincts, including drinking.

5.5 How ambiguous loss/frozen grief is created in an active addict

Gaining sobriety during the greater earthquake events, with all the objective stressors of constant uncertainty and environmental challenges could be considered twice as hard when recovering from alcoholism, as discussed in chapter 4. For India, the stress of the aftershocks was a means to reduce her drinking by volume, but moving from early recovery to sustained recovery proved to be quite challenging. India's sobriety was physically absent but psychologically present and is a constant theme in her dialogue throughout the interview:

> … I definitely want a sober life, definitely want a sober life … I just wanted to do things differently, I thought "I'm not getting any younger, I don't want to live like this anymore" how I have been with the drinking and drugs over the years, I want some quality of life and I want to feel good within myself and I can't have that if I continue to drink … (India, August 2012)

With statements made like "wanting to do things differently" and "not wanting to live like this anymore" it can be seen that India is recognising the negative effect that her addictive lifestyle is creating and that it is actually her addiction which is robbing her of quality of life. Implicit within this text is the awareness that she is losing ground with her addiction and does not want to lose anymore of her life, that she wants a different outcome to the lifestyle in which she is currently located. She talks of years of relapsing and unsuccessful recovery and it would appear that she has no robust experience of sobriety to guarantee for herself that she can sustain action towards staying sober. India knows she does not want this way of living but does not appear to have a conclusion to the proposition. She only has half a sobriety equation, that is, "I don't want this … but …". It appears she cannot conclude or extrapolate her thought of wanting sobriety to include what she can do or what she needs to make it a reality.

Losses are building up for India and keeping her in a cycle of drinking, perpetuating the ambiguity. The structural aspect of ambiguous loss, discarding roles and an inability to make good decisions, perpetuates the psychological ambiguity of feeling hopeless and depressed. This then leads to ambivalence about the need to stay sober and continue taking positive actions to perpetuate sobriety. India talks about wanting to be sober and the cost to her at many levels of not living in sobriety, but her situation seems so difficult to change that she is frozen in ambiguity and perpetuating her losses.

In the following narrative, India talks more about her feelings of fear and cites the anxiety and depression created by the possibility of another aftershock happening as the reason she cannot look for work. Therefore the fear of an aftershock means she must stay on a benefit, but this makes her so depressed she needs to self-medicate with alcohol to feel better about her situation:

> …I always had a fear about the night one I suppose in a lot of ways that I'd be out to it and not get out … Oh it was dreadful, really dreadful, a lot of depression, and anxiety yeah … it intensified with the earthquakes definitely …. when those bigger one's happened, it was quite a bit really … I got quite depressed and didn't feel I could go out and get a job, I suppose I just felt really disheartened…. especially when there was like the power cuts and stuff, and …it was pretty scary back then not knowing if there was going to be another big one straight away … it was that unknown, it was a horrible feeling that, yeah … there's no control over when an earthquakes going to hit is there, it just comes … it [alcohol] just soothes it for a bit I suppose, but I do know that it doesn't last does it, you've still got the next day kind of thing, after you've drank, so it doesn't really solve anything it's just that self-medicating bit … (India, August 2012)

In this excerpt the earthquakes are a hindrance as she cites them as a valid argument for her not caring for herself and future wellbeing. According to India, the earthquakes have created an initial position of no or low hope making it difficult for her to sustain thinking and behaviour past existential despair - what Boss (2006) would cite as psychological ambiguity as discussed above. India's psychological ambiguity also creates an opposite effect - the other end of a pendulum swing, which is a burning desire to pursue a sober lifestyle. In her dialogue with me it is implicit that she believes the earthquakes are the reason for her lapses of judgement to have another drink, but, another look at her thought process could be to observe that the reality is, India needs to drink because she is physically and psychologically addicted to alcohol. When she does drink, the end result is generally not a positive experience and at some level she knows this, but - she needs to drink. Therefore, the reality is, the earthquake activity has no effect to her causality for drinking.

> …it [relapsing] went through my head briefly but I actually …. I was feeling … like, when I am in recovery, I get quite staunch about it, I might fall off sometimes but … I think over Christmas I had a couple of bad drinking sessions where I had

> blackouts and really put myself at risk, walking around at night and I got into a car with a guy I didn't know, that thank goodness dropped me off up in Stanmore Road but that could have been entirely different what might have happened there and I was just feeling so sick getting really bad hangovers because my liver's not well so I have like a two day hangover where I just feel like death warmed up, it's just ghastly and I just got so over feeling like that… (India, August 2012)

With little recovery time, India's constant relapsing kept her in a vicious cycle of ambiguity that both compounded the living loss and perpetuated the need to continue to relapse to avoid feelings, thus maintaining and preserving conditions of stress via re-victimisation. The following narrative excerpt emphasises the minimising of her relapse six days before this interview after her longest tenure of sobriety yet:

> …even though I slipped the other day I've still had eight months up I'm trying to look at … remember that, that I've still got that time up, on the down side the stress of it and worry about money and stuff I did get depressed and often drank … I had so many different feelings going on, because I had different things kind of happening in my life when they [the earthquakes] hit, I had a really destructive relationship I've been trying to get rid of and like I said I had a lot of guilt and stuff about [names daughter], in prison and then there was just the unsettlement and stuff from being in the earthquakes. I think they affected me mostly in the way that I felt really insecure and trapped here and that didn't feel that great. (India, August 2012)

Her previous statement 'I might fall off sometimes' or use of the term 'slipped' are indicative of the incorporation of relapse narratives into her story through using language that minimises the impact of binge drinking on her life. India's narrative is illustrative of what Frank (1995) would term chaos dialogue in which events are storied through an 'and then, and then, and then …' (Frank, 1995, p. 99) sequence. As India tells her story the reader/listener gains information about her poor health, depression, destructive relationship, the earthquakes, her precarious financial position, the guilt associated with her daughter in prison and her blaming herself for this situation as well as general feelings of guilt and addictions. As difficult as her relapse story can be to read (or listen to) her dialogue does exemplify the resilience of the human spirit (Frank, 1995) illustrated in India's awareness of how staunch she can be in her desire to have a sober life and that she holds the time of sobriety that she has gained as an acknowledgement that she can stay sober for periods of time.

The use of minimising language enables India to position the relapse as a minor event rather than the antithesis of the outcome that she desires, perhaps in an attempt to downplay the meaning of relapsing and how difficult the loss of her current length of sobriety was for her to acknowledge. The list of external factors that have impacted upon her life are resources that India draws upon to justify her drinking and to minimise external judgements about her situation. Twerski (1997) discusses the lack of clarity and awareness surrounding relapse incidents when he says there is no

clear tell-tale sign that the addict in early recovery is about to shift from a life seemingly happy in sobriety to existential despair and relapse and the event is usually quite baffling to the addict. There does appear to be a subliminal resistance in India's narrative to recognising that the constant battle with sobriety and subsequent lack of healthy gains is made more difficult by the need to drink. India then is not as Twerski (1997) suggests 'baffled', but rather exhibits an implicit sense of powerlessness to change from her old routines:

> …after the February one I kind of started to isolate a bit … yeah I wasn't kind of keeping in touch with AA people … I … felt it a bit hard to reach out to people that's where I was at, um, so the people that I were talking to and that were people that did drink sometimes and I wasn't really around healthy people. (India, August 2012)

Seismic activity is cited as the catalyst for India cancelling the ritual of attending meetings, cutting off from contact with AA members by isolating at home and re-victimisation by staying in contact with old drinking associates, as if attending to these things is a choice for India. The stress of ambiguous loss creating frozen cognition and grief encourages denial of loss by its very nature (Boss, 2006). The stress of the earthquake situation then would seem to create the denial for a change from current addiction behaviour. By blaming the natural disaster for her lack of control is a much more palatable answer on the surface to what can appear an unworkable situation of unresolved grief, triggering relapse.

White (2009, p. 2) considers using the 'alcoholism as a lifestyle choice' paradigm to explain relapsing behaviour "misses the point". He considers that it is social factors such as sociological experiences, gender specific social roles, hierarchical status of ethnicity and standard of living that are involved in producing an individual's action, not a choice to live this way. White (2009) suggests that the social factors that impact negatively on a recovering alcoholic need to be viewed from within the context of the political environment. Reducing inequality, providing a social environment that prevents sickness and enhancing a lifestyle that sustains recovery is what is required socially to prevent sickness and disease.

Until a person is in stable recovery, they may continuously and simultaneously hold two opposing thoughts in their mind. For India this duality appears to be "I don't want to live like this anymore" as well as "look at the chaos, what's the point, I might as well drink". It could be said then that these irresolvable situations that India often found herself in during the earthquake events blocked her cognition and personal coping, creating ambiguous loss and thus freezing India in her grief process. The persistence of ambiguity blocking meaning-making, cognition and coping makes it harder for India to figure things out and she plummets from hope to hopelessness and back again (Kreutzer,

2013). I also considered that this lack of meaning-making blocks mastery and independence and keeps India immersed in unrecognised grief. Her symptoms then as Boss (Boss, 2004, p. 554) suggests, are in fact "outcomes of the relentless stress from having no answers, rather than from psychic … weakness". I consider, that when viewing addiction from an ambiguous loss or frozen grief perspective it could be said that it is not a choice for India to use alcohol or drugs, but rather that she is using against her will.

When an individual is still actively self-medicating they may grieve for the loss of their life of wellness, a life they may not have any experience of in reality but one that they desire. I also suggest that grief for a loss of this healthy life is housed within the body at an intuitive level, the same as traumatic experiences are (Dayton, 2000; Miller, 2001; van der Kolk, 2007). Hobfoll (2001, p. 344) considers there is valence in the concept of subconscious remembering of grief and loss. He suggests that "traumatic events tend to imprint on the victim a memory … and [it] is rekindled as if … the original event by associated stimuli". He goes on to state that this imprinting is biologically based and serves as a function to the reminder of loss.

Therefore considering the holding of grief within one's physical body and/or subconsciously too, I suggest that irrespective of whether one is living in addiction or relapsing, they live within both types of situations creating ambiguous loss. That is, when in active addiction and under the influence of alcohol they are physically present but psychologically absent, but simultaneously they are grieving for the loss of a healthy life. That is, a sober life which is physically absent but psychologically present. The latter situation can be active grief such as with Aroha who is sober but does not have the life she desperately wanted with sobriety, or with India where sobriety has eluded her so far and yet she holds the dream of a sober life as state she is desperate to achieve.

5.6 Coming to a new life amidst the earthquake events

Generally speaking, in between the life of living numb to everything and a situation where one is living a life that is meeting much of their needs, is the early recovery process (Janoff-Bulman, 2004) and the difficulties that are most often inherent within the transition. Jojo uses the term grief to define her emotional state as she negotiates the journey from an existence in addiction to a life in sobriety while also manoeuvring through daily aftershocks in a devastated city:

> …I grieved … I was very miserable, I remember at the first meeting I went back to … and the topic was 'gratitude' and I was like … I had absolutely nothing to be grateful for – nothing. I didn't know what these people were talking about but I kept coming back because I had no choice. … because it's hard, recovery is hard, nobody told me it was going to be this hard, because you wouldn't do it, I mean

> you've gotta be a strong person to give up drinking, especially in Christchurch, going through, like sobriety's hard enough on its own going through these earthquakes, and how we've gotta live, so yeah … (Jojo, August 2012)

The grief that Jojo was experiencing was in leaving a life behind that was destructive, but which was familiar and understandable and therefore not an easy thing to let go, a factor that kept her in a cycle of relapsing for some time. As Jojo states, the dream of sobriety was much more attractive in her head than the life she actually was living, or so it seemed. She acknowledges that if she had of known just how difficult the task of getting and staying sober was, she might have rethought her plan, although she later points out that given how her life is currently, she would not want to revert back to her old way of living. It was only the threat of losing her children that created the desperation for a sober life and to continue her chase for wellness despite the social losses. Tedeschi and Calhoun (2007) point out that post traumatic growth does not mean there is no distress to the growth process and it would seem that recovery from alcoholism is the same scenario, that is, there is no growth without distress. As difficult as the transition has been, at the time of our interview, the emotional and psychological benefits of sobriety are tangible:

> …I'd got myself in the shit big time because of my drinking, I took back my ex-partner, I'd split with him sometime before that because of his violence … but I kept it all secret because I had a protection order and I knew I'd get into trouble with Child Youth and Family … which I got in trouble with anyway who are the main reason why I stopped my drinking … but I … did pick up again … because I … had to let go of my friends … but no, I couldn't go back to drinking, I couldn't go back to the way it was. To be honest I'd much rather kill myself than go back to drinking, 'cause it was just … there was no hope, I mean and there's only a glimmer of it today, but at least there's more hope without drinking than there was drinking, definitely… (Jojo, August 2012)

In looking at Jojo's narratives collectively, it seems that with some sobriety time and a gaining of positive experience, she begins to move from a sickness persona to a wellness identity, to shift from having no hope to 'a glimmer of it'. Jojo is comfortable with her decisions about shedding her old social network and knows it was a healthy move for her future - she has moved from early to stable recovery.

5.7 Being sober is hard, but throw in an earthquake too …

Reviewing Jojo's sobriety progress in light of the environmental conditions that her journey is unfolding within, the picture of a constant battering to the personal recovery process is apparent. The environmental difficulties include rising fuel costs, constant rental increases and financial problems. The challenges could, without positive support, lead to the perception that recovery

gains are being eroded, making it overly difficult to sustain a sober lifestyle even though it is much desired:

> …I hate where we live, and I don't feel good about saying that because I know people who are living in garages and we hear all the time, you should be grateful you've got somewhere to live and I know I should be grateful, but it's the tiniest house I've ever lived in in my life but it's all I can afford, because rent prices have gone up … it feels like I'm going backwards, yeah. Financially I've gone from putting $50 a week in my car to, I've put $90 in my car this week … it's a struggle and I do feel like I'm going backwards, and I feel that that's reflected by where I live and the fact that I can't get ahead. So what do I do, do I go and get a fulltime job and work 40 hours a week, I need to be getting $23 minimum an hour to cover my costs and save money, but then who takes care of my children after school … What help is there for solo mum's, and I've often thought to myself "maybe I should just give up drinking in another five years, when the kids are a bit older and it will be a bit easier. (Jojo, August 2012)

Fothergill (1998) points out that women are the most at risk in disasters because they lack status, power and resources and their role as caregivers contributes to their exposure to disaster. This point is clear in the above narrative. Jojo, forced to gain employment by Work and Income NZ (WINZ) when they exercise their claw-back policy, takes work that pays the minimum wage but is all she can get. Jojo has little choice but to accept this type of role because her human capital, that is her educational qualifications and job prospects are low and there are few jobs anyway because of the disaster. It seems at least in the short term, Jojo's dreams of a better lifestyle will have to wait.

When the September earthquake struck, Jojo was living in an environment of domestic violence and active addiction where she was psychologically absent but physically present. Through the journey of early recovery, as she says, often immersed in grief and frustration at environmental conditions she creates a life where sobriety is physically present but a healthy, happy life is still psychologically absent. It could be said then, that sobriety recovery is a process where the life one wants is constantly expanding or contracting as their level of wellness increases (or decreases with relapse) dependent upon resources available and where both types of ambiguous loss are present.

Boss (2006) points out when one is living in ambiguity the resilience process is both systemic and circular and sometimes both, with the situations that create ambiguity neither mutually exclusive nor absolute but instead frequently overlapping. The greater the boundary ambiguity, the more risk there is for stress, relational dysfunction and risk to personal health and wellbeing.

5.8 Resilience to ambiguous loss

The key to resilience with ambiguous loss is to learn how to hold two opposing thoughts in one's mind concurrently (Boss, 1999; Kreutzer, 2013). Extrapolating this statement to addiction it needs to be added that these opposing thoughts need to be predicated in a desire to gain and sustain sobriety rather than a running argument of reasons to relapse. Holding psychologically two opposing thoughts such as the consequence of drinking versus the gains made in sobriety to date, a recovering alcoholic can recall the positive living experiences of sobriety and use this as a buffer against relapse, irrespective of environmental or other current difficulties. Staying sober then can mean they have the 'living space' to act their way into new thinking, one day at a time as shown in the following excerpt from Isabelle's narrative.

> …yeah just wishing I could drink, I had a lot of that, wishing I could drink but not wanting to on the other hand because I didn't want to stuff everything up that I'd worked so hard for … kept fighting it, it wasn't there all the time, so it was just getting through those times and just breaking that day at a time down to an hour at a time a minute at a time, whatever worked, day at a time's too big sometimes … (Isabelle, August 2012)

Isabelle is over ten years sober at the time of this interview and therefore she has the benefit of a number of years of positive experience based on healthy sobriety. She has what Frank (1995) calls a quest narrative in this case for sustained sobriety. That is, Isabelle acknowledges her illness and the cost and loss associated with active addiction and seeks to use it to her advantage. As Frank (1995, p. 115) somewhat romantically puts it, "illness is the occasion of a journey, that becomes a quest", thus Isabelle has become a wounded healer. For India, who is embedded within the chaos of her chronic illness, the awareness of the duality of thinking and moving on from it are immensely difficult and the nature of the coping or recovery response is predicated at least in part, by the unexpectedness and [un]predictability of how the loss is created (Boss, 1999). Boss (2006) considers that how boundary ambiguity is perceived has subjective elements, for example psychological health, as well as contextual factors such as an individual's culture and community.

Living on the edge of poverty with no hope for future gains as in India and Jojo's narrative could be a key factor in negatively influencing one's belief that things can and will get better. Bradby (2009, p. 79) suggests living in "… poverty and a lack of social cohesion give rise to the negative sense of being at the bottom of the heap, which in turn damages health" giving more influence to the consideration that health is socially constructed and "determined through social class differences in the material circumstances of life". Blank and Burau (2004) consider the social construction of health suggesting that good health has a public dimension as well as being socially defined. They say that health (good

and poor) also operates within a cultural or community context. This can be shown in the case of Jojo and India as for them, having no resources because of a lifetime of losses has created vulnerability that in times of natural disaster put them at greater risk of harm.

Narratives of people interviewed for this project suggest that boundary ambiguity for the addict and recovering alcoholic is also strongly influenced by past trauma experience and their level of recovery resources of which cultural and human capital are only a part. Similarly the environmental devastation that awakened latent negative feelings and memories of trauma could directly influence one's ability to bounce back (Hobfoll, 2001). Therefore I consider that it is one's early memories and lack of recovery capital or relational, social or financial resources which is what influence participants' perception of any situation, not just boundary ambiguity (Boss, 2006). Incorporating this finding into addiction intervention and assistance for alcoholism treatment may influence an individual's natural resilience to grow from the illness experience and create a more robust recovery.

With the nature of ambiguity being mirrored by a devastating environment it could be said that the ability to care for all one's needs personally is unattainable for those in early or even stable recovery due to a lack of personal resources. The impact of early trauma experience and a previous lifestyle of active addiction has a systemic effect creating losses in all areas of an individual's life, making it difficult to find a starting point to ending the chaos and begin recovery, as indicated in India and Jojo's narratives. Disaster recovery support such as blankets, batteries and financial assistance will not, it is considered, (Hobfoll, 2001; Hobfoll, 2002; Zaidi et al., 2010) be of sufficient help to act as a replacement for the types of losses that are being experienced by Aroha and India. Other forms of community support need to be employed (Armenian et al., 2000) to aid the grief that is becoming manifest, rather than medicating or treating a pathological diagnosis of depression that is often considered in the disaster literature. Buckle (2006, p. 91) suggests vulnerability and resilience are linked logically but are not necessarily opposite ends of a spectrum. He suggests that vulnerability and resilience occur simultaneous and one's capacity to recover from loss, what he defines as resilience, is independent of vulnerability. Quality of life, according to Groshkova, Best and White (2013) influences both vulnerability and alcohol dependency. They believe that understanding where an addict is within their recovery journey will provide a timely and powerful predictor of the type of social assets that are needed to bolster their personal strengths and reinforce the recovery journey during disaster recovery events.

5.9 Losses not known surface with earthquake activity

As discussed earlier, India longs for sobriety but is unable to achieve it. For her sobriety is physically absent but constantly, psychologically present or at least the dream of achieving it is. I consider that this is more than her 'dry drunk' thinking, this is a desperate need to believe that she can be well, but often contradicted by her next thought of "… but how can I when …". For India, the belief that she may one day live as a sober person is held in her mind like a beacon of hope.

The duality of absence/presence also fits within the recovery journey of those with longer term recovery. That is, one can have the physical presence of sobriety, but their dream of sobriety, the life they thought they would have when sober, can also be psychologically absent. For Aroha this type of ambiguous loss appeared in a sudden and shocking revelation when viewing the devastated Christchurch environment. When seeing a broken city she recognised that the city mirrored her life. In the following excerpt she explains how, through observing the impact that the September and February earthquakes had on close community members, she came to recognise the impact on her that her early life experience of trauma had and how a new perception and altered awareness of her life story was being created:

> …Yeah, like I almost wanted to go "oh for Christ's sake" you know to people like "you're milkin it man, you're all milkin it". Yeah that's how I felt, like quite sort of like … detached from it … you know I have experienced some pretty horrific situations in my life, in my addiction … um, so to come out the other end of that um, um, I don't know, I mean, yeah to come out the other end of that [February quake], it's just another one isn't it? I mean … maybe it has made me come to terms with the seriousness of the things that I have gone through in my life … more. (Aroha, August 2012)

Aroha sees herself as more resilient than other community members because of the comparison that she is able to make between her past and the earthquakes which to her seem less threatening than years of living in crisis as an addict. In the following narrative, Aroha also makes the connection between the February quake, and her early survival experiences suggesting that the seismic damage is not as devastating as the psychological damage that is able to be inflicted by people:

> …if this is how people, if this is how it is for a major disaster you know, coz it's a different thing see, this is an earthquake which is an act of nature, ok, my traumas were … came from other people … I mean they were life and death … situations, where … you know, I could have died so … and it was like that … (Aroha, August 2012)

The earthquake was the vehicle by which Aroha could reassess the emotional devastation caused by earlier life experiences and she attributes the loss of opportunities throughout her life to her early trauma. This early life experience was worse trauma than the earthquakes she believes, but the seismic activity was a vivid reminder of the effect of trauma on her life and how much the experiences have cost her personally:

> …I have spent the last so many years struggling with those trauma … going … you know, having periods of sobriety, going really well for a period of couple of years, then something will happen and I will become triggered, didn't know this, and I would flip into a depression that wouldn't just last a few weeks, I'm talking about depression that lasts six months, that absolutely immobilises me … so I lost jobs as a result of that, I lost friends as a result of that, I lost my sobriety as a result of that I lost a whole lot of stuff as a human being. (Aroha, August 2012)

When hearing others' stories and reconciling how other's felt with her experiences and emotional state, Aroha places herself on a newly formed cognitive platform to review early distressing memories and relocate them within a more realistic (and yet still disturbing) position psychically. In her discourse there is an attribution that the loss of life opportunities was social, vocational and financial, that is, for her the impact of her early trauma experiences was systemic. For Aroha, the years of constant decline back into her addiction has kept her stuck, hindering her development and, she believes, deprived her of the basic human essentials of belongingness, nurturing and implicitly, self-realisation.

5.10 Loss and grief … and nothing to do with the seismic activity

Through the overt trauma of the natural disaster the awakening to the loss created by covert trauma is reflected in the following narrative. Aroha's inability to avoid or deny not just early memories but the impact of her traumatic early life loss created (or awoke) significant grief. At some point in her natural disaster recovery process she experienced a cognitive restructuring or a psychic shift that enabled her to start a process of psychological tallying up of the things she felt she had lost due to her previous lifestyle:

> …I'd be driving around on the munted roads and you know like places, historic places that I grew up with aren't there anymore, and … my whole history's gone. What I grew up with, you know town, the Cathedral, places I worked, no longer there, empty sections … so huge amount of grief … because I'm seeing things, buildings coming down, not there anymore, pieces of my life, you know, so um … and although I've had eight years, you know, of, I believe the best sobriety that I had … so far … but it's taken a long time to get here, those 8 years and then I'm still not .. it's like all of a sudden … I'm menopausal … I've got no children, I've never been married, like those things are important to me … they never used to

> be and all of a sudden it's like … I see the devastation that I've caused with my life … (Aroha, August 2012)

For Aroha, the emotional ravages of a life spent fighting addiction now seemed to look the same as Christchurch post-earthquake. She said that suddenly she felt as if her life, newly revealed and stripped to its reality, appeared to have little value or with limited meaning and purpose, the same as how she felt her life in Christchurch now was. The awareness of the cost of living in addiction at a very personal level is apparent in the above excerpt. She sees that constant trauma re-enactment created by years of relapsing, coupled with her body's natural aging process, places greatly desired goals beyond her reach. As with other early recovery narratives, Aroha viewed a city that had been devastated and for her it invoked a correlation with an intrapersonal sense of devastation

For participants Aroha and Jojo (as discussed in chapter 4) who are newly awoken to the correlation between their active addiction years and the earthquake impact, they recognise what is a new and profound personal loss that manifests emotionally as grief and threatens their awareness of recovery gains, and potentially their sobriety. The duality of recognising sobriety gains but addiction losses occurrence occurs simultaneously and in opposition to each other. Hobfoll (2001, p. 343) recognises the grief/loss event and considers it in the first principle of his Conservation of Resource (COR) theory when he suggests that "resource loss is disproportionally more salient than resource gain". In their model of PTG, Tedeschi and Calhoun (2004) discuss what they term event-related rumination and the discrepancy between goal attainment which they refer to and label as rumination. They consider rumination is part of the process of giving up or disengaging from certain goals and basic assumptions. Continuing at the same time with building new schemas and creating meaning is a balancing act of cognitive processing associated with a growth outcome. Rather than rumination and depression as they label these emotive states, I consider it is the grief associated with the recognition of a life lost to the chronic illness of alcoholism. Tedeschi and Calhoun (2004) point out that when survivors are reflecting on the discrepancy between what was possible then but not now as in the case of Aroha above, they are developing their trauma narrative and creating a turning point to their lives, with the trauma event the fulcrum to growth.

Grief was the word that Aroha used to describe how she was feeling following the devastation of the February earthquake it is grief for what she recognises is the loss of a life. Although she says she is immensely grateful to have managed 8 years of sobriety, 'the best [sobriety] years of her life', when unexpectedly given the opportunity to view her life through a lens of earthquake damage, immediately the 8 years of sobriety do not seem enough compensation for the loss felt. Hobfoll (2001, p. 343) considers that "given equal amounts of loss and gain, loss will have significantly

greater impact". As she suggests, the opportunity cost of the 23 intermittent years of relapsing and the loss associated with this lifestyle is greater than 8 great years of healthy living that she has right now. Therefore for Aroha, she finally has a sober life, it is physically present - but is (at least in the short term post natural disaster) overshadowed by the psychological absence of a much desired loving, nurturing life. The damage created by a life of addiction fuelled trauma and the earthquake destruction is feeding her sense of loss by being present visually and symbolically.

Hobfoll (2001, p. 345) suggests that "the impact of … loss [is] … greater than the impact of negative life events… ". Aroha acknowledges later in the interview that her earlier life experiences helped her cope with the earthquake activity and damage, an incongruity of addiction/earthquake duality. That is, when viewing the earthquake devastation and seeing the correlation with her lost life, Aroha has also had a dual awareness, she says that "if she had not had the experiences she had as a child and as an active alcoholic, she would not be the person she is". The recognition that she has value, worth and something to offer, I consider, is what keeps Aroha in the positive side of sobriety, rather than moving into a relapse slide

> …you know I've been around recovery for 23 years, that's a long time, with being in and out, um … those … 23 years of trying to … have had their own traumas as well, within recovery, you know experience and … because they haven't um, so it's been a hard road um, yeah, I've had to do a lot of work, you know if I wasn't, if I didn't have that history or if I didn't have that um, you know, I don't know if I would have made it, actually … and I mean you take 46 years, well … it's been 8 years of that 46 years that I've had some grasp of sanity and be able to do quite a few things in those 8 years, like I've studied, I've got a diploma you know, this doing what I'm doing now, was a 10 year plan, well I've done it in 6, you know um… (Aroha, August 2012)

Aroha's perception of how her sober life should or might have been is actually greater than the impact of a life in addiction and certainly greater than the devastation of the earthquakes. Although Aroha recognises her negative experiences have created an identity that she now embraces, she also notes the converse of this or the opportunity cost. That if she had not had these previous experiences and style of living she would have had an opportunity to marry and create her own family. The cost of her previous experiences have deprived her of a much desired family, which she sees would have been an important source of support during the natural disaster:

> …I haven't had a relationship for a long time because I can't have relationships because of the shit that you know … it's just … it's huge, and so there's all that grief around that lost thing, that lost life, you know … because it's like, the one thing that human beings want to do when there's something big time happening like this, is you want your family, well I haven't got a family. I've got a mother who's living and yeah I'm blessed to have that, my sister, she's two hours away, but I don't have a husband, I don't have children, I'm alone, I've got my dog … you

> know, and in some ways I wanted to have a husband … you know, where's … who's there for me, story of my life. (Aroha, August 2012)

As Boss (2006) points out the ambiguity between absence and presence creates a unique kind of loss that has both psychological and physical qualities and the recovery process is both systemic and cyclical. The sense of loss for Aroha is almost palpable. With the recognition of unfulfilled dreams that have been shaken into re-existence with the earthquakes, she is faced with a certainty that at first glance these life desires are now unattainable, and potentially, her life is now without meaning. The recognition of what now appears a meaningless life could, as with other participants have led to a rational argument favouring relapse. However viewing Aroha's statements through a lens of post traumatic growth as discussed by Tedeschi and Calhoun (2004) it can be seen that the disaster has created an opportunity for cognitive restructuring with the realisation of what one has lost, but taking a positive pathway to recognising new possibilities. The way forward for Aroha was very clear:

> …yeah I just didn't want to run from it … I didn't want to run, you know, I'd spent my life running and yeah … you know a lot of people have run away, and I haven't run away … you know that's when I could've and it would've been acceptable to do that. (Aroha, August 2012)

The growing realization of the opportunity cost on her life process or more importantly the robbing of the higher order psychological, emotional and spiritual needs that active alcoholism created (Miller & Guidry 2001) was an impetus to avoid relapsing in order to avoid any further loss of resources. The change in perception and acknowledgement of her new reality also sets an understanding about opportunity costs and the consequences to loss of resources which Aroha also uses to justify staying in Christchurch rather than running which "would've been acceptable". In Aroha's mind, leaving Christchurch or as she puts it '[to] run away' would mean accumulating another set of losses associated with the life that she had created in Christchurch during her eight years of sobriety. This window of reflection provides what Tedeschi and Calhoun (2004) call a turning point in one's trauma narrative, stemming from a reflection on the discrepancy between her unattained goals or schemas and the disaster event. It could be said then that this emotional state mirrored and reinforced by the environmental conditions was instrumental in raising awareness, to avoid further loss, rather than to encourage recovery gains which may not be able to be met at a time of major disruption. Given this then, it is suggested that resilience is adaptation through learning, it may not always appear in a positive form and one may not have on the outside what appears a greater state of being or living, but when faced with survival situations and uncountable loss, merely keeping one's status quo in life could be said to be enough:

> …have I grown from it? I've stayed sober, I think that's a pretty huge achievement, it's the longest I've ever been sober in my entire life … (Aroha, August 2012)

Tedeschi and Calhoun (2004) suggest that the recognition at a personal level of the paradox of from less there is gain engages the trauma survivor in dialectical thinking, creating wisdom. It could be said then that this emotional state as Tedeschi and Calhoun (2004) suggest, more so than the environmental conditions or perhaps in conjunction with each other, was instrumental in raising the awareness providing impetus for long term change.

5.11 Post Trauma Growth - Altering of schema

The inability to grieve for what has been lost while in active addiction is revisited with the advent of the natural disaster. For Aroha the earthquakes provided an opportunity for delayed grief recognition by the resurfacing of memories and forgotten dreams, which paradoxically provided a growth opportunity to seek additional, professional support.

> …because the other thing that, um … for me I have reconnected with ACC counselling again … and I'm back at my ACC Counsellor for that stuff um, because you know, you know I really do see how it's impacted on my life, you know, that is why I'm on my own, that is why I haven't been able to consistently work a 40 hour week, you know for eight years, um, or … you know, that's why I don't own my own home, that's why I haven't [been] married had children, I'm going through menopause you know, I haven't had children, you know … I haven't had a relationship for a long time because I can't have relationships because of the shit that you know … it's just … it's huge, and so there's all that grief around that lost thing, that lost life, you know? (Aroha, August 2012)

In Aroha's narrative is the documenting of her experience of ambiguous loss within the context of her life in addiction. Aroha has a sober life but she grieves the loss of the life that she wants, that is, being able to work consistently a forty hour week, owning her own home and being married with all the positive aspects that a loving relationship can bring such as children, emotional nurturing, and sexual intimacy.

Boss (2006) points out ambiguous loss in the form of the loss of dreams is no-one's fault but if viewed by the community as the result of an immoral act or a personal deficiency this can be an impetus for feelings of guilt or anxiety that erode resiliency. She discusses the cultural need to avoid pain but it is the pain of ambiguous loss and the recognition of it that can lead to change. Tedeschi and Calhoun (2004) first recognised the impact of loss of dream on individuals. They consider that it is the very processes that create the psychic rupturing following trauma that create the growth process. PTG occurs because of the struggle with trauma and refers to a change within people that

occurs concomitantly with distress. They discuss that a paradox of post traumatic growth is the recognition of one's vulnerability. The awareness of their own personal strength, they believe, heightens one's mindfulness of their vulnerability and can produce assertiveness in seeking useful support.

For those in stable and sustained recovery, their grief is not so much re-visited but rather acknowledged and re-assessed with the benefit of skills learnt in recovery. The opportunity to deal with what appears to be a delayed grief reaction, provides not so much a sense of emotional equilibrium to be restored but rather one to be re-located and growth and wisdom to be experienced as a consequence of that realisation. Aroha, reaching out for support has provided an opportunity to reframe shame and guilt associated with self-created chaos, to a new connection that encourages viewing the behaviour as more an attempt at psychological survival (Tedeschi & Calhoun, 2004). This is another of the general paradoxes of PTG - from loss there is gain.

As with the narrative of Aroha, a sense of loss is overshadowed with frustration and a subtext of yearning, but with the benefit of interview hindsight a new, altered reality unfolds that incorporates the chaos, loss and personal cost with a colouring of a new, yet more robust identity. Firman and Gila (1997, p. 181) consider this is the essence of self-realisation, what they say is "a conscious ongoing relationship to Self … that will … entail an openness, not only to the joys of life, but to the pain, uncertainty and limitations of life as well":

> …Because I've had more time on my own, um, you know I've done really simple things with my life, um, you know I've been, I've moved, I've started this place, I spent a lot of time at home, doing creativity, you know my garden really grounds me… I mean I'm dealing with some grief that probably wouldn't have come up had this not happen, that's a positive. Getting to sort of deal with some of that stuff that may have not have surfaced had it not been for the earthquake … (Aroha, August 2012)

Growth does not occur as a direct result of trauma but as with Aroha's narrative, the struggle with the reality of the aftermath (Tedeschi & Calhoun, 2004). Tedeschi and Calhoun (2004) consider that it is the coping process and specifically the affective component of any trauma experience that explains why trauma is both a process of improvement and an outcome. Janoff-Bulman (2004, p. 31) suggested that the transformation is profound because the intra-personal improvement enables one to move beyond one's pre-trauma levels "through experiencing and coping with the debilitating pain and distress of trauma". I also consider that the same transformation process from story to experience is where knowledge is gained and is one of the major aspects in the turning point in recovery from addiction, where one goes from being wounded storyteller to wounded healer, from telling ones story using a quest rather than a chaos narrative (Frank, 1985).

When viewing the trauma of a life in addiction from the perspective of hindsight, as with a seismic event, the participants of this study can be seen to value what has happened to them. As a 'side-effect' of the trauma experience, they can inadvertently and mostly unconsciously make meaning out of it as part of their psychological survival process (Tedeschi & Calhoun, 2001; Janoff-Bulman, 2004). Wright (1989) refers to this cognitive reframing as the rehabilitation process, a framework from which individuals' consider their disability experience in a broader life context of a dauntless human spirit. One does not necessarily want the disability, but one integrates the acceptance and understanding of the condition within their new post trauma identity. This is what Tedeschi and Calhoun (2004) consider to be the experience of growth, and suggest that the cognitive rebuilding following from ruptured schema incorporates the changed reality of one's life, creating an identity that is more resistant to being shattered.

Resilience is a multifarious concept that can apply to the capacity to withstand loss, the capacity to prevent a loss occurring in the first place, and the capacity to recover from a loss if it occurs. Vulnerability on the other hand, is a measure of what losses may occur and how severe they may be (Paton & Johnston, 2006). Coping capacity is defined by Paton and Johnston (2006) as the means by which people or organisations use available resources to maximise an ability to face adverse consequences that could lead to a disaster (Paton & Johnston, 2006, p. 90). As discussed earlier, natural disasters can create vulnerability, and a more aware approach to community members' unique needs could be instrumental in creating a capacity to adapt. Building adaptation into community recovery, Paton and Johnston (2006) consider will not happen by chance, creating the opportunity for this to manifest also provides a capacity for post disaster growth and development.

5.12 Conclusion

I have used the lens of ambiguous loss to view the valued losses that participants recognise they have amassed during their life of active addiction or as for some, the period of time when they were reliant on others such as parents and caregivers. In applying the theory of ambiguous loss to illustrate the loss and associated grief as told by participants I have expanded upon and extended the model to cover psychological forms of loss encountered among people with a diagnosed alcohol dependency following a natural disaster. The building block of the theory based upon the psychological 'family', is replaced by the psychological 'life of sobriety'. The higher the incongruence between a participant's psychological life of sobriety, (their perception of a sober life) and the reality of their sober life, is the greater their boundary ambiguity. For the participants in this chapter, boundary ambiguity is not knowing if the gains made in having sobriety make up for the losses incurred in a life of addiction, at least when also recovering from a natural disaster event.

As discussed in the previous chapter, recognising the stage of recovery from alcoholism and understanding the differing impact that earthquakes have, relative to the phase of disaster recovery but also viewed within the bigger picture of early life experience may provide a useful form of grief and loss intervention, post natural disaster. Boss (2006) considers that ambiguous loss is systemic and ubiquitous and rather than a pathology, it is a relational disorder, so treating the individual's addiction issue solely is of little help, it is the underlying trauma and outcomes of loss and grief that need recognising, acknowledging and treating. An approach to trauma counselling that incorporates the whole life experience may well be useful when incorporated into a community approach for disaster recovery. Perhaps more importantly viewing grief and loss post disaster within the life journey in context could prove beneficial for long term recovery options if used to form the basis of addiction intervention programmes.

Jojo managed to remain resilient, that is she gained and stayed sober, but with few recovery resources in her 'disaster toolbox' she had no real movement forward or growth opportunity. Aroha had some capacity to adapt because, not only did she not relapse when faced with her vulnerability, she had, she said, grown from the experience of the disaster and could call on stocks of human and cultural capital to support her during difficulty. Isabelle on the other hand had positive experiences in the form of social, cultural and financial capital therefore Jojo, Aroha and Isabelle had the greatest personal growth through the disaster period as described above and in the following chapter.

Chapter 6
Seismic activity and early life experience … no difference ...

> … that could be why I was getting lots of flashbacks because …it was the smell of the liquefaction and the soil in the backyard and the um, and the bubbling over of the water … for me it brought back a lot of that stuff … it was very much like … as a young person, we went through a lot of physical um, trauma and moving and … constant uncertainty and abandonment and violence and this whole kind of … our world was moving and shaking all the time and I guess for me the earthquakes … they were like a symbol of that, it was the same feeling … (Sapphire, August 2012)

Theme 3: Early trauma experiences and the symbolism of the earthquakes

6.1 Introduction

In this chapter it is identified that before the experience of active addiction or natural disaster, participants' had experiences of early life trauma that they carried within them into adulthood. For the three participants whose narratives are presented in this chapter, early life trauma was recalled in the seismic activity and relived through the earthquake devastation.

Schaeffer and Moos (1998) in defining their model of PTG (see Appendix 1) suggest that when considering the context of post traumatic growth there is an understanding that a significant life crisis meets at a junction with an individual's personal and social resources. Personal resources shape an individual's response to the events that create a crisis situation and environmental systems shape a person's response to the crisis experience. Through the medium they define as a 'coping response' an individual either finds a way forward to a growth opportunity or, as indicated in the trauma and disaster literature, (Chou et al., 2007; Norris, Friedman, Watson, et al., 2002; Person et al., 2006) regresses to a pathological condition such as depression, anxiety or PTSD. The personal resources Schaeffer and Moos (1998) name as pertinent are self-efficacy, resilience and motivation but also health status and prior crisis experience. Environmental factors are defined by them as relationships with family, coworkers and friends, access to financial resources and current living situation.

In this chapter it can be seen that the greater earthquake events were a significant enough crisis that participants were re-immersed in their earlier memories of childhood vulnerability. For some

participants the primary source of distress was not the earthquake activity and related environmental devastation, but the way in which the seismic events recalled forgotten trauma memories. The emotional and cognitive effect of recall had more of an impact than any aftershock, but the aftershocks set the scene for the memory recall. Within the context of the greater earthquake events, participant early memories of abuse were triggered and were what defined their initial coping responses. These trauma and coping factors in turn redefined their personal resources and environmental system. To this end, it could be said that the disaster events created a window of opportunity – as long as participants had enough or the right recovery capital to ease their way through not just the situational trauma of significant aftershocks, but the additional cumulative trauma of negative memory recall.

As discussed in chapters four and five, participants' level of self-efficacy, resilience and motivation are impacted by their level of recovery capital, which is contingent upon their health status and stage or recovery from alcoholism. Personal resources such as motivation do not all have the same positive, supportive effect for individuals. Some resources such as health status can in fact thwart a person's response to crisis, while other resources for example, prior crisis expeirence may have a direct and negative impact.

The Tedeschi and Calhoun (2004) model PTG (Appendix 2) is a strength-based theory focussing on survivors who report a positive outcome from the experience of a trauma event. The concept of PTG is "a positive psychological change experienced as a result of the struggle with highly challenging life crises" (Tedeschi & Calhoun, 2004, p. 1). An implicit assumption in the model of PTG developed by Tedeschi and Calhoun is that most individuals will have experienced forms of distress in their life but only in a general sense as part of daily living. For the majority of people these forms of distress are not significant enough to affect fundamental schemas, beliefs and goals which may cause them to revisit their life narratives. One finding in this research is that pre-trauma is a state created by historical trauma incidents that have taken place and are held consciously or unconsciously within the memory (and potentially visceral body) of each participant. These experiences drive emotional and cognitive responses (both negatively and positively) when new traumatic events, such as a natural disaster occur. In this thesis I consider that it is the early experiences of trauma, abuse, abandonment and neglect that have created the participant's current identity or how they define themselves, with a negative persona. This negative perception of themselves and a lack of recovery capital is what creates their primary source of vulnerability and as suggested by Schaeffer and Moos (1998), shapes their response to the disaster event.

In this study, rather than stage of recovery from alcohol dependency or the level of illness associated with their condition negatively influencing their position in the social hierarchy, motivation and positive action levelled the playing field for all participants, but particularly for Sapphire, Aroha and Isabelle. Over time and through stages of cognitive appraisal they were presented with opportunities to re-evaluate their beliefs, values, historical coping responses and life narratives. This research indicates a cyclical recovery process of situational trauma triggering cumulative trauma, then self-reflection, education, learning and personal action. This cyclical and progressive process eventuated in psychological reframing plus wisdom building. Wisdom created from the integration of past practice, current experience, and new learning, backed up by supportive vocational, social and community networks provided an opportunity to reframe experiences of abuse, neglect and abandonment and rupture the old connection with their historical vulnerable persona. It is suggested that the outcome of disaster recovery for some during their rehabilitation from alcoholism journey is a recursive cycle. The outcome was a redefinition of themselves with stronger recovery identities and more self-reliance and maturity, reflecting the conditions that Tedeschi, Park and Calhoun (1998) cite as Post Traumatic Growth (PTG).

The PTG model of coping and growth focusses on the possibilities of positive change arising from the challenge of difficult circumstances, therefore PTG is considered a reliable and accurate lens and a contextual model through which to view and document the transformation process that all participants of this research project experienced. To date, there does not appear to be consistent application of this model to describe the rehabilitation and/or growth process from alcoholism following a natural disaster in any disaster or addiction literature.

6.2 Trauma at the beginning … and again as an adult

Trauma literature has a particular focus on pathological outcomes such as PTSD or psychosis (Feldman, Conger, & Burzette, 2004; Galletly, Van Hooff, & McFarlane, 2011). Other research discusses a connection between constant and consistent early childhood adversity creating changes to brain chemistry (Avant, Davis, & Cranston, 2011; De Bellis, 2002; Fetzner et al., 2011; van der Kolk, 2007). These studies all describe the long term consequences from a childhood predicated in abuse, neglect or violence including poor cognitive development, maturity response, problem solving and coping skills as well as attachment issues.

Pratchett and Yehuda (2011) also consider that attainment of goal development, positive self-concept and the potential for developing PTSD are outcomes of maltreatment when young. They go a step further in suggesting that arrested development is one outcome that occurs when a crisis

incident in adulthood is consolidated with untreated early memories. Firman and Gila (1997) consider there is a connection between early trauma experiences and alcohol abuse or dependence. They believe that for many people, early experiences are so terrible that they are forced, automatically and unconsciously to avoid them, triggering "powerful addictive behaviours … even though the addiction in many cases involves considerable discomfort and pain …" (Firman & Gila, 1997, p. 15).

Schaeffer and Moos (1998) believe that an individual's existing or useable personal and social resources foreshadow improved psychological functioning after a life crisis and that environmental forces and personal characteristics combine to shape a disaster event and any outcome. They suggest therefore that not all trauma experiences or crisis events lead to a pathological condition or types of maladaptive coping including self-medicating behaviour. Examples of learning and growth have been provided in the narratives of participants who contributed to this thesis. In chapter four, Sapphire for example, identified that the biggest crisis event during the greater earthquake period for her was getting sober, but this was always within the context of a devastating natural disaster that created challenging situations. For participants of this chapter both alcoholism and the earthquake events were not considered as traumatic as their childhood memories of trauma, violence and abuse. However, the earthquakes provided a catalyst and a stage from which to view the level of devastation that addiction and/or their previous life was having or had had on them.

6.3 Early environment – Shaper of Perception and Coping Response

Within the narratives of this research emerged stories of childhood abuse that all but one participant associated with the aftershocks. This narrow glimpse of the impact that trauma had during their early lives, which although subconscious and for some considered forgotten, brought a strong affective response that they suggested was like a seismic event. In the following excerpt Sapphire discusses her recall of the abuse she experienced as a small child and the association of the feelings when an earthquake 7.1 in magnitude hits in the early hours of the morning, waking her from sleep, providing what could be considered an untimely opportunity to revisit memories:

> … I remember lying in the bed … it was like … like that physical sensation of the moving and the being bounced off the walls was you know I remember being five again, you know … and I may not have been aware of it at the time … (Sapphire, August 2012)

The suddenness and violence of this natural disaster event created a situation of initial emotional and cognitive vulnerability. Woken from sleep Sapphire at least initially, was defenceless from both her immediate feelings and historical memories of abuse that she quickly associated with the

earthquake. The seismic activity reminded Sapphire of a time when she was vulnerable without escape and rendered emotionally illiterate (Dayton, 2000).

The darker aspect to society such as child abuse, neglect, abandonment and bonding to wounded caregivers is also highlighted in the following narrative as Sapphire recognises the correlation between the emotional and psychological impact of the natural disaster event and her early experiences with an abusive caregiver. The violent physical shaking of the aftershocks, the carnage Sapphire witnessed when she viewed a broken city and the smell of the damage done by the liquefaction coating the environment bought with it an intense psychological recollection from her childhood:

> …it was the same sensation and I guess that could be why I was getting lots of flashbacks because … it was the smell of the liquefaction and the soil in the backyard and the um, and the bubbling over of the water … um, because we worked … well my father had worked in the hydro development in [names area] so we … lived ... in very isolated rural communities and … you know, these places were a law unto themselves and um, so I spent a lot of time under the house because that's where it was safe or in the forest, so for me it brought back a lot of that stuff … for me it was very much like that, you know, the earth moved, um, everything changed and um, as a young person, we went through a lot of physical um, trauma and moving and constant change and constant uncertainty and abandonment and violence and this whole kind of … our world was moving and shaking all the time and I guess for me the earthquakes for me they were like a symbol of that, it was the same feeling … (Sapphire, August 2012)

Sapphire considers that living through the greater earthquake period was a constant reminder of what she had survived pre-natural disaster but the severity of the earthquake threat although frightening, was not as traumatic for her as what she recalled of her childhood. Sapphire discussed that she was not aware of what coping skills she invoked at stressful times, such as her ability to use a well-developed skill of disassociation to survive:

> … it was a huge reality check for me to know … you know I had suffered some pretty major trauma throughout my life, and not processed it at all because I had learnt from a very young age how to disassociate and detach … that's how I used to cope with life basically and that's kind of where I went, so it wasn't a bad thing at that point in time, it was probably a coping mechanism … it's kind of like "ok we've just got through that" and either I would get really sick because I had time too or I would pick up. (Sapphire, August 2012)

Shutting down emotionally as a young child provided a means of responding to an immediate and highly stressful situation while attending to the critical necessity of ensuring personal safety. For Sapphire as Schaefer and Moos (1998) point out, her prior life experiences shaped her perception of the disaster and her initial coping response. Detaching when a child helped Sapphire 'get through'

and invoking this same skill also enabled her to continue functioning at a very stressful time. Sapphire said she often used this operating style for weeks or months at a time both pre and post-earthquakes. Warchall and Graham (2011, p. 39) consider that post disaster, "adaptive functioning and effective coping are … common reactions". They too consider that coping responses stem from skills learnt and developed throughout child and adulthood.

The unveiling of previous experiences of abuse, neglect and trauma produced what was an overwhelming outpouring of insights which in itself was initially unhelpful when Sapphire first attempted to stop drinking prior to the September earthquake:

> … that's why recovery was such a huge sort of thing for me because as soon as I went into treatment you know, the huge Pandora's box opened up for me it was just hideous and this huge well of grief, yeah, finally looking at stuff and it was really frightening for a while, I thought "oh my God", you know and I got a bit suicidal at times and um, it was a crazy crazy time, it was really scary … (Sapphire, August 2012)

The earthquake environment was frightening, creating uncertainty. Early recovery too was scary for Sapphire, two difficult situations operating simultaneously with limited coping resources. The need to avoid memories of abuse and feelings associated with the recall often created situations that lead to further trauma in the search to continue the alcohol dependence and avoidance (McFarlane, 1998; D. a. G. Miller, Laurie, 2001; Pratchett & Yehuda, 2011). Dayton (2000) puts it better when she suggests that if one has attempted to deal with a traumatic incident in a certain way and the outcome has achieved the desired goal, such as drinking to avoid feeling, then this response will be used in similar situations with a view to achieving the same end, irrespective of whether the action is in fact in the person's best interests.

6.4 Environmental systems meet personal resources – not always a growth outcome initially

For Sapphire the pain of relapse was not a choice to avoid daily responsibilities and behavioural consequences but rather a means to avoid the reality of her emotional state and the environmental context within which her need to drink was situated:

> … it was another way of feeling other than what I was feeling for me and um … yeah I found you know every rattle and roll, for me I got to the point of using it as an excuse to use because "who wouldn't … who the fuck … would want to do this straight …" (Sapphire, August 2012)

Sapphire talked about the struggle to gain some sober time after the September earthquake. She notes that there was quite an emotional upheaval for her in early sobriety as she began to make

connections to how dysfunctional her addictive lifestyle had been for her but also to the lives of her children. Another sudden awakening in early sobriety for Sapphire was the recognition of just how much addiction fuelled chaos had been created by her drinking. The reality of the damage done and reparation that needed to be made was another significant stressor for Sapphire as the impact of this new knowledge equalled the impact of the September seismic event.

Early recovery for Sapphire appeared a frightening and confusing ordeal but even during the earthquake experience it was all just part of her "story". The nature of the seismic devastation did not affect her as much as what she was attempting to re-forget or the rigours of early recovery. How she tried to deal sober with her daily stressors was by using the same techniques and behaviours that she would if she was still drinking. As it turns out, she did not have the necessary skills to concurrently clean up the mess left over from living in active alcoholism while coping with new emotional awareness in a difficult post-disaster environment:

> … I mean it was an horrific kind of insight … it was frightening, when I went into treatment it was like "oh my God, things are really as bad as I thought they were" well no things are worse than I thought they were I mean cause I was in a lot of denial so that first couple of months was pretty horrific, for me emotionally trying to get through all that stuff, processing all that stuff um, and then yeah we had a few family sort of traumas sort of not long after I came out of treatment, and … I had quite a major relapse because I just couldn't … the thought of being clean and sober and um, dealing with all this emotional stuff just wasn't working for me … yeah I think by the time the quakes came it was like "oh just another thing to cope with yep ok now what? What next?" … (Sapphire, August 2012)

Sapphire recognises with hindsight that her drinking behaviour is well embedded in her response repertoire and for her the utility of alcohol is a direct vehicle to produce a desired state. With the benefit of self-reflection she understands that this is what is behind her relapsing behaviour:

> … yeah, well I had my first drink when I was five and then I started drinking heavily when I was 10 so um, yeah, you see it's quite interesting for me to look back on that because I mean I didn't know any of this stuff until I got into recovery because I'd stuffed so much stuff down … on one hand I'm really aware of what's going on but when I'm in active addiction, I'm not. So I know the … lengths and the … end result, but it's still not enough to stop. (Sapphire, August 2012)

The cumulative nature of the environmental stressors including family crisis events, trauma memory recall, an earthquake plus lack of intra-personal resources meant that her tenuous link to a sober lifestyle became too difficult to sustain. Schaefer and Moos (1998) consider that for personal growth to occur as an outcome to a crisis event, effective adaptation requires a blending of particular factors, both environmental and personal, that form a positive cognitive link to a successful crisis outcome. In the case of Sapphire, who was in early recovery during the greater

earthquake events sobriety was not maintained because her environment and personal situation were not positive. She talks of being forced (by circumstances of lack of food and water) to go to the supermarket to get needed supplies but once there was exposed to her drug of choice which often proved too difficult to resist:

> Yeah so, I'd managed to clock some time up and when the quakes hit at that stage I didn't have any alcohol in the house so and I hadn't any intention of getting it but um, yeah … I mean the supermarkets were opened pretty quickly afterwards, but it was so stressful even going to the supermarkets there wasn't an option … I just didn't want to go there … I understand what they mean now about relapsing before you do … my therapist explained it to me that it's like there's potholes in your brain and in an earthquake, being a major physical event can actually affect your thinking and you just go straight back to your old thinking. (Sapphire, August 2012)

May (2001) considers that environmental factors that focus the problem on susceptibility, that is addiction being an individual's problem primarily due to their lack of willpower, rather than an understanding that recovery is a social responsibility for community members and policy makers alike, actually adds to the source of recovery difficulties for those in addiction. Wisner, Blaikie, Cannon and Davis (2004) assert that a disaster occurs when a vulnerable group is exposed to a particular type of hazard, a claim that fits with the experience of Sapphire. She was committed to living a sober life and had no alcohol in her house nor was she considering drinking. With alcohol being too readily available for sale in critical locations it created what could have been a preventable hazard for Sapphire who required a little extra assistance to evade a situation that ended in a relapse. Schaeffer and Moos (1998) point out social resources that foster successful adaptation need to be available if positive coping behaviour is to be influenced and growth in the form of lasting sobriety is to occur. In the event of lack of physical resources (including sobriety time up), human capital (supportive social networks) and cultural capital (a supportive environment) Sapphire resorts to a learnt response of coping through using alcohol. It could be said then that Sapphire's level of ability to adapt in a positive way to a stressful event is related to both her personal resources and environmental supports as pointed out by Schaeffer and Moos (1998). These in turn directly contribute to (or in actuality define) the type of sobriety response.

The need to drink in stressful situations also appears to be the case for participants in long term sobriety. As Isabelle commented, the forced recall of early childhood memories invoked by the seismic activity was what created a need to want to relapse:

> I've had a lot of trauma in my life, like right from childhood right through so it sort of stirred up a lot of feelings about other stuff and actually I probably wanted

> marijuana more than alcohol because marijuana takes away the feelings and I'm just numb on that. (Isabelle, August 2012)

For Isabelle, the minute the February quake hit her response was immediate, basic and compelling:

> … my first instinct then was I want a drink and I want a cigarette … but I remember that was my instant feeling, I want a drink and a smoke just straight away. (Isabelle, August 2012)

The ability to pause between the initial thought for a drink or a drug and taking immediate action to fulfil the desire to use was one difference between participant's in early and those in longer-term sobriety. Schaeffer and Moos (1998) refer to Isabelle's ability to pause as possessing a 'means to regulate effect'. They consider the ability to forego instant gratification is an indicator in the development of enhanced coping skills that form a stronger link to a growth outcome. Old-timers' in sobriety like Isabelle recognised the need to use but were able to refrain from taking action - to regulate her response - long enough to considered the consequences.

The reverting to old patterns of operating could still be invoked by those in long term sobriety in stressful situations. For example, Aroha, although unable to understand what was happening intra-personally at the time, noticed that when the February earthquake struck, she was aware that her coping mechanisms were not as fully functioning as they were pre-September disaster, but it was only a vague awareness, neither good nor bad. It appears that she had at some point reverted to a learnt response of blocking her emotions, or disassociating the same as Sapphire did:

> … I just felt like it was just another day and I remember saying to someone "Oh, I don't know why I'm not having any reaction to this, it seems a bit odd". (Aroha, August, 2012)

Even though Aroha did not relapse to alcohol use, she still maintained the operant learning of avoidance and disassociation, hallmarks of her historic coping response to trauma. Irrespective then of tenure in sobriety the disruption of memory, concentration and the emotional numbing as a response to experiencing an earthquake were indicative of problems in managing and processing day-to-day stimuli for all participants at some level (Firman & Gila, 1997; van der Kolk, 2007).

Schaeffer and Moos (1998, p. 107) consider that "people's response to crises vary immensely" and it depends they say, on their level of personal resources. Aroha's and Sapphire's, responses to trauma events may look different on the outside but it is in effect the same – taking the path of least resistance to avoid what they were feeling. Stage of recovery, or 'years up' is not necessarily a protective mechanism from negative coping response, at least when teamed up with other negative personal resources, for example, early trauma recall and historic grief. Schaeffer and Moos (1998)

consider a positive outcome associated with the creation of enhanced coping skills is the ability to think through a problem logically. For Aroha a regulating effect in relation to alcohol occurred, but not necessarily in relation to the need to dissociate, whereas Sapphire did neither and drank. Isabelle however had both higher level emotional and problem solving skills that combined to create a positive outcome. Perhaps cognitive appraisal is related to tenure of sobriety at least in Isabelle's case.

6.5 Growth from Trauma – Isabelle's Story

Personal change or growth was a theme woven through the discourses of all participants and as suggested in the models of PTG, growth was both an outcome and a process (Tedeschi et al., 1998). The process of growth is also a paradox as is illustrated in the story of Isabelle. Before the September 2010 earthquake struck Isabelle was a highly functioning professional in the helping industry. She had a view of herself as capable, helpful and strong, a perception that stemmed from her experience of caring for others from an early age:

> … like I said before I am the oldest and I was even a parent to my mother when I [was a] teenager, I was the caregiver, I was the adult in the house and was always the one that protected and looked after and kept everything together and that just so wasn't the case in the earthquake ... (Isabelle, August 2012)

Isabelle recounts that the earthquakes were so frightening to her that from the time the first earthquake hit and throughout the early months of aftershocks, she was reminded of the significant level of fear that was a hallmark of her childhood, adolescent and early adult life which was reflected in the earthquake events:

> … just a lot of uncertainty, confusion and fear, fear's a big one, it's been my theme right from childhood right through so that was stirring up lots … just a lot of violence in my life … I was always a scared kid and a scared teenager and … and I didn't like the frights [from the earthquakes], I found that out … I can sort of cope with those noisy ones that you hear a little bit of noise first and you can brace yourself um … well I've got a permanent health condition and um, that's pain and fatigue they are the main symptoms … so that had flared up as well, so my fatigue was worse and my body pain was worse, um, so I was coping with physical health stuff as well … I just felt useless … I felt like I should have been out there helping … and I just physically couldn't so I felt quite useless … (Isabelle, August 2012)

As with Sapphire, Isabelle at least for a short time, was transported back to when she was frightened and vulnerable, the antithesis to the positive image of herself pre-earthquakes. With the seismic events for some participants who were recovering from early life trauma as well, the paradox of the recovery from disaster (within the context of early life trauma/addiction) is initially that they felt strong but now feel weak – they are reduced within their identity by the trauma experience.

Previously as Isabelle narrates, her cognitive schema was that of protector/caregiver but the impact of the earthquake renders her vulnerable, reflected and symbolised by fatigue as well as chronic pain. The revisiting of childhood trauma is mimicked with the flaring up of her chronic illness and is extrapolated into other areas of personal resource such as self-esteem. Isabelle's regression to negative image is reflected in her narrative above as she recounts feeling 'useless'. For some time, this vulnerable persona, and the emotions and beliefs inherent in the biological manifestation of early trauma (D. a. G. Miller, Laurie, 2001), is Isabelle's current reality.

Warchall and Graham (2011) point out that loss of identity either at an individual, familial or community level can occur during a natural disaster but it is the loss of old perceptions of self that is vital to the recovery process as it paves the way for a stronger post-disaster identity to emerge. According to Tedeschi and Calhoun (2004), the crushing of positive schemas of self, such as Isabelle's view of herself as a protector, is critical to establish growth and ironically, it requires a highly challenging life experience, equivalent to a psychological seismic event, for progress to occur. Considering Wisner et al's., (2004) linking of exposure to particular hazard types with the creation of vulnerability, I suggest that the recognition of the link between trauma experience and addiction needs to be considered as an integral aspect to recovery from both disaster and addiction treatment programmes. What needs to be recognised is that trauma, whether situational or cumulative is by nature reductionist and if not assessed and supported correctly, could be exposing vulnerable individuals to unnecessary hazards.

As discussed in earlier chapters, trauma can arrest emotional and cognitive development creating faulty life narratives. In Isabelle's case a regression to historic somatic illness and memories of fear, violence and vulnerability was not helpful, so the shattering of her early schemas although distressing, can be viewed paradoxically as positive. This statement is true if an altered and stronger sense of self is the process outcome. A paradox of PTG growth is that from vulnerability comes strength and in the case of addiction recovery during disaster events as related to Isabelle's story, this appears to be true.

Firman and Gila (1997, pp. 198-199) suggest that the paradox of the growth outcome is the individual "no longer feels the need to hide and compensate for [our] wounds, but can recognise and accept them as part of … life experience". The early experience has been integrated into an individual's life narrative as part of their story and impairment. To illustrate this point, when I asked Isabelle what was learned from her earthquake experience of self-reported fear and powerlessness, she discussed using earlier experiences of trauma and applying them to the earthquake events,

creating, in hindsight, a changed perception based in a new understanding of herself and her potential (Tedeschi et al., 1998).

> I can get through anything sober and that I've got more strength in me than what I realise I think … I've been through the experience so I knew that I could do it, it wasn't like … trauma wasn't the end of me, so if you're trying to find a positive about trauma I knew that you can go through it and come out the other side … that I'm capable and that I am a strong person even though I feel weak … (Isabelle, August 2012)

An altered perception of how Isabelle viewed herself was generated from earlier learning creating a positive outcome. She was able to connect past learning with her current situation to create future resilience (Landau & Saul, 2004). Schaeffer and Moos (1998) consider that prior experience may enhance coping resources, specifically as indicated in the above narrative, successful mastery of a previous crisis event can lead to more positive self-efficacy if a future crisis event happens. Janoff-Bulman (1992, p31) suggests an outcome of the change and subsequent growth process is that one "becomes aware of previously undiscovered strengths, but also develops new coping skills and resources that are more robust to future traumatic conditions" as indicated in Isabelle's narrative through her reference to knowing that if she can survive the greater earthquake events, she can survive anything, that trauma was not the end of her.

For Isabelle, the process of change was reflected in her altering perception of herself but also in her deliberate cognitive processing. Isabelle suggested that she used positive self-talk, including reciting to herself the slogans that she had learned during her time at AA meetings, in order to overcome the difficulties of negative thinking and emotion, what Tedeschi and Calhoun (2004) refer to as rumination.

> I remember thinking, because I'd had a really messy relationship break up about four years previous and I remember thinking back then "if I can get through this without a drink, then I can get through anything". That was pre all the earthquakes though, um, and so I went back to that quite a bit … Yeah, 'cause I got through that, I can get through this. A lot of self-talk battling that voice in my head sometimes, but yeah, protective things like my job, and wanting to set an example for my niece and nephew because I was the only sober one in the family, so wanting to show them that you can get through experiences like that without alcohol and drugs … Yeah, but it wasn't easy at times … it wasn't easy but I did it. (Isabelle, August 2012)

Apart from the invocation of slogans and affirmations to directly rebut rumination, within the narratives of Isabelle there were also examples of early memories being both an asset and a liability to her recovery from alcoholism as well as social, familial and vocational roles and responsibilities that protected her from making a poor decision to drink. Her understanding of successfully

managing previous experiences of harm and trauma were the producer of knowledge and provider of hope (Snyder, 2002):

> … around the alcohol stuff, like I just … I literally feel like I can get through anything now, whether I will or not you never know but I believe I can do it … yeah, it's definitely a learning process … I still thought that there was a chance that I'd pick up if something really bad happened, but now I don't think that, but now I can see that it is possible for me to live into my eighties and not have a drink. (Isabelle, August 2012)

It appears for Isabelle the learning associated with successfully negotiating the earthquake events while maintaining her sobriety, was the opportunity for Isabelle to re-create herself with a more robust identity.

As Tedeschi and Calhoun (1998, pg 4) discuss "trauma is a time when meaning may be created and courage may be found". It is the struggle with the trauma that is crucial for PTG to occur and Tedeschi and Calhoun (2004) point out that people who have limited adaptive capacity, such as vulnerable community members, may experience the greatest growth because they are by definition, more challenged. Schaefer and Moos (1998) consider that prior experience with and enhancement of life mastery is a boost to self-efficacy and enhances personal resources, providing a direct pathway to growth. The more personal and social resources one has the less likely they are to consider a crisis event a threat and thus to rely more on active coping strategies (Schaefer & Moos, 1998).

Tedeschi and Calhoun (2004) posit that individuals consistently face during their coping process, a revisiting of their life narratives. Life narratives are the internal messaging and beliefs that 'play' constantly in one's mind, guiding their thoughts, emotions and actions. It is through our life narrative that we define ourselves, and from our story know who we are, providing us with meaning, unity and purpose (McAdams, 1993).

When life narratives are challenged as in a trauma incident or illness, there may be an opportunity to redefine one's beliefs and values and create the ground for a new 'story' (Frank, 1995; McAdams, 2001). Isabelle successfully negotiated both situational trauma in the form of a fatal natural disaster but also psychological distress created by the abrupt revisiting of early life trauma and violence. Her ability to negotiate and manoeuvre to a positive outcome or as she puts it "came out the other end" of the post traumatic experience provided her with the learning and knowledge to revise her life story (Tedeschi & Calhoun, 2004). For Isabelle, trauma both in early life and again as an adult, was not the end of her, but paradoxically, was the precursor to an improved perception of herself and the potential for a brighter future.

6.6 Enhanced coping encourages growth but also healing

Tedeschi and Calhoun (2004) define the construct of PTG within five domains. These domains are a greater sense of personal strength, recognition of new possibilities or paths for one's life, greater appreciation for life and changed sense of priorities, warmer, more intimate relationships with others and spiritual development. Within Isabelle's story above two examples relating to the PTG domains of greater sense of personal strength and recognition of new possibilities for life have been be identified.

A third domain, 'a greater appreciation for life' is provided in the following excerpt from Aroha's narrative in which she suggests that the greater earthquake events enabled her to re-evaluate her priorities and existing social networks. This change, although distressing, provided an opening in which to review her current thinking about her past. Cognitive reframing of past events forced by the rupturing of earlier schema created an opportunity to work through her present perceptions, beliefs and goals including understanding and naming with certainty what it was she wanted for herself. This change in thinking was a radical shift in how she approached and experienced her daily life, directly influencing her relationships with others in her social and familial network and subsequent connections. Aroha had a new knowing about who was now welcome in an updated social circle and who was not:

> … I guess it's made me think about what the important things are in my life, and it's not about … yeah it's just … I guess it's made … you know every day's a bonus, like um … you know it's made me see you know what I believe in, who I am, what I value, what's important to me what's not, who's important to me who's not, um, and that I don't have to be … what it's taught me is about being interdependent rather than being independent um, on people, um, my faith's stronger. (Aroha, August 2012)

The alteration to social networks is often considered a key aspect in the transformation process from living in active addiction and choosing a life of sobriety. As Schaeffer and Moos (1998) point out, a new social network is also a key indicator in enhanced personal resources post crisis event. Alterations to one's social and community networks are also aspects of the post trauma cognitive reshuffling that often emerge in survivors' lives following a natural disaster. As seen in Chapter 4 with India's story, positive alteration to social networks is also a key dynamic for change behaviour to progress in addiction practice.

Other major restructuring of one's ontology and paradigms is an appreciation for life, as well as an increase in empathy and compassion for others as discussed in Isabelle's narrative below. Part of the altering of her values includes the recognition that her first response to the earthquake event

was to want to regress to her addiction. This recognition paved the way for an indelible knowledge of herself as an alcoholic. The building of more dimensions to her identity and recognition of vulnerability in self aids her in having more empathy for others in her social and familial networks. This empathy provides a vehicle for building warmer more intimate relationships with others which was another growth outcome for her:

> … it's that whole you don't know when you're life's gonna end, you just don't know what's going to happen it just impacted me more with all the deaths around February and yeah take more time to spend with people that are important I guess … my values change[d] … I guess I just not, I'm trying not to be as judge … I can be quite judgemental, so that's … I guess that's changed I'm not as judgemental now I'm just … even though my family are in addiction, just spending that time with them anyway … Because they are still important to me and I still love them and don't want to lose them, whereas I'd distanced myself quite a bit … and so I still look after myself if the middle of that, I'll leave if it gets too crazy … (Isabelle, August 2012)

Isabelle's family are functioning addicts and the stress of the familial environment challenges her long standing and ongoing health issues. As discussed earlier, Isabelle exhibits enhanced coping skills post natural disaster that not only protected her from relapse at a very stressful time but as her narrative also discloses, she used her social and familial roles to add value to the lives of those closest to her and herself at the same time. It may be that Isabelle was protected by her years of solid time in sobriety, but as she discusses above, the effect of the seismic activity and devastation was that it altered her perception of her family members by encouraging her to look at the nature of her relationship with them. As the PTG literature suggests, this encouraged her to exhibit more empathy and self-confidence amidst the dysfunction of her family relationships. She was able to detach emotionally from her family's behaviour while remaining connected to and creating stronger kinship ties, a living example of what Landau and Saul (2004) define as resilience. That is "the capacity to rebound from adversity, strengthened and more resourceful in an active process of endurance, self-righting and growth" (Landau & Saul, 2004, pg 1).

6.7 Adaptation as a form of resilience

Boss (1999) in developing her theory of ambiguous loss discusses the need for family in times of great distress. Previous research has indicated that the need to draw upon social networks is critical in times of natural disaster (Bourque, Siegel, Kano, & Wood, 2006; Good et al., 2011) and serve as preventive factors of addictive behaviours (Beaudoin, 2011). However, one finding of this research that differed from the disaster literature was that most participants could not rely on their close family or social networks for emotional support as Aroha found:

> … I noticed that a lot of people um you know, in the fellowship, friends, you know kind of went a bit weird, yeah which would have been their own stuff around the earthquake, but a lot of people kind of, yeah sort of … I don't know … you didn't see a lot of people out around, everyone kind of stayed close to home … (Aroha, August 2012)

Isabelle also pointed out that her social network was actually in a worse state than her so being able to feel connected to someone but not being personally close to their distress or angst was helpful in times when her self-reliance and vulnerability were stretched:

> I don't have a big social network … um it wasn't really a help, because … I mean, Facebook was great, just reading everything on there … because my friends were more traumatised than me. (Isabelle, August 2012)

For Isabelle personal networks were not supportive or helpful following the natural disaster but paradoxically, as discussed above, the earthquake devastation also brought her closer to her family, even though it was the family that had created the early trauma experiences. The earthquakes then appear to have created vulnerability by forcing her to revisit her early trauma experiences, but they were also a vehicle for healing from the past by provided the medium in the present for enhanced coping, that is cognitive reappraisal and schema reconstruction.

The healing of the wounds torn open by trauma recall was a process that took time for Isabelle. During this process interaction with her social network should have been useful as a coping mechanism according to the disaster literature. However Isabelle as with Aroha found her social network and her familial relationships although loving and her work environment supportive were not always positive environments to be in physically during many stressful times:

> So um, it wasn't … I wouldn't say it was a big help, although it was nice … it's that still connection eh, it's still that you're not the only one feeling this way was still helpful, but as far as having those moments where you just needed someone to be there just for you, that wasn't helpful, it just wasn't there. (Isabelle, August 2012)

Aroha too experienced a disintegration of her usual social networks as the same seismic activity that broke the infrastructure of Christchurch also changed her connection with people. However, she found that she could stay within the same social community of Alcoholics Anonymous but choose different people to associate with, at least short term:

> Well I, yeah, there was a couple of meetings that I didn't go to because obviously the church was munted, but um … I'm not as sociable, because the people that I was socialising with, that I was spending time with, have moved away … circles have changed … meetings have changed, geographically they've changed so they're not as accessible, well they're accessible but they've changed their

> locations … I think people have changed, um, I don't know, you know I'm not seeing as many people as I used to see, just because I don't see them anymore, I don't know where they are, I know they're in Christchurch but … I think it changed people um, what was a regular meeting and the same people would go, that because we couldn't go there, then someone would start up another meeting somewhere else and then some people wouldn't go because it was way over the other side of town, whereas some people that lived in the area would start going to that meeting and people, you know ... (Aroha, August 2012)

Even though Aroha had noticed significant changes in the behaviour of her pre-disaster network of social contacts, the motivation to stay connected required her to acknowledge that AA as she knew it, had changed. Choices had to be made including going to different meetings in order to manage the seismic damage to infrastructure. Other changes such as staying with her Mother to care for her rather than continuing with her desire to stay in her home where she was more comfortable were incorporated into her responses to people and environmental challenges as well as in her emotional states. Aroha exhibits both emotional maturity and a commitment to continue living in sobriety by seeking out and taking action to keep connected with the support of her network of like-minded sobriety colleagues. Schaeffer and Moos (1998) consider these factors are all key elements that define growth outcomes in the form of enhanced social and personal resources. Growth in these areas of recovery capital combined to enhance coping skills, modifying and moderating coping responses and changes in perception in turn moderating behaviour and interaction.

Throughout the change process Aroha recognised that she needed to stay close to Fellowship members and to continue her sobriety routines despite the difficulties:

> Oh … well yeah, it's changed, my life's changed, life as I know it in Christchurch has changed … things will never be the same in Christchurch for anybody who lives here, how can they be? You know, what is normal anymore, you know, we're not the same … I've just carried on, kept calm and carried on … I mean since the earthquake life's become more simple than it was before … I don't go to town at all, nobody goes to town at all anymore, for anything … because the places you used to go to aren't there anymore or um … I've moved, jobs changed um, you now friends have changed, people I saw back then I'm not seeing now, yeah it's not as social as it was … people have become more unpredictable than they were before … I think that everybody's working through their own processes so therefore they're not the same, the earthquakes have changed everything. (Aroha, August 2012)

Aroha's narrative indicates the converse of the public narrative that the Christchurch earthquakes have brought communities closer together and closer, more intimate ties exist between households (Phibbs et al., 2012). As Aroha points out for those that were displaced, friends may have distanced themselves or new networks needed to be built and old, familiar routines were discarded adding to the existing stressors. Increased community relationships and closer relationships within existing

networks may be the norm for those people who were not required to relocate, but as this and other research indicates (Phibbs et al., 2012), stronger social ties did not occur for many vulnerable individuals impacted by the earthquakes.

According to Pelling and High (2005), social capital provides a lens to view the development of adaptive capacity which is continually being reshaped through changing social relationships during natural disaster. Changes in priorities are reflective of the development of positive growth outcomes such as knowing when to seek help when needed (Schaefer & Moos, 1998) and the taking of new and different paths in life (Tedeschi & Calhoun, 2004). Paton & Johnson (2006, p. 15) agree when they note that those that "exhibit resilience reflect … a capacity to make choices within their social context".

There does appear within Aroha's narrative to be a resistance to accept the changes that have been forced upon her and her community by the magnitude of the earthquake events. Her resistance could be fuelled by her grief, as routines that gave a sense of permanence and rightness to her life are lost. The grief that she expressed relating to her loss as discussed in chapter five and now the loss of structure to her day could be hindering her growth process. For Aroha there is not so much a willingness to thrive but rather a need to restore equilibrium and survive. The thriving comes from being forced into eventual re-adaptation or re-invention of self. It may be then that the ambiguous loss and associated grief as described in chapter 5 helps her to either learn from the experiences of her past and also plan for restorative action or to over time, accept what has happened and adjust her expectations for herself and her future (van der Kolk, 2007). Hobfoll (1989) points out that although sticking to goals through positive action is an indicator of healthy coping and potentially admirable resilience, he also suggests that the ability to note when control is not possible and accept changing circumstances by relinquishing one's need to control is in itself, adaptive.

As discussed earlier in chapter four, bouncing back to one's previous state of functioning and more importantly lifestyle may be desired but as Paton and Johnston (2006, p. 8) state, it may be an untenable proposition because of "changes to the physical, social and psychological reality of societal life emanating from the disaster". They consider that the reality of the post-disaster environment, irrespective of the type and magnitude of disaster devastation or what rebuilding activities have begun, individuals are faced with a new reality. Landau and Saul (2004) consider that inaccessibility to prior social structure requires the need for transformation and creation of new social patterns to meet the demands of a new reality. Paton and Johnston (2006, p. 8) also consider that personal adaptation to the disaster event must begin with an acknowledgement and acceptance of a changed reality because it is the recognition of new possibilities that can stem from

the devastated environment which "can be the catalyst for change" (Paton & Johnston, 2006, p. 8). It would appear that change is apparent within an individual but is also external to the person, at a social and community level.

Adaptation appears to be a core to resilience when faced with a changed reality. Paton and Johnston (2006) suggest the ability to capitalise on the new possibilities offered and the provision of both the capacity to adapt and the capacity for post disaster growth and development will not happen by chance. They say it requires a conscious effort by the people, the communities and governmental agencies to develop and maintain the resources and process required to capitalise on the elements of learning and growth for survivors of disasters.

6.8 Influences on Resilience – A blending of personal and community resources

During the recovery from the Christchurch natural disaster events the type and level of community support which one operated within was a key factor that influenced individual growth processes. Milner (2013, p. 45) suggests that "the difference between natural disasters and social disasters is the cloak of the community". Putnam (1995, p. 67) defines social capital as "the features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit". Putnam (2002, p. 10) points out that "associations constitute merely one form of social capital" and that some associates are better at achieving valued purposes. For the participants of this research project, social support by trusted others helped modify perceptions of self but also supported adjustments in interpersonal relationships by encouraging and facilitating changes to ontological assumptions and beliefs.

Helliwell and Putnam (2004, p. 1437) state that "social networks can be a powerful asset, both for individuals and for communities". Putnam (2002) considers that although social capital can be thickly stranded networks of relationships, it can also take the form of connections that are thinly woven, such as acquaintances that we only nod to. He believes that the thin connections of social networks may in fact be a more powerful means to induce reciprocity. Membership of the fellowship of AA was a powerful tool for all participants of this research irrespective of their level of engagement with this community in general because it provided a source of both bonding and bridging relationships. Strong bonding ties are generally associated with 'co-identifying groups' in survival mode such as after a natural disaster or alcoholics meeting together because they share a common illness. Bridging ties are used to describe "social relationships of exchange … between people with shared interests" (Pelling & High, 2005, p. 310). Putnam (2002) suggests that the

distinction between bonding and bridging ties is important because if groups are limited to bonding ties only, or meeting just because of a common illness, they are at greater risk of producing negative results.

Members of AA not only having bonding capital, that is co-identify as a group - that of alcoholics who are recovering from the impairment of alcoholism, but they identify within their social relationship with each other in the exchange of trust and reciprocity as well – have bridging ties as social capital. Thus there are linking ties that bind AA community members across the group through altruistic activity, but also the creation of bonds through the joint action of shared goals that provide strength and relational rather than structural power. The benefit of bridging capital within AA can provide the reassurance of safety, minimising uncertainty and reducing risk taking providing an opportunity for co-operation and productive reciprocity (Putnam, 2002, pg 390). These factors I consider create the vehicle and arena for spiritual growth that is the hallmark of the 12-step programme of AA. I consider that when an individual's spirit is being fed, they have intra-personal space to feel peace, happiness and hope. This way, as Putnam (2002) suggests, social interaction can go beyond the group into the wider community, perpetuating weaker, socially anonymous ties that bind a larger network.

The concept of bridging, bonding and linking ties is reflected in the book of AA (1976, p. 17) where it states "all sections of this country and many of its occupations are represented as well as many political, economic, social and religious backgrounds. We are people who normally would not mix. But there exists among us a fellowship, a friendliness and an understanding … the feeling of having shared in a common peril is one element in the powerful cement which binds us." A central tenet of the AA fellowship is to place "principles before personalities" and in general when members uphold this philosophy in their thought and action towards each other and those still struggling for sobriety, they buffer the lifeline of their support for recovery from alcoholism against vulnerability to disruption. This buffer against vulnerability also provides them with the social resources of support and information to ensure resilience.

Help from community groups and governmental agencies supported change processes by providing counselling and day to day living assistance through financial aid (as discussed in chapter 4 and 5). However the people within the Fellowship of AA, and a private organisation that extended the use of their building to enable a continuity of social meetings, the permanence of sober behaviour for alcoholics in recovery was assured:

> … it was ok because um, my work opened up their group room for meetings, you know the ones that were across the road normally, so we had meetings there,

> and that was really cool … like I remember the first meeting that I went to after the quake and everybody was just so relieved so see each other and cried and say you know like wow you know, "if there was ever an excuse a drink now's one", you know and … but it was just a real fellowship … it was great, I really loved it … it was like home base you know … It just keeps me grounded … you know when everything else is chaos, that's the one consistent thing that I have in my life, which is that and that's what I automatically do … I've always been a regular group meeting person, so if I couldn't get to a meeting you know I'd get on the phone, you know, or I'd go and visit someone. (Aroha, August 2012)

Aroha's daily structure had been fragmented, potentially damaging the structure of her sobriety. Rather than 'hunker down' and remain isolated Aroha continues with the Fellowship. As she discusses, her usual meeting places and people were unavailable so she extends herself beyond her comfort zone to ensure the connection with the social networks is retained. When meeting places were unavailable community groups extended their services in order to bridge the gap between what was available and what was needed. The term 'lifelines' is commonly used to discuss the infrastructure of a community such as "systems or networks … of people, goods, services and information upon which health, safety [and] comfort … depend" (Johnston et al., 2012, p. 40). Lifelines, according to Johnston, Becker and Cousins (2012) support the daily communal activity and in times of natural disaster are as vulnerable as the community to disaster activity. When considering the community of recovering alcoholics, this definition of lifelines is extended to include not just the infrastructure of the city but the social capital and resources of the community members.

Aroha discusses how attendance at meetings and the connection she experienced with other members was the rock to her recovery during the greater earthquake events, or what she calls 'home base'. To her it was a source of stability that enabled her to stay grounded to her recovery programme amidst the chaos of the seismic activity. AA was a lifeline to assist Aroha's emotional stability and ensure her continued sobriety recovery but actual access to meetings was difficult for all participants due to the broken roads, disrupted transport options and unavailability of meeting places due to earthquake damage.

The motivation to combat her social isolation but the need to protect herself from others' tangible stress, saw Isabelle access her cyber-community of AA friends via the social medium of Facebook. The utility and power of being a member of AA during the greater earthquake events helped Isabelle via the giving and receiving of information and story sharing (Pelling & High, 2005). Even though Isabelle could not interact directly, she had enough trust in the cyber-members because of the value of their shared social capital. As Beaudoin (2011) suggests there is an inherent value in the accessing of information and the sharing of social resources because of the protective mechanism inherent

against alcohol consumption in stressful times. This is shown in the instance when I asked Isabelle what she did to 'get through' when frightened and wanting to drink. She said she invoked mental messages that she had internalised over time from years of attending and participating in Alcoholics Anonymous (AA) meetings.

> …The first step … which is what I use even without earthquakes, if I'm hanging out, I always go back to how bad it was when I was drinking and how bad it got in the end … I always go back to that because there's such a huge difference um, so that helped and just remembering the slogans that … you know "this shall pass" … it's not forever and just trying to get through that moment of it I guess, and just so much self-talk, it's all I could really do I couldn't get it from the people around me … (Isabelle, August 2012)

The AA slogans and tenets passed on from AA members through the sharing of experience within their stories had become a positive holding environment within Isabelle's head which she recalled and recited to herself as positive 'self-talk' during stressful times. Bandura (2003) considers the power in sharing one's experience, strength and hope with others benefits all in AA community. Crape et al., (2002, p. 297) hold to this assertion too, they suggest that the speaker as well as the listener can experience a positive behaviour modification during the sharing of stories. They consider that the giving and receiving of instruction is a "predictor of improved psychosocial adjustment and the receiving of knowledge in the form of verbal help is indicative of cognitive reframing". Hobfoll (2002) agrees stating that social support is a complex process where the ability to confide in and share with others is he considers, the most salient type of support.

Tedeschi and Calhoun (1998) discuss the increase in self-disclosure and emotional expressiveness that is emitted as being a direct outcome of trauma events. Boss (1999) considers that resilience is a process that takes time and the sharing of stories and listening without judgement to each other is a hallmark in facilitating the healing process from loss. Mankowski et al., (2001) consider that in the exchanging of personal stories, members find a common ground which provides a means for others to identify with. It could be that in the sharing of stories, people are provided with an opportunity to reframe and re-label events that could cause guilt and shame as well as encourage optimism in others and themselves (Boss, 2006). This identification process may involve the re-authoring of one's own story to fit within their worldview or provide a means to reshape their perceptions, belief systems and plans for the future perpetuating within these processes the outcome of an altered reality.

It could be said that Mutual Help Groups (MHGs) and (imagined) cyber-communities however they meet, sustain a rehabilitation process by providing a learning environment with which to share stories and the experience of practicing living life in a new and altered state. These skills once

internalised are portable to similar situations. Individual's transform then from being a wounded storyteller immersed in a chaos narrative (as with India in chapter 4) to a wounded healer such as Isabelle, helping others by sharing their story of experience, strength and hope via a quest narrative (Alcoholics Anonymous 1976; Frank, 1995; Schaefer & Moos, 1998). In supporting the individual to heal, the community as a whole benefits (Durant, 2011).

Schaeffer and Moos (1998) consider that social support including a positive family environment and community resources plus new life events post-disaster are key personal resources. Recognition of the potential for hazards to occur post disaster not only includes the need to acknowledge that communities are not homogenous, but to also understand that not all social networks are equal in terms of ability or capacity (Nakagawa & Shaw, 2004). Durant (2011) suggests that the level of social stratification is important when considering any social network's capacity to influence and function and is a critical proposition in explaining the particular types and levels of support by groups in times of natural disaster.

Sapphire's level of illness with addiction, Isabelle's on-going medical issues correlated with long standing trauma memory or Aroha's stage of recovery from alcoholism were not contingent upon an ability to invoke intra-personal factors including seeking support and taking action to solve problems. The forced opportunity to reframe self and persona that altered Sapphire's perceptions and provided a way forward to sobriety for her also worked in Aroha and Isabelle's favour. For them changes in how they interacted with family, co-workers and the making of new social networks created stronger social and community capital. Their learnt response to regulate their behaviour, and learn from previous experience created the opportunity to building knowledge and financial and physical recovery resources. The synergy of these composite parts of recovery capital eventually led to the creation of a robust and enduring post trauma identity.

6.10 Conclusion

This chapter emphasises and supports the Schaeffer and Moos' (1998) conceptual model of positive outcomes of crisis. In their model they determine that environmental and personal system factors shape life crisis and their aftermath while also influencing perception and coping skills. This research indicates that trauma by its nature reduces an individual's recovery resources but community and personal recovery factors contribute to the development of positive outcomes or growth. Building of these resources within each individual can then be transformed and utilised in the development of community and financial capital, stabilising recovery from alcoholism and supplying a forward path to recovery from disaster.

The stories of Aroha, Sapphire and Isabelle add to the literature on PTG following a natural disaster event by highlighting the relationship between trauma memory/crisis events and the meeting of social networks and personal recovery resources that aid their recovery from disaster and alcoholism. To date, there does not appear to be consistent application of this model to describe the rehabilitation and growth process from alcoholism following an earthquake in any disaster or addiction literature. This research indicates that for some people a cyclical recovery process of proximal trauma triggering distal trauma occurs. Through a cyclical process involving intra-personal resources, learnt skills and the addition of resources including vocational, social and community networks an opportunity to reframe experiences of abuse, neglect and abandonment and to rupture the old connection with an historical vulnerable persona exists The outcome was a reworking of self with stronger recovery identities and more self-reliance and maturity, reflecting the conditions that Tedeschi, Park and Calhoun (1998) cite as Posttraumatic Growth (PTG).

It is suggested that the outcome of disaster recovery for some during their rehabilitation from alcoholism requires a nuanced examination of the disaster recovery process and they ways in which responding agencies can support survivors through the process. The need for a more complex analysis of a response to the psychosocial processes following a disaster is highlighted by the 'double hit' that most participants experienced with their disaster experience and their childhood/addiction life recall. The following chapter sets out the overall conclusions and findings of this research project.

Chapter 7
Findings and Conclusions

7.1 Introduction

The final chapter provides an overview of the aim of the research and a review of the key findings of the study. The contribution of the research findings to the disaster and addiction literature is outlined followed by limitations of the study, recommendations for further research and overall conclusions to the research outcomes.

7.2 Review of the findings

7.2.1 Document participant's experience of the Christchurch earthquakes.

A major theme that stood out in the research findings of this study was that both the earthquakes and living in active addiction involved significant levels of traumatic stress. In fact, living in addiction is more stressful than a significant earthquake and a level of fear, uncertainty, terror and stress was invoked by constant aftershocks that mirrored how participants felt prior to the earthquakes.

Within the narratives of the participants in this study it can be seen that illness has torn at the fabric of their lives as they became more dependent on alcohol. Outcomes of living in addition include ongoing trauma and extreme stress, violence as well as a lifestyle that arrests cognitive, emotional and spiritual development. Ironically for some participants, there was recognition that their addictive behaviour and therefore their lives were being mirrored in the earthquake activity and through recognition of this association, how drinking was causing them harm. Old schemas were shattered and present life narratives interrupted, creating opportunities for new behaviour and thinking to be formed.

A second theme that wove through the narratives indicated the earthquake devastation was a stark reminder of losses from a life spent in addiction and for some participants it felt like there was an erosion of gains made in recovery. Where a participant is placed within their recovery journey highlighted different types of impacts from the devastation caused by seismic events while the range and the size of the deficit in resource capital can be a risk for relapse. It is suggested that sobriety recovery is a process where the life one wants is constantly expanding or contracting as the level of wellness increases (or decreases with relapse) dependent upon resources available and where differing types of loss are present.

A third theme identified that the greater earthquake events were a significant enough crisis to immersed participants in their earlier memories of childhood vulnerability. For some participants the primary source of distress was not the earthquake activity, and related environmental devastation, but the way in which the seismic events recalled forgotten trauma memories. The emotional and cognitive effect of recall had more of an impact than any aftershock, but the aftershocks set the scene for the memory recall. Within the context of the greater earthquake events, participant early memories of abuse were triggered shaping initial coping responses which in turn redefined personal resources and environmental system. To this end, it could be said that in a paradoxical way, the disaster events created a window of opportunity for positive identity reconstruction and healing from early trauma. Reconstruction and healing was dependent on whether participants had enough of the right recovery capital to ease their way through not just the situational trauma of significant aftershocks, but the additional cumulative trauma of negative memory recall.

This research indicates for all but one participant recovery from natural disaster while managing their rehabiltiation from addiction is an adaptive process of situational trauma triggering cumulative trauma, then self-reflection, education, learning and personal action. This cyclical and progressive process eventuated in psychological reframing in addition to wisdom building. Wisdom created from the integration of past practice, current experience, and new learning, backed up by supportive vocational, social and community networks provided an opportunity to reframe experiences of abuse, loss and grief and rupture the old connection with their historical vulnerable persona. The outcome was a redefinition of themselves with stronger recovery identities characterised by more self-reliance and maturity.

7.2.2 Document the social, economic and environmental issues that emerged following the Christchurch earthquakes and their impact on participants.

7.2.2.1 Social Issues

Five socially oriented themes were prevalent through the stories told by participants. The first, social isolation was created by the seismic activity and considered a hindrance to recovery from alcoholism because participants did not want to interact with others if it meant leaving their home. Secondly, some participants commented that following the greater earthquake events their cognitive schema were altered, involving changes to priorities, and values that meant alteration to how they viewed their social relationships. The altered thinking meant that existing social networks changed as the role of people in participants' lives were re-evaluated and re-prioritised.

A third social theme that differed from the disaster literature was that most participants could not rely on their close family or social networks for emotional support. In some cases, the people that comprised the social networks of participants were in a worse state emotionally, or the individuals that comprised the networks were displaced geographically. Two participants protected their alcoholism recovery by minimising isolation through accessing social media or by changing physical locations to attend different community meetings. This finding was the converse to public narratives which suggested that the Christchurch earthquakes brought communities closer together and developed closer, more intimate ties between households. Increased community and closer relationships within existing networks may be the norm for people who were not required to relocate, but as this research indicates, this may not be the case for people who were vulnerable and/or displaced.

A fourth theme indicated that the earthquake devastation may also bring some people closer to family that had created early trauma experiences. Cognitive reappraisal and schema reconstruction encouraged one participant to exhibit more empathy and self-confidence amidst the dysfunction of her family relationships. She was able to detach emotionally from her family's behaviour while remaining connected to and creating stronger kinship ties.

Finally, throughout the narratives in the research there was a fifth theme of consequences created by active addiction and the social problems associated with this form of illness meant some participant's social positioning has been determined and was reflected in their lack of human, physical, social and cultural capital. For these participants, resilience was activated and managed due to the aid provided by social organisations, disaster relief agencies or government departments.

7.2.2.2 Economic Issues

Following on from the statement above, most participants of this research had limited financial resources that created additional stress and hardship post-earthquakes. Seismic damage limited the volume of habitable properties available on the renting market, forcing the price of weekly rents up as demand exceeded supply. One participant was forced by seismic devastation to move several times and experienced a downward spiral of living conditions with each move. Additional distress was also created by the need to move household possessions on a very limited income with no financial aid available. Government policy introduced to control rental price rises during this time would have been helpful for many people competing for housing stock on limited incomes.

A second financial stressor that many participants mentioned was the constant seismic activity created damage to roads that in turn created damage to cars, which then needed constant,

expensive repairs. With limited financial resources and few options for employment this created serious financial difficulty because other transport options were often unavailable.

Participant narratives support current literature that suggests disaster aid is primarily used to restore and create infrastructure before caring for and supporting people. Those without influence such as the participants of this research may not gain from the resource allocation by aid agencies.

7.2.2.3 Environmental Issues

A major theme throughout this research was that the social, political and physical environment was both disabling and supportive. The environment did help one participant who found it difficult to sustain recovery from alcohol dependency during the greater earthquake events. Awareness of the potential for harm to occur during seismic activity encouraged a reduction in drinking by volume.

This study adds to the literature on domestic violence, alcohol abuse/dependency and natural disasters. Domestic violence was an issue for one participant and contact with crisis services including court protection and law enforcement became unavailable or was not helpful, following the natural disasters.

Pressure to conform to agency requirements and rules also created additional stressors for participants when just getting through the earthquakes felt almost too much to manage. One participant was faced with pressure from CYFs and the Police to relocate due to seismic devastation and domestic violence issues. Moving from the area post-earthquake meant relocating her children from a stable, well respected school to a place where they were initially, socially isolated. There were also no forms of financial aid that may have been used for childcare in order to provide some respite from the rigours of single parenting during the earthquake events.

The cumulative nature of the environmental stressors including family crisis events, trauma memory recall, an earthquake plus lack of intrapersonal resources meant that for one participant, a sober lifestyle became too difficult to sustain. It appears that alcohol was too readily available for sale in critical locations creating a preventable hazard for relapse. For this participant the ability to adapt positively to a stressful event was related to both personal resources and environmental supports which in turn shaped her sobriety response.

7.2.3 Explore the physical, emotional, psychological and spiritual impact that the earthquakes have had on the participant's recovery process

Participant narratives suggested that the stress of living with alcohol dependency required the same skills to respond and recover from a fatal natural disaster as coping with active addiction. Being in active addiction felt worse and was perceived by them to be more life threatening than the greater earthquake events.

For some participants it was harder to cope with addiction and to gain and sustain sobriety during the greater earthquake events because of their stage of recovery/level of illness, lower social status and limited recovery resources available. For some participants, relapsing was not located in avoidance of responsibilities and consequences but rather a means to eschew the reality of the emotional/environmental context within which the need to drink was situated.

One finding in this research is that pre-trauma was a state created by historical trauma incidents, held consciously or unconsciously within the memory (and potentially visceral body) of each participant. These experiences drove emotional and cognitive responses (both negative and positive) when new traumatic events, such as a natural disaster occurred. In this thesis I considered that early experiences of violence, abuse, abandonment and addiction created the participant's negative perception of themselves. A spoilt identity along with a lack of recovery capital exacerbated vulnerability and shaped responses to the disaster event.

For one woman the emotional ravages of a life spent fighting addiction now seemed to look the same as Christchurch post-earthquake. The narratives of participants disclosed centrally valued losses both distal and proximal which were recognised as they managed recovery from alcoholism. In this thesis I suggested that the inability to grieve for what has been lost while in active addiction is revisited with the advent of the natural disaster. For those in stable and sustained recovery, grief is not so much re-visited but rather acknowledged and re-assessed with the benefit of skills learnt in recovery. The opportunity to deal with what appears to be a delayed grief reaction, provides not so much a sense of emotional equilibrium to be restored but rather one to be re-located with growth, healing and wisdom experienced as a consequence of that realisation. Delayed grief recognition by the resurfacing of memories and forgotten dreams paradoxically provided the opportunity to seek additional, professional support for one participant.

All participants' narratives highlighted a theme that growth was both an outcome and a process – paradoxical in nature. For example the seismic activity and devastation was a frightening reminder of the significant level of fear that was a hallmark of one participant's childhood. This fear was

reflected in the earthquakes and was to manifest physical as a recurring somatic chronic pain problem. The pain transported her back to when she was a frightened and vulnerable child, the antithesis to the positive image of herself pre-earthquakes. The paradox of the recovery from disaster (within the context of early life trauma/addiction) is initially that some participant's felt strong but now feel weak – they are reduced within their identity by the trauma experience.

7.2.4 Factors that enhance personal resilience

Some participants either in early recovery or still living with active addiction were faced with multiple stressors and living with considerable losses through the greater earthquake events. For these participants resilience was not about bouncing back but rather holding on. Understanding where a vulnerable community member is in their recovery journey and what recovery capital they have available to access to maintain resilience is a key factor in understanding what support is required post natural disaster.

Resilience during the recovery from addiction was supported by the possession of valued resource capital such as an education or good employment prospects that worked to provide a sense of meaning and purpose. Financial and social capital in the form of supportive family members and accumulated family capital enabled vulnerable individuals to maintain shelter and a good standard of living. Financial resilience enabled participants to access community service that supported sobriety

Not all participants were protected by the ravages of their illness or the devastation of the disaster and continued to live in poverty through the greater earthquake events. The means to survive was through community aid but additional agency support provided a flickering light of hope and the means to get through. For other participant's resilience involved developing acceptance for their situation, specifically powerlessness to make life better than it was, at least short term. Being in early recovery during the disaster period was a dichotomy of unmet financial, social and physical needs and an evolving new and exciting life of wellness. The absence of financial resource capital was offset by increasing sober time and improved social networks.

Other participants had some recovery capital in the form of stocks of social, cultural and human capital which provided a buffer against a sudden and vivid realization of the opportunity cost of a life spent in active alcoholism. The recognition of the extent of lifetime losses and personal cost was a winning argument to avoid relapse indicating a positive coping response crafted by healthy decision making to maintain the status quo. Minimising further loss rather than attempting to build recovery gains indicated positive adaptation.

It is also suggested that resilience is adaptation through learning as changes in perception and acknowledgement of a new reality created a means to rupture the perception of a negative persona and create a more robust identity. As suggested in the post traumatic growth literature, distress and growth exist simultaneously. When viewing the trauma of a life in addiction from hindsight, as with a seismic event, the participants of this study can be seen to value what has happened to them. As a 'side-effect' of the trauma experience, they can inadvertently and mostly unconsciously, make meaning out of the experience as part of their psychological survival process.

7.2.5 Document participant's unmet needs over the first year of the earthquakes

Unmet needs of participants' were located within the social, physical, financial psychological and emotional realms of recovery. Two participants found that their social network and familial relationships although loving and work environments supportive, were not always positive environments to be in physically during many stressful times. In a different take on familial relationships, one participant, unable to sustain sobriety during the earthquake events believed that having a parent that understood what her experience with the earthquakes was like and the impact they had had on her would have been helpful. Her unmet familial needs she believed were a motivator to continue drinking to avoid the awareness of her losses. It is suggested that in addition to offering financial and domestic aid, addressing participant's emotional state and providing support to identify, understand and reframe feelings of shame, guilt, grief, loss and depression post disaster could provide enough psychological and emotional relief to begin to heal and then to move forward to build recovery.

Two participants who came to sobriety during the greater earthquake events required community support to assist learning new skills in how to live sober. One participant commented that she had dreams for her and her children now that she was sober but limited financial resources and few job opportunities kept her living in poverty.

The impact of early trauma experience and a previous lifestyle of active addiction had a systemic effect creating losses in all areas of one participant's life. For this participant, disaster recovery support such as blankets, batteries and financial assistance would not be of sufficient help to act as a replacement for the types of losses that she believed were being mirrored in the earthquake devastation. For her the life of sobriety that she thought she would have was psychologically absent creating resounding grief.

7.3 Expanding or extending existing theories

For the purposes of this research, the theory of ambiguous loss, first developed by Boss (1999) is extended to cover psychological forms of loss encountered among people with a diagnosed alcohol dependency following a natural disaster. In this thesis the building block of the theory based upon the psychological 'family' is replaced by the psychological 'life of sobriety'. Therefore, the higher the incongruence between one's psychological life of sobriety (their perception of a sober life) and the reality of their sober life, the greater their boundary ambiguity. For the addict in recovery or relapsing, boundary ambiguity then is not knowing if the gains made in having sobriety make up for the losses incurred in a life of addiction, at least when also recovering from a natural disaster event.

It is suggested then that the concept of ambiguous loss and associated grief complement the concept of rumination in the model of PTG defined and extended by Tedeschi and Calhoun (2004). In their model they consider event-related rumination is part of the process of giving up or disengaging from certain goals and basic assumptions. However rather than rumination and depression as they label these negative emotive states, I consider the emotion is grief which participant's associated with the recognition of a life lost to the chronic illness of alcoholism and the absence of an imagined life of sobriety that provides meaning and hope to their sober life and future.

7.4 Limitations of the study

The interview questions shaped the stories that were told even though due care was taken to incorporate new themes as they became known. The participants were self-selected which could have shaped the format of the narratives because they had a special interest in my topic and felt they had a story to tell. There was still much that could have been asked but length of interviews was also a consideration and there were specific areas that I did not delve into such as examples and type of childhood abuse. The small number of participants that formed the basis of this research was a limitation of the study. Similarly the use of a qualitative methodology provided for depth to the analysis but not for transferability of the results to the general public or an empirical explanation of the findings.

7.5 Further research

Further research expanding and extending the ambiguous loss theory within the context of addiction post disaster is suggested. A research aim of recording what losses have been experienced by addicts following a natural disaster within the context of their addiction is suggested. A secondary

research aim of documenting underlying trauma and associated grief and loss that is self-reported as stemming from both the disaster and addiction processes is recommended. As Boss (2006) points out ambiguous loss is systemic and ubiquitous and rather than a form of pathology, it is a relational disorder. Therefore outcomes of this research could add to addiction counselling by incorporating, into the intervention toolkit and understanding of trauma, loss and grief experience as documented in the research aims for the thesis. Perhaps viewing grief and loss post disaster within the addiction journey could prove beneficial for long term recovery options if used to form the basis of addiction intervention programmes. Further research is needed on mental health status before and after a natural disaster as current literature is mostly predicated in measuring impact once a disaster event has passed. Other research that addresses historical trauma and ways to work through the experience to sustain recovery from addiction is needed.

7.6 Conclusions

Alcoholics, particularly women addicts are more vulnerable to disaster conditions and potentially at risk of grater harm than many other members of society because they lack social status, power and recovery resources. Being able to identify who these vulnerable community members are and identify what their needs might be, is an important consideration following major disaster events if protecting and supporting recovery from alcoholism within the greater disaster recovery effort is to be a community goal.

For participants relapsing through the greater earthquake events, rehabilitation to their previous state of functioning in which they are poor and vulnerable would not be a useful or desired outcome. Therefore to aid long term disaster recovery and minimise the risk of relapse, potential hazards within the environment such as alcohol availability and lack of continuity in AA support due to disrupted infrastructure and damaged buildings needs to be addressed. Psychological intervention needs to treat the trauma of daily living, rather than just looking to assist with the addiction problem. That is, it is suggested that recovery agencies (both disaster and addiction) adopt a more nuanced approach to understanding each individuals' psychosocial recovery process as it relates to their recovery capital and stage of illness rather than focussing on treating addiction and reducing the harm that illness causes.

This research is not representative of the general population of those recovering from alcoholism, but it is suggested that within the narratives there are examples of social status, poverty and living conditions that could be a useful lens to view the social construction of alcohol abuse and the creation of dependence. That is, the exposure to abuse, abandonment and neglect creates the

possibility that through extended exposure to trauma from an early age, an individual's response repertoire may be curtailed. There is also an indication that lack of resources including societal awareness of the nature of the problem, combined with the rigours of chronic illness lead to a downward spiral of social status and hope for the future, subverting sometimes, participant's best attempts at recovery. This research also indicates that if addiction is socially constructed, the converse is also true, that is, personal recovery from alcoholism, especially within the context of a natural disaster series of events is also socially constructed and therefore subject to change.

These findings indicate that recovery from alcoholism after natural disaster is a complex process requiring personal, community and political interventions. Focussing support and forms of assistance that aim to build recovery capital, that is, that are solution/recovery oriented rather than treating the addiction with acute or palliative care may increase the possibility of long term recovery outcomes benefitting both the individual and the community.

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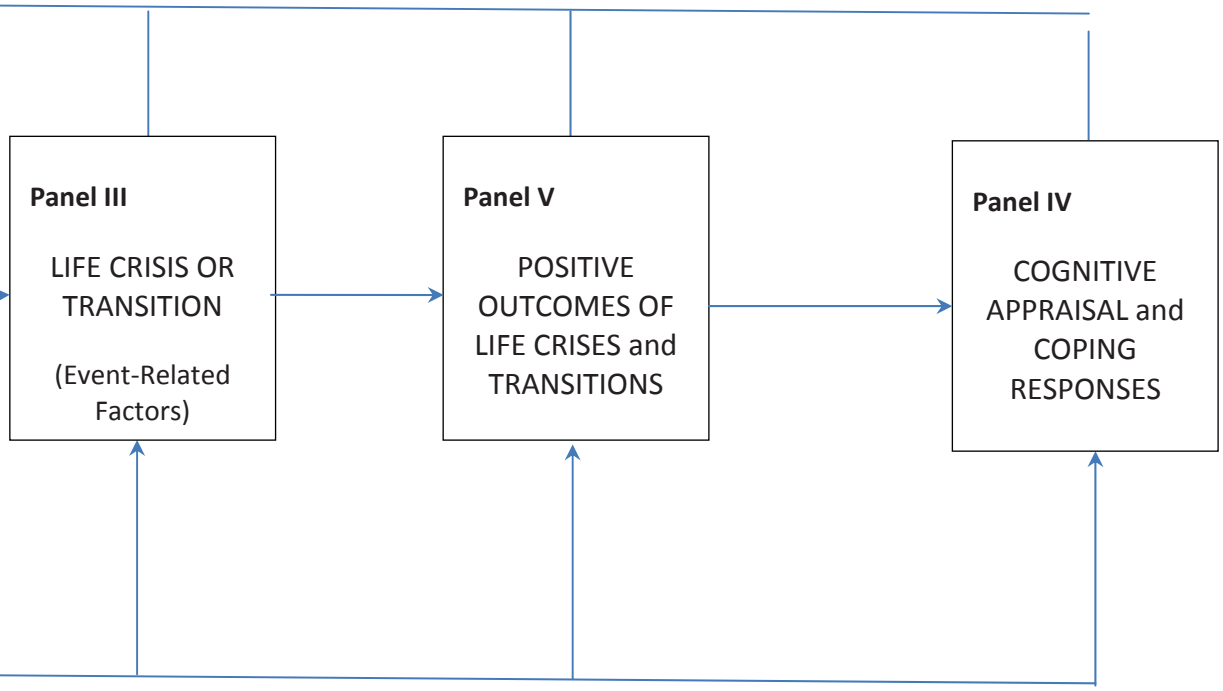
Appendices

aumatic Growth Theory



r posttraumatic growth: Life crises, individual and social resources, and coping. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), ermath of crisis (pp. 99–126).

Appendix 2: Posttraumatic Growth Model/Theory

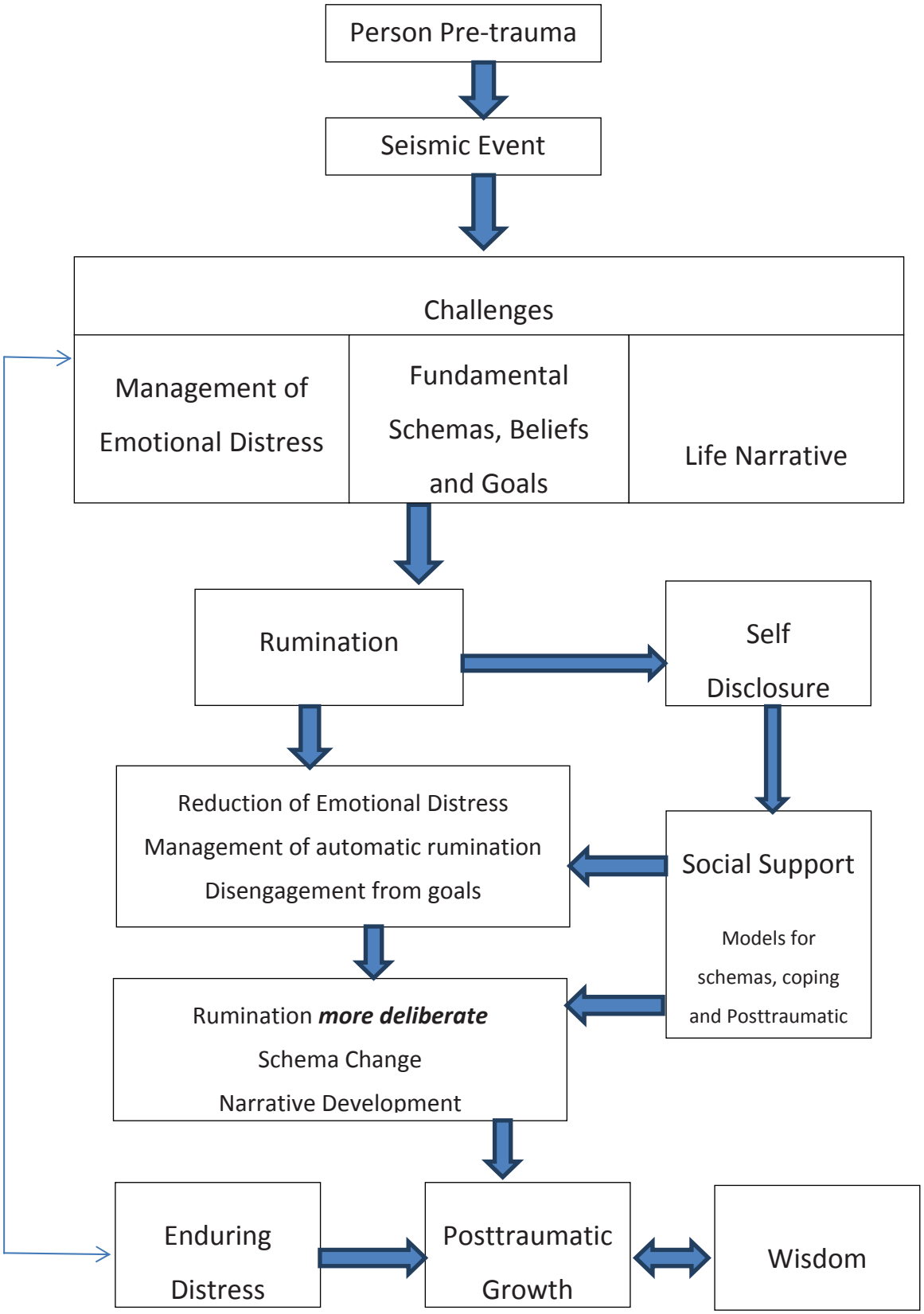


Figure 2: Tedeschi & Calhoun (2004). A model of Posttraumatic Growth from *Posttraumatic* Growth: Conceptual Foundations and Empirical Evidence. Psychological Inquiry, 2004, Vol 15, No 1, 1-18

Appendix 3: Ambiguous Loss Model/Theory

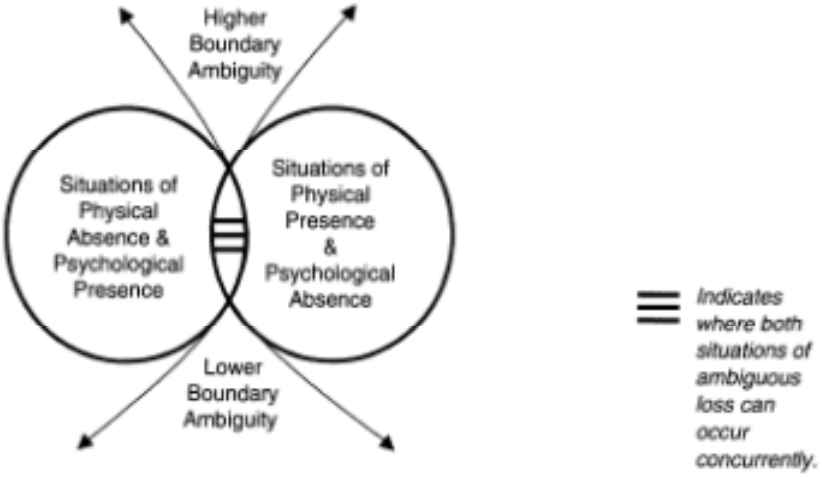


Figure 3: Boss (2004). Types of Ambiguous Loss Situations which cause varying degrees of Boundary Ambiguity. *Ambiguous Loss Research, Theory, and Practice: Reflections After 9/11.* Journal of Marriage and Family, Vol. 66, August 2004, (pp. 551-566).

Appendix 4 : Human Ethics Committee Research Approval

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

29 May 2012

Kerry Williamson
3 Newry Road
Raumati Beach
PARAPARAUMU 5032

Dear Kerry

Re: HEC: Southern B Application – 12/12
Exploring resilience in the stories of people living with the Christchurch earthquakes when recovering from alcohol dependence

Thank you for your letter dated 28 May 2012.

On behalf of the Massey University Human Ethics Committee: Southern B I am pleased to advise you that the ethics of your application are now approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Dr Nathan Matthews, Chair
Massey University Human Ethics Committee: Southern B

cc Dr Gretchen Good
School of Health & Social Services
PN371

Dr Suzanne Phibbs
School of Health & Social Services
PN371

Prof Steve LaGrow, HoS
School of Health & Social Services
PN371

Appendix 5: Flyer Advertising Research and Requesting Participants

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

SCHOOL OF HEALTH AND SOCIAL SERVICES

Private Bag 11 222

Palmerston North 4442

New Zealand

Resilience and Recovery with Earthquakes

Research Participants Needed

I am a Post Graduate student with the School of Health and Social Services at Massey University. I am interested in learning about your experience of the earthquakes as a research project for partial fulfilment to a Master of Philosophy in Rehabilitation.

What is this research about?

This research aims to interview adults who identify as having an historical dependency with alcohol to find out how they were affected by the recent earthquakes and how they have managed day-to-day with the environmental conditions and their recovery process.

If you identify as having had a dependency to alcohol (call yourself an alcoholic) and are currently in sobriety, I would like to hear your story. I am seeking 10-12 volunteers to interview who have either sustained (1-5 years) or stable (>5 years) continuous sobriety OR with less than one year's continuous recovery, that is, did you relapse during the earthquake period?

The interview will take about an hour, so if you're willing to assist me with my research then all you have to do is give your name to either

- **Karen Watson** at **The Familial Trust** by emailing her at Karen@familiartrust.org **or**
- **Everett Sullivan** at the **Alternative Recovery Centre (ARC)** at activerecoverycentre@hotmail.com **or**
- **contact me directly** either by email at Kerry.williamson01@gmail.com or 027 2603796.

If you don't have access to email or txt facility, then fill out the form below and hand it in to either ARC or the Familial Trust and they will forward your name on to me. When the interview is typed up, I will ask you to read the transcript to confirm it is a true reflection of the interview.

Thanks for your time and for helping me further my learning, I'll be in touch soon.

Ka kite ano

Kerry Williamson

Yes, I would like to volunteer to participate in your research project by telling you my story. Please email me at_____ or phone me on _____. The best time to reach me is _____ so you can tell me more about the project and what my rights as a participant are.

Name: _____

Signed: _____

Appendix 6: Information Sheet

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

SCHOOL OF HEALTH AND SOCIAL SERVICES

Private Bag 11 222

Palmerston North 4442

New Zealand

Resilience and Recovery with Earthquakes and Alcohol Dependence

INFORMATION SHEET

For those interested in participating in research related to the impact of the recent earthquakes on those recovering from alcohol dependence.

Who is doing this research?

Kerry Williamson, I am a Post Graduate Rehabilitation student with the School of Health and Social Services at Massey University undertaking this as a research project for partial fulfilment to a Master of Philosophy in Rehabilitation. My Research Supervisors are Dr Gretchen Good and Dr Suzanne Phibbs who are lecturers in the School of Health and Social Services at Massey University.

What is this research about?

This research aims to interview adults who identify as having an historical dependency with alcohol (identify as an alcoholic, but are now sober) to explore the lived experience of the earthquakes that have impacted Christchurch from September 2010 on the daily recovery process from alcoholism.

I have a special interest in how people with disabilities manage in disasters. My previous research has been with the people living with impaired vision. I hope to collect stories and gain an understanding of what the experience was like and what the factors were that helped adapt to changing circumstances or those which created difficulty and what it is that people did at these times.

What will happen if I agree to participate?

The interview will last about one hour to 90 minutes. I will record the interview so it can be transcribed for analysis and consideration. If you should experience any discomfort in discussing your experiences related to the earthquakes, resources are available to assist with this. You can choose not to answer any questions I ask, as well as withdraw from the research at any time. If you are uncomfortable during the interview, you can ask to have the recorder turned off.

Once the interview is typed up, I will ask you to read it to ensure that you agree that the transcript is an accurate reflection of the interview.

To recognise your effort and time to participate I would like to give you a $20.00 voucher and if you have to pay to travel to the interview at my office, I will reimburse your receipted travel costs.

Issues of confidentiality

Your real name will not be used when I transcribe the audio-tapes or write down information that you share in the interview. This will help to keep information confidential. Only myself and my two Academic Supervisors (Dr Gretchen Good and Dr Suzanne Phibbs) will have access to the information you have shared. This information will be locked away securely. None of the information you provide will go to any agency and none of your private information will be made available to anyone other than the Supervisors.

A summary of the results of the study, the themes and extracts from your story, will be forwarded to any consumer service groups involved in providing alcohol and other drug treatment programmes should they request one. A copy of this report will be available (as well as a copy of your interview audio file) should you want it - just ask me. Finally, findings from the research will be available through the research database on the Christchurch earthquakes that is being developed in conjunction with the Joint Centre for Disaster Management at Massey University and GSN Science and in peer reviewed journal articles.

How can I participate?

You are invited to participate by contacting either the Familial Trust on (03) 981 1093 or emailing Karen@familialtrust.org. Alternatively you can contact Everett Sullivan at ARC or email at activerecoverycentre@hotmail.com. They will forward your name and contact details to me and I will arrange a time to meet with you, in your home if you like, or my office in Christchurch.

I am seeking 10-12 volunteer participants, six with sustained or stable continuous recovery and six with less than one year's continuous recovery who are currently in sobriety and do not identify as having a dual diagnosis with mental illness. As this is an exploratory research project only a small number of participants is required, so, once I have twelve interviews booked in (6 people from each group) then recruiting will stop.

Your rights as a Participant

- Your participation in this research is entirely voluntary. You have the right to decline any involvement.
- You can ask any questions about the research at any stage.
- You can refuse to answer any particular questions and withdraw from the research at any time.
- As your interview will be audio recorded, you may ask for the recorder to be turned off at any time during the interview.

- Your participation will remain confidential to the researcher and supervisors. That is, your information will be used in a way that you will not be identified and is given on the understanding that your name or any identifying details will not be used under any circumstances. As far as possible, I will assure your confidentiality but, while I will make every effort to maintain your confidentiality, it cannot be guaranteed
- A summary of the findings will be available to you at the completion of the research, on request. Tell me if you would like a report of the research when it is completed.

You will need to

- Contact the recruiters directly if you are interested in participating either by phoning or emailing them as discussed above.
- Agree over the telephone to what is stated in the consent form. A copy of this will be provided to you at the interview, but I will discuss it at length with you when I phone you to book in a time for our meeting and can send you a copy by email or postal mail until then.
- Participate by speaking with the interviewer.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 12/12. If you have any concerns about the conduct of the research, please contact Dr Nathan Matthews, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 8729, email ***humanethicsouthb@massey.ac.nz****."*

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Appendix 7: Interview Schedule

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

SCHOOL OF HEALTH AND SOCIAL SERVICES

Private Bag 11 222

Palmerston North 4442

New Zealand

Resilience and Recovery with Earthquakes and Addiction

Semi-Structured Interview Schedule

1. Tell me about your experience of the earthquakes, starting with the September 2010 quake.
2. Tell me about any damage your home was subjected to. What about your neighbourhood? Your friends?
3. What did you do during the major quakes? Sept 10; Feb 11; June 11; Dec 11?
4. What were some of the things that created stress during these times?
5. What was your response to this (these)?
6. Thinking about your response at that time, now, can you tell me why you think you responded in this way?
7. What has been your experience of the aftershocks? (prompt re continuity of them / the unpredictability of the magnitude / feelings of powerlessness)
8. To what extent have the earthquakes (and aftershocks) impacted your daily living? Have you had to make changes? (Prompt financial / social / vocational / physical (environmental – agencies decisions …)
9. Thinking about the factors that you have just talked about – what has been particularly difficult for you? Why? What has helped and why?
10. Did other agencies or people offer support at this time – what did they do? Was this helpful / difficult ? Why?

11. To what extent have the events impacted your A&D recovery?

12. Again, thinking about your addiction recovery – what's been difficult during this time since September 2010.

13. Do you feel you had the resources during the earthquake period to cope with your recovery or did you seek assistance from other sources? What was it and why was it helpful (or not)?

14. Over this period of time have there been opportunities that have been useful to you, that maybe looking back at now, these have been opportunities to grow or to extend your abilities regarding recovery or even as a member of society?

15. Thinking about your recovery journey over the last 12 months – how has it changed?

16. Has your life returned to normal since the first earthquake? If not, how has your life changed?

    (prompt: anything on changed belief systems eg safety/connection to people/connection to HP).

    (prompt: Can you tell me what things you have done to adapt to the circumstances ……)

    (prompt: Can you tell me what things have contributed to you feeling disconnected from …)

17. Thinking of the last 12 months, what would have made your recovery journey smoother?

    What would be helpful to make your daily living easier/smoother?

18. What would you say to someone new to A&D recovery living in Christchurch and experiencing the unpredictability of the earthquakes and aftershocks.

    Why do you say this?

19. What would you say to someone who had plenty of time up and experienced a natural disaster like you have? Why do you say this?

20. What support / assistance (say from disaster recovery agencies) would have

- assisted you in the first week after the big quakes?
- the first six months?
- from now into the second year?

Appendix 8: Consent to Disclose Form

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

SCHOOL OF HEALTH AND SOCIAL SERVICES

Private Bag 11 222

Palmerston North 4442

New Zealand

Resilience and Recovery with Earthquakes and Alcohol Dependence

PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years

- I have read the information sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.
- I agree/do not agree to any part of my interview being sound recorded.
- I wish/do not wish to have my recordings returned to me.
- I agree to participate in this study under the conditions set out in the information sheet.

Signature: ..... **Date:** .....

Full Name Printed

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