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**Children's Experiences of a School Merger as a  
Secondary Stressor of the Canterbury  
Earthquakes**

**EDUC 796A and B**

**A thesis submitted in fulfillment of the requirements for the degree of Master of**

**Arts in Education**

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# Abstract

This is a follow-up study nested under a large UNESCO-funded project to uncover and preserve stories involving schools and children about their earthquake experiences. It sets out to investigate children's experiences of a school merger as a secondary stressor of the Canterbury earthquakes. The main aims of this study are to identify the protective factors that contributed positively to their resilience building, and to identify the risk factors that contributed negatively to their coping and adjustment with Bronfenbrenner's (1979) ecological model as the theoretical framework of this study.

The key findings of this study suggest that children do contribute to their own resilience building. Children tended to have protective personal characteristics such as curiosity and optimism. Also, they applied strategies taught by the adults, and had their own creative ways to help themselves and each other to build resilience against various secondary stressors associated with the merger. Secondly, children's resilience building was also reinforced by external protective factors provided by various actors within their micro-system such as their teachers, family members and their community. Finally, this study found that children were more likely to be well protected within the micro and meso-systems, in which both children and various actors within their immediate systems had more control of their own affairs and environment. On the other hand, negative contributors were more likely to present in the macro-system, in which they had less or no control of the environment and affairs.

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# Chapter One: Introduction

## 1.1 Background

In recent years, the city of Christchurch and the Canterbury region encountered a number of major earthquakes and aftershocks. On September 4th 2010, a 7.1 magnitude earthquake struck the Canterbury region and the city of Christchurch (Canterbury Earthquakes Royal Commission, 2012). This earthquake resulted in a considerable amount of damage to infrastructure and buildings. Many areas of the city were covered in mud and water due to liquefaction and flooding. Transportation in those badly affected areas was paralyzed. Thousands of citizens had to be relocated to emergency shelters in local schools and event centers due to housing damage and because of concerns for their safety. City authorities expected that it would take a number of years to fully recover from this earthquake. Fortunately, there were no fatalities caused by this earthquake. However, the recovery process was much more difficult than expected due to continuing aftershocks. On February 22nd 2011, while the city was slowly recovering, a 6.3 magnitude aftershock suddenly struck the city. This time the epicenter was located near the central business district (CBD) of Christchurch. The CBD area was badly damaged and many buildings partially collapsed. To make things worse, this aftershock claimed 185 people's lives (CERC, 2012). The residents of Christchurch were devastated as they were already struggling to recover from the damage caused by the previous earthquake. Yet, another 6.3 magnitude aftershock hit the already devastated city and its surrounding outskirts on June 13th, 2011. Mutch and Gawith (2013) state that people in Christchurch believed that this aftershock had broken their spirit. Incredibly, on December 23rd 2011, once again a 6.3 earthquake rocked the city. Following the major earthquakes, there were

as many as 12,000 more aftershocks, some of which were over 5.0 magnitude on the Richter scale. The total financial loss caused by those aftershocks was estimated at approximately 40 billion dollars. The recovery process, therefore, was delayed further.

In 2013, my supervisor, a disaster researcher, was granted permission and funds from UNESCO to carry out a research project involving schools and children in Christchurch. The project set out to provide schools in Christchurch with a permanent record of their earthquake experiences; to document the roles that schools played in disaster response and the recovery process; to preserve the stories of children, teachers and schools during the earthquakes; and to make the stories available to UNESCO and New Zealand researchers. It was hoped that this project could serve as an example for researchers to contribute further to the understanding of the roles of schools in disaster response and recovery (Mutch, 2013a; Mutch, 2014a; Mutch & Gawith, 2013). A number of schools participated in this project and each school selected different methods to record their stories. As a research assistant, I was involved in one of the projects involving BW (note, this is a pseudonym). BW school decided that their students would interview each other using a video camera to preserve the story of their school's merger as part of the education renewal plan in Christchurch's post-earthquake reconstruction. The Minister of Education had declared that BW would be merged with WZ (also a pseudonym) into a new school, later named WK (a pseudonym). The main reason for this merger was because the school had lost much of its student population due to the earthquakes. In total, 19 students and a number of adults including teachers and the principal were involved in this project. Although various steps were taken by the school to prepare its students for

the merger, their interviews were mainly about their earthquake experiences. The participants only revealed minimal information about the merger. This caught my attention, as I believed that further research could be conducted to learn more about the participants' experiences of the merger. A follow-up study of BW's post-merger experiences would provide further information and contribute to the preservation of the experiences of schools in the Canterbury earthquakes.

## **1.2 The purpose and aims of this study**

In order to conduct this study, I needed to become familiar with the disaster literature. I learned that not only was the merger part of the earthquake experience, but it could be seen as a secondary stressor caused by the earthquakes. The term 'secondary stressor' refers to various traumatic events that occur in the aftermath of a disaster and are related to or as a result of the disaster (Shaw, Espinel, & Shultz, 2007). Victims, especially children, who have been exposed to both primary and secondary stressors are more likely to develop various psychological disorders such as post-traumatic stress disorder (PTSD) and depression (Norris, Friedman, & Watson, 2002; La Greca & Silverman, 2009). As I continued to widen my knowledge about secondary stressors, however, I discovered that there was a lack of research on this specific topic, and most existing disaster studies focused mainly on the effects of primary stressors on the victims. There were even fewer relevant studies on the effects of secondary stressors in the form of school mergers. International studies on school closures or mergers were mostly done outside of a disaster situation and I only found two studies about mergers in New Zealand. The existing studies often pointed to contradictory results. Some studies suggested that school mergers

affected students, teachers and parents negatively, whereas other studies indicated that most negative effects could be avoided with the presence of various protective factors. I further learned that there had been a tendency amongst disaster researchers to see victims, especially children, as being passive when dealing with disaster related experiences. Thus, most studies suggested that negative effects were more likely to be associated with disaster related experiences. However, in recent years an increasing number of researchers point out that children are more resilient to disaster related experiences than previously thought and are able to contribute to their own resilience building with the support of various external protective factors (Gibbs, Mutch, O'Connor, & MacDougall, 2013). These researchers also urged other researchers to pay more attention to the protective factors that help children to build resilience and to look further into them.

I decided to conduct a follow-up case study on BW participants' experiences of school merger for the following reasons because: a) currently, there is a significant lack of research being done to look at the effects of secondary stressors on victims, especially children, and in particular in relation to school closures or mergers; and b) there is a lack of clear identification of specific protective factors that contribute positively to children's resilience building against secondary stressors. Hence, the main purpose of this study is to fill this gap by identifying various protective factors that helped BW children (and adults) build resilience against the various negative factors associated with their school merger. The study will also identify specific factors that contributed negatively to their resilience building and adjustment to the new school, so that, in the future, negative factors could be anticipated.

Thus, the overarching research question of this study is: *“What are the protective factors and risk factors that affected BW children’s resilience building as they faced the closure and subsequent merger of their school?”* More specific questions addressed by this study are:

*How did the merger process happen?*

*How did the merger affect the children and adults?*

*What were the difficulties for them?*

*What were the positive factors that helped them during the merger and settle them in to the new school?*

*What things could have been done better?*

*What were the roles played by significant adults (parents, teachers) in helping children adjust and build resilience? What did they do to help each other?*

*How did children apply the coping strategies they had developed?*

*What did children and adults learn from the process?*

*What can the education sector learn from the process?*

### **1.3 The structure of this study**

This study is divided into six chapters. The first chapter provides an overview of this study that includes some background information on the Canterbury earthquakes. It also introduces how, as the researcher of this study, I came to be interested in this topic and decided on the purpose and aims of this study. The second chapter is the literature review chapter. In this chapter, an introduction to the concepts of disaster and disaster research

will first be presented in order to provide the readers with a basic understanding about what disasters and disaster studies are. Then, various studies about the effects of disasters on victims, especially children, will be provided. Next, a number of studies that looked at the effects of disaster on school closure and the effects of school closure on children and other people associated with the school will be presented. Lastly, various protective factors that contribute positively to children's resilience building will be introduced, together with Bronfenbrenner's (1979) ecological model as the underpinning framework of this study. Chapter Three is the methodology chapter, in which the methodological paradigm for this study will be introduced, in this case, a participatory approach. The design of this study, the data collecting tools, the analytical tools applied, and the ethical issues will be discussed in detail. Chapter Four is the findings chapter. In this chapter, the interview data collected from four adults and 19 students who were participants from the original BW school study will be presented. The participants' own words will be used to provide a vivid and detailed account of what they thought about the merger and how they encountered various secondary stressors associated with the merger. The data will also explore the ways in which BW children and adults responded to the merger and the resilience factors that helped them to cope. In the discussion chapter, the data presented in the findings will be further analyzed theoretically. The protective and risk factors identified in the findings will be placed in each of the Bronfenbrenner's ecological systems before further analysis as to how these factors affected the BW participants during the merger process is discussed. Finally, the conclusion chapter will be a summary of the whole study. In addition, the limitations of this study and future implications will be discussed.

# **Chapter Two: Literature Review**

## **2.1 Introduction**

This chapter deals with various literature related to disasters, children's psychological well-being, school closure, and children's resilience building in relation to disasters. It is divided into four sections. The first section provides a brief introduction to the concept of disaster and disaster study. The second section attempts to explain how disasters may negatively affect children's psychological well-being through primary and secondary stressors. This section also describes how traditional approaches to disaster studies had a tendency to place children in the role of a passive victim. This tendency underestimated children's ability to cope with traumatic experiences and overlooked the protective factors that contribute to children's resilience building. The third section focuses on how disasters can cause school closures and how school closures are a secondary stressor that affects both children and adults associated with the school. The last section will explain various protective factors that are associated with children's resilience building through Bronfenbrenner's (1979) ecological model.

## **2.2 Disaster and disaster studies**

In the field of disaster studies, some scholars define disasters according to their nature and character. For example, Smawfield (2013) states disasters are "sudden and calamitous events producing great material damage, loss and distress" (p. 2). Others focus on the relationship with humans and society, such as Anthony (1987), who defines disaster as a disruptive force that interrupts the normal social environment in which individuals and groups live and function. Although there may be different ways of viewing a disaster, it is widely agreed that disasters cause short and long term negative

effects on the human ecological system (Shaw, Espinel, & Shultz, 2007). Two large categories of disasters have been classified by scholars: human-generated disasters and natural disasters. Shaw, Espinel and Shultz (2007) indicate that human-generated disasters can be intentional, such as terrorism, or unintentional, such as the ecological destruction caused by industrial accidents. Natural disasters can be defined as specific harmful forces generated by natural hazards that cause damage to the ecological system (Cahill, Beadle, Mitch, Coffey, & Crofts, 2010; Quarantelli, 1998). There are a variety of different types of natural hazards such as such tornadoes, fires and earthquakes (Cahill et al., 2010). Due to a variety of conditions related to landforms and weather patterns, different nations may be prone to specific natural disasters. New Zealand, for example, has experienced several earthquakes in recent years because it sits on the Pacific Rim fault system.

Earthquakes are caused by diastrophism, that is, crustal movement. The crustal movement generates trembling shockwaves, and if the shockwave is strong enough, it transfers the energy from underground to the surface of the earth and thus creates an earthquake (Lay et al., 2005). Earthquakes strike suddenly and usually last only a few seconds but they can last up to several minutes. Earthquakes occur often, and each earthquake is able to generate thousands of aftershocks. While most earthquakes are not dangerous, some of them pose a serious threat to human property and life (Lay et al., 2005; Mutch, 2013b). In New Zealand, as discussed earlier, from 2010 to 2011 in Canterbury, four major earthquakes struck the city and many aftershocks continued for several years (CERC, 2012).

During the past two decades, research shows that, overall, natural disasters have increased (Aalst, 2006). Thus, an increasing amount of attention has been generated in academic fields to study different aspects of natural disasters. Researchers in the field of disaster studies attempt to understand the specific consequences of disasters directly and indirectly on victims' physical and mental health in order to understand what can be done to help victims cope better and recover faster (Handbook 1- Resilience & Disaster Adaptations, 2012).

Traditionally, within the field of disaster studies, infants and females were considered to be the most vulnerable (Benjamin & Murchison, 2004; Cahill et al. 2010). Relatively recently, disaster researchers have shifted their attention towards children and young people. Children had not been often studied as a separate group of individuals. They had generally been conceptualized as passive victims and grouped with infants and females. This was mainly due to the fact that, prior to the 1990s, research on children was dominated by developmental psychologists who tended to believe that children were not mature enough to have developed sufficient cognitive ability to deal with complicated issues (Woodhead & Faulkner, 2000). This negatively influenced how the field of disaster studies viewed children's ability to cope with disaster experiences (Sommers, 2006). More detailed analysis on this matter will be introduced in the methodology chapter, as it informs the methodological paradigm and framework of this study. Nevertheless, scholars such as Boyden (2003) point out that children should be studied separately as they are a distinctive group of individuals in terms of age, social status and

capabilities, and have different needs from those of the infants and adults in disaster situations. Subsequently, an increasing number of disaster researchers have started studying children as a unique group of individuals, to better understand how a disaster experience affects children's development and overall well-being (La Greca, Lai, Joormann, Auslander, & Short, 2013). The next section will introduce literature about how a disaster experience affects children with a main focus on the psychological aspects.

### **2.3 Disaster studies on children's psychological well-being**

It has been estimated that each year more than 66 million children are affected by disasters. By the end of 2023, researchers predict that the number will have increased to 175 million (Pronczuk & Surdu, 2008; La Greca et al., 2013). Disasters affect victims through primary stressors and secondary stressors, both of which create physical and psychological stress that may harm the victims. Stress can be defined as physical or psychological demands on human organs that produce reactive responses that unbalance one's homeostasis or psychosocial equilibrium (Shaw et al., 2007). Stressors are a variety of specific stress factors that trigger physical or psychological demands upon human's response system (Clow, 2001; Feist & Rosenberg, 2009; Stowell, 2008; Weiten, 2010). Primary stressors are a direct result of the event. During the Canterbury earthquakes, those who experienced shock, injury or loss of life because of the earthquakes were facing primary stressors (Shaw et al., 2007). Secondary stressors are the traumatic events that occur in the aftermath of a disaster. For example, many schools were negatively affected, damaged, closed or merged with others as a result of the Christchurch

earthquakes. Therefore, any negative effects caused by the earthquakes on the people associated with the affected schools could be seen as secondary stressors (Cooper, Feder, Southwick, & Charney, 2007; Shaw et al., 2007). Scholars have understood that primary and secondary stressors rarely affect victims in an isolated manner. In fact, they often strike at the same time and a cumulative effect from a combination of primary and secondary stressors increases the likelihood of psychological disorders developing amongst victims, especially children (La Greca & Silverman, 2009; Norris et al., 2002).

One psychological disorder that children are prone to when exposed to primary and secondary stressors is post-traumatic stress disorder (PTSD). PTSD is an “enduring psychological disturbance attributed to the experience of a major traumatic event” (Weiten, 2010, p.550). Sufferers may have an automatic and repetitive flashback of the traumatic event. They can be psychologically distressed when they come in contact with something that reminds them of the event. They may be anxious about the chance of reliving in a traumatic event, but avoid expressing thoughts and feelings about the anxiety (American Psychiatric Association, 2000; Shaw et al., 2007; Weiten, 2010). Approximately 15-25 percent of children are thought to suffer from at least one type of PTSD caused by disasters in most given populations (McFarlane, 1987). McCrone (2014) reported in his article that a New Zealand based researcher, Liberty, suggested that as many as one in five 5-year-olds going to primary schools in Christchurch showed signs of PTSD after the Canterbury earthquakes.

In addition to PTSD, there are other psychological disorders associated with disasters.

Depression, for example, is also known to be associated with traumatic experiences (Warheit, Zimmerman, Khoury, Vega, & Gill, 1996). Symptoms may include constant feelings of sadness, unhappiness, helplessness, hopelessness and a sense of loss (Boland & Keller, 2002; Cohen & Wills, 1985; Steinberg, 2011). Disaster scholars have learned that children with close direct exposure to a disaster event and subsequent traumatic events are four times more likely to develop depression (Kar & Bastia, 2006; Fergusson, McNaughton, Hayne, & Cunningham, 2011). Furthermore, psychologists have also learned that PTSD can trigger depression. For example, a child who suffers from PTSD may have constant flashbacks, which would force him/her to re-experience the traumatic event that was encountered. This constant flashback is likely to provide the child with constant psychological disruptions and over time increases the likelihood of depression (Kar & Bastia, 2006). PTSD and depression, therefore, may also co-exist. When both PTSD and depression or any other psychological disorder co-exist in a person, it is referred to as co-morbidity and it is not uncommon for children to suffer from more than one psychological disorder at once related to traumatic experiences (Fergusson et al., 2011).

Although PTSD and depression are frequently reported amongst children in the aftermath of disasters, we should not exaggerate the effects and the prevalence rate of such disorders. Many credible studies point out that in most populations, children identified as suffering from such disorders after being exposed to disaster and subsequent traumatic events, rarely exceeded 30 percent (Bonanno, 2005; Norris, Friedman, Watson, 2002; Yehuda, 2002). Also, studies showed that most children recovered well with the help of

various protective factors within two years of the traumatic event. Bonanno, Brewin, Kaniasty and La Greca (2011) state “Some survivors recover their psychological equilibrium within a period from several months to one or two years... often more than half of those exposed experience only transitory distress and maintain a stable trajectory of healthy functioning or resilience” (p. 1).

In fact, an increasing number of scholars acknowledge that within the field of disaster studies, there has been a tendency to focus on children’s vulnerability and to overly stress the risk of various psychological disorders associated with disaster. This tendency positions children as passive victims and it underestimates children’s ability to cope with disaster related experiences or build resilience. Cahill et al. (2010) explain that while, “it is important to emphasize the vulnerability of children and adolescents and the requirement for protection and assistance, it is equally important to recognize their ability to form and express opinions, participate in decision-making processes and influence directions” (p. 13). Recent research shows that most children are able to contribute to their own resilience building due to various protective factors (Cahill et al., 2010). This research project, therefore, examines how secondary stressors in the context of school closure as a result of the Canterbury earthquakes affected children associated with the closing school (BW). It also investigates what factors helped children build resilience against the various negative factors associated with the closure.

## **2.4 The effects of disaster on school closure and the effects of school closure on children associated with the school**

As my study is concerned with school closure as a result of earthquakes, the body of literature associated with the effects of disaster on school closure and the effects of closure on children associated with the school should be examined in order to comprehend what other scholars have learned about this topic.

Egelund and Laustsen (2006) note that the most likely cause of school closure is a reduction of socialization. In other words, a decrease in the natural population of a community increases the likelihood of school closure (Bushrod, 1999). In a disaster situation such as an earthquake, the population can decrease suddenly due to the fact that the houses of the affected community may be damaged and people killed. Thus, the survivors who lose their houses and loved ones are likely to move away from the community with their children. The subsequent decrease in the overall population of the community and, in turn, the local schools can result in school closure (Bushrod, 1999; Egelund & Laustsen, 2006). In addition, damage to the school infrastructure can also lead to school closure in the aftermath of disaster. For example, in China's Wenchuan County, an 8.0 magnitude earthquake struck the city on 12 May 2008 (Ng & Sim, 2012). This devastating earthquake took approximately 90,000 lives and 5335 of them were students (Bai, 2009; Ng & Sim, 2012). In the aftermath of the earthquake, one of the schools in Wenchuan was heavily damaged and needed to be closed and reconstructed. Thus, the remaining students had to be sent to four different schools in different provinces to continue their studies ((Bai, 2009; Ng & Sim, 2012).

Political ideology and educational reform can also influence school closure. Witten, Kearns, Lewis, Coster and McCreanor (2003) suggest that neo-liberal ideology and educational reform is a significant reason for many school closures in New Zealand. Codd (2008) explains that neo-liberalism is a political philosophy that stresses the role of the market. It strongly encourages freedom of individual choice within a globalizing economic environment. Neo-liberal ideology is hostile towards state welfare and supportive of a 'user pays' philosophy (Hill, 2009). In New Zealand, in 1988, the government announced the Tomorrow's Schools policy in an attempt to reform and privatise the state education system (Codd, 2008). This policy meant that the Board of Trustees would need to manage and run the school like a business in order for them to be economically viable. Thus, in the aftermath of disaster, it is not surprising that a government with a neo-liberal philosophy would be more likely to view a school according to its economic viability rather than social concerns. Therefore, those schools that have lost their student populations would be more likely to suffer from a decline in economic viability. Those schools are less likely to be supported by a neo-liberal government and thus closure or merger is more likely to occur.

In short, in the aftermath of disaster, a decline in population, the loss of a school infrastructure and neo-liberal government ideology may lead to school closure. When a school is forced to close, the closure becomes a stressor that could affect those associated with the school. Next, literature related to how school closure may affect those associated with the school will be presented. It is worth noticing that overall there is only a limited

body of literature that directly studies the impact of school closure on the children associated with the school as a secondary stressor due to disaster. Thus, although some of the studies presented are still about the impact of school closure on those associated with the school, they are not necessarily all in a disaster context. Nevertheless, all of the studies provide rich insights into how school closure affected different aspects such as the psychological well-being and social cohesion of different groups of people such as teachers and children.

Valencia (1984) conducted a pilot study on the impacts of the closure of three elementary schools in California on the students, their families and communities. She discovered that the participants not only saw their schools as educational facilities, but they were also the centers of the communities where social cohesion, interaction and identity were preserved. School closure, therefore, affected the whole community. More specifically, Valencia (1984) discovered that school closure negatively affected the psychological adjustment and academic achievement of the children. The closure also decreased the involvement of the parents with their children's new schools due to the fact that the parents were not familiar with the new schools and the social-economic status of the new communities was different from that of their original communities. Non-white parents in the study, particularly, felt less comfortable sending their children to predominantly white schools and were less likely to get involved in the activities of the new schools and communities. Therefore, the school change resulted in parents and students losing their previous social connections and ties and, as a result, some parents felt distanced from the new schools and communities. Although Valencia (1984) provided an insight into how the closure

affected the students, parents, and their communities, the impacts on teachers were not mentioned.

In contrast, a British study focused on exploring the experiences and impacts of school closure on two specific teachers. According to the study, 'Sam' and 'John' had worked in a successful school for a number of years and were both successful teachers who had been promoted many times (Riseborough, 1994). However, due to a change of education policy, together with a decline in overall student enrolments over several years, the local education authority decided that Sam and John's schools would be closed or merged (Hargreaves, 1980; Riseborough, 1994). When the decision was made, there was a lack of clear official announcement about the closure, and hence rumors spread as to which schools were going to be closed. There were uncertainties amongst teachers. Sam, for example, did not know whether the rumor was true and, if it was true, what it would mean for his career. He believed that teachers had no power in determining or making decisions about their own occupational future (Riseborough, 1994). When the official announcement was finally made, teachers fought for the school collectively. Some teachers sought an appeal while others teachers protested (Ball, 1987; Riseborough, 1994). The requests were denied by the local government. Redundancy was used as a mean to silence the teachers. Local parents were outraged and helped fight for the school. They, too, failed because of lack of political power. Eventually, everyone had to accept that the school was going to be closed (Riseborough, 1994). This study illustrates that as the decision making power was not in the hands of the people, they had to accept the decisions made for them (Riseborough, 1994). Some teachers were traumatized and

others felt that they were de-professionalized as they had no power to decide their future. ‘Good’ teachers, like Sam and John, were selected by the local government to be transferred to universities, polytechnics or other higher status schools. However, other teachers were dismissed. Riseborough’s (1994) study revealed that the decision of school closure was made without the participation of those directly associated with the school, namely, the teachers and parents. Teachers had no power to determine their own future as some were given better jobs and others were dismissed whilst the closure was carried out. When working in new places, teachers often found that their new colleagues felt threatened by their presence or they were treated as newcomers, with a lack of respect.

So far, the studies presented have been set overseas and have focused much attention on parents and teachers rather than children. In New Zealand, one study looks school closure in Invercargill in 1998. It examined four aspects of the closure: the impacts of closure on parents and children; the issues excluded from the closure debate; the socio-economic implications; and the resistance and protests (Witten, McCreanor, Kearns, & Ramasubramanian, 2001). For the first aspect the study, it was found that most parents felt a prolonged period of uncertainty surrounding the school closure and surrounding the appeal against the closure decision (Witten et al., 2001). One parent indicated that they did not know whether the closure was true until the very last stage. During the waiting period, rumors surrounded the closure and counter-closure process, and false hopes prevailed. Some parents accused the officials of not providing adequate and correct information regarding the school closure. After the closure decision was formally announced, many parents supported the school, and felt that the process of many schools

fighting over one position (to stay open) was not fair. Many parents kept on fighting for their school. Some parents were concerned that their children would not be welcomed at new schools and that they might get bullied or mistreated by other students and teachers or be seen as intruders, which would negatively affect children's emotional and psychological well-being. Some parents were afraid of losing social networks and connections with the original community members. Interestingly, the study indicates that during this period, community cohesion was strong and actually increased (Witten et al., 2001).

The study identifies many issues that are excluded as points for consideration when deciding about school closure. Many participants in the Invercargill study perceived the school as more than simply an educational place for their children, but a community center built upon the goodwill accumulated over many generations (Witten et al., 2001). Some parents pointed out that the school held memories of past pupils and that much equipment such as the sports field and the school's wharenuī, were built with the money donated by the local people. The participants perceived the school as a center for parents to catch up and socialize. Events such as fairs, sports days and other celebrations were often held there. A number of parents saw the school as the community's boundary, which separated them from the random violence of a gang area nearby. Closing it down made them fear for the safety of their children. Understandably, the community felt a sense of loss when the school closed. Some parents criticized the Ministry of Education for failing to recognize the connection between the school and the community. They believed that they should have been given the right to choose the kind of schooling they

preferred for their children as promised by the Tomorrow's Schools policy (Dale, 2008; Witten et al., 2001). The closure of their school showed that no such rights were given to them because they had no decision making power during the process.

The Invercargill study also revealed the socio-economic impacts of closure upon a school community. The closed school was a decile one school, thus most of the affected parents did not have much money. When the school closed, many parents had to send their children to new schools located miles away from their homes and therefore transportation costs increased. Some parents sent their children to higher decile schools and they were concerned about the fees related to school uniform in these schools. One parent suggested that the school culture, behavior and values were different between low decile and high decile schools. He was afraid that the richer community and school generally, would not accept his children or his family. This feeling of difference, and the fear of being discriminated against, was shared by a number of participants (Witten et al., 2001).

Finally, the study indicated that in terms of resistance and protests, there was anger and disquiet amongst the parents. They expressed their anger to the Ministry of Education through protests and media. After the school was closed, many parents felt that they had lost their sense of belonging (Witten et al., 2001).

A separate study by Egelund and Laustsen (2006) reflects the findings of the Invercargill study. They indicate that school closure in a small community could cause its teachers and parents great harm due to the strong feelings of loss of identity, belonging and

connection to a society.

So far, all of the studies presented report negative outcomes associated with the closure on those connected to the schools. A study conducted in China's Wenchuan County by Ng and Sim (2012), however, shows a positive outcome. Ng and Sim (2012) intended to learn whether school closure and the changing schools would negatively affect students' mental health and overall well-being. They focused on the psychological adjustment of the students in 'Z' school after their school had been destroyed in an earthquake. One school outside Wenchuan County, approximately 300 km away, agreed to take in some of the students from Z school until it was rebuilt. Ng and Sim (2012) found, quite surprisingly, a survey showed an overall positive result in terms of the students' adjustment and normal functioning. Most students (79%) indicated that they adjusted quickly within 2.5 months and that they did not perceive that the relocation had affected their health and study conditions much. Although, in interviews with students, Ng and Sim (2012) learned that some students did experience difficulties in the first few weeks, and some wanted to go home or wanted their parents to visit them more often. After one semester, most students felt more comfortable and did not want their parents to visit them. Later, some students even started to worry about the financial difficulties that frequent visiting might cause their families (Ng & Sim, 2012). In other words, as the students became more resilient they were more concerned about their family members rather than themselves. The reasons given for those students being resilient to both the primary stressor (the earthquake) and the secondary stressor, (school relocation) relate to Chinese ways of coping. Ng and Sim (2012) explained that their results showed that rational

problem-solving, resigned distancing, seeking support and passive wishful thinking were the key factors. They further explained that Chinese culture has a great sense of the importance of family and study. Enduring hardship is a common value that many Chinese parents instill in their children. When the students in this study talked about their difficulties to their parents, one parent explained to her child that life is not supposed to be comfortable. Moreover, some parents told their children that they should be thankful to the government for providing them with an alternative opportunity to continue their academic career. Other parents ordered their children not to be a burden to teachers and parents. Teachers also told the students to be positive and not to share negative thoughts with their parents (Ng & Sim, 2012).

In short, the Wenchuan study concluded that the uniqueness of the Chinese culture, thinking and ways of coping with disaster experience was the reason why the students were resilient to the earthquake and school closure, and that the Chinese ways of coping were different from that of the Western culture (Ng & Sim, 2012). However, the study provided a valuable insight into how different parties such as the parents and teachers acted as protective factors. It also showed that the students themselves were able to apply various strategies to cope with the school closure and thus build resilience. These insights lead into the final section that discusses resilience building. In this section, various protective factors will be introduced using Bronfenbrenner's (1979) ecological model as the guiding framework.

## **2.5 Resilience building**

Resilience is defined as the capacity to deal with the hazard of disaster in ways that reflect strengths, capacity to respond without significant disruption to function, and with positive outcomes (Handbook 1- Resilience and Disaster Adaptations, 2012). Resilience building is the interplay and contribution of various protective factors with which one develops the strengths and capacity to overcome a traumatic experience (Shaw et al., 2007). Disaster researchers have identified a considerable number of protective factors that contribute to children's resilience building, such as, individual, school, teacher, peer, family, and neighborhood factors (Handbook 1- Resilience and Disaster Adaptations, 2012; Shaw, et al., 2007). These factors not only contribute to the protection of children independently, but they also interplay with each other, affect each other and depend on each other. Within each of these factors there are many micro-theories developed in different fields. As the field is complicated, the detail about protective factors needs to be analyzed in an organized manner. This study introduces Bronfenbrenner's (1979) ecological model as the framework to guide the analysis of individual factors in order to analyze them in a coherent and systematic manner.

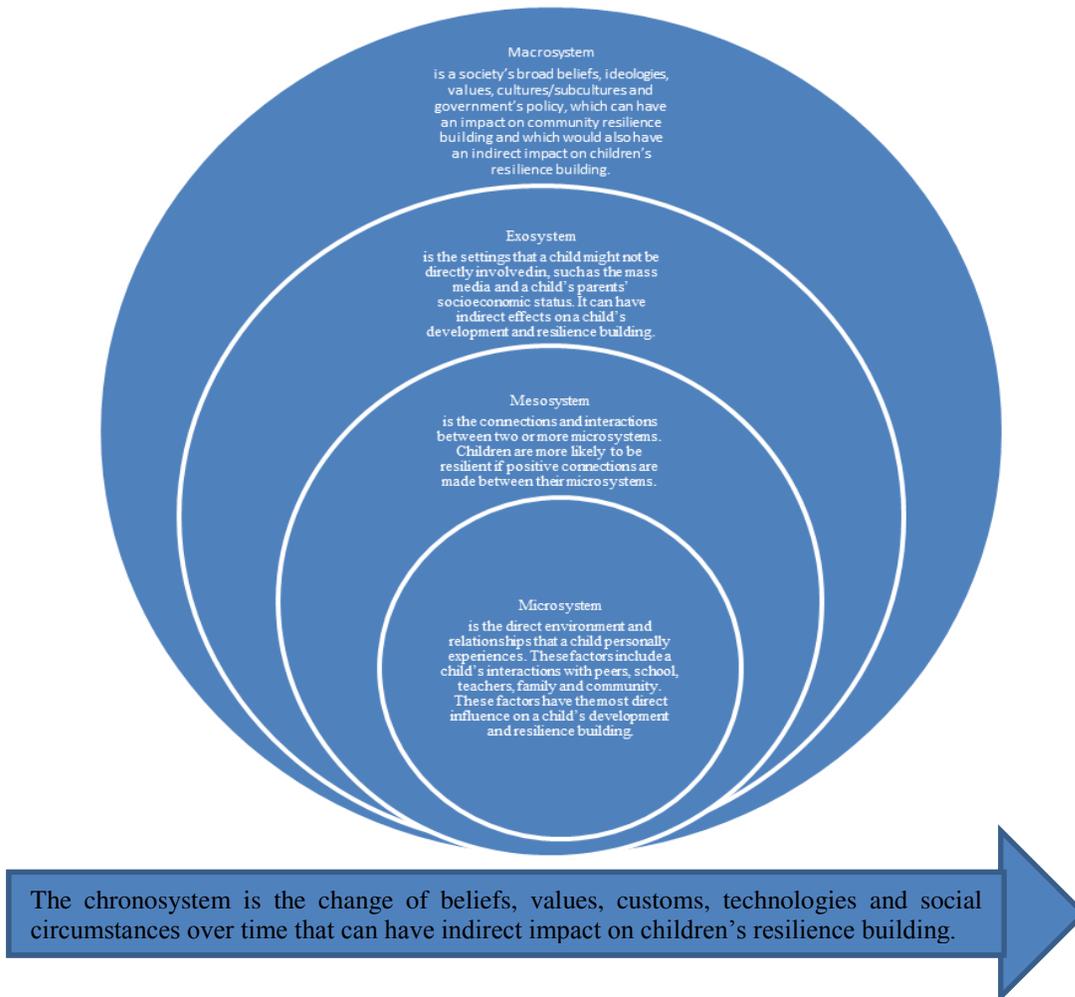
### **2.5.1 Bronfenbrenner's ecological model**

Bronfenbrenner (1979) suggests that the ecological model is the most encompassing model of the general context of a child's development. Bronfenbrenner (1979) proposes five systems: microsystem, mesosystem, exo-system, macrosystem and chronosystem to examine a child's development and resilience factors.

To Bronfenbrenner (1979) the five systems are: “a set of nested structures, each inside the next, like a set of Russian dolls” (p. 22). The five systems do not affect a child’s development and resilience building at the same level (Steinberg, 2011). The microsystem contributes most directly and the chronosystem contributes least directly. Bronfenbrenner’s model, however, stresses the importance of the interrelationship between the five systems and the individual protective factors within each system. Instead of seeing a child’s positive attitude towards school closure as an isolated factor within the microsystem, the ecological model encourages analysts to associate this child’s positive attitude with other factors within other systems; for example, seeing this child’s positive attitude as a result of a combined effort of his/her own positive mentality (microsystem) and the positive interaction with parents and teachers (mesosystem). Steinberg (2011) makes the criticism that many social scientists tend to investigate one aspect of a child’s development at one time without acknowledging the linkages between different factors that influence a child’s resilience development. Bronfenbrenner’s model encourages researchers to investigate the inter-influence between a child’s personal factors and other external factors, giving a more holistic view of a child’s development and resilience. It also acts as an overarching model for complementary theories.

One example is the four parenting style theory developed by psychologist Baumrind (1991), which is also useful in explaining how the interaction and nature of parenting might affect a child’s resilience building. Bronfenbrenner’s (1979) ecological model is flexible, encompassing and non-discriminative and able to encompass a large number of different perspectives in explaining children’s development. By using Bronfenbrenner’s

(1979) ecological model various protective factors and theories can be systematically analyzed by placing them under each ecological system so that the interaction between these factors can also be emphasized.



*Figure 1.* A representation of the Bronfenbrenner's ecological model

### **2.5.2 The ecological model and resilience factors**

The microsystem is placed in the most inner circle of the model. It refers to the direct environment and relationships that a child personally experiences. These factors include a child's own personality and the relationship between a child and his/her parents and peers. These also include a child's interaction with his/her teachers, neighborhood, or other

activities. All of these factors within the microsystem have the most direct influence on a child's development and resilience building (Arnett, 2007; Siegler, Deloache & Eisenberg, 2006; Steinberg, 2011). Within the microsystem, five particular factors will be examined: the individual factor, peer factor, teacher factor, school factor, family factor, and the neighborhood/community factor.

#### **a) The individual factor**

Research shows that various factors within the individual level affect a child's resilience building (Pine & Cohen, 2002). However, all children's resilience building depends on the interaction between nature and nurture (Plomin, DeFries, McClearn, & Rutter, 1997). All children have a nature base or the biological endowment that a child receives from his/her parents through genetic heredity (Plomin et al., 1997). This genetic heredity determines a child's physical look and gender, and it affects a child's personality, temper, intellectual ability and psychological stability. This nature base can be a risk factor if a child has a pre-existing psychopathology tendency inherited from or influenced by his/her parents, such as depression or PTSD (Siegler, Deloache, & Eisenberg, 2006). Research shows that depression has a strong genetic influence. A child is four times more likely to develop depression under trauma or pressure if his/her family members, especially the mother, had a history of depression compared to those who do not possess such genes (Shaw et al., 2007). Negative personality is another inherited factor that may contribute negatively to a child's resilience building. A number of studies reveal that children who have a personality of neuroticism, that is emotional instability, are more likely to develop mental health issues in a disaster situation because neuroticism is

associated with a negative disposition towards negative affectivity, adaption and dissatisfaction (Costa & McCrae, 1980).

On the other hand, if a child has a mild temperament and optimistic personality, he/she is more likely to be resilient during difficult times (Fredrickson, 2001; Lyubomirsky, King, & Diener, 2005; Nakamura & Csikszentmihalyi, 2002). However, a negative nature base can be over-ridden by nurture, which refers to the external protective factors that influence a child's development. These factors include the five factors such the school, teachers, family, peers and community, which will be discussed individually later on. As to children's personal resilience building, research shows that overall a child's personal resilience depends on his/her capacity to manage the negative thoughts and emotions associated with a traumatic event. A child who is skillful in restoring psychological equilibrium, who applies problem and conflict solving strategies, and who is open and positive is more likely to be resilient. According to Tedeschi and Calhoun (1996), children more likely to be resilient if they are confident in handling difficulties, and can manifest and display a strong psychological sense of control of their own lives. Moreover, the degree of social, community and family cohesiveness and shared valued and beliefs with those close to children also affect their resilience building. (Bagshaw, 2011; Handbook 1- Resilience and Disaster Adaptations, 2012; Shaw et al., 2007). Children are more likely to be resilient if they have a greater sense of closeness with others and have sympathy for others. These mental attributes not only show that such children are confident in themselves and have high self-esteem and positive values, but also show that they can relate and attach to others positively. Positive mentality, thus, contributes

positively to children's self-resilience building. On the other hand, Shaw et al. (2007) indicate repeated external traumatic experiences such as exposure to various secondary stressors would have a cumulative detrimental effect on children with loss of resilience.

#### **b) The school factor**

In a disaster event, schools should serve as a 'safe space' – a place that provides children with basic survival needs such as food, and emotional needs such as a sense of safety (Cahill et al., 2010). The role of a school can be discussed alongside the three phases of a disaster sequence (Mutch, 2014b). First, prior to a disaster, schools are expected to focus on risk prevention and reduction. One of the most important prevention measures involves providing students with factual information associated with disasters (Lazarus, Jimerson, & Brock, 2003). This factual information allows students to better understand the nature of a particular disaster and to learn the necessary procedures and actions that should be taken to increase the chance of survival (Lazarus et al., 2003). This reduces unnecessary fear, misunderstanding and uncertainty surrounding a disaster. In Jamaica, for example, schools have developed songs and poems associated with disaster management to educate children about disasters (Morris & Edwards, 2008). Second, during a traumatic event, schools move to response status, in which they actively respond to students' emotional and physical needs. Schools need to attempt to identify high-risk children and plan interventions. Schools pay attention to children's emotional needs and encourage children to process disaster-related events, thoughts and emotions. Schools also promote positive coping strategies such as strengthening children's friendship and peer support. Such strategies support resilience building (Lazarus et al., 2003). Third, in

the aftermath, schools actively engage in post-disaster activities that facilitate the recovery process (Mutch, 2014b). Such activities include encouraging children to express their thoughts and emotions associated with the disaster through creativity such as drawing, stories, audio and video recording (Lazarus et al., 2003). By doing so, it not only helps children to share their traumatic experiences in a safe manner, but also enable them to look forward to the future.

### **c) The teacher factor**

As teachers are natural mediators for children, they can play a significant role in providing for children's emotional needs (Wolmer, Hamiel & Laor, 2011). Australian Psychological Society (APS, 2013) and National Association of School Psychologists (NASP, 2008) provided a list of strategies that teachers can use to help children in a traumatic event. Teachers should first attempt to identify the most vulnerable children in the aftermath of a disaster in order to provide early intervention. They should be good listeners who listen and encourage children to share their feelings and concerns about the traumatic event. Teachers should then talk to students to comfort and reassure them in order to let them know that they are safe and being looked after. Re-establishing the daily teaching routine is key to helping children gain a sense of continuity and normalcy (APS, 2013; NASP, 2008). Teachers should also highlight humanity and compassion and encourage students to take action in building resilience. It is also an important way to encourage children to be sympathetic to others and to help build each others' resilience. Being honest and keeping children updated on news associated with such disasters can help clarify uncertainty but monitoring the amount of news is also required to minimize

further trauma (Lazarus et al., 2003; Shaw et al., 2007). Teachers can also organize structured leisure activities such as team sports to help children build resilience. Structured leisure activities encourage children to work together and help each other out, and at the same time provide children with a way to release their emotions (Csikszentmihalyi, 1990; Larson, 2000). Lastly, teachers should seek professional assistance, such as mental health services, when identifying children with mental health concerns.

#### **d) The family factor**

Family is the direct environment in which children live. The family environment and the interaction between children and their parents directly influences children's resilience building. Research shows that one of the key resilience factors for children is to maintain a warm connection with their family (Morrow, 2003). Immediately after a traumatic event, parents should provide children with safety reassurance that includes providing information to children regarding the traumatic event. Parents also should listen to children's thoughts and feelings and answer their questions honestly making sure that they are emotionally stable. Efforts to normalize children's lives by providing a positive family atmosphere and an atmosphere of acceptance will help children build resilience (Bagshaw, 2011; Handbook 1- Resilience and Disaster Adaptations, 2012; Siegler et al., 2006). Parents who support their children and provide them with emotional comfort and a sense of safety are more likely to help their children build resilience. Such parents are not only more likely to respond to children's emotional needs, but at the same time they encourage children to build competence, self-assurance and resilience by setting up

positive goals for children to achieve (Baumrind, 1991). In addition, parents are the role models for children. Parents who are positive and resilient themselves are more likely to set up positive role models for children to be resilient and positive. Parents should use rational problem solving strategies to teach and show children how to deal with any traumatic experience and this would encourage their children to apply similar conflict solving strategies. On the other hand, parents, especially the mothers who break down in or after a traumatic event, or who respond negatively, in turn set up a negative role model for their children. Thus, positive parenting is a very important protective factor for building children's resilience in the aftermath of a disaster (Bagshaw, 2011; Handbook 1- Resilience and Disaster Adaptations, 2012; Siegler et al., 2006).

In addition to parents, positive sibling relationships also play an important role in resilience building. For example, research shows that siblings are not only playmates and good friends, but they also support, instruct, assist and care for each other (Siegler et al., 2006). The older siblings tend to show warmth and emotional support to younger siblings in a positive sibling relationship and that provides younger children with comfort, which helps protect them from depression and other psychological disorders associated with trauma. Further research shows that a positive sibling relationship is associated with positive cognitive and behavioral development; all of which play a role in resilience building (Boland & Keller, 2002; Cohen & Wills, 1985; Steinberg, 2011).

#### **e) The peer factor**

Peers and friendship also play a vital role in children's resilience building. Peers

gradually become more influential than parents once children start going to school. This is due to the dramatic increase in the amount of time children spend with peers as opposed to parents (Larson & Richards, 1991). In terms of resilience building, studies show that peers and friends provide children with a sense of safety, security, familiarity and control during difficulty times such as during a disaster event or school transition (Blatt & Blass, 1990). Thus, a child is more likely to be resilient if he/she has a positive relationship with peers, in which children support each other and provide emotional comfort to each other. This is also known as reciprocated friendship, which is characterized by mutual understandings and support (Ladd & Kochenderfer, 1996). In addition, having a positive peer relationship assists children to develop positive social skills and conflict solving skills, and as Babad (2009) explains: “Friendship is a major source of satisfaction and social adjustment, constituting most often the central support system for the individual child” (p. 43). On the contrary, although having positive friendships can contribute positively to children’s resilience building, negative peer pressure may negatively affect a child’s resilience. For example, a child’s suicidal ideation after a traumatic event can be reinforced by a friend who has a similar ideation (Steinberg, 2011).

#### **f) The community factor**

The vital importance of community support to children’s resilience building in disaster is well-known, providing the community itself is self-resilient (Peek, 2008). Gurwitch, Pfefferbaum, Montgomery, Klopman and Reissman (2007) explain that a self-resilient community prepares itself prior to disaster. Such preparations may include educating its

members about a particular disaster. A self-resilient community will also respond quickly to a traumatic event by reducing the consequences of the event and return to normality, that is, the capacity to maintain community functions and reproduce itself financially, as fast as possible (Witten et al., 2001). A self-resilient community is cohesive and has a strong sense of collective identity. The members of such a community are more likely to form social networks that provide various resources such as financial support, also known as social capital, to children. Social capital is both the direct and indirect resources produced by social networks and social support systems (Hawkins & Maurer, 2009; Witten et al. 2001). Thus, children in a cohesive community are more likely have access to social support. Children also are more likely to be resilient when a community provides relief and a health care program, where they are looked after by community members, both physically and psychologically (Shaw et al., 2007). Children are more likely to be resilient if a community encourages them to be contributors to their own recovery process by involving them in recovery activities rather than seeing them as passive victims (Sinclair, 2004). When children are involved and become active members of the community, this sense of responsibility helps to build resilience.

To sum up, five protective factors, that is, the individual factor, the school and teacher factor, the family factor, the peer factor and the community factor have been identified as important contributors to children's resilience building within Bronfenbrenner's (1979) ecological model. Although, these five factors contribute independently to resilience building, at the same time they interact with each other. When different micro-systems interact with each other, it is referred to as the mesosystem.

*Figure 2.* A representation of the five protective factors within a child's microsystem

#### **h) The mesosystem**

The mesosystem is located outside the microsystem. It surrounds the microsystem. It refers to the connections and interactions between two or more microsystems. Research shows that children are more likely to be resilient when positive connections are made between their microsystems, whereas a non-supportive connection will be more likely to result in negative outcomes (Arnett, 2007; Siegler et al., 2006; Steinberg, 2011). In a disaster context, positive connections between various microsystems are also vital to resilience building. For example, in the Hawkins and Maurer (2010) study about how social capital contributed to the recovery and resilience building in New Orleans following Hurricane Katrina, it was found that three types of social capital were especially important. They were bonding, bridging and linking social capital. Bonding social capital is referred to as the networks and resources produced by members of homophilous communities where everyone has similarities in social-economic status (SES), beliefs, values and experiences (Putnam, 2000). Bridging social capital is the connection made between communities that are dissimilar in SES and beliefs. Linking social capital is referred to as the connections made between a community and other institutions, which can provide access to various services to the community (Szreter & Woolcock, 2004; Woolcock, 2001). Hawkins and Maurer (2010) concluded that bonding social capital was mostly formed within and between family, friends and household, and was important for lower-income families because it provided them with survival and

daily logistical help following the hurricane. Bridging social capital was formed through connections made across “geographical, social, cultural and economic lines provided access to essential resources for families” (p. 12). Linking social capital was provided by social workers and various aids to help the reconstruction of the city. While all three forms of social capital contributed individually, Hawkins and Maurer (2010) note the following:

While bonding social capital provides one layer of connection and security, it alone may not sustain wellbeing in difficult times. Bonding helped some of those families left behind to survive or plan for survival, but lack of community resources before and after the hurricane left many residents hopeless and struggling to maintain their lives... Combining bridging and linking with bonding social capital offers the best economic chances. (p. 13)

### **i) The exosystem**

The exosystem is the third system within the model and is located outside the mesosystem. It refers to the settings that a child might not be directly involved in, such as the mass media and a child’s parents’ socioeconomic status (SES). It can have indirect effects on a child’s development and resilience building (Shaw et al., 2007; Siegler et al., 2006; Steinberg, 2011). Disaster research shows that television and other media may indirectly expose children to traumatic experiences that they may or may not have been directly involved in, and such experiences can cause emotional disruptions. For example, in both the Riseborough (1994) and Witten et al. (2001) studies, the participants faced emotional disruption and uncertainty when they first heard about the news surrounding

their schools closure through leaked information. This was because the leaked information was unclear and later proved to include errors. This example shows that prematurely leaked information about a traumatic event can negatively affect those people who might be directly impacted by the event. On the other hand, media information regarding traumatic experiences can also affect those who are not directly involved. Research shows that children are more likely to be psychologically affected by viewing a traumatic event that they do not have personal experience of, if someone they knew could have been affected by it, or because of the terrible images they saw (Shaw et al., 2007). Hence, Arnett (2001) suggests that parents should guide children's exposure to media by providing facts as opposed to the information shown in the media. For instance, if a child is negatively affected by seeing an earthquake on television without knowledge about it, parents should provide facts about earthquakes such as what is and what one should do (Lazarus et al., 2003). Also, restrictions on media should be applied if such information is deemed to be harmful to children (Denny, 2011).

Parents' SES is associated with children's development and resilience building. Financial difficulty is a significant negative contributor to children's poor development and resilience building (Shaw et al., 2007; Siegler et al., 2006; Steinberg, 2011). Studies presented earlier suggest that school closure could provide parents with financial burdens (Witten et al., 2001). Parents with lower SES also believed that the students from families with the higher SES would discriminate against their children (Witten et al., 2001). Reducing parent's financial difficulties can help children in resilience building. Cahill et al. (2010) and Bagshaw (2011) suggest various social and financial supports can be

provided by government agencies to reduce parents' financial stress.

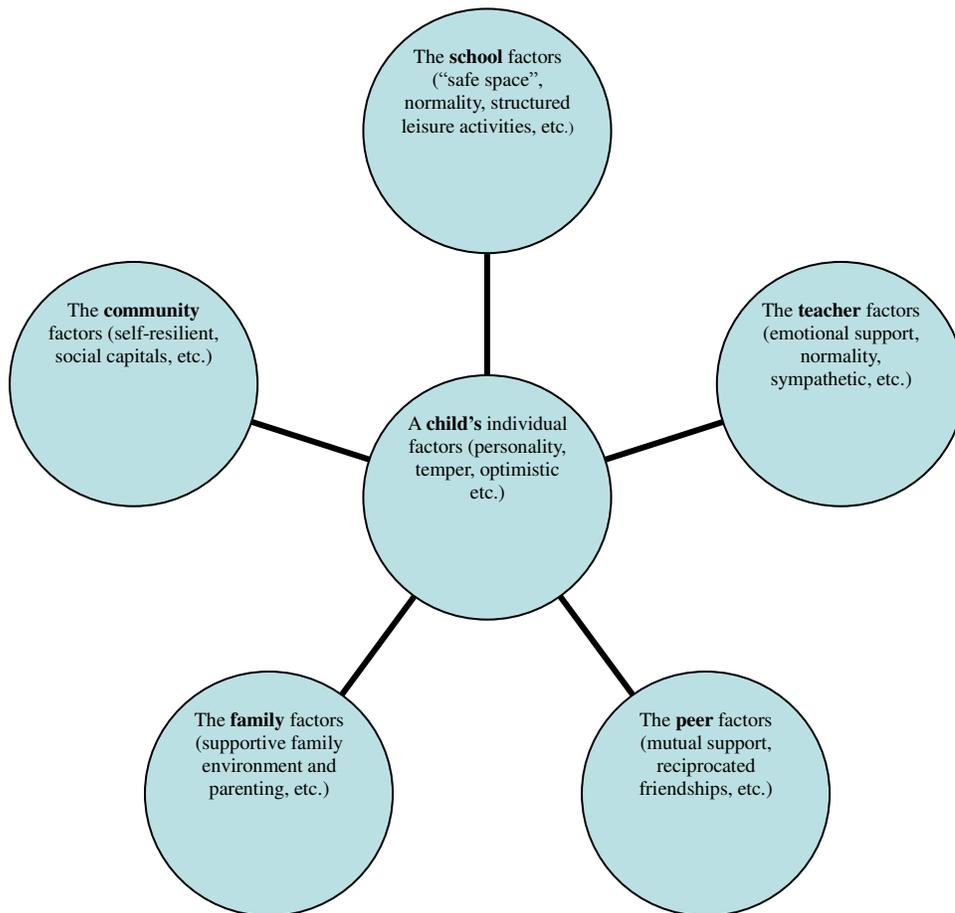


Figure 2. A representation of the five protective factors within a child's microsystem

### j) The macrosystem

The macrosystem is located at the most outer circle of the model. It refers to a society's broad beliefs, ideologies, values, social class, cultures/subcultures, laws and government's policy (Siegler et al., 2006). Political policy, structure and governance have an impact on community resilience building, which would also have an indirect impact on children's resilience building. Shaw et al. (2007) stated that, "response and

intervention following disaster exposure are greatly influenced by political structure and governance ... a tension always exists between the responsibilities and resources of the national government and the disaster-affected local municipalities” (p. 56). Policies regarding disaster response can both positively and negatively affect children’s resilience building. Dolan and Krug (2006) provided a negative example where non-English-speaking children were not provided with any access to mental healthcare services in the aftermath of Hurricane Katrina as there was a lack of specific government policy, responsibility and resources to address and look after those children who did not speak English. Thus, non-English-speaking children suffered a higher rate of mental health problems compared to those who spoke English and who were provided with mental healthcare services. However, on the other hand, positive government policy can help children build resilience. For example, it was mentioned in Ng and Sim’s (2012) study that after the participants’ school was destroyed in the Wenchuan earthquake, the government quickly launched a policy that provided the participants with an alternative education service by sending them to other schools until their school was reconstructed. If such a policy was not delivered by the government, it would mean that the participants’ would have been forced to discontinue their pursuit of education (Ng & Sim, 2012). This example shows that a supportive policy in the aftermath of a disaster can be helpful in providing children with access to services that would help children build resilience in the long run.

Ng and Sim’s (2012) study shows that broad cultural values, such as valuing the importance of family and study, can play a role in children’s resilience building. In

addition, recent disaster researchers, such as Gibbs et al. (2013) indicate that a change in the belief that children are vulnerable and passive in disaster situations to perceiving them as active contributors to their own resilience could actually contribute to children's resilience building. Such a change also allows children's voices to be heard in disaster research.

### **k) The chronosystem**

Lastly, the chronosystem is located outside the cycle. The chronosystem refers to the change of beliefs, values, customs, technologies and social circumstances over time that can have indirect impact on children's resilience building. Disaster researchers acknowledged that children's long-term resilience building is affected by a combination of external protective factors and internal factors over time (Shaw, Espinel, & Shultz, 2007). Thus, time itself can be a positive contributor reinforced by the presence of other protective factors. As mentioned most, children are resilient and can recover from traumatic experience within a year or two (Bonanno, 2005; Norris, Friedman, & Watson, 2002; Yehuda, 2002). Thus, one should not underestimate the positive contributing power of time.

## **2.6 Conclusion**

This chapter has presented an introduction that describes and defines disaster and disaster studies. Following this introduction, it was explained that although children were more likely to be prone to psychological disorders such as PTSD in relation to a traumatic experience, disaster researchers tended to overlook children's ability to contribute to their

own resilience building together with other external protective factors. The third section introduced literature related to school closure as a result of a disaster and the effects of school closure on people associated with the school. Lastly, Bronfenbrenner's (1979) ecological model was used to guide the examination of various factors that could help children build resilience against primary and secondary stressors.

The literature presented in this chapter shows that limited research exists about how school closure as a secondary stressor of a disaster might affect people associated with it. Most literature pointed to an overall negative outcome of secondary stressors with only one study pointing to the contrary. Also, currently most literature related to children's resilience building is focused on identifying protective factors against primary stressors with secondary stressors bypassed, although presumably these factors interchangeably protect children against secondary stressors. In other words, the specific contributors that protect children against secondary stressors have not been given much attention. Therefore, this study attempts to fill in this gap. It aims to present a case study that examines both the negative and protective contributors that affected 19 children and four adults' well-being and adjustment when their school had to be closed and/or merged as a result of the education renewal plan in the aftermath of the Canterbury earthquakes. By doing so, this study will contribute to a better understanding of the specific protective factors that may help children (and adults) build resilience against school closure as a secondary stressor. At the same time, the negative contributors can be identified in order to be more aware of those that may harm children's adjustment and well-being. In the discussion chapter, the literature and framework presented will be further applied to the

analysis of the data gathered in this thesis. The next chapter is the methodology chapter, in which the specific paradigm, methods and protocols applied to gather the data in this study is presented in detail.

## **Chapter Three: Methodology**

### **3.1 Introduction**

This chapter provides detailed insights into the methodological dimension of the study. It begins with an introduction to the idea of ‘engagement of children in research’. A brief history, which explains why traditionally children had often been treated as passive victims in research, will be presented. It is followed by a description of the current view of children as active participants in relation to disaster studies. This explanation of the engagement of children in research will position my research in a participatory research paradigm and will address the significance of the involvement of children in this study. Following the introduction, the research design for this study is discussed. The next sections address the strategies for collecting, recording, and analyzing data. The chapter includes a consideration of ethical issues.

### **3.2 Engagement of children in research**

A review of the literature revealed that disaster researchers had a tendency to place children in a passive role and often perceived them as passive victims. Therefore, researchers focused much attention on learning about the vulnerability of children. Children were seen as being psychologically vulnerable to traumatic experiences and prone to psychological disorders such as post-traumatic stress disorder and depression. Nevertheless, an increasing number of scholars realized that most children were resilient to traumatic experiences and were able to contribute to their own resilience building along with the support of various external protective factors.

Before the 1990s, research on children was dominated by developmental psychology (Woodhead & Faulkner, 2000). Developmental psychology in the early days advanced the view that children's cognitive development progressed through four developmental stages. Piaget (1959) believed that each child progressed through a sensorimotor stage, pre-operational stage, concrete operational stage, and formal operational stage. These stages were believed to be fixed and related to a child's age and brain maturity (Arnett, 2007). In other words, developmental psychologists tended to see children's cognitive development as a continuous and gradual process, yet such development is limited by children's age (Siegler et al., 2006). As a result, developmental psychologists believed and encouraged adults to play a leading role in assisting children's cognitive development. For example, scaffolding is a well-established concept in developmental psychology theory (Vygotsky, 1934). It is a process by which a child is supported and guided by adults to solve a cognitive task at a level that is believed to be beyond his/her own cognitive comprehension (Steinberg, 2011). Due to this belief, developmental psychologists often carried out research 'on' children in order to find out the ways to reinforce children's development. However, research of this kind often positioned children as passive objects being studied by adults. Also, they were often regarded as incompetent in handling complicated tasks such as taking an active or leading part in research on their own (Woodhead & Faulkner, 2000). Developmental psychology underpinned research in the fields of physics and biology where research 'on' children was undertaken using animal models to measure and reinforce children's development by using external stimulators such as conditioning (Alderson, 1993; Siegler et al., 2006). It also influenced behavioral psychologists' research on children. In the 1980s, Skinner

(1972), for example, applied operant conditioning principles on children such as rewards and punishments in child research. James and Prout (1997) criticized that children were treated like laboratory rats. This concern led to a change brought in by the Article 12 of the United Nations Convention on the Rights of the Child in 1989 (UNCROC, 1989). This Article specifically addressed the issue of children's rights to be consulted and informed as they are a significant part of any given society and active citizens who should be empowered and given the rights and capacity to participate in decision-making process that directly affect their future lives (Morrow, 2003). As a result, research on children in the early 1990s expanded from the center of developmental psychology to a wider range of fields (Hill, Laybourn, & Borland, 1996). This expansion led researchers to reconsider the roles of children in research. Children began to be positioned as active participants who were capable and should be given the right and opportunity to be actively involved in research.

In the field of disaster study, there was also a tendency to treat children as passive subjects (Boyden & Ennew, 1997). Many studies were adult-centric and were carried out 'on' children. These studies often assumed or placed children in vulnerability without giving them a chance to share their experiences and thoughts about the traumatic event (Gibbs et al., 2013). In doing so, children's actual thoughts and needs were potentially overtaken by the researcher's attribution bias. Hollway and Jefferson (2000) explain that attribution bias is a tendency that researchers pay specific attention only to the evidence that they intended to see, and at the same time avoiding to notice the evidence that disagrees with their ideas. This often leads to misunderstandings about the data. For

instance, Nelson and Israel (2013) note that many people hold the impression that by asking children to recall the experiences they encountered during disasters could cause PTSD. In fact, on the contrary, studies suggest that by asking psychologically healthy children to share their experiences about traumatic events in a non-threatening way, it can help them to release their emotions (Cahill et al., 2010; Ministry of Education, 2007). Furthermore, other adult-centric disaster studies perceive children as being too young and thus unable to contribute to their own well-being. They believe that children are particularly vulnerable in both physical and psychological health and hence should be looked after by adults or institutions, which underestimate children's coping abilities, and not realizing them as having the capacity to contribute to their own resilience building (Gibbs et al., 2013).

### **3.3 Methodological Paradigm: Participatory Research Paradigm**

Recently, a number of New Zealand and Australian disaster researchers such as Gibbs, et al. (2013) raised the idea that there is a crucial need for change in disaster studies to allow children to share their own understandings about disasters and to provide their own thoughts and solutions rather than treating them as victims. Thus, after the Canterbury earthquakes in 2010 and 2011, Gibbs et al. (2013) and Mutch (2013a, 2013b) conducted studies with children about their experiences of the earthquakes using a participatory research paradigm treating children as active researchers and participants in their studies.

Morrow (2003) indicates that in social sciences, the participatory research paradigm derived its root from the Article 12 of the United Nations Convention on the Rights of the

Child (UNCROC). Skolimowski (1994) was the first scholar who formally introduced and promoted the participatory paradigm. Skolimowski (1994) believes that the participatory paradigm is a counter to the positivist paradigm that emerged during the Renaissance. Modern science and philosophy at the time provided a worldview that universal reality is governed by nomothetic law and cause-effect relationships and therefore could be objectively studied by using scientific instruments (Skolimowski, 1994). Reason (1998) argues that one of the major issues created by the positivists is that they tend to separate themselves from the human world who seek objectivity of the ontological nature of the outer world, yet ignoring the problems in the social world and the subjectivity in the human mind and experiences (Deetz, 1996; Reason, 1998; Skolimowski, 1994). Participatory researchers focus their primary attention on the promotion of human welfare through conducting social research with people (Maxwell, 1984). Such a paradigm, therefore, requires researchers to conduct research ‘with’ people rather than ‘on’ people in order to understand the experiences and subjectivity of the participants (Reason, 1994). In disaster studies, the participatory paradigm promotes the idea of children as active participants and citizens who could contribute to their own resilience building and to society as a whole. Jones (2004) argues that the participatory paradigm acknowledges that research about children’s disaster experiences are unable to provide a whole picture if children’s voices are missing. Children’s knowledge about themselves gives a fuller understanding about their experiences (Kellet, 2005). Cahill et al. (2010) further indicate that children’s understandings about disasters can be very different from that of adults; they can and do contribute considerably to their own well-being and resilience. Children are able to provide valuable insights into the

strategies they adopt to deal with traumatic experience, which adults might not have thought of. Thus, disaster researchers who apply the participatory paradigm seek partnership with children. They do not see children as passive subjects or victims. Instead, they tend to encourage children to be an active and important part of the research. It be should noted that although, as mentioned, researchers who apply a participatory paradigm tend to conduct study ‘with’ children rather than ‘on’ them, in fact, there are various levels of involvement of children in research such as research *with*, *by*, *for* and *about* children, each indicating a different degree of involvement of children (Mutch, 2013a).

Research for children	Research about children	Research with children	Research by children
Child-related research	Child-focused research	Child-centered research	Child-driven research

Figure 3. Continuum of engagement of children in research

Source: “Sailing through a river of emotions”: Capturing children’s earthquake stories, 2013a, p. 449

The table above (Fig. 3) demonstrates the level of engagement of children in research (Mutch, 2013a). On the very left end of the continuum lies research *for* children or a *child-related* approach. This approach refers to those disaster studies that do not have children’s perspectives or involvement but believe their research will benefit children (Mutch, 2013a). These studies are adult-centric and often see children as passive victims. In comparison, research *about* children or a *child-focused* approach tends to encourage children to share their stories, perspectives and opinions on their disaster experience with the researchers’ presence and assistance in terms of technology or emotional needs. However, the focus is always on children, thus it is called a child-focused approach (Mutch, 2013a). Research *with* children or *child-centered* research tends to encourage researchers and children working together on a project, with children as the main decision makers. The researchers might share their ideas with children or facilitate children’s ideas

(Mutch, 2013a). At the very right end of the continuum lies the research *by* children or a *child-driven* approach. This approach allows further involvement and autonomy of children in a project. The research is led by children and both the researchers and participants might be children themselves. This approach tends to give children more control and allows children to work with each other and thus a comprehensive picture of children's own disaster experiences could be drawn (Mutch, 2013a). It is worth acknowledging that although each level of engagement of children varies in degree, this does not imply that those researchers who chose a *child-focused* approach possess lower motives in obtaining data to present children compared to those who choose a *child-driven* approach (Mutch, 2013a). Each of the above approaches maybe best fitted for a study design depending on the purposes, aims and values of the research.

This study applies a participatory paradigm with a *child-focused* approach. The participatory paradigm best fits the value and aims of this study. To be specific, as explained in the first chapter, my study is nested under a large UNESCO funded project and serves as a follow-up study to uncover the experiences of 19 children and 3 adults concerning their post-earthquake school merger. The study aims to provide insights into the protective and risk factors that positively or negatively contributed to their resilience building and adjustment to the new school. The school merger experiences will be studied as a secondary stressor of the earthquakes. I believe that in order for this study to genuinely present a comprehensive understanding about these children's and adults' experiences of school closure, their voices and thoughts are the most important element to achieve this goal. It was important to actively involve children in this study and to

focus the research attention on what they had to say. In doing so, it would also provide children with the right to be active participants who could share their insider's view and knowledge rather than being treated as passive subjects. Also, the results yielded by the child participants in this study might be able to help other students who encounter a similar situation.

The child participants were encouraged to actively share their experiences in an interview about their school closure. Children led the conversation and the direction of the interview. The researcher asked questions and reacted to children's responses with appropriate prompts. Interviews were also conducted with adults to seek further information about the children's experiences. Adults were asked to share how they helped children in the process and how children responded to the closure. Therefore, although adults participated in this study, the children were always the main focus. Thus, this study applied a child-*focused* approach.

### **3.4 Research Methodology**

Prior to conducting research, a researcher should carefully consider the research methodology that he/she is going to apply (Mutch, 2005). Cohen, Manion and Morrison (2000) explain that research methodology not only provides researchers with various specific methods and strategies to different types of studies, it also guides the researcher to determine which specific research method can best be fitted to the goal and aims of a particular research project. There are two major methodological approaches being used in social science, they are, quantitative and qualitative approaches. The two approaches vary

considerably in terms of the overall design, the ways of collecting data and the specific philosophy and goals behind them (Lodico, Spauling, & Voegtler, 2006).

### **3.4.1 Quantitative Design**

Quantitative designs collect numerical data. However, depending on the specific goals, the overall research design can vary (Lodico et al., 2006). There are basically four types of quantitative approaches: descriptive survey design, experimental design, casual-comparative design and correlation design. Quantitative design is often underpinned by a positivistic paradigm in which every phenomenon has an objective explanation to be discovered and interpreted with scientific theories and mathematical tools. Theory is developed prior to conducting the research and then tested in the real world context. Objectivity is essential to the validity and reliability of quantitative research (Gall, Gall, & Borg, 2010). After the numerical data is collected, the researcher then will use various mathematical tools to translate the data into statistics (Gall et al. 2010). One of the most important advantages of using a quantitative design over a qualitative design is that it is more objective because a quantitative design is able to yield a high generalization ability given the large number of participants and amount of data it collects (Ary, Jacobs, Razavieh, & Sorensen, 2006).

### **3.4.2 Qualitative Design**

This study used a qualitative design. Qualitative design is interpretive and descriptive rather than numerical. It mainly seeks narrative data from participants through the means of observations, interviews and document analysis (Lodico et al., 2006). Researchers aim

to gain a rich insight into various social phenomenon and human perspectives, experiences and stories (Liamputtong & Ezzy, 2005). A researcher who selects a qualitative approach may or may not have a theory in mind about a particular phenomenon prior to conducting the study (Gall et al., 2010). Compared to the quantitative approach, the qualitative approach does not seek a large number of participants because generalizability is not the focus. Qualitative research is about richness and depth as Patton (1985) states:

Qualitative research is an effort to understand situations in their uniqueness as part of a particular context and the interactions... what it means for participants to be in that setting, what their lives are like, what is going on for them, what their meanings are, what the world looks like in that particular setting... The analysis strives for depth of understanding. (p.1)

Qualitative researchers are interested in participants' subjective views of their experiences of the context and world in which they live (Crotty, 1998). Researchers might set up a few themes about a particular topic or phenomenon before the actual research, and then design the data gathering tools on and around these themes. Participant's beliefs, perceptions, understandings, experiences and interpretations are the main sources of data (Mason, 2002). Qualitative design is more flexible than quantitative design.

Qualitative researchers interact with their participants directly and the participants are free to give their opinions and views (Punch, 2009). Once the data is collected, researchers will then attempt to categorize the data into different themes (Punch, 2009).

Thematic analysis method is often used as the tool to help the categorizing process (Mutch, 2005). In short, qualitative design is more improvisatory, flexible and in-depth than the quantitative approach.

### **3.4.3 Selecting an Appropriate Design**

Merriam (1998) suggests qualitative design can further be divided into a number of major types such as basic qualitative study, ethnography, phenomenology and case study. All of these approaches have similarities such as they all share the basic characteristics of qualitative research design. Yet, in fact, each approach is designed to fit specific research purposes (Merriam, 1998). This study used a qualitative research design with a case study approach. In case study design the researcher draws a boundary between who or what will or will not be studied in a case. This boundary can be drawn geographically, demographically or simply by the number of participants (Merriam, 1998). The case study approach is defined as a qualitative design that provides intensive, holistic description and analysis of a unit of study and the study can be about people or a phenomenon occurring in a bounded context (Merriam, 1998; Yin, 1994).

There are a number of reasons why my study uses a case study approach. Firstly, such an approach fits well with the context of this study. The study was interested in both intensive and holistic description of the children who were affected by their school closure and merger. These descriptions could be captured during in-depth qualitative interviews with those involved following the merger of the two schools to learn the specific factors that protected or harmed them in the process. The study took place within

the bounded context of the merged school. While the findings were unknown, due to the limited number of studies that explored this phenomenon, there was the expectation that this study could allow a wider exploration of topics related to BW children and adult's experiences of the closure. Most importantly, the case study approach would also allow children to be an active part of this research by providing their own experiences about what they had been through. They were asked to freely share their thoughts and feelings related to the closure. Thus, the focus was on them. Also, this study recognized them as important contributors to their own resilience building. The case study approach matched the overall design of this study, that is, the participatory paradigm with a *child-focused* approach (Morrow, 2003).

### **3.5 Research Strategies**

#### **3.5.1 Recruitment of the Participants**

The overarching UNESCO project described earlier involved many schools. Of these, BW school stood out because it was one of the more than 30 Christchurch schools that was going to be closed or merged with another school. This decision was part of the government's education renewal plan. I recognized that the merger could be seen as a post-earthquake secondary stressor. The current study was initiated as a follow-up study in 2014 drawing from the same 23 participants who were involved in the 2013 interviews. There were 19 former BW students, some of whom were now at the merged WK school and others who had moved onto intermediate (CW school). Three adult participants were teachers and one was a parent. It should also be noted that two of the teachers were parents themselves whose children also went to BW school and experienced the merger

process.

In terms of the actual recruitment of the participants for this 2014 project, contact was made with WK school (after BW and WZ school merged) and CW school in order to seek agreement to carry out the study. Letters were sent to the principals, in which the purpose of the study, the names of the students, teachers and parents who were to be interviewed, the nature of the data to be gathered and where the interviews might take place. The principals of the two schools agreed and decided that the study would be carried out at their schools. Immediately after the approval, participant information sheets and consent or assent forms were sent to the participants and principals via email for them to read and sign (see Appendix A, B, C, D, E) All participants were willing to take part in this study and signed the consent forms. Some of the forms were collected on the day of the interviews, and others were later on mailed to me in Auckland.

### **3.6 Ethical issues and considerations**

A researcher should demonstrate a high moral, ethical and professional manner when conducting research (Neuman, 1997). First of all, a researcher should comply with the rules set by their approving ethics committee. My study was nested under my supervisor's ethics approval for her Canterbury earthquake project. Her approval was from The University of Auckland Human Participants Ethics Committee and had a 3-year validity, from 5 Oct 2012 to 5 Oct 2015. There was no requirement for this study to submit an additional ethics proposal but as a number of human participants were involved, including many non-adults, participant information, consent and assent forms were prepared, on which ethical considerations were stated.

**1. Anonymity and Confidentiality:** In this study, all the participants were informed that they reserved the right to confidentiality and would remain anonymous in all publications and presentations related to this project. The only individuals who would be able to know their real names would be my supervisor, co-supervisor and myself. Although their identities were protected by anonymity, they were also informed that their stories and words might be used in academic publications and presentations. They would be referred to as T (for teacher) or S (for student) and P (for parent) followed by a numeral.

**2. Participation and consent (PIS, Consent and Assent forms):** Participation in this study was completely voluntary. The participants were notified that they reserved the right to decide whether or not to participate. They also reserved the right to withdraw from the interview at anytime without giving a reason. They could also withdraw information they provided, up until four weeks after the data collection was completed. All the adult participants and the parents of the child participants had to read and agree with the terms and conditions before the participation. The participant information form and consent form were in two versions (principal and other adults). There were slight differences in wording, but the content was identical. The child participants, however, had to read and sign an assent form in which the wording was deliberately designed to be child friendly (See Appendix F, G, H).

**3. Data care and usage:** The participants were informed that a voice recorder would be used to record the interviews. It would be transferred onto a pass-worded external hard

drive for transcription. The hard drive would be kept in a secure cupboard in The University of Auckland for no more than six years. It would be destroyed after this period. During this period only my supervisors and I could access the data.

**4. The safety issues of the participants:** Due to the nature of this study, it was necessary to involve child participants. In order to ensure their safety, a teacher would be asked to supervise the entire interview. Moreover, some participants might experience a minor degree of emotional distress, as sharing experiences related to school closure might be disturbing. The teacher would ensure that if any sign of emotional distress appeared, the interview would be stopped and the participant's emotional needs attended to.

By addressing the above concerns and solutions, this study has complied with the ethical standard that the ethics committee deemed to be significant. Finally, the trustworthiness of this study should be considered.

### **3.6.1 Trustworthiness**

Trustworthiness can be understood as the evaluation of the quality of a study (Marshall & Rossman, 1999). Traditionally, in quantitative research, researchers established the trustworthiness of a study by establishing validity and reliability of the study. For qualitative researchers to demonstrate trustworthiness, however, the concept of validity and reliability used in quantitative research is inappropriate. Qualitative research cannot be fully replicated nor should the concept of generalization be applied (Gall et al., 2010). Thus, for qualitative research, a more appropriate way to demonstrate its trustworthiness

is by addressing the transferability, dependability, conformability, and credibility of a study (Lincoln & Guba, 1985).

### **3.6.2 Transferability**

Transferability relates to whether the results of one study can be generalized to other contexts and populations. In qualitative research, transferability is treated as “user generalizability” (Merriam, 1998, p. 221). That is to say, the usefulness and applications of the findings of a qualitative study are dependent on the readers. The readers need to see for themselves as to what and how the findings of a study can be applied to their situation (Walker, 1980). Researchers who present qualitative findings provide rich information and results, from which the readers can draw conclusions and applications for themselves (Lincoln & Guba, 1985). For this study, transferability is ensured by presenting the rich descriptive data collected from the interviews and provided in the findings chapter, and by providing an analysis on this data with reference to the literature in the discussion chapter. The readers of this study, therefore, can draw conclusions from the data or conclusions presented to match their own situations. It should also be noted that some of the findings in this study align with those of other studies done in New Zealand and overseas. This suggests that the findings of this study do transfer to different populations and contexts.

### **3.6.3 Dependability**

As qualitative research cannot be fully replicated (Gall, et al., 2010; Shenton, 2004), researchers need to instead establish dependability. Dependability requires researchers to

explain how they arrived at their results. This can be achieved by providing, “the research design and its implementation, describing what was planned and executed on a strategic level and the operational detail of data gathering, addressing the minutiae of what was done in the field” (Shenton, 2004, pp. 71-72). These procedures allow other researchers to gain an insight into how a study derived its result and, “the research design may be viewed as a ‘prototype model’... this in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed” (Shenton, 2004, p. 71). My study established dependability by providing detailed information regarding the specific reasons for selecting the case study research design and how it was carried out in the field. My study also provided details on the specific data gathering method used and outlined the interview questions in this chapter. Other supporting evidence, such as the interview questions are provided in the appendices.

#### **3.6.4 Confirmability**

The confirmability of a study can be ensured by the researcher providing explanations for, and evidence of, various aspects of the process of the study. The researcher should present and explain, for example, the process regarding the selection of participants, the ways in which the data were collected and analyzed, and how the conclusions were drawn (LeCompte & Preissle, 1993). The confirmability of this study has been ensured by providing detailed information and explanations to the process that I undertook to select and recruit my participants, the tools that I used to collect data, and the method I used to analyze the data outlined in this chapter. Various evidence that supports my explanations, such as the PIS forms, is also provided in the appendices section of this

study.

### **3.6.5 Credibility**

According to Mutch (2005) “credibility means that you have used some way of ensuring that your findings resonate with those in, or who are familiar with, the case or setting” (p.111). Mills (2000) suggests that triangulation can be used to ensure the credibility of a study. Triangulation involves using multiple data sources or data collecting methods to verify the findings. My study has applied triangulation to ensure its credibility by involving three groups of participants: children, teachers and a parent. Thus, there was more than one data source to provide credibility of the participants and to complement each other’s statements. Another way of ensuring the credibility of this study is by using the member checking method. Merriam (1998) explains that member checks mean taking the collected and transcribed data back to the participants to check whether they agree with the interpretation of the data. The participants of this study were invited to read and check the transcripts of their interviews to ensure that they agreed with the transcripts. Lastly, peer examination is used to ensure the credibility of this study. Peer examination means “asking colleagues to comment on the findings as they emerge” (Merriam, 1998, p. 204). This was achieved through on-going discussions with my supervisors with regard to my study and by presenting my work to them periodically. They have expertise in the fields of disaster study, education and research methodology. In turn, they often provided suggestions and sometimes challenged my interpretations.

All in all, the overall trustworthiness of this study was established through ensuring the

transferability, dependability, conformability, and credibility. This study is trustworthy in terms of presenting the BW participants' experience of school closure.

### **3.6.6 Interviews**

A research interview is defined as a carefully designed conversation between an interviewer and an interviewee to obtain specific information with regard to the aims and objectives of a study (Cohen & Manion, 1994). As a data gathering tool, the interview enables a researcher to collect rich and descriptive data that provides an in-depth insight into the phenomenon that he/she intends to explore (Cohen & Manion, 1994). There are three types of interviews: the unstructured interview, the structured interview, and the semi-structured interview (Denscombe, 2003; Mason, 2002). Although, all of the three types of interviews allow researchers to obtain rich information, each varies from that of the others, hence researchers need to select the one that best fits his/her research aims.

The unstructured interview is more relaxed, free and conversational. Specific interview questions are not pre-determined, rather the interviewer has a general guideline of the topics and ideas that he/she hopes to obtain from the interviewee (Denscombe, 2003). During an unstructured interview, the interviewer often starts the interview by introducing a topic and then allows the interviewee to expand on this topic freely. The interviewer does not contribute equally and tries to remain as non-interruptive as possible (Denscombe, 2003). In contrast, the structured interview is highly pre-organized. This means that the content and questions of the interview are prepared in advance. Moreover, the interviewee uses the prepared questions and asks the questions in a specific order.

The semi-structured interview has a list of general questions, but the interviewer allows the interviewee to elaborate on their thoughts and ideas without restriction. Burgess (1984) describes the semi-structured interview as a goal driven conversation. In this way, the semi-structured interview allows the interviewer to obtain rich and in-depth information from the interviewee in order to fulfil the objectives of the study by using a set of prepared questions. It also allows the interviewee to freely share their experiences, beliefs and feelings without being overly restricted (Burns, 2000). However, the interviewer does guide the interviewee and sets a boundary to ensure that the purpose of the study is fulfilled. This study used the semi-structured interview so the participants could freely share their experiences and thoughts about the closure and the protective and risk factors that helped or harmed them in the process. Thus, rich and in-depth qualitative data could be drawn (Mutch, 2014a) yet the structure ensured that the participants did not deviate too much from the topic of the research (Punch, 2009).

Three different interview schedules were designed: one for parents, one for teachers, and one for children. The aims and the overall nature of the questions were the same but the wording was altered in order to be more appropriate for the different ages or roles. For instance, the child participants were asked what their teachers and parents did to help them adjust. This question was altered to ask teachers and parents what they did to help their children to adjust.

As the researcher, I began by introducing myself and explaining the purpose of the

interview. Once the participants felt comfortable, the interview began. All the participants were interviewed separately in a room provided by the schools. A teacher attended all of the interviews conducted with the children in WK school. This ensured that the children were psychologically and emotionally supported.

Gillham (2005) suggests that to conduct an engaging and simulative interview, the interviewer needs to firstly learn to listen to and have respect for the interviewees. It is equally important to reply, reconfirm and support what the interviewees say during the interview. Words such as “I see” are useful for such purposes. Gillham (2005) suggests that interviewers may need to improvise to deal with unplanned or unexpected information. They might also stimulate the interviewees to talk more about a particular matter by using probes such as “could you please expand on this idea”, or “could you tell me more about it.” During my interviews, I listened carefully to the participants and responded to them by saying words such as “I see”. I also used probes such as, “you mentioned that...” or “could you tell me more about...” as a way of extracting in-depth information.

### **3.6.7 Data Analysis**

The interviews were recorded by an audio voice recorder. The recorded data were then transcribed and analyzed using a thematic analysis. Mutch (2005) provides a general framework for the thematic analysis (or constant comparative analysis). It involves several steps such as gaining first perceptions; comparing and contrasting the differences and similarities between responses; aggregating the evidence that goes together as a

theme; establishing the relationships between the results and literature or framework; and speculating on the results by using a theoretical framework or the literature.

This study followed the above steps. At the onset of the data analysis, I thoroughly examined the transcribed interviews searching for terms, phrases, key words, concepts or themes that were repeated or mentioned by multiple participants. This step is also referred to as open coding, which is a way ‘to generate an emergent set of categories and their properties’ (Glaser, 1978, p. 56). Uncertainty, for example was identified as a key word through the open coding. I, then, highlighted the words and phrases that appeared to be important, with different colours indicating different themes. Each highlighted word and phrase was then extracted from the corresponding transcripts, compared, and classified in order to identify emergent themes and patterns.

The next step of the data analysis drew on the notion of axial coding (Neuman, 1997; Strauss & Corbin, 1990). The identified open codes were assembled and reorganised by themes and concepts and were given a label to reflect the categorization of the data and to reflect an answer to specific research and/or interview questions (Merriam, 1998). This process was then repeated with other transcripts until all transcripts were coded. At the conclusion of this process, the identified categories were merged into a single list from which significant themes were identified. For example, the key word ‘uncertainty’ was finally categorized under the theme of ‘the initial uncertainty’. The results chapter will present the identified themes from this study.

The final step of the coding process involved going back to the data and finding various

examples that most clearly illustrated the themes and concepts, in order to make the categories more robust and to validate and refine the emerging theory. This process is also called ‘selective coding’ (Neuman, 1997; Strauss & Corbin, 1990). It allows for the validation of the theory by comparing it back to the raw data. In other words, it is the process of speculating and explaining the results by using the framework and literature to give meaning to the data (Mutch, 2005). The discussion chapter deals with the explanation of the data collected (See Appendix I).

To sum up, this chapter provided information regarding the methodological aspects of this study. This study applied a participatory paradigm with a child-*focused* approach to ensure that the child participants were actively involved and empowered to be contributors to their own resilience building. This study used a case study design which best fitted the context and goals of this study. A semi-structured interview was used as the data collecting method to ensure that rich qualitative data could be extracted from the participants. A thematic analysis method was used to analyze the collected data. Lastly, information was provided to show the study was trustworthy through transferability, dependability, conformability, and credibility.

# Chapter Four: Findings

## 4.1 Introduction

The data presented in this chapter come from the interviews conducted with four adults and 19 students from BW school. The data present the participants' experiences as they dealt with the secondary stressors of a post-disaster school merger. The findings detail the process of the merger in the participants' words. The aims of this study were to explore how the children and adults experienced and responded to the secondary stressors and to identify the factors that helped them to develop resilience.

This chapter introduces the key themes arising from an analysis of the data. These themes are a) initial uncertainty, b) mixed feelings, c) loss of identity, and d) building resilience.

## 4.2 Themes

### 4.2.1 Theme I: The initial uncertainty

A sense of uncertainty was evident in all the teacher interviews when they described how they heard about the possibility of a merger. Teacher 1 (T1) described the lengthy decision process about when and how the merger might happen and the challenges to the decision that contributed to the uncertainty.

*It must have been in 2012 when...the government first announced...the merger could be a possibility. And our Board of Trustees and management challenged that position. And then in February last year, so that's in 2013, we heard that...it's going to merge. We were told it was going to merge on the WZ site only...It would definitely be rubber stamped and happen. And in September it came out that, no, actually it's not going to happen on one site, it's going to be splintered on two sites for two years. (T1, p.1)*

Prior to the official announcement, many teachers and parents had already heard about the merger through television, radio, internet and hearsay. But the leaked information was

premature, too little, and incorrect. The leaked information had made many participants feel uncertain about their immediate future and long term plans.

Teacher 2 (T2), for example, first heard about the merger through an Internet news site before the BW school authorities did. She felt there was too little information given out about the merger at the time and she was left worried about the future:

*[I was] worried. I was just sick in my stomach thinking okay, is it saying about jobs? Is it saying about my child's school; other children's schools? . . . There wasn't enough information given out at the time, for you not to think about what does this mean for you, for your future. I mean, we're already living in house waiting to be repaired, and we're going to lose my job now and my child's going to lose the school now. There was just not enough information to allay those fears at that time. (T2, pp. 1-2)*

Teacher 1 indicated that initially neither the principal nor the teachers had any idea about the proposed merger.

*Unfortunately the media leaked it before [we were told]. So people were texting me. They texted me at work. Friends . . . said 'Oh the school is closing'. But we hadn't heard that as a school, as staff. The principal hadn't even heard it. So, she had to get on the phone to confirm it. (T1, p.2)*

Finding out about the merger from unofficial sources was the experience of most of the teachers at BW school. Teacher 3 (T3) also heard before the official announcement and explained that the initial leaked information was incorrect.

*It was prior to the Minister of Education announcing all the mergers in Christchurch. So it was probably 18 month ago, and at that time we were told that it was going to be the end of 2016 I think it was. (T3, p.1)*

Some students, for example Student 15 (S15), also learned about the merger through the leaked information.

*We knew that something would probably happen, because the education department people [leaked] all the information that some school will be closing and merging and*

*some stuff. (S15, p.1)*

Parent 1 (P1) thought the media leakage was unfortunate because it did not allow the school to advise the parents about the merger.

*Unfortunately the media leaked it [information about the merger] before the school was given the opportunity to advise the families. I heard it on the radio on the news as I was coming to pick up the kids from school. (P1, p.1)*

In fact, although the teachers and parents had learned about the merger before the official announcement was made, most of the students did not know of the merger until relatively late, that is, not until mid to late 2013. Most of them learned about it from their teachers, parents or other means provided by the school, rather than through media coverage.

*[I found out] at the start of term 4 last year [2013]. (S10, p.1)*

*It was on the notice board outside [the school] and I also heard from my Mum and other teachers. (S13, p.1)*

*I heard it from my principal first and then my teachers and then my Mum. (S16, p.1)*

*I think they told us a little bit about it at school together and we got further information through emails. (S17, p.1)*

*We got a notice about it that was inside of an envelope and we got told to take it back home for our parents to read. Yeah, that's when we heard. (S4, p.1)*

The school and teachers had intentionally kept the news from the students, as they themselves were not entirely certain about the merger. They did not want to make a premature announcement as the school and community had decided to challenge the Ministry of Education about the merger.

*There was a big day when we knew the news was coming out. The teachers knew but they weren't allowed to tell us. (S15, p.1)*

*[The teacher] didn't announce it to the class, until we knew that it was definitely going to happen...They kept quiet...because, they didn't know it for sure when it would close or if we were, but it was a possibility. (S20, p.1)*

Teacher 3 (T3) explained that the BW community had a strong will to keep the school, so the school did a lot to fight for its survival.

*They did fight it. They put a huge document together...It was quite a strong push for the BW community to stay here... but unfortunately ours didn't have any credibility at all and so the end result... (T3, p.2)*

The school lost their appeal to keep the school open. It was then decided that the news would be released officially to the students. As indicated above, teachers at BW school were aware of how upsetting this news would be for students and took care not to tell students until the decision was final.

*Originally the letter went home and it was up to the parents at that time to read the letter to the students. And in the morning the kids would be told by the teacher...So I think that was actually very proactive to let the parents tell...rather than have 30 kids in the class bawling their eyes out. (T1, p.2)*

This was a better way of telling the students because at home with parents children would feel safe, which may have reduced the possible shock the children might get from hearing the bad news.

*I think...it's [a] parent's right to tell them...its really not up to the [teachers]...well as a parent I think that was good because you could tell your child at home and in an environment they were safe in..., so that you could prepare them for the next journey ... like tomorrow you were going to be told that your school is closing (T1, p.2)*

When it was decided that the school would close, parents were encouraged to tell the news to their children and teachers finally talked to their classes about the merger.

*I think we told our classes, I think we hoped that it wasn't going to happen... I think it*

*was a shock and I think parents had talked and I think that the children were really shocked. (T3, p.4)*

Due to the uncertainty about the merger, some students were shocked by the news as it was sudden or they did not know anything about it. Student 15 expressed a feeling of sadness about the merger, and she indicated that her class and teacher were uncertain about when exactly the merger would take place. Student 20 wished that they could have explained the matters regarding the merger more clearly. Overall, this created anxiety in the participants.

In summary, in 2012, the Ministry of Education decided to merge BW school with WZ school. However, the final decision was not made until 2013. During this period, the news media leaked the information before the final decision was announced. Many teachers and parents had learned about it through the media. The leaked information was premature. Little was clear as to when, where, how and even if the school would be merged. The leaking of information and the prolonged process left participants in this study feeling uncertain about their future. Due to this uncertainty, many participants were fearful, worried and anxious about the school, the children and their own futures. The school decided not to release the information to its students until after the school lost its appeal to stay independent. Then, the school decided to encourage the parents to deliver the news to the students. The school would also formally announce it. After the official announcement, some participants felt shocked by the news and the uncertainty and lack of information regarding the merger process.

#### 4.2.2 Theme II: Mixed feelings

After officially being notified about the merger, some participants' feelings changed. The adults tended to feel negative about the merger, as they did not want the school to close. Children were more divided. They shared some of the adults' concerns, but they also expressed more positive feelings. Some children felt excited about the merger and were looking forward to the change and the new friendships that they could make. As Student 5 said,

*I felt quite good about [merging with another school].... just to make new friends, new teachers and new ways to do it. (S5, p.1)*

Student 4 also had similar thoughts.

*I was excited to be meeting new people and new teachers. (S4, p.1)*

Student 8 expressed excitement over the new learning environment and new ideas that new school could bring.

*I thought about the new learning, things we were going to do, and new teachers and new kids . . . putting more things in the playground or something and making paintings on the walls and stuff. (S8, p.1, p.2)*

Many students mentioned the word 'new'. It appears that their positive views and excitement about the merger derived from their imagination of what the future could bring. Thus, the idea of 'newness' appeared to be a source of their positivity about the merger.

While some children were looking forward to new friendships, others were excited about renewing old friendships. Student 10, for instance, had many friends at WZ school, so he

was looking forward to meeting his old friends in the merged school.

*I felt excited because... most of my friends were there [in WZ] and I already knew them and had really good friendship with them. (S10, p.1)*

Student 12 had a long lost friend at WZ school.

*I felt really happy and like real surprised that we were merging... because I would get to see my friend that left a few years earlier. (S12, p.1)*

In short, these students felt excited and happy that BW was going to be merged with WZ. Friendship appears to be one of the most important factors—both making new friends and reuniting with old friends.

Students and adults displayed a range of negative emotions about the merger. There are four reasons for this. Firstly, some students were shocked by the news and were uncertain about the details of the merger at the time of the announcement. Secondly, many participants felt a sense of belonging to the school and hence did not want the school to be closed. Thirdly, the BW community felt that the school had a long history and they had a sense of continuity and family ties to the school. Lastly, the adult participants, especially the teachers, felt that the school was the hub of the community and functioning perfectly well.

*[I am] disappointed 'cause I've been here for probably nine years at that stage. And it was a great school. (T3, p.2)*

*At first I was pretty sad, because I have been in that school for 5 years, and then as my last year at the school proceeds, the school would then finish when I leave. So, I didn't feel too well. (S19, p.1)*

Student 15 displayed a strong sense of belonging to the school.

*It's my school and it's special, I have had all my schooling at BW. (S15, p.1)*

There were students who felt sad and cried because they had a sense of belonging to BW and did not want the teachers to leave the school because it would not be the same school anymore.

*A couple of them [students] crying because one of our teachers were leaving. (S9, p.1)*

*I was quite upset and disappointed that the school was going and it wouldn't be BW anymore. (S18, p.1)*

Feeling sad and being disappointed was mild response to the merger. Other students felt angry about the decision to merge. In one instance, a student explained that their anger was directed towards political leaders.

*Some of them felt pretty sad, some felt angry with the Minister for Education. (S19, p.1)*

One student turned to political leaders for a solution. A parent explained that her son was determined to prevent the merger and took the matter into his own hands. He was convinced that the Queen of England and leader of the Commonwealth had the power to overturn the decision made the New Zealand government and could prevent the merger from going ahead. However, it was quite emotional for her son when the Queen indicated that she could not interfere with the process.

*My younger son had even written letter to the Queen. He was going to go just to John Key, who he blamed for the whole merger. He was going to the top. He thought, well the Queen is in charge of the countries of the Commonwealth, so he wrote to her to ask if she could help. And of course she wrote back and said that she couldn't interfere. ... He was sure his letter would stop the merger from going ahead. And it didn't. So for a little while he took it quite, quite hard. (P1, p.2)*

While this was the only action taken by a student in this study, others had strong opinions about what could have been done. Student 1 thought that Christchurch had already

suffered enough from the earthquakes, and they did not need to suffer further.

*They could have started the merger in the North Island first since we had earthquakes. Lots of earthquakes. (S1, p.2)*

Whether or not the merger process would affect students personally, many responded negatively. Student 14 went to intermediate before the merger took place, but he still felt concerned.

*I was a bit worried that it would close when I was still in BW... just the fact that it could be closing, because I really liked BW and all the teachers. (S14, p.1)*

Compared to the children, the adults had been more prepared for the news, so when the merger was announced they expressed a sense of inevitability rather than the shock felt by the children.

*Because of the fact that we had heard that it was a possibility... it didn't come as a surprise... I expected that it was going to happen. As soon as the ministry had said that they were looking at doing it, I expected that it was going to happen. (P1, p.1)*

*We had so much time to know that, yes, they were definitely merging; I guess it felt, oh well, we fought the battle; we have tried.... (T1, p.1)*

However, the adults tended to retain negative emotions and did not want the school to close. One of the reasons was the school's long history. Teacher 3 felt the BW community believed that it was something that should be kept rather than closed.

*It was quite a strong push for the BW community to stay here. Because it's...I mean the school was from 1872... So it's a long [history]...it's almost the second oldest or third oldest school in...I think New Zealand. (T3, p.1)*

Parent 1 felt angry about the merger because her family members over a several generations had attended the school. The school played a role in her family history and

was a part of their identity, embedded in them and it reflected the continuity of their identity. She was particularly strong about her family ties to the school.

*[I was] very angry [about the merger].... I actually came to the school as well. So it's a family history... it was part of MY personal history as well as my children's... then all of a sudden they said, well, no, this is going as well. So yeah, it was like having the roots pulled out from underneath your feet. (P1, p.1-2)*

Parent 1's feelings were echoed in the responses of some students who had younger siblings.

*They were upset [at the Minister of Education]... Some of the reasons were because they had little brothers and sisters. They told their little brothers and sisters about the school and then all of the sudden, their brothers and sisters can't go to it. (S19, p.1)*

One particular student indicated that the closure was a disappointment for her, because she wanted to be there for her sister when facing difficulties.

*I mean she is turning 10, that would have concerned her a bit. I want to grow up with [my sister], I want to be there with her like when she falls over I want to be there to help her and obviously that hasn't happened, so it's a bit disappointing. (S18, p.4)*

Another reason the adults held negative emotions about the merger was because they thought that there was no valid reason for shutting the school because it was functioning well structurally, academically and socially. Teacher 1 felt particularly strong about the closure in relation to the school's academic achievement.

*We had the earthquake... the school was undamaged as it could still function the way it was. So why would you need to close?... The school was functioning physically as well as*

*academically. The students were achieving, they were ... achieving. (T1, p.1)*

In fact, she considered that saying goodbye to a perfectly good, high achieving school was the hardest part to cope with and accept during the entire merger process.

*I think it was saying goodbye to a school that was functioning perfectly fine. Like as academically we were fine, leadership child wise we were fine, I think that was the hardest thing (T1, p.7)*

Student 13 noted that BW school had produced many future leaders.

*We had so many advancing leaders, like we had head boys at [CW] and [SLB] and things like that. (S13, p.1)*

BW school was not only an educational facility, but it was also the center of the BW community.

*It was also our community. It was where we came together as a school, and it was a safe place for us and for the kids to come, you know, for the kids to come every day. The thing that was the same, and regular and routine because a lot of families, including ourselves at home, are still waiting in the queue to be rebuilt, that's a lot of families here. And there was a lot of uncertainty at home. But the school was the one place where the kids could come, and it was routine ... the same thing happened every day, which was really important, to keep them ... feeling safe. (P1, p.1)*

Parent 1 noted that BW community's spirit had been strongly reflected in the school.

*BW [has] a very strong community spirit. All the children knew one another... they had each other's back... it was just a very strong community spirit within the BW school. (P1, p.3)*

Teacher 1 described how the school became the community hub after the earthquakes.

*The BW school was like that; it was a real community hub... They also had the library open for parents to go in and have coffee in the morning just to talk about, you know.... There could only be four or five of them but they could all sit in there, if they wanted to cry, they could cry... (T1, p.4)*

Teacher 2 also indicated that there was strong mutual support between the school and the community.

*We were a community... It was also the support centre for all those parents out there who were mainly in very damaged area. So it brought them together, we had counsellors on site for them. We were the hub. We liked them to come and talk and get support. (T2, p.2)*

Teacher 3 noted that BW school was a great community school long before the earthquakes.

*It was a great community school. You have people here in and out all day, before school after school – just huge involvement, not just from current day parents either. It was past pupils, past parents and members of their families and everything. Not sure whether we've got to fourth generation, but definitely there were third generation children here. (T3, p.2)*

In short, the adult participants believed that BW school was not only functioning well, but it was also the community hub where the spirit of the BW community, had been active, especially in the aftermath of the earthquakes. Thus, to many there appeared no sound reason to close the school.

While most adults felt negative about the merger, a few expressed their understanding.

*I suppose the realization was that these properties were all red-zoned. And therefore almost straight away we lost half our zoning... we would normally have built up to a school of about 480 by the end of the year with the new entrants...but at the beginning of next year we were a school of 250. (T3, p.2-3)*

Some understanding was also expressed by students.

*It was a bit unfair because you know I guess that the school was damaged and needed more population because the people and students were leaving. (S18, p.1)*

In summary, after BW school formally announced to its students that the school was going to be merged, the students and adults expressed different emotions about the merger. Some of the students were excited because they could meet new people and teachers and reunite with old friends in the new school. However, most other students and adults tended to feel negatively about the merger. Some students were shocked by the news but adults were not surprised because they had already known about the merger and there was a sense of inevitability reflected in their statements. Many participants felt a sense of belonging to the school. They liked the school and the teachers and did not want the school to be merged. BW school had a long history where a several generations of families had attended the school and it represented a continuity of their family roots. Lastly, adult participants, especially the teachers, felt that the school was not only academically functioning well, but that it was the community hub where a range of support was given and received. While many felt that there was no valid reason to merge the school, a few participants realized that as the school was located in the red zone there was some basis for the merger.

#### **4.3.3 Theme III: Loss of identity**

In the last theme, it was noted that many participants did not want BW school to be closed and merged because the participants had strong ties and a sense of belonging to the school. As the merger occurred, participants faced various problems. Many participants soon realized that as the ‘closing school’, BW’s identity, ways of teaching and management also disappeared. It appeared the ‘continuing school’, (WZ) was able to retain its identity and their systems despite being merged into the newly named WK

school.

Teacher 3 noticed not long after the merger took place that BW was struggling to preserve its identity and uniqueness in the merged school. They had to adapt to the WZ ways of doing things.

*The children are definitely talking. Some of the parents and the children were beginning to say at the end of the last term, 'why were we doing everything the WZ way?' (T3, p.11)*

Student 13 wished that the school could have kept BW's systems in the merged school.

*Sort of keep BW's things because I know after the merger there have been a lot of the other school things there. (S13, p.3)*

The BW community retained a strong feeling for BW school. People were proud of their association with the school, its history and its family ties to the school. They saw the school as central to their community spirit and identity. While the school might have merged with WZ, the school community wanted to preserve some of the BW school identity and the ways of doing things when it was merged. They understood that WZ and BW school were two different schools, but they wanted to retain some of their identity.

*I guess it's like me; the school was special to them [BW students]. And we knew that once it was merged that it was going to change a lot. And it was going to be very different. I think we tried to make it different from that school because that was the way we wanted. We didn't want it to be the same as theirs ... That was our opinion and they had theirs ... we were different schools. (S15, p.2)*

Even before the merger took place, Parent 1 indicated that parents were concerned that the BW students were going to be lost because WZ was larger than BW. She also felt that the merger process was less like a merger and more like a closure where BW children had

to adapt to the WZ school environment.

*There was a lot of concern over the fact that we felt like the small fish going in to the big pond, because WZ was the larger school with the bigger community and our concern was that we would feel swallowed up. That once we were with WZ, we would sort of be lost... it's meant to be a merger, but in some ways it does feel as if BW closed and we, our children, now are in the WZ school environment. (P1, p.4)*

The idea that BW students were “swallowed up” rather than merged is evident in the perception that all the changes were required by the BW students. One incident that illustrates this point was mentioned by many participants. They described an issue that arose over the wearing of uniforms. BW school wanted to keep their original, uniforms, which not only would remind them of their identity but would save the BW parents from spending extra money on buying new uniforms. Teacher 3 noted that the Board of Trustees of the merged school would not allow the BW students to wear BW uniforms. She further explained that the decision was made by four members of the board of the merged school. On the board only three members were from the WZ school, which meant that the BW was a minority with little say in the process. Consequently, BW parents had to buy new uniforms for their children to wear.

*Ours had to change. We had pale blue, so ours had to all go and buy new polo shirts... the board made the decision... to begin with our parents were told that the girls weren't even allowed to wear their dresses or their uniforms, so of course our parents went out to... get the little skirts for them. And then they did a backward turn and said, yes, they could wear their own uniform, but ... with navy on top, so everyone had to buy a new navy sweatshirt. (T3, p.8, p.9)*

On the other hand, WZ children were allowed to wear their original WZ uniforms with the WZ logo.

*Totally their uniform! They were allowed to keep their navy blue polo shirts, with their emblem which says WZ school on it. (T3, p.8)*

Teacher 3 felt that such a decision was very unfair.

*I don't think it's fair. I think it should've been either everyone was allowed to stay in their own uniform, or a completely different colour altogether. Or they had to, like some of ours did, and go out and buy navy shorts or navy skirts, so that everyone was the same. (T3, p.9)*

Teacher 3 attempted to bring the issue to the principal's attention during a sports event.

BW students were not allowed to wear their sports uniform despite the fact that it was mostly navy blue and matched the WZ one. The issue was that the BW uniform had a red BW logo on. Teacher 3 felt that it was unfair when the WZ students were allowed to have their logo on their uniform but when she tried to bring up this issue, the principal was unhappy. In the end, the BW students had to wear their uniform inside out to prevent people from seeing the red logo.

*And the same thing has happened with sports team uniforms... I mean they are navy blue and blue tops with the red across them. They've got BW on them. .... And I got told more than once that I wasn't allowed... 'cause, of course, some teams wanted to look nice and wear the coloured uniform. We had to turn them inside out so they had the white singlet inside and put the number in vivid on the shirt on the outside ... But they [WZ]were allowed to go with WZ, written across their polo shirts. (T3, p.9)*

*I asked him [the principal], could we please wear the BW basketball uniforms, the red one. And I said it's only in red. It's hardly noticeable. When I said 'because we're looking at WZ in front of us every day', but he got quite annoyed about that. (T3, p.10)*

Teacher 1 said it was very difficult to explain this to her son and to the community. The community felt unhappy about such a decision. Her son could not understand why there was unequal treatment between the two schools and why BW school's way was not happening in the merged school. Thus, she had wished that BW school could have been treated more equally to make a balance.

*But I think like the uniform thing, for instance. You've got WZ kids still allowed to wear*

*their WZ logo shirt, whereas BW school aren't. So I think its just a little thing but for the ex-BW community that was quite hard. Looking at my son, for instance, because he is autistic, everything is very literal to him. So things used to happen that he couldn't understand... and for me as a parent it's hard to explain to him, 'well I don't know why your BW way is not happening', so it would have been nicer, I think, to have a bit of more of an equal balance. (T1, p.6)*

Parent 1 felt that BW students and community were a minority in the merged school because the principal and other school leaders were from the original WZ school. As a result, instead of forming a new merged identity of WK students and teachers, the BW community felt that their identity had been taken over by the WZ identity. This parent coined the term 'WZ-ised' to vividly demonstrate this point.

*It's more that we've lost the BW identity and we've taken on the WZ identity. Because there were more teachers, the principal from WZ... you know the majority of the children were from the WZ campus... I mean it's little things like notices came out and instead of having WK [the name of the merged school], WZ school [was] on it... the children come to school and they are wearing their plain navy polo shirts, and the WZ children still have got their logos on theirs, so it feels very WZ-ised... It's not a merged identity... BW has become WZ. (P1, p.4)*

Parent 1 further indicated that after the merger she did not feel connected to the new school and part of the reason was that the community was not the same anymore.

*I do admit that this year I haven't felt in any way connected to the school, and part of that could be because you know...there's not...the community. (P1, p.15)*

Many participants also pointed out that they had difficulties coping with the new teaching and study system. The system was completely different from BW's system, but it was already familiar to the WZ students. S11, for instance, indicated that in the newly merged school the teaching books and tasks were different from that of the BW's but they were familiar to the WZ students. However, the teacher in the merged school assumed that

everyone had already known about the WZ's way of naming the books and the ways of solving tasks, which was not true for S11.

*The thing I feel different about this school is like we have different names for our books ... like homework but we instead we call it home learning... I think they had that in WZ already, but I am learning the new names of what they are alright. (S11, p.2)*

Student 11 further indicated that he wished that the teachers could have checked with him about whether he understood the tasks rather than assuming everyone knew the WZ system.

*Maybe, like if they asked if people knew how to do this before setting the task. (S11, p.3)*

Teachers spoke of similar experiences. Teacher 1 indicated that the teaching and study system in the merged school was familiar to the WZ students and teachers, but it was completely new to the BW students.

*Because I feel otherwise you get one group of children that know all the processes; they know all the testing... whereas you get another group of kids and everything is new to them. Every single thing, learning-wise... they have to learn the homework structure, everything is different. (T1, p.8-9)*

Teacher 1 suggested it would have been better if they learned from each because the WZ teachers were familiar with their teaching system, whereas as the BW teachers had to learn everything again. She also believed that if the two systems had been integrated, it would also make the BW community feel that something of the original BW had been preserved.

*The teachers are the same... it would be more balanced if the other teachers had to learn a new process for teaching rather than just one learning a lot of processes they already all know and then... especially for the BW community, if something of BW had stayed. I feel strongly about that, because BW was achieving, it wasn't not achieving or going down. (T1, p.8-9)*

Teacher 3 noted that WZ did not value BW's teaching resources and ways of teaching despite being a merged school. The BW books and equipment were thrown out by the WZ teachers without consultation.

*They had people from WZ coming in sorting out our resource room and actually throwing away all our social studies resources, and what they didn't want. They put it into another room and they sorted it through and threw a lot away because they said they've got them on their side... So that was huge difference. No consultation either really. It was just laid down like that. This was what was going to happen. (T3, p11)*

BW teachers also felt that they were not valued. They felt that they had to prove that they were good teachers despite the fact that they were well established and qualified teachers.

*It was horrible. And it's like, you know you were a teacher, you were an existing person. Now you have to suddenly establish who you are again. You have to convince them that you know how to teach. And I was quite shocked by that; we are qualified, we have been teaching; we've been having appraisal... we have a license. We are qualified! (T2, p.3)*

Parent 1 agreed that WZ ignored the merits of the BW programmes and the experience of BW teachers. She believed that BW school had done a good job in terms of academic achievement.

*One of the other things was the principal. For him, spelling and handwriting aren't major issues. He doesn't see that that is something that needs to be worked on, and for me, if you can't read somebody's handwriting... Believe it or not, to me, spelling is one of the most important things, because you need to be able to spell, to read, to be able to communicate with people. (P1, pp.12-13)*

*The CSI reading program was so great. The improvement in the reading when they took the program on here, when it was implemented, it was incredible. And I keep thinking BW must had been doing something right... It feels, because there are more teachers and children from WZ, as if we've just taken on board what they did. (P1, p.13)*

In addition to the loss of BW school's identity and teaching systems, several participants pointed out that there was a cultural difference between the two schools. This was difficult for some students to cope with. A number of students indicated that in the newly

merged school, BW students were vulnerable to potential bullying and such a culture did not exist in BW school.

*There are more people and you were like a little kid that just started school; everywhere you go you see these big people [bullies]. (S11, p.3)*

Student 11 provided a personal example. She said that the WZ students had a different understanding about friendship than the BW students did.

*There are quite a lot of bullies from WZ. At the new WK school, me and my friend, because he is a boy, and all the BW kids understand that me and my friend, well we were just friends ... but when the WZ kids came ... first thing they think we were girlfriend and boyfriend. Like they don't understand, it's annoying. (S7, p.4)*

Parent 1 indicated that once her son also saw bullying occurring in the school and reported to a WZ teacher. However, the difference was that the WZ teacher did not see bullying as a matter of importance and told her son to solve it by himself, whereas the BW teachers would take the matter seriously.

*He feels as if it's a complete alien environment at times and he finds little things hard... for instance, there's apparently a group of about 8 boys that go around at lunch time and pick on children. He's seen it in action, and when he and his friends went to tell their teacher about it, they said well you should be old enough to work out how it is solved yourself, whereas... when he was at BW, when he had gone to a teacher, they would have to sort out the situation with them, to help them, guide them. (P1, p.11)*

Teacher 3 explained that there was a cultural clash between the two schools because the rules were different and that the WZ side did not seem to care about how rules had operated in BW.

*'Cause they didn't ask how things operated on our side. And this is where the children have found it hard as well. (T3, p.12)*

Teacher 3 believed there should be a set of rules that could be created and agreed upon so

that students from both schools would know the rules and boundaries.

*There needs to be more unity. There needs to be making things together for the new school. You know, like, if there are rules for WZ, okay, what are those rules? What can you come up with? You know, use students. They know themselves best. They know the ways in which they can do things best. Could they not establish rules and boundaries for their school that they all understand and can agree upon? (T2, p.9)*

Teacher 2 also noticed that the WZ teachers were less likely to pay attention to students' emotional needs. She was disappointed that the BW students could not form a close relationship with the WZ teachers. She did not believe that telling the students to deal with their problem without providing help was the right thing to do.

*[They need] emotional support. Things have had happened in their families. And I was a bit disappointed that they couldn't go to their own teacher about that. Not that I would ever not be there because of our shared experience but I had hoped that after a term of school they could share that with their new teacher. (T2, p.10)*

*I mean children need their feelings acknowledged. Sometimes all they want to hear is 'Oh I'm really sad that happened to you, I hope you feel better soon.'... You need to acknowledge their feelings. You need to listen even though you can't solve it. Or you can give them ideas...how to go about it themselves, [by] giving them skills [and] giving them scaffolding to deal with things... Not just saying, 'Deal with it'. (T2, p.11)*

Some students also felt that the BW students were not treated fairly compared to the WZ students.

*I feel that most kids who come from WZ, they don't get as much punishment. (S7, p.3)*

In addition to the cultural differences between the two schools, there was one issue that stood out during the interview, which was that the merged school would split the juniors and seniors on two different campuses. This issue upset many participants. The juniors, that is, Year 1-3, would be placed on WZ campus. The seniors, that is, Year 4-6, would be placed on the BW site. Many students did not like this idea.

Student 18 valued friendship and family ties and indicated that it would have been better if siblings could have stayed together on a same campus rather than being separated on two sites.

*Yeah, because, you know, I have got and most people have younger siblings, and you know my friend MD... she has got two younger siblings; they had to be split up as well. I have got two younger siblings and had to be split up. And I am sure that was the same for most other people. It was unfair for mums and dads having to go and drive around to different places. It's a bit stressful. (S18, p.1-2)*

She further felt that it would be better to let siblings, family, friends and teachers be together on the same site so that the families and friends did not need to be separated.

*It would just be better if more of us were together, and like siblings, friends, teachers. Because all the teachers are real good friends, some of them all got split up... why don't you maybe mix it up a bit, so maybe families can go to the same school together or, it doesn't matter what years... it's better if people were together. (S18, p.5)*

One student indicated that there was a clash between parents from the BW and WZ school blaming each other for coming to their site.

*The WZ parents just didn't want us going to theirs and their children coming to us. (S20, p.3)*

Parent 1 felt particularly strong about the split. She indicated that the decision had been made without the participation of the parents and that the process was rushed without enough planning. The merged school did not realize the reactions that the parents from both schools could have had.

*There were a lot of issues which starting coming up at that stage for the children at WZ because all of a sudden they were going to be split over two sites. The parents were upset because they hadn't been explained that it could be an option. (P1, p.12)*

*[The planning of split sties] needed to be done earlier and I know it was a huge thing, and it was really rushed, but I don't think that they thought through the repercussions of how families and children would react. (P1, p.12)*

Parent 1 had attempted to remind the principal of the merged school before the split when the idea came out, but the principal did not see why it would be a problem.

*I mentioned to [the principal] and he was all very, 'Oh, nah, it's not a problem here...for our children', and I actually said to him at the time, I said, 'It isn't at the moment but once it has happened and things have changed, how's that going to work?'... I don't think he quite got that. (P1, p.13)*

To briefly sum up the above findings, as the merger took place, various issues surfaced that caused further stress and anxiety for parents and students of BW school. One of the issues was that the BW school's identity was not preserved in the merged school, whereas WZ school's identity was allowed to thrive. This was reflected in that the BW students were not allowed to wear their school and sports uniforms, when the WZ students were allowed to wear their original uniforms. Another problem was that the merged school fully adapted WZ's teaching and learning system without integrating any of BW's system. Thus, the current system was friendly to the WZ students and teachers only, but was completely new to the BW students and teachers. Many participants felt that it was unfair and that the merged school did not value BW's systems. In addition, there was also a cultural difference between the two schools. The participants provided a number of examples, such as bullying and the lack of emotional support from the teachers. The participants also pointed out that the clash was due to a lack of unity in terms of rules and boundaries. Lastly, many participants pointed out that having the juniors and seniors of the school on two different school campuses, not only resulted in separation between family members and friends, but also gave parents the burden of dropping their children off at two sites.

The interviews give further insight into why BW staff and students felt so disempowered. Adult participants concluded that these issues existed because the BW school was the minority who had no decision making power or say in the setting up of the new school. Nor did BW children; they just had to accept the change that was made for them.

*Everybody making the decisions for us ... and that happened to me in my job, and to the schools It's now happened to the children at the schools. Everyone is deemed to [think] that they know better for everybody in Christchurch. (T2, p.13-14)*

Teacher 2 suggested that the teachers from both school should have talked more.

*I think that teachers should've got together, and they should have talked about their children and talked about the understanding [of] the ways the things they had in place to deal with things. Then from those two different ways, created one great way that worked for both sets of children. (T2, p.14)*

She believed that by discussing the differences between the two schools and by integrating the two systems into one, it would work for both sides.

*Talk. Communicate. I mean, it's a bit like marriage when you put two people together, you talk to each other, you find out what's really important to you and what things might not be important as much. You work out the differences between you and you celebrate those differences, but then you also create new memories, new activities, or things you do as a family or as a couple. And this is two schools together, and so you need to have not just one way. (T2, p.11-12)*

Teacher 3 suggested that for a better integrated school, more time was required to absorb each other's culture and systems to produce the best outcome for the students.

*I think definitely the time has to be longer. The time frame has to be a lot longer. I think there has to be a lot more integrating with the schools... longer time frames would have more discussion... I just think the whole thing is, if we were given more time by the government ... It's important that both schools have teachers at the senior management level, so you can bring the two cultures, and systems and procedures together. (T3, p.16, p.17)*

Teacher 3 felt that an independent person should have taken over the merged school.

*I don't think you employ a principal who's already a principal of one of the schools, doesn't matter which school. But I think it's got to be an independent person... It's affected everyone, as the WZ principal and senior management have totally taken over everything. They've disregarded anything that BW had, because we've haven't got our senior management up there to voice anything. We can't. We have managed to put a few things in place, but very few... So I think if you had an independent person, that you would have more consideration; it would have felt more like a new beginning. (T3, p.14)*

All in all, the adult participants concluded that the issues highlighted in this section, such as a loss of identity and culture, were a result of BW school having no decision making power during the process. They were left feeling powerless. They believed that in order to make a better merger, mutual communication and equal representation were required to understand both school's systems in order to come up with a merged system that would work for both sets of students.

#### **Theme IV: Building resilience**

In the previous section, it was shown that during the merger process, there were various difficulties that participants had to face. Nonetheless, throughout the merger process, support was provided to assist the BW children to work through the transition process and to help them deal with negative emotions and build resilience. The support came from five factors: the teacher factor, the school factor, the community factor and the individual factor. This section will focus on how each of these factors helped the students to cope with the merger and build resilience.

##### **a) The Teacher Factor**

Throughout the process, the BW teachers were major contributors to building BW

children's resilience. Teachers also attended to their emotional needs. Many children were feeling negative after hearing about the merger. They felt sad, worried and upset. BW teachers adopted various strategies to provide emotional support.

*All of the teachers were actually quite helpful. They were encouraging us saying that it was ok. Our teacher [Ms J], she was helping us, she was saying, 'It's ok'. (S9, p.1)*

*[The teacher said] positive things like, 'we would get through it', 'it was alright'. (S20, p.1)*

A number of teachers tried to reason with the students by explaining or providing information about the merger.

*They just made sure we knew what was going on... We could talk to them about anything and they would look after us about it (S15, p.2)*

*Later on next year they started telling us more information, maybe every week the principal would come in and tell us a little bit more information. And that helped a lot... that was really good and saved not knowing anything. (S17, p. 1-2)*

Student 1's teacher told him that by the time that the merger process was fully completed, he would be at Intermediate.

*They said that it would be ok, and that it wouldn't matter because by the time the new school comes I would be in intermediate... that would mean that I wouldn't need to go through this school closure again and go to the other site. (S1, p.1)*

Some teachers noticed the importance of friendship and encouraged the students to think positively about the new school.

*They just told us that we will be ok and we will make new friends... it gave me a good and positive attitude. (S6, p.1)*

*She talked about all the good things and she told us what would happen and stuff... like you can meet new people and bring in a lot of new ideas, and new teachers you can meet. (S8, p.1)*

*It calmed us down quite a bit. Just knowing we were all, you know, we all feel the same way. And we all are going to be with each other. (S18, p.2)*

A few teachers adopted more creative methods such as pairing up students in groups to share their thoughts and feelings with each other.

*[My teacher] said to pair up with a buddy and then talk about our feelings. And then share them to the teachers... [The teacher said] it was ok to feel like nervous and shy and that new school was coming into it. (S10, p.1)*

*Some of the times, teachers like, start to listen... we could have a talk about our feelings. [Teachers encouraged us to] take a deep breath and share our thoughts. (S19, p.1)*

Teachers' comments show that they explicitly tried to support students and be positive in spite of the fact that they were just as worried and anxious themselves.

*A boy had nightmares because he thought that I wouldn't be there. We couldn't tell them we had a job at that point, either. And he thought, but there would be no one I know there. And he got really worried. Then we found out, and I said, 'Well I am definitely going to be there, I don't know what site yet, but I'll be there and I can see you and I can talk to you if you need me' and his nightmares stopped. (T2, p.3)*

*It was all about the children. We made sure that everything was really positive. We looked for positive things; we talked about it; we told them about the decision. We held discussions with our classes so that any fears could be brought up and they could be talked about and we could then relay these to parents if they want to talk about them further. (T2, p.4)*

Parent 1 noted that despite the fact that the teachers were going through the earthquakes and the uncertainty about the merger, they acted very positively and professionally.

*They were so positive. I mean the teachers were going through more themselves about the whole merger and how it was going to work. They all had to apply for their jobs and all the rest of it. And yet they were so positive with the children. They did their best to make sure that when the WZ merger occurred, that the children had a positive view of the whole thing. So I take my hat off to the teachers because they were going through so much too... – the earthquake, the merger, the uncertainty themselves about how*

*everything was going to happen with the merger. And they were just so positive with the kids and they reinforced that it was going to be okay. (P1, p.5)*

Teacher 1 made herself ready and available especially for the high-risk children. She felt that knowing that the teachers were there for the students would make them feel better.

*I think I just made myself available for students. If I saw a kid in the playground ... we obviously had a register of children and we still have that, we know they are at risk that they might burst into tears all of a sudden. You know that has affected them. So I just made myself available for them like, 'Look I am here to talk to you, if you want to see me' or I'd go out to the playground and play with them for a bit. Just so they know you are still here; that they could still see you. (T1, p.5)*

*There was a lot done for the students, but basically learning just carried on as normal. There was nothing, like, 'Oh gosh we are going to stop learning now'... they just carried on teaching; which to a teacher, I think, it was amazing because they had all their issues – some of them had their homes in the red zone, but they still just carried on teaching as normal. (T1, p.2-3)*

Teacher 3 indicated that fostering empathy was the key to helping children build resilience.

*But we had empathy. And we used it a lot. We were doing a programme, a brain programme, and we were teaching the children on how [and] why they reacted as they did... We taught the children a lot of empathy, and why we were feeling like that, and to support each other. And I think they've carried that on. I think that's why they've adapted so well. They've shown empathy even though it was their school that had a takeover. I think they've shown empathy that there are more WZ children, and it is like a new beginning, so therefore we've got to change. (T3, p.15)*

Sometimes the teachers had their moments of breakdown but they supported each other.

*It was being able to talk to others, having that one person you can talk to, because they knew how you were feeling, their knowledge was there, they were there to support. And I think that was the best, because it's hard to talk to your husband and things, even though you do know about them, they are not in that environment day in day out, and they're not seeing you dealing with the crying kids, because you're trying to allay their fears. You know that does make you feel sad, it was quite hard. (T2, p.6)*

*It was really hard. We gave each other support, because a lot of people were still going*

*through their properties as well. So this was on top. A few people cracked, as to be expected, so we put in support people. We all buddied up and we would do things for each other. If they wanted to come and talk they could come and talk. If someone was having a bad day, we were released and we could go and help that member that day. (T2, p.6)*

Teacher 1 indicated that by working with and talking to colleagues who were in the same situation and attending social functions, the BW teachers supported each other.

*I think as a teaching staff, we joined quite a lot together because we had two principals throughout that time... so we had a lot of social functions. As a team we all sort of absorbed each other, like we would help each other out. If you saw someone was having a bad day, you would go talk to them. There was a lot of more talking going on amongst people, because most people were in the same predicament like their house was broken, so they had to try to fix that and they still had to still keep upbeat for the kids. (T1, p.4)*

#### **b) The School Factors**

In addition to the teachers' selfless support, BW school organized a number of fun activities and memorable celebrations at the end of 2013. A three-day celebration was planned for the whole community to come together and participate in activities, such as a family picnic, games, dancing, and music. These activities were organized to help children take their minds off the merger and to leave with happy memories. On the first day, the school held a jubilee-style celebration where over 500 people from the BW community attended.

*We had this BW celebration and it went for 3 days. And on the Friday night there was a family fun night, a picnic and fun games and a bit team thing. We were just having a picnic because it started raining. And there was music playing... I just completely forgot about the merger and so every time I felt sad about it, I just think about that. (S11, p.2)*

Students thought it was a fun way to say goodbye and to forget about the merger.

*[It was] a kind of fun way to say goodbye to the school and to make a good memory of the last day. (S17, p.2)*

*Probably to take our mind off things and also to get to know each other more, and then to make new friends, I suppose. While I was playing around with my friends, I just completely forgot about everything that was going on. (S19, p.2)*

During the celebration, a memorial photo book documenting the history of BW school and special pens were given out. In the library, photos of BW school's history and past and current students were displayed.

*[It provided] a memory, a very, very, good memory. We also had these books that had these photos of everyone, a photo of you, at least, and lots were very old photos. And we got a special pen. They were very special to us. (S9, p.3)*

Some students indicated that they had interactive activities with WZ students to get to know each other.

*People from WZ school came over to us. We did meet them and the juniors had gone over [WZ]... We did go on a WZ and BW trip to snow ski, to kind of meet people... to get to know each other... I did [make new friends] because now a lot of my classmates are from WZ from the snow ski trip. (S16, p.1-2)*

*We went to a ski trip with WZ... We visited each school... Probably just to get to know each other and get to know the new environment. (S20, p.2)*

Student 16 found this was particularly helpful and wanted more.

*Maybe doing another trip with the WZ school, and year 5s and 6s and doing things like that to get to know them better and to make more friends easier. (S16, p.3)*

On the second day of the celebration, the school invited past students to revisit and to say goodbye to the school.

*They had all the BW school history around and you could read it. There were lots of people who had been there who had gone to school 50 years ago. They came back. Sort of like memory coming back and saw the way it was now and that sort of thing... I think just to know that there are other people who went to BW school too and that it's not just us who are feeling sad. But they also made it fun because it was the last school thing they did and it was more special. (S15, p.3)*

On the last day, students mentioned that everyone was given the chance to ring the school bell.

*We all got to ring this old bell that had been there since the school started about 140 years ago. (S7, p.3)*

One student said that ringing the bell was to clear the memories of the old BW school.

*To clear the memories... just to get them all out and make a new one. (S5, p.2)*

A time capsule was made on the last day of the school, in which items that represented the BW school identity were contained.

*We would look at [the time capsule] and we would remember and realize that they came to the new school... [The time capsule] was to let them know that BW hadn't completely disappeared, that a part of BW was going to the new school... And we would open it up in 20 years time... The time capsule holds uniforms that the children wore, pictures of all the last children who were there at the last day. [It also] holds curriculum documents, all those things, they were BW. And holds a lot of old photos, cups, things like that, so that they are not lost. (T2, p.5)*

After the merger was completed, the new school welcomed the students and put processes in place to make the transition easier.

*[We had] a buddy system where the bigger children here scooted up to the other site and they got to spend I think it was an hour and a half with the junior class... [The purpose of the buddy system was] to get to know each other so the big kids get to still relate to little kids. Because it's important they still relate to them and it doesn't mean you have got one school here from 4 to 6 and you have got one school there from new entrants to 3. I think that was quite important. (T1, p.8)*

### **c) The Family Factor**

Apart from the support given by the teachers and schools, many participants indicated that their family members helped and encouraged them throughout the merger process. Parents, especially the mothers, were likely to attend to children's emotional needs.

Parents used similar strategies to the teachers to help their children. These included verbal comfort, positive reasoning, dealing with the change, and stressing the importance of friendship.

*[The parents] would say stuff about how change is sometimes the thing you need to deal with and that we should just go with the flow... every time me and my little brother felt sad about the merger, Mum and Dad would comfort us. (S19, p.2)*

*My mum knew about it most, she was like, 'Oh that is going to be that good' because my sister and I had to go to separate schools. So, after that but my mum was like, 'it's ok, because that's going to be fun', so we actually had quite a good adventure. (S9, p.3)*

*Because my sister is in the merged school now, they showed us the positive side of things. And they made sure that we could talk to them about anything... [They told me] I would be in a whole new school, I will have new uniforms, it will be exciting and everything will be different. You'll meet new people and you can make new friends and things like that. (S15, p.3)*

S20 indicated that his parents were particularly warm and encouraging.

*My parents they encouraged me to do as hard as I can, even if I failed, they would still be proud of me of everything. (S20, p.2)*

Parent 1 acknowledged that one of her sons did not deal with change well, so she remained as positive as possible in front of him.

*Every now and again he keeps going "Mum there's none of the old BW things left here..." It's a different school. ...but we kept talking about the positives, you know...this and that and the other things with him... We just tried to remain really positive about all the good things that were going to come out of it. (P1, p.3)*

Teacher 2 had a son who went to BW and although she was worried about her job and had to deal with the damage and stress from the earthquakes, she had to keep positive for her son.

*Anything that I was unhappy about, we didn't tell... I had to keep my job and my position separate from my child's school – this is his school. And I had to make this really good for him, because he was staying on the site, but it was not going to be the old school*

*anymore. So we had to continually listen to him and talk with him and support him through the change, I was keeping back from him anything I might be feeling or the things that were happening that I knew he was struggling with as a student. And so it was quite hard actually as dual role, very difficult. (T2, p.8)*

#### **d) The Community Factor**

The BW school and community had a very close relationship, especially in the aftermath of the earthquakes. The community was keen to help the school; it was like a community hub where everyone looked after each other.

*On the Sunday we incorporated a church service. Because a lot of our churches around the area had supported us throughout; they bought lunches every once a month for the staff. They put on sausage sizzles for the students last year. Parents on the PTA sometimes just turned up with a dozen of muffins for staff to have. We also got support from the Red Cross through funding to have some fun days. (T1, p.3)*

BW school made sure various counseling services were available to their students. High-risk students were especially targeted, but the service was available to everyone who was in need. And the professionals would talk to those children who showed psychological stress and help them out.

*The school also linked in with the [City] Mission... and we had counselors come for students who were struggling so they could go meet them at lunch time, where they would just wander around the play ground and play games... because some children showed anger that they normally wouldn't show anger, whether that was earthquake related or from the merger. So the counselor would just go and pick them up you know, and keep walking with them and talking to them about their anger. (T1, p.3)*

Teacher 1 felt that professionals were more likely to accurately detect children's hidden psychological stress.

*I think it's quite important to have professional agencies involve. It's all very well for people to say, 'Oh this child won't be affected and that child won't be affected'. But some little thing might happen and that actually they will be affected. I think that professional agencies like counselors and stuff are there on site to nip that in the bud. (T1, p.9)*

### e) The Individual Factor

BW children had their own ways and strategies to comfort themselves when feeling negative.

*I was talking to myself... I was saying just to forget about it. And just go to school like a normal school day. (S2, p.3)*

*Sometimes I'd say in my head that it is going to be ok and it is going to be a lot of fun. (S4, p.3)*

The BW celebrations were particularly helpful to Student 11.

*I just completely forgot about the merger and so every time I felt sad about it, I just think about [the celebrations]. (S11, p.2)*

Student 19 would revisit the BW school to bring back the good memories.

*Often during the weekends and holidays me and my brother would hop on our bikes and head down to school and have look around... It just brought back so many good memories when I was in that school and helped me to remember that even though BW school closed sometime, it's still got our memories in it. (S19, p.3)*

Many students were more concerned about their siblings.

*I think I tried to make myself like the positive things. And I think that I had to look after my sister and to make her see the positive things and that kind of helped me as well. (S15, p.3)*

In addition to the above strategies, friendship was frequently used strategy.

*Every time I felt just a bit sad, and wanted to just calm myself down, I'd think about how in the new school, I would be able to make new friends at the new school. (S19, p.3)*

*I knew a few kids [in WZ] because my cousins went to WZ, so I played with them for a few days and then they were with my old friends from BW, and then I met some new WZ children... and then when I played with the WZ children, they showed me to some of their friends, so we met them. (S4, p.3)*

When children were asked what they had learned through the process and what advice

could they give to other children if their school were facing merger, they highlighted the importance of friendship.

*We learned that we would always stick together and no matter what you will always be friends. (S17, p.3)*

*[I learned] it would be really good to make new friends. And most of the friends will probably be you know, friends for a long time or so. (S10, p.3)*

Apart from friendship, most students also indicated that thinking or being positive, trusting others, and accepting change were the strategies they frequently used to help themselves.

*Changes are bad sometimes, but not all the time. They can be bad but there can be some good things come out of them.... Try to stay at the positive side of things, not to look at so much about the negative because there will be negatives but there also will be the positives. You will find it easier if you help others as well, because then you know that they are ok about things, and you help yourself as well. (S15, p.5)*

*I learned that changes are sometimes a good thing, and if you think more positive it will come out like that way...positive. (S19, p.4)*

*Changes are sometimes something you have to accept. (S19, p.2)*

Teacher 1 also felt that most of the BW students were resilient and they would continue to be resilient in adulthood.

*I think long term that would be interesting to interview them say when they are 20. Because I think they will become very resilient people like adults . . . I think 90% of them will be more [of] accepting change... Because they have been through so much change... (T1, p.9)*

To sum up, throughout the merger process, BW students were supported by their teachers, school, families and the community. Some teachers provided verbal comfort to the students and other teachers reasoned with the students. Teachers used strategies to

encouraged children to share their thoughts and feelings. The school, in turn, organized many fun activities and celebrations to distract the students from the merger and to provide them with good memories of BW school. The BW community and other organizations not only participated in the celebrations, but also provided funds or donated provisions to support the school. BW children had their own ways of coping with the negative emotions associated with the merger. These included talking and comforting themselves and remembering good times. The most important coping strategy that the children used was friendship, that is, by keeping with their BW friends or thinking about and making new friends in the merged school. The children also indicated that they learned to think positively about change. All in all, each of the resilience factors presented in this section provided ways for children and adults to protect themselves from the emotional distress, difficulties and negative experiences associated with the merger. In the next chapter, the findings will be further analyzed with reference the relevant literature and, in particular, Bronfenbrenner's (1979) ecological model.

# Chapter Five: Discussion

## 5.1 Introduction

This study set out to investigate children's experiences of a school merger as a secondary stressor of the Canterbury earthquakes. The main aims of this study were to identify the protective factors that assisted children to cope with the merger, and to identify various risk factors that contributed negatively to children's adjustment, in order to raise awareness of them. The findings from the previous chapter will be theorized with reference to relevant literature and the framework of this study, that is, Bronfenbrenner's (1979) ecological model. This model is a structure of five nested systems: the microsystem, the mesosystem, the exosystem, the macrosystem and the chronosystem. Each protective and risk factor identified in the previous chapter will be analyzed according to a system in Bronfenbrenner's model. Three arguments will be presented. Firstly, it will be argued that children contribute actively to their own resilience building. In fact, they have unique ways of coping with traumatic experiences. Thus, researchers and adults should see children as playing an active part in their own resilience building rather than seeing them as passive victims. Secondly, children's resilience building is affected by both internal and external factors within various systems. Thirdly, I will argue that protective factors are more likely to be presented within children's immediate microsystem, such as through their teachers and parents, who have more direct influence and control. Those within the microsystem are able to provide and apply specific methods and strategies to help children cope with secondary stressors more purposefully. They are also more likely to make connections with each other, and this is deemed to be important to children's resilience building. Negative contributors are more likely to be presented in situations that are beyond the control of the children and where those within the

children's microsystem have little or no influence, such as within the macrosystem. By presenting the above arguments, it will highlight whether or not the study has achieved its aims.

## **5.2 The microsystem**

The microsystem is the direct environment that a child personally experiences. It has the most direct influence on a child's development and resilience building (Arnett, 2007; Siegler et al., 2006; Steinberg, 2011). This study found that a number of important internal and external protective factors within the microsystem helped the children build resilience against the merger as a secondary stressor. These factors were the individual factor, the peer factor, the teacher factor, the school factor, the family factor and the community factor. Within each of these factors, various specific protective factors reinforced children's resilience building.

### **a) The individual factor**

This study found that children had various internal and individual characteristics, mental attributes and unique ways of coping with the merger. One of the characteristics, which contributed positively to their adjustment to the new school, was children's curiosity. Research shows that curiosity is a significant motivator that influences human behaviors in both positive and negative directions throughout the life span (Loewenstein, 1994). According to Stern (1973) and Wohlwill (1978) curiosity is one of the most important driving forces in child development and educational achievement (Day, 1982). Although curiosity can be defined in different ways, it is commonly agreed, by researchers in the

field of psychology, that curiosity is an intrinsic thirst or motive to obtain new information and to acquire knowledge (Berlyne, 1954; Loewenstein, 1994). In other words, curiosity is one's internal desire to know and learn new things. Hebb (1955) noted that the underlying cause of curiosity is that humans have a natural tendency to make sense of the world and that not knowing what and why things are happening in our environment creates uncertainty and fear that disrupts our psychological equilibrium (James, 1950). Schmuck (1978) indicated that humans feel the need to control their social environment. Knowing that one is in control of his/her own surroundings provides a sense of safety and competence (Day, 1968; Loewenstein, 1994). In order to eliminate fear and uncertainty, people have an internal drive to make sense of the environment in which they live (Kagan, 1972). Loewenstein (1994) and Piaget (1969) noted that people who actively seek knowledge are known as voluntary curiosity seekers and such behavior is associated with pleasure. Pleasure not only encourages people to explore further, but pleasure can be derived from satisfying one's curiosity. Thus, it is a positive cycle. It is not so surprising then that curiosity is associated with positive achievement and adjustment.

In this study, curiosity had a positive influence on those children who were excited about the new school. They appeared to have a strong internal drive to learn and experience various new things and ideas associated with an unknown environment, that is, their new school. As they were stimulated by excitement to explore the 'newness' of the merged school, they were less likely to focus on any negative emotion associated with the closure of their own school. Their curiosity led them to actively explore the new school, which

meant they were more likely to adjust themselves to fit into the new school quickly and more smoothly. Children who were curious and claimed to be excited about the new school experienced pleasure rather than fear or uncertainty about the transition and the new environment. Those children indicated that they were happy throughout the process, and had little emotional distress. As a result, these children developed a sense of control over their circumstances and felt competent in controlling their social environment.

In short, curiosity, as a personal and internal motivation, served as a protective factor that contributed positively to the adjustment and resilience building of those children who possessed it. It should be noted that curiosity was an internal characteristic possessed by these children that drove them to actively explore the new environment. In this way, it can be seen that children can contribute actively to their own resilience building (Gibbs et al., 2013).

In addition to curiosity, positive mentalities were found to have contributed to children's adjustment and resilience building. Positive mentalities are sets of positive thoughts and ideas about oneself that increase self confidence and ability in dealing with difficulties in the present or the future (Seligman, 2000; Tedeschi & Calhoun, 1996). Children in this study displayed such positive thoughts by telling themselves that 'everything is going to be fine' or 'I will be fine' to give themselves confidence and comfort. Such mentalities are important because these thoughts strengthen optimism and positive affectivity, both of which enhance resilience and adjustment (Nakamura & Csikszentmihalyi, 2002; Peters, Flink, Boersma, & Linton, 2010). Optimism can be defined as a psychological tendency

to believe that one will receive mostly positive experiences throughout life. Studies show that optimistic people are in general happier, healthier and more positive than those who are not optimistic (Andersson, 1996; Wrosch & Scheier, 2003). Although no evidence suggests that optimistic people actually have better life experiences, they tend to possess a positive psychological attribution. In other words, people who have a hostile attribution bias tend to interpret neutral events negatively, whereas optimistic people are more likely to see the positive aspects of a neutral or even a negative event (Gillham, Reivich, Jaycox, & Seligman, 1995; Hollway & Jefferson, 2000). Optimistic people tend to be happier, healthier and more resilient. Moreover, positive affectivity is also related to optimism. Positive affectivity refers to the experience of sustained positive mood status, such as joy and happiness (Fredrickson, 2001; Lyubomirsky, King, & Diener, 2005; Nakamura & Csikszentmihalyi, 2002). People who experience sustained happiness are generally happy in daily life because such an emotional status lasts for a relatively long time. Weiten (2010) notes that happiness counters stress and other negative emotions and disorders, because when people are happy, their brains tend to produce a chemical substance known as dopamine, through neural transmitters to neurons, which reduces stress.

Many children in this study encouraged themselves to stay optimistic and to have a positive affectivity. Not only did they use various positive mentalities to achieve this, they also accepted the fact that negativity was an inevitable part of life. They had to see the positive side of change in order to have the best outcome come from these difficult circumstances. Children used different ways to encourage themselves to stay positive and actively applied positive mood-enhancing strategies to manipulate their level of optimism

and to enhance their positive affectivity (Peters et al., 2010; Lybomirsky, Sheldon, & Schkade, 2005). These mental behaviors helped them to cope with the transition as a secondary stressor and highlights again that children can contribute actively to their own resilience building.

Another method that some children applied was a technique called visualizing the best possible future (Markus & Nurius, 1986; Omodei & Wearing, 1990). This technique is promoted by positive psychologists. It involves imagining positive outcomes or achievements and then attempting to make such outcomes visible, like mental pictures or presentations (Smyth, 1998). Such mental presentations can also be written down or drawn on paper.

Research shows that by imagining these positive pictures, a person is more likely to be motivated to achieve a possible outcome. A person is also more likely to have positive thinking, emotions and adjustment associated with new tasks and environments. Imagining a successful future provides a person with a feeling of control (Lyubomirsky, Sheldon, & Schkade, 2005). In terms of children in this study, it was noted that some students were curious about the ‘newness’ in the new school. Children imagined ‘newness’, such as making new friends or having a new playground. This was one of the ways that children kept themselves emotionally positive about the merger. Having an imagined successful future was yet another protective factor that children applied to help themselves to overcome the negative emotions associated with the merger – another example of children contributing to their own resilience building (Gibbs et al., 2013).

Some children developed their own unique ways of coping with their negative emotions associated with the merger. One child, for example, would think about the happiness that he experienced at the BW closure celebration. Another child would revisit the school with his brother to bring back pleasant memories. These unique coping methods can also be explained by creativity. It is difficult to correctly define creativity as scholars in different fields have different views. Yet, Claxton, Edwards and Scale-Constantinou (2006) state that rather than trying to define what creativity is, one should understand why creativity is important. In terms of resilience building, the question of ‘why?’ is significant, as creativity is an effective means to help children build resilience. Creativity in resilience building can be expressed through the form of imaginative drama play or creative art, by which children are enabled to express their feelings, thoughts and ideas about traumatic experiences in a free manner without reliving the negative experience associated with trauma (Erikson, 1963; Gibbs et al., 2013; Terr, 1981). Such creativity can reduce the negative emotions associated with trauma and promote psychological well-being. Creativity in resilience building is not limited to the above forms – a person’s creativity can also be defined as a mental process by which one shares independent and innovative ideas, thoughts and emotions through various means. Those children who developed and applied unique ways to cope with the merger showed creativity and originality in dealing with the merger as a traumatic event. Most importantly, the goal of such creativity was also to reduce their negative feelings. This idea also further suggests that children have their own ways of coping with traumatic experiences that adults are not always aware of. For this reason, it is important to involve children in disaster and

resilience research (Kellet, 2005; Cahill et al., 2010).

To sum up, this study has found that curiosity as an internal and a personal characteristic motivated a number of BW children to be excited about the new school. This curiosity may have contributed to their adjustment to the new school and prevented them from having distress associated with the merger. Some children used various positive mentalities to encourage themselves to stay optimistic and happy throughout the merger. These mentalities protected them from feeling negative. There were also children who used a technique called visualizing. This technique allowed them to imagine the positive things associated the new school to encourage themselves to look forward to the change. Lastly, some children developed their own creative ways to cope with the merger. These findings tend to suggest that faced with secondary stressors, children show the ability to use a range of strategies, including creating their own ways of coping. Thus, researchers in disaster study should not treat children as passive victims, but should involve them actively and allow them to share their ideas and ways of coping with a traumatic event. It is argued that by enabling children to become active participants in research, researchers not only can gain insight into children's unique coping methods, but through the process itself could help children to release the emotions associated with trauma.

This section argued that various internal factors were vital to children's resilience building. Many of these internal factors, such as positive mentalities, were reinforced by external factors. Such external factors came from children's various microsystems such as their peers, teachers, parents and other third parties. The next section will discuss

various external factors within the children's microsystems that contributed to their resilience building and adjustment.

#### **b) The peer factor**

Among the most important players within the children's microsystem, who contributed positively to their adjustment and resilience building, were their close peers and friends, who had been through the transition with them. Friendship can be identified as a significant protective factor. Friendship is one of the basic human needs for affection, that is, to be accepted and loved by others (Schmuck, 1978). Friendship is a positive interpersonal relationship and phenomenon characterized by intimacy, trust, mutual understanding and reciprocation (Babad, 2009). In this study, initially for many children the biggest fear associated with the transition was the possibility that they might lose their close friends in the new school. This finding is consistent with Ladd and Coleman's (1997) and Ladd and Kochenderfer's (1996) studies, in which they pointed out that friends are vital during difficult times of school transition and that children are more likely to show positive attitudes towards the new school if a large number of their classmates in the new school are their established friends. This is because one of the most important functions of friendship is that it provides children with a sense of security, especially in an unknown or unfamiliar environment (Blatt & Blass, 1990; Bowlby, 1988). Bowlby (1973), Behrends and Blatt (1985) and Winnicott (1965) acknowledged that people of all ages function most confidently when knowing that significant and trusted others, such as friends, are with them and backing them. This is also a phenomenon known as internal representations of relationships (Behrends & Blatt, 1985; Bowlby,

1973). When the children in this study knew that their important friends were still going to be with them and that they would back each other up and go through the same process, they felt an immediate relief that their fear of losing friends and concerns over the transition vanished. It also provided a secure base from which children could look forward and explore the new environment together with more confidence. Such confidence also enhanced a sense of control over the new environment and promoted a positive coping and adjustment cycle (Ryan, Stiller, & Lynch, 1994). In addition, a reciprocated best friendship was found to be a vital positive contributor by children in this study. This is reflected in the fact that many children felt better after knowing that their best friends would be in the same class as them and that they could talk to them for emotional support. A reciprocated best friendship is characterized by a strong sense of mutual understandings and support (Ladd & Kochenderfer, 1996). Research shows that best friends are an important source to turn to for emotional support against unpleasant experiences amongst children (Ladd, Kochenderfer, & Colman, 1996). Sharing thoughts and emotions with best friends is also known as self-disclosure. Self-disclosure not only releases one's unpleasant emotions, but also in turn further promotes intimacy and loyalty towards such a friendship (Bigelow, 1977). It would, in turn, help children to adjust and obtain a sense of control in new environment and provide a positive protection cycle (Ryan, Stiller, & Lynch, 1994). In short, friendship has been identified in this study as a crucial protective factor that served as a secure base for children to cope with their fear, to release their negative emotions and to explore and gain control of the new environment. In fact, by supporting each other emotionally, it provided an immediate chain of positivity towards their own adjustment. This, again, strongly supports the argument that

children can contribute to their own resilience building and can share this actively in disaster and resilience research.

### **c) The Teacher factor**

In addition to the peer factor, teachers were also key contributors in terms of attending to children's emotional needs and assisting them to cope with the secondary stressor. Teachers are natural mediators for children (Wolmer et al., 2011). When children were feeling negative about the transition, many teachers immediately made themselves available and provided various levels of comfort to their students. This finding is consistent with the strategies that APS (2013) and NASP (2008) suggest: that after a traumatic event teachers should provide children with emotional comfort to reassure them that they are safe. A sense of safety is important to prevent children from developing uncertainty, helplessness, hopelessness and fear about their lives and future (Shaw, Espinel, & Shultz, 2007). Moreover, knowing that teachers, as trusted and significant adults, were there to back them up when they were needed also helped children to build a sense of security. It is important for children to have a safe psychological base to explore an unknown environment, and this positively contributed to children's adjustment (Behrends & Blatt, 1985; Bowlby, 1973). The important role of teachers was evidenced in that many children felt an immediate relief after being comforted by their teachers and knowing that they were going to be with them in the new school.

Those teachers who provided immediate emotional support to their students, moved beyond their traditional role. Babad (2009) has indicated that responsible teachers have a

dual role in the classroom. The first role is that of an ‘instructor’. Teachers as instructors are responsible for helping children to gain knowledge and they positively reinforce children’s cognitive development and school achievement. However, teachers also need to take on the role as an ‘educator’, who handles children’s personal problems and looks after children’s emotional and psychological well-being (Babad, 2009; Sternberg & Williams, 2010). In fact, being an ‘educator’ has many long term benefits for both teachers and children in terms of resilience building and positive adjustment. For example, teachers who attend to children’s emotional needs are in fact providing emotional feedback (Sternberg & Williams, 2010). Positive feedback from teachers reinforces a positive relationship between students and teachers (Babad, 2009). In this study, students listened to their teachers and adopted various coping strategies (discussed in the next section) recommended by their teachers. In short, ‘teachers as educators’ are an important protective factor that assisted children’s adjustment and resilience building against secondary stressors.

Babad’s (2009) definition of ‘teachers as educators’ meant that some of these teachers provided a form of educational therapy and such a therapy helps children to cope with traumatic events cognitively by giving factual information regarding the events (Lazarus et al., 2003; Shaw et al., 2007; Wolmer et al., 2011). Factual information could prevent children from feeling uncertain about what would or could happen to them in an unknown situation. Uncertainty is associated with fear and a sense of helplessness in controlling one’s social environment (Loewenstein, 1994). Thus, educational therapy reduces this uncertainty by providing information that explains what could happen in this

unknown situation. This is evidenced in that some children indicated that they felt better after gaining more information about the merger.

Apart from those teachers who provided educational therapy, there were also many teachers who acknowledged that friendship was important to their students. Hence, these teachers used friendship to comfort their students. Some teachers even knew the names of the best friends the children wanted to be with in the same classroom in the new school. This is referred to as “knowing the narrative of the classroom” (Babad, 2009, p.43). Classroom narrative is the social process and phenomenon of a classroom such as a student’s status or a student’s friends in a classroom. Knowing these particular narratives helps teachers to manage and lead a class more peacefully and productively (Babad, 2009). It also shows that teachers care about their students and are ready to help students when needed (Babad, 2009). In addition, as mentioned, many teachers used friendship to encourage students to look forward to the new school. These teachers were, in fact, stimulating students’ interest and curiosity about the new school with an extrinsic motivation (Sternberg & Williams, 2010). Extrinsic motivation includes external stimulators or rewards such as money that motivate one to achieve certain goals (Alberto & Troutman, 2009). To use this method effectively, such rewards must be wanted or liked by the receivers. In this study, BW teachers were aware that many children were highly concerned about losing friends. Therefore, they reassured students that their friends would still be with them, as an extrinsic stimulator to encourage them to feel safe in the new school. In fact, participants noted that this was one of the most helpful pieces of advice received from their teachers.

In addition, a number of teachers were reported to have organized group activities in which children were teamed up and encouraged to share their negative feelings associated with the merger. This approach is consistent with one of the strategies that APS (2013) and NASP (2008) suggest teachers should use. When students talk about their feelings and thoughts, stress and negative emotions are reduced (Weiten, 2010). It is also referred to as the emotional disclosure approach (Feist & Rosenberg, 2009; Pennebaker, 1995). Research shows that it is not helpful to repress stress or traumatic experiences as it can lead to psychological and physical exhaustion (Feist & Rosenberg, 2009). The best way to release stress after a traumatic experience is by disclosing negative emotions to supportive and trusted others (Feist & Rosenberg, 2009). Such disclosure can be in the form of writing such as diary or it can be verbal such as sharing with a friend or teacher. At the same time the person receives social support from others (Pennebaker, 1995) promoting positive psychological adjustment and physical health. Moreover, another benefit of such an approach is that it encourages children to talk with others. Emotional disclosure not only allows children to reduce their psychological stress, but to challenge the idea of 'not disclosing feelings', which could have a negative impact on children's well-being.

Those teachers who encouraged children to share feelings with others also encouraged children to be sympathetic to each other. In this study, children's sympathy is reflected in that many children were more concerned about their friends, siblings or teachers' adjustment and well-being during the process rather than their own. They often tried to

help and comfort each other when needed. People who receive help are also more likely to return such a favour by giving help to others. This is referred to as reciprocal altruism (Trivers, 1985). Such mutual help acts as a protective cycle. In this study children helped each other and at the same time reinforced their resilience against secondary stressors.

Finally, although BW teachers also had their moments of sadness and helplessness, they remained positive for the sake of children, and supported each other emotionally to reduce the risk of burnout. Burnout is psychological and physical exhaustion. Pines and Aronson (1988) explain that it is caused by constant stress and daily pressures. Teaching as a profession is deemed to be at high risk for burnout due to demanding daily tasks. The BW teachers had to deal with both primary and secondary stressors, which added extra stress to the pressures of their regular work (Babad, 2009; Friedman, 2000). Teachers' burnout can also affect students' emotional well-being. To avoid burnout, BW teachers gave each other emotional and social support. Wood and McCarthy (2000) suggest that mutual support from colleagues is an effective way to protect teachers from burnout. However, more importantly, by preventing burnout, BW teachers managed to keep very positive in front of their students. This not only prevented children from being affected by their negative emotions, but also set up a good model for children. It was important to be positive, supportive and sympathetic to each other as children learn various behaviors through observation, imitation and interaction with adults (Babad, 2009; Bandura, 1986).

To sum up, this study found that BW teachers were important players within the children's micro-system and provided many ways to help children to build resilience

against secondary stressors. In general, they took on great responsibility for the children's emotional well-being. They were familiar with the narrative of their classrooms and encouraged their students to open up, share feelings and to be sympathetic towards others. In order to provide children with a positive school environment, they remained positive for children by avoiding burnout. They set up good models for children, and children were willing to listen to and try out the methods that their teachers taught them to prevent themselves from thinking negatively. It was through the above protective actions that teachers reinforced children's resilience building and positive adjustment. This also tends to suggest that children's resilience building is affected by a bidirectional relationship with interaction from both internal and external factors.

#### **d) The school factor**

BW school provided a number of measures that positively contributed to the protection of children against secondary stressors. BW school had been a safe space where children's physical and psychological safety and well-being were met in school during and in the aftermath of a disaster (Cahill et al., 2010). This was achieved mainly through using preventive measures when any potential risk was discovered, reducing children's negative emotions through structured leisure activities during the process, and keeping children connected after the process.

The first measure that the school took was a preventive measure to avoid children from feeling uncertain about the school closure. Such a measure involved controlling the release of media and unofficial/official information regarding the closure. This is

consistent with Fergusson et al.'s (2011) acknowledgement that prevention is the best way to reduce children's psychological and physical issues as opposed to treatment. It is also consistent with the idea that schools are expected to focus on risk prevention and reduction prior to disasters (Mutch, 2014b). However, as media guidance and control is included and will be analyzed in the exosystem section, the details will not be discussed here.

During the merger process, the school re-established daily education activities, which were important for providing children with a sense of normality. One of the most outstanding education activities provided was structured leisure activities or school-sponsored extracurricular activities to help children to cope better (Mahoney, Larson, Eccles, & Lord, 2009). Structured leisure activities are healthy and meaningful activities, which have positive physical or psychological benefits to children such as sports or artistic activities. Structured leisure activities enhance students' psychological well-being (Mahoney et al., 2009). Structured leisure activities take children's mind off stress, at least temporarily, and instead provide them with enjoyment and happiness. Happiness is a major protective factor in reducing stress and other emotional disorders (Weiten, 2010). In addition, structured leisure activities also teach children alternative and meaningful ways of coping with stress, for example, by expressing one's thoughts through arts or sports. BW school used structured leisure activities to reduce children's stress associated with the merger.

Among various leisure activities provided, there were some that involved students from

both BW and WZ schools, such as a ski trip. These activities allowed them to get to know each other. They were important as they reduced some biases and stereotypes that had been held by both BW and WZ students and parents. Studies show that one of the best ways to reduce bias against other people is by getting to know and communicating with each other (Babad, 2009). It allows people to understand and be more tolerant towards the differences between different people and cultures. The ski trip, for example, served as such an opportunity. A reduced bias had positive effects on children's adjustment as through the activity they made friends with WZ students and were more likely to now have friends in the new school. Finally, after the transition was completed, although officially BW school was closed, the school kept a 'buddy system' to maintain a positive connection between friends and family. The system not only provided physical benefit and enjoyment to children but was also meaningful as it allowed a continuity of friendships (including relationships between siblings), that otherwise would have been discontinued by the separation of two school sites. As this system was put in place in the school that was officially closed, it shows that BW school was still helping its children in a recovery process in the aftermath of the closure (Mutch, 2014).

#### **e) The family factor**

Within the children's microsystem, family directly and positively contributed to their resilience building. This study revealed that parents were very supportive throughout the entire process. This is consistent with the idea that an important resilience factor for children is to maintain a positive connection with their family and to be supported by their care-givers (Morrow, 2003). The parents in this study applied many strategies that

were similar to those applied by teachers. These included providing verbal comfort, disclosing emotions with their children, providing insights into the new school, encouraging children to deal with change, and acknowledging the importance of friendships. All of the above methods contributed positively to the children's adjustment along with a positive family atmosphere. Halberstadt, Crisp and Eaton (1999) stated that family atmosphere affects children's psychological and emotional well-being. Children's emotional status is more likely to be negative when exposed to frequent expressions of negative emotions between parents, whereas when positive emotions are being expressed often at home, children are more likely to also experience and express positive emotion. This would in turn protect children from negative psychological issues. There is evidence in this study that parents hid any negative emotions from their children in order to maintain a positive family environment during a time of change and potential trauma. One example of this was that one child's mother had initially created a negative family atmosphere, but quickly realized it and managed to alter it to a positive one, which served as a protective factor for her child. Those parents who kept a positive family atmosphere acted in a similar way as the teachers who stayed positive. Thus, both parents and teachers built a strong double layer of protection around children through maintaining a positive atmosphere in school and at home.

Finally, positive sibling relationships, especially a 'buddy relationship' were shown to be a protective factor. Herrera and Dunn (1997) note that children often perceive their siblings as important companionship. In a positive sibling relationship, siblings are sources of emotional support, assistance, instruction, security, and caretaking (Boland &

Keller, 2002; Cohen & Wills, 1985; Steinberg, 2011). Having positive sibling relationships seems to positively contribute to children's cognitive competence, social and moral development and other positive mental status such as high self-esteem; all of which assist children to build resilience (Siegler et al., 2006). Often in a positive sibling relationship, the older siblings tend to take care of younger siblings. This is referred to as a 'buddy relationship' where the older siblings not only treat their younger siblings as friends, but they also act as models for their younger siblings (Arnett, 2007). Through this process the older siblings in turn become more likely to develop a strong sense of responsibility and hence more likely to act and think positively in front of their siblings (Arnett, 2007). Younger siblings receive protection from their older siblings and at the same time learn various positive behaviors from them. Therefore, a positive sibling relationship has mutual benefits to both the older and the younger siblings. In this study, a buddy relationship was shown when some children who had younger siblings demonstrated great responsibility in taking care of their younger siblings, as they were more worried about them during the transition than about themselves. This feeling of responsibility also helped these children to stay positive, as they wanted to be a good model for their younger siblings. The buddy relationship appeared to protect children who had siblings in this study. It should be noted that research shows that one of the most significant sources of positive sibling relationships come from families where parents show warmth and love to both children and who keep a positive family atmosphere (Grych, Raynor, & Fosca, 2004; MacKinnon-Lewis, Starnes, Volling, & Johnson, 1997). Thus, as parents had generally kept a positive family atmosphere during the process and showed their children warmth and support, they had contributed to the positive sibling relationships found in this study

as a protective factor.

This study found that family could make a positive contribution to children's resilience building and adjustment, especially through having a positive parenting style, keeping a positive family atmosphere, and having positive sibling relationships. It should not be overlooked that as siblings were contributing positively to each other's resilience building, this once again suggests that children had been actively contributing to their own resilience building process.

**f) The community factor**

Within the children's microsystem, the community was a positive contributor to children's resilience building. The BW community contributed to children's resilience building in many ways. One of the most important ways was through their collective identity and shared values. However, this section will not discuss identity and values as they will be thoroughly analyzed in the macrosystem section. Thus, apart from its collective identity and shared values, the community mainly helped children by providing them with bonding social capital (as discussed in Chapter 2) and by encouraging them to actively contribute to coping and recovery activities rather than seeing themselves as passive victims (Sinclair, 2004).

The importance and power of community in terms of contributing to its members' resilience building in disasters is well known. Community mainly helps its members through various shared activities and social supports. A self-resilient community exhibits

fast adjustment and active engagement in the recovery process after a disaster. Nevertheless, a community is made by its members. Hence, it is through its members' individual and collective contributions to the adjustment and recovery process of the community that such a community can be self-resilient (Peek, 2008). These kinds of contributions are referred to by Hawkins and Maurer (2010) as social capital. They describe social capital as "the direct and indirect resources that are by-product of social networks and social support systems amongst family, friends or community members" (p. 1778). In disasters, social capital derives from various social networks supports and contributes extensively to victims' survival and resilience building (Bassuk, Mickelson, Bissell, & Perloff, 2002; Edin & Lein, 1997; Hawkins & Abrams, 2007). Social capital can be any protective factor such as financial resources or psychological support provided by members of a social network. Three specific types of social capital have been identified, they are, bonding, bridging and linking social capital (Gitell & Vidal, 1998; Szreter & Woolcock, 2004). Bonding social capital is more likely to be formed in a homophilous community where everyone has similarities in certain ways such as they live in the same location, and they have similar SES, beliefs, values and experiences (Putnam, 2000). Members of such a community are more likely to help each other through difficult times due these similarities and a sense of connectedness between them.

In this study, bonding social capital was especially important to the community and its children's resilience building. In fact, various players within children's microsystems discussed so far such as peers, teachers, school and family members were all part of the greater community network and had all provided children with some form of support that

assisted children both individually and collectively in building resilience against secondary stressors. Specific individual ways of support have already been discussed in each factor in children's micro-system section. However, it should be noted that emotional and psychological protection and support was the main bonding social capital given by players within this community network. This level of support and protection is consistent with Luthans, Vogelgesang and Lester's (2006) study that bonding social capital has a vital role in developing disaster victims' resiliency through psychological support. Financial and other professional support was given through linking social capital, which will be discussed in the mesosystem section.

The children, teachers, and parents in this study acknowledged that their community involved the children as active players in their own coping and resilience building process. Sinclair (2004) pointed out that children are more likely to be resilient if a community encourages children to contribute to the coping and recovery process rather than seeing themselves as powerless. Such a community would more likely to form bonding social capital as children are part of social capital, which is important for community's self-resiliency (Hawkins & Maurer 2010). In fact, a community's self-resiliency is important to children's resilience building as community disruption creates a significant secondary stressor itself. Thus, it is a mutual relationship. Also, when children are involved in a coping and recovery process, they are also more likely to both provide and receive help from others and thus it is a positive cycle (Winkworth, Healy, Wooward, & Gamiller, 2009).

The involvement of the children in their own resilience building has been discussed thoroughly throughout the micro-system section. There can be little doubt that children are active players in their own resilience building, but that they are supported in this process and kept from further trauma by the protective layers that are built up around them by friends, family, teachers, the school, and their community. Although, each of these protective layers contributed individually, connections were made between them, which further enhance the layers of protection within the community, and this is called bonding social capital. In the next section, that is, the mesosystem section, the importance of the connections made between individual contributors within and outside the BW community will be discussed.

### **5.3 The mesosystem**

So far, various specific protective factors and contributions made by the five actors within children's microsystems along with children's own contributions have been discussed individually. In this section, the connections made between these individual contributors will be discussed. Also, the important role that the school played in connecting these actors and in connecting other social capital outside the community will be discussed in detail.

The mesosystem is the connections and interactions between two or more microsystems. Research shows that children are more likely to be resilient when positive connections are made between different microsystems (Arnett, 2007; Siegler et al., 2006; Steinberg, 2011). The current study found that various connections were made between actors

within children's microsystems. And such connections were mainly made through the school, which strengthened the protective cycle of children. The school was the 'connector' between various microsystems in the community. Such connections were reflected in many ways, for example, the school supported parents emotionally by providing a gathering place for them to disclose their emotions, it involved the entire community in resilience building activities, and the school involved parents in a joint effort to keep children positive about change. These connections were important because overall, they reinforced a positive emotional atmosphere amongst members of the community and within the households. As discussed, a positive family atmosphere is positively associated with children's' resilience building, and vice versa. Providing parents with a place to share and release their negative emotions, assisted parents to keep an overall positive atmosphere at home, so that children would not be negatively affected by secondary stressors within the home environment. Furthermore, involving community members in various resilience-building activities enhanced a positive psychological atmosphere amongst the entire community and promoted the idea that the members of the community were looking after each other and were going through the same secondary stressors along with the children. Thus, it is argued that school acted as a connector between various actors within children's micro-system and that such connections enhanced bonding social capital within the community and ultimately promoted children's resilience building against secondary stressors.

The school not only enhanced bonding social capital within the community, but also developed bridging and linking social capital. Bridging social capital is the relationships

and support amongst people who are dissimilar in many ways such as SES, race and values (Szreter & Woolcock, 2004). BW school mainly developed bridging social capital through structured leisure activities, which involved children from two different communities. As acknowledged earlier, the main positive outcome of this bridging capital was that previous held biases were lessened and this reduced anxiety and helped BW children adjust to their new school. The school also made an effort to develop linking capital, which mainly assisted children professionally through access to various services (Szreter & Woolcock, 2004; Woolcock, 2001). Such a link was built by BW school when they contacted the local Red Cross, churches and other agencies for financial support to hold the celebrations and to provide professional services for psychological assistance. This linking capital, therefore, provided BW children and their families with protective services and resources that were beyond the ability of the community and school to produce and provide.

To sum up, various connections were made between different actors within children's micro-systems using the BW school as an intermediary. These connections enhanced the bonding social capital within the community. Also, various connections were made outside the community where linking and bridging social capital provided children with resources and services that the BW community could not have provided by itself. The presence of each and all three types of social capital greatly enhanced the protective layer around the children and assisted resilience building against secondary stressors. As can be seen, so far, most protective factors were provided by actors within the children's immediate system. Nevertheless, as will be discussed in the next sections, various risk

factors were evident in the exosystem and macrosystem mainly because many factors in these systems were beyond the control of the children and actors within children's microsystems.

#### **5.4 The exosystem**

Both the microsystem and mesosystem are within children's direct settings. However, the exosystem includes settings that a child is not directly involved with, such as the mass media (Shaw et al., 2007; Siegler et al., 2006; Steinberg, 2011). In this case study, the news and social media made mostly negative contributions to the adult participants' psychological well-being and had a moderately negative effect on some children.

Initially, the news media had contributed negatively to adult participants' psychological well-being because of the prematurely leaked information about the merger. Adult participants were overwhelmed with uncertainty. Their uncertainty soon became intensified and ultimately turned into anxiety and fearfulness for their children's and their own future. Thus, the news media was acting as an additional secondary stressor. This result is consistent with the Riseborough (1994) and Witten et al., (2001) studies in which uncertainty was found to be a negative psychological stressor. Exposure to media coverage of a traumatic event can be a powerful indirect source of emotional stress. Whether a person might be affected is mainly due to two influences: exposure and interaction (Pfefferbaum, Houston, North, & Regens, 2008; Shaw, Espinel, & Shultz, 2007; Steele & Brown 1995;). Exposure refers to how closely a person is involved personally in a particular traumatic situation covered by the media (Pfefferbaum et al.,

2008). The closer a person is involved, the more likely that he/she would be affected by the media information. The participants in this study had all been part of BW school. Therefore, the leak immediately caught their attention and affected them psychologically. Secondly, interaction plays a significant role in creating uncertainty. The media practice model explains the interaction between media and viewers (Brown, 1995). People use media for their own motives, which includes seeking particular information of relevance to them. In this case, adult participants relied on the media to inform them about their own situations, such as the merger. Brown (1995) explains that if the information provided by the media is vague and does not give the reader satisfaction, then psychological uncertainty and resistance towards such information is likely to occur. Uncertainty can disrupt one's psychological equilibrium extensively especially in traumatic events, because it is associated with a sense of not knowing one's future and a lack of control of one's fate. Therefore, it also can create fear and a sense of helplessness such as that which the participants in this study experienced (Shaw, Espinel, & Shultz, 2007). Although the media leak of information contributed negatively to the adults to a considerable extent, only a few children were affected. This was because the school realized the potential harm of the media and managed to provide children with further information that mitigated the potential harm and in so doing protected them from being overwhelmed by uncertainty.

Although BW school managed to find ways to reduce the negative effects of the media leakage within its power, the media was beyond the direct control of the school. Risk factors were more likely to emerge when they could be prevented or directly controlled

by children and their immediate protective systems. This pattern was also found in the macrosystem. In fact, a number of negative contributors were beyond the control of the participants, and, therefore, those who were key actors in protecting the children were relatively powerless at this level. These negative contributors and the reasons why they were beyond of the control of the participants will be discussed in the next section.

### **5.5 The macrosystem**

The macrosystem is referred to as a society's broad beliefs, ideologies, values, social class, cultures/subcultures, laws and government's policies (Siegler et al., 2006). In this study, the macro-system can be seen as the culture, system, values, and policies of the merged school. These factors contributed negatively to BW children's adjustment. However, before examining these contributors, it is worth analyzing how BW participants defined themselves as a community. There are two important reasons doing so: first, the collective identity of the BW community had been a major positive contributor to children's resilience building and adjustment to the new school. Second, the negative contributors within the macrosystem are associated with neglecting the BW community's identity. Therefore, by providing an insight into BW community's collective identity in relation to the school, will help to better understand the negative contributors within the macrosystem.

The BW community, as mentioned, had been one of the major positive contributors to children's resilience building and adjustment to the new school. One of the positive contributions was made through their community identity and it thrived in BW school

during the time of primary and secondary stressors. Identity formation is affected by both internal and external factors. A person's identity, however, is neither fixed, nor one-dimensional (Gilchrist, Bowles, & Wetherell, 2010). It evolves accordingly to a person's particular needs at particular time and contexts so that people express different identities in various situations in order to enable them to obtain better lives (Gilchrist et al., 2010) However, individual identities and needs can be threatened as individuals have a limited amount of power. Thus, people with limited power often assemble to form communities and utilize resources, networks and connections, as with the bonding social capital mentioned earlier, to protect and strengthen their interests and needs (Gilchrist et al., 2010; Gitell & Vidal, 1998; Szreter & Woolcock, 2004). Members of a community can have different identities and interests that may cause conflict, but a successful convergence of these identities and interests forms a sense of mutuality and this is known as community or collective identity (Gilchrist et al., 2010). A successful convergence often requires members of a community to have common or shared values such as fairness and to engage in reciprocal behaviors such as mutual support in times of difficulty. In turn, community identity empowers individual members by creating a cohesive and supportive environment, which allows them to thrive with social connections and resources (Gilchrist et al., 2010). Correspondingly, members are more likely to develop and have shared values, attachment, connections, networks, familiarity, locality and loyalty to the community and with its members. Community identity also defines boundaries between various communities and creates the difference between 'us' and 'them' through physical location and through community values and cultures. In short, community identity defines who belongs to a particular community and who does

not.

In this study, the BW community had formed a strong community identity. Their identity was demonstrated through reciprocal and mutual support in the aftermath of the Canterbury earthquakes and during the school closure. As has already been discussed in the micro, meso and exosystems sections, such mutual support included the entire BW community network. This support fulfilled and enhanced the survival and safety needs of children in the aftermath of the earthquakes and during the merger. The school was the hub of the community and many supportive events and actions were devised to help both the children and the BW community members. Correspondingly, the BW community's identity had been enhanced, as participants expressed a sense of belonging to and continuity with their former school. They also formed shared values, which defined and strengthened who they were as a community. The BW community's identity contributed positively to both children's resilience building through meeting and enhancing their various levels of needs and by providing them with various supports, which have been discussed in each layer of the system.

In the merged school, however, BW community's identity was not allowed to thrive. Teachers' and children's needs for safety, respect and actualization were threatened (Maslow, 1970; Weiten, 2010). These were the major negative contributors to the children's adjustment to the new school. Along with these two major contributors, other minor negative contributors emerged. For example, one of the major incidents was related to uniform. The symbol that represented the BW school and the community's

identity, was not allowed to be worn in the new school. Only one school's and one community's identities were allowed to thrive. Lornic (2007) notes that a successful integration allows the identities of two entities to thrive. If only one identity is allowed to thrive and the other is repressed, then it is called assimilation (Babad, 2009; Gilchrist et al., 2010). Assimilation is forcing the minorities to abandon their own identity and to accept the norms and identity of the dominant culture. The negative effects of this assimilation were displayed in children's discussion of threats and changes to their identity, such as the uniform. Many had not formed feelings of belonging to the new school. They believed that they were the minority and that their collective identity was neglected. Thus, such negative thinking contributed negatively to some children's adjustment. Moreover, a minor side effect of this assimilation was that extra financial burden had been placed on parents to buy new uniforms. Cui, Conger, Bryant and Edler (2002) explain that financial strain is associated with an increase in emotional and psychological distress. Consequently, children who live with distressed parents would be more likely to be negatively affected themselves, both emotionally and psychologically. This was also reported to be the case in this study.

In addition to assimilation, some teachers and children's needs for safety were also threatened. Bullying was highlighted as an issue that threatened some children's sense of safety in the new school. This issue was not treated seriously because of the cultural difference between the two schools and a lack of communication and mutual agreement about specific rules. Lorinc (2013) believes that a successful integration requires that the two merging entities understand each other's culture and to build an active

communication mechanism. School bullying is not only harmful to children's adjustment, but also potentially damaging to children's physical and psychological well-being. Bullying can cause bodily harm, and it creates constant fear and concern for one's safety (Haynie et al., 2001). Maslow (1970) and Weiten (2010) also indicated that people cannot focus on higher needs such as achievement, if lower needs such as safety can not be met. Thus, due to a lack of communication and agreement on rules regarding students' safety issues, bullying became a concern for some children and was negatively affecting their adjustment to the new school.

Finally, teachers' and children's needs for respect and self-actualization were threatened (Maslow, 1970; Weiten 2010). This was reflected in the lack of integration between the learning systems of the two schools. BW school had to completely abandon their learning system and to fully adapt to the learning system that was been familiar to the dominant school. The WZ teachers assumed that everyone knew the new system and therefore provided little support to those who were not familiar with it. This was because of a power imbalance in the management level where the decision making power was dominated by one side. A shared vision had not been created. Lorinc (2013) suggests that sharing the vision means that the leaders of the two entities should make decisions together for the best interests of the integrated entity. The negative effect of this situation was that some children found it difficult to adjust to the new learning system and felt disadvantaged. Sternberg and Williams (2010) note that students' achievement often drops during transition to new school because the learning systems and expectations are often unknown. As the new school did not help BW children with the new learning

system, their need for self-actualization to achieve in the new school was under threat. It was also a form of assimilation as BW children were forced to accept the learning norms and habits of the other school. The positive self-esteem and self-concept derived from their school achievement was diminished as they felt forced to adapt to a new learning system. All in all, it appears that there was a lack of understanding of these threats to children's well-being by the management of the new school. The efforts to maintain WZ's learning environment might have been viewed as a means of maintaining normality for the WZ students, but this practice undermined the establishment of a newly merged school because it privileged the practices of some but not all students. BW children did not see the accepted practices as normality and felt that it undermined their collective identity.

To sum up, within the macrosystem, the participants' sense of a strong collective identity positively contributed to children's resilience building in the face of secondary stressors. However, their collective identity was neglected as they were assimilated into the integrated school. Children's and adults' needs for safety, respect and actualization were jeopardized by forcing them to adapt to a new learning system. The fundamental cause of these negative contributors was a power imbalance between the two schools where the dominant party had full decision-making power. A successful integration, however, requires active communication, mutual understanding and agreement, meshing cultures and a shared vision between the two schools to avoid the negative contributors presented above. These negative contributors in the macrosystem were beyond the control of the children and that of the various actors within children's microsystems. Thus, it is argued

that this study found that negative contributors are more likely to be present in situations where children and those within children's microsystems have less or no influence of, as opposed to in those situations that over which they have more control.

## **5.6 The chronosystem and summary**

Many children's attitudes and emotions towards the merger changed over time. Many children displayed various negative emotions towards the merger at the onset. However, by the time the integration was completed, they were mostly resilient and had successfully adjusted to the transition, although a few students were still trying to adapt themselves to the new system. This change was due to their own contributions, along with all of the external factors presented and discussed in this chapter. This suggests that time can be a positive contributor along with the presence of other protective factors (Bonanno, 2005; Yehuda 2002).

In summary, this study investigated the participants' experiences of school merger as a secondary stressor. The aims of this study were to identify various protective and negative contributors that assisted or harmed children's coping with this secondary stressor. It was found that some children were resilient because they had protective personal characteristics such curiosity or optimism, and others created own ways of coping with the traumatic experience. Children also protected and supported each other emotionally throughout the transition. Thus, it is argued that this suggests that children do contribute to their own resilience building. Researchers and adults should treat children as active parties to understand their unique ways of resilience building rather than

treating them as passive victims. Nevertheless, children's resilience building was largely supported by external factors such as various actors within their microsystems and the connections made in the mesosystem. The BW teachers were good role models for children; they taught sympathy to the children by showing them various forms of emotional support and by encouraging the children to share their emotions. BW school not only held structured leisure activities to take the children's mind off the transition but actively made connections between different external actors to provide children with both bonding and linking social capitals. BW school also protected children from negative media influences by providing guidance and factual information, although the media itself could not be controlled by the school. The BW community supported children through their collective identity, which not only fulfilled, but also enhanced children's various levels of need through bonding social capital derived from various networks within the community. However, at the macrosystem level, it was found that there were negative contributors affecting children's adjustment. Such negative contributors were present in the integrated school where assimilation strategies repressed BW's identity; where children's need for safety was threatened; and children's and adults' need for respect and actualization was diminished. The fundamental cause of these negative contributors was a power imbalance between the two schools where there was a lack of communication, and therefore little mutual agreement in the meshing of cultures between the two schools. This suggests that protective factors were more likely to be present within the children's immediate systems, such as the micro and mesosystems, where various actors and the children themselves had more direct control. In those areas within their control and power limit, the children and various actors could autonomously apply

different strategies to build resilience and help with adjustment. Negative contributors were more likely to emerge when they had less or no influence, such as through school policies within the macrosystem, because it was beyond their power limit to prevent or protect children from these negative contributors. This chapter concludes the identification and discussion of the protective and risk factors that assisted or harmed children's resilience building in post-earthquake Canterbury, as was outlined in the study's aims. In the conclusion chapter, both the limitations and the future implications of this study will be discussed.

# Chapter Six: Conclusion

## 6.1 Overview

This chapter summarizes the entire study with an emphasis on the key findings and discussion. The strengths and limitations of this study will also be considered. Finally, future implications will be suggested.

## 6.2 Summary of the study

This follow-up study was nested under a UNESCO-funded project, which set out to uncover and preserve stories involving schools and children about their earthquake experiences. The follow-up study investigated children's experiences of a school merger as a secondary stressor of the Canterbury earthquakes. The main aims of this study were to identify the protective factors that contributed positively to children's resilience building, and to identify the risk factors that contributed negatively to their coping and adjustment. This study applied a case study research design within a participatory research paradigm to provide a deep insight into the topic and to present the case for children to have active participation in research. Data were analyzed thematically to identify the key findings, and subsequently discussed with the use of relevant literature and the theoretical framework of this study, that is, Bronfenbrenner's (1979) ecological model.

The key findings of this study suggest that initially the adult participants were psychologically and negatively affected by the information leaked from the media about the merger. As the leaked information was vague, it left them feeling uncertain and anxious about their children's and their own future. When it was officially confirmed that

the school would be merged, the participants' reactions varied. Some children felt excited about the merger throughout the entire process, yet others wished that the school would not be closed. This was mainly because the community had strong individual, family and collective connections with the school and treated the school as the hub of the community where their identity, values and sense of belonging were embedded. In the merged school, many participants believed that the school was not integrated, as their identity and school system were completely neglected, and they were forced to accept the 'other' identity and school system without negotiation. As a result, some children had some difficulties in adjusting to the new school. However, in fact, most children demonstrated and developed resilience throughout the process and coped with the transition positively. They were not only fully supported by their teachers, family members, the school and the community throughout the process, but that they also actively contributed to their own resilience building.

A number of arguments were drawn from the discussion of the key findings. First of all, this study argued that children do contribute to their own resilience building. This was reflected mostly in that the children not only had protective personal characteristics such as curiosity and optimism, but also applied methods taught by the adults, and had their own creative ways to help themselves and each other to build resilience against various secondary stressors associated with the merger. Secondly, this study argued that children's resilience building was also reinforced largely by external protective factors provided by various players within their microsystem. The BW teachers and family members provided extensive emotional support to children. They taught children the

value of sympathy and friendship. The BW school kept children occupied and happy throughout the process by holding a number of structured leisure activities. Connections were made between different external players to provide children with both bonding and linking social capital through the active contribution of the school and other institutions. Moreover, the BW community supported children mainly through an already established collective identity that responded to their needs through bonding social capital derived from various networks within the community. Thirdly, this study found that children were more likely to be well protected within the micro and mesosystems, in which both children and various players within their immediate systems had more control of their own affairs and environment. On the other hand, negative contributors were more likely to be present in the macrosystem, in which they had less or no control of the environment and affairs. This was mostly reflected in that BW's identity and school system were repressed in the integrated school, caused by a lack of power balance and communication between the two schools. As a result, BW children's need for safety, respect and actualization was not protected.

### **6.3 Strengths and Contributions**

This study has a number of strengths. Firstly, the literature review chapter noted that currently although there are studies that deal with the effects of disaster on children, most of them focused on studying the protective and risk factors associated with primary stressors. Secondary stressors were thought of as a by-product. Furthermore, there is very limited research on how school closure, as a specific secondary stressor, affects people

associated with it. This study, therefore, contributed to this area by focusing on identifying the specific protective and risk factors associated with children's resilience building against the secondary stressors associated with a school merger.

Secondly, the methodology chapter identified that much disaster research on children's well-being in disaster contexts tends to place children in a passive and vulnerable role without giving them the right and chance for their voices to be heard. This study, however, treated them as active participants, not only in research, but also in their own resilience building process by providing children with the right and the opportunity to lead the interview conversations and speak freely. This method led to discovering the unique and specific ways that children contributed to their own resilience building. Hence, this study emphasizes that disaster researchers ought to actively involve children in disaster research in the future, as they are an important part of the resilience building process.

Lastly, being a case study, this study provided an insight into the BW children's experiences of their school merger, and from which both children and adult participants identified a number of risk factors during the merger process. Hence, by discovering, presenting and discussing these risk factors, this study has raised the awareness of those factors that may harm children's adjustment and resilience building. In the future implications section, suggestions for possible improvement of those risk factors will be discussed.

#### **6.4 Limitations**

Although, this study has made some contributions to the field of disaster study, it has limitations. One of the most important limitations is that only the BW participants were interviewed and that only their side of the story was told. The methodology chapter mentioned that this study has applied the triangulation technique involving using multiple data sources such as the BW children, teachers and parents to cross examine the credibility of their stories. Nevertheless, none of those participants in this study belonged to the WZ school community or was from the management level of the integrated school. Such voices may have presented different points of view and experiences from those identified by the BW participants. However, this is not to say that the BW participants and this study are not credible, yet disaster research shows that sometimes there might be a gap between the perceived support and the actual received support (Kaniasty, Norris, & Murrell, 1990; Kaniasty & Norris, 2004). Although, a detailed discussion of the above concept is beyond the scope of this study, it is worth noting that the gap between the perceived support and the actual received support might be influenced by the perception that one group had an advantage over or received more support than the other. There might also be the perception of a reduction in support provided over time, and by the perception that the support provided does not meet the actual needs. These perceptions could have influenced the BW participants' understanding about the causes of the risk factors they identified. Therefore, without learning the WZ views, there could have been a misunderstanding between the two sides about the actual received and perceived support, which this study did not investigate.

Finally, although this study has identified and discussed extensively the specific protective and risk factors associated with resilience building in regards to secondary stressors and suggested that children were more resilient than has been previously acknowledged, it does not treat lightly research that takes a different view. Garmezy (1993), for example, believes that children who show competent behavior, happiness and successful coping with adversity may still experience trauma-related negative effects such as depression. In addition, Boyden and Mann (2005) point out

The need to recognize that concepts such as resilience and coping should be applied with extreme caution... Their use should not be taken to imply that children who appear to have adapted successfully to difficult situations suffer no ill effects. Nor should they be regarded as fixed states. (p.18).

It should be noted that this study does not aim to provide a clinical analysis of children's psychological resiliency in a disaster context. It is limited to the experiences of the participants within a bounded case. It cannot conclude that the participants were resilient, in the sense that they were not suffering from, or will not suffer any form of psychological or emotional problems associated the merger. However, this study can be seen as a reminder of the factors that could affect children's resilience building in a disaster context and goes some way to meet the challenge that Boyden and Mann (2005) identified: "The challenge in this regard is to identify ways in which resilience and coping in children can best be supported while also being mindful of the psychological and emotional costs to children and of the need to minimize these" (p. 18).

## **6.5 Future implications**

This section will deal with two separate implications. First of all, the implications for possible improvements to a more successful merger based on the risk factors identified by the BW participants will be suggested with reference to Lorinc (2013). Secondly, a future implication for researchers who wish to extend this study will be discussed.

As this study found, many of the secondary stressors came from the ways in which the merger was handled. Lorinc (2013) suggests a number of key factors towards a successful integration. Firstly, a successful merger needs to start early. The leaders, such as the principals of the two schools, should start finding out the potential integration challenges before the actual merger, in order to plan and deal with the challenges before they become actual problems. For example, the potential financial and psychological costs of not allowing BW children to wear their own uniform could have been avoided if it was seen as a potential challenge. Secondly, collaboration requires the teachers of the two schools find common ground on which to develop the merger. A teacher participant suggested that if both sides could have learned and integrated the best part of each other's learning systems, both children and teachers would have benefited, rather than one side being disadvantaged. A successful integration also requires that two entities understand each other's culture and build an active communication mechanism. This requires both schools to understand that there are two sets of identities, values and beliefs involved, through communication with each other, rather than one side trying to assimilate the other by not allowing their identity to thrive. Thirdly, Lorinc (2013) indicates that sharing the vision means that the leaders of the two groups must clearly set up the goals and aims for the newly merged entity and make decisions together for the best interests of the

merged entity. As mentioned, the participants of this study identified that the most fundamental problem of the merger was that there was a lack of shared vision because decisions were made predominantly by one group due to a power imbalance at the management level. Therefore, for a successful merger, as a teacher participant suggested, there should have been a more balanced power arrangement at the management level, so that it could protect the interests of both groups.

Lastly, for those who wish to contribute further to this study and the field of disaster study, it is suggested that a further follow-up study may be carried out to learn the views of the WZ school. This would clarify whether a misunderstanding between the perceived and actual received support had existed. In addition, a further follow-up study may also be carried out with the BW participants again to see if their situation has changed, and at the same time, perhaps, whether more or different protective and risk factors could be discovered.

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# Appendices

All Consent and PIS forms have been approved by UAHPEC.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS  
ETHICS COMMITTEE ON 5 Oct 2012 FOR (3) YEARS. REFERENCE NUMBER  
2012/8274

# Appendix A: Assent Form (Children)



## ASSENT FORM (Children)

### **Children's experiences of school closure in the aftermath of the Canterbury earthquakes**

Hello there,

My name is Chris Hu. I am a masters student at the University of Auckland. I am doing a study on children's (your) experiences of school closure following the Christchurch earthquakes. It would be great if you would like to share your experience and stories with me about your school closure and how you are getting on at your new school.

If you would like to talk with me about your experience, please tick the sentences below that you agree with as you read them.

- I would like to share my experience and stories of my school closure.
- I am happy to have my words recorded by a voice recorder.
- I understand that I can stop the interview at any time if I don't want to go on.
- I understand that if I feel sad or upset I can stop the interview and ask for a teacher or another adult to help.
- I understand that my real name will not be known, but what I say might be read by others.

Thank you very much for your help!

Chris Hu

# Appendix B: Consent Form (Adults)



## CONSENT FORM (Adults)

**THIS FORM WILL BE RETAINED SECURELY FOR A PERIOD OF 6 YEARS**

**Project title:** Children’s experiences of school closure in the aftermath of the Canterbury earthquakes.

**Name of Researcher:** Chris Hu

I have read the Participant Information Sheet and understood the nature of this study and why I have has been asked to participate.

- I agree to take part in this research.
- I understand that I will be asked to share my experience of school closure in an interview, which will last approximately 30-40 minutes and the conservations will be recorded on a voice recorder.
- I understand that I have the right to provide information freely during the interview and I can withdraw from the interview at any time without providing a reason.
- I understand that I can withdraw from participation at any time without providing any reason up until four weeks after data collection is accomplished.
- I understand that my identity of your child will not be revealed. However, my anonymous stories maybe shared in publications or presentations.
- I understand that the recorded data will be kept on a pass-worded hard drive in a safe locker in the University of Auckland for six years. It will be destroyed after this period. During the time frame of the project only my supervisor and I have the access to this data.

Name\_\_\_\_\_

Signature\_\_\_\_\_

Date\_\_\_\_\_

## Appendix C: Consent Form (Parents)



### CONSENT FORM (Parents)

**THIS FORM WILL BE RETAINED SECURELY FOR A PERIOD OF 6 YEARS**

**Project title:** Children's experiences of school closure in the aftermath of the Canterbury earthquakes.

**Name of Researcher:** Chris Hu

I/we have read the Participant Information Sheet and understood the nature of this study and why my child has been asked to participate.

- I/we agree to allow my child to take part in this research.
- I/we understand that my child will be asked to share his/her experience of school closure in an interview, which will last approximately 10-15 minutes in groups, and the conversations will be recorded on a voice recorder.
- I/we understand that my child has the right to provide information freely during the interview and he/she can withdraw from the interview at any time without providing a reason.
- I/we understand that I can withdraw my child from participation at any time without providing any reason up until four weeks after data collection is accomplished.
- I/we understand that the identity of your child will not be revealed. However, his/her anonymous stories maybe shared in publications or presentations.
- I/we understand that the recorded data will be kept on a pass-worded hard drive in a safe locker in the University of Auckland for six years. It will be destroyed after this period. During the time frame of the project only my supervisor and I have the access to this data.

Name \_\_\_\_\_ Parent/Carer of \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## Appendix D: Participant Information Sheet (Parents)



### **PARTICIPANT INFORMATION SHEET (Parents)**

**Project title:** Children's experiences of school closure in the aftermath of the Canterbury earthquakes.

**Name of Researcher:** Chris Hu

#### **Researcher Introduction:**

I am currently a masters student at The University of Auckland specializing in education, under the supervision of Associate Professor Carol Mutch.

#### **Project Description:**

In 2013, I was involved in a UNESCO study with a number of schools in Christchurch, including xxx, about their earthquake experiences. This project was intended to record the important moment of our history and to document schools' individual earthquake experiences for all of us to learn more about disaster response and recovery.

As part of the study we interviewed 15 students from XX primary school. At that time those students were preparing for transition to their new schools. Currently, very little is known about the ways in which children cope with such events and how important adults and institutions can assist them. This has stimulated my interest in conducting a follow-up study on those 13 students in order to find out more about their unique experiences and the stories of their transition. This project is also a partial requirement of my masters degree.

#### **Project aim and invitation:**

The aim of this project is to provide an insight into how children coped with the transition and in what ways significant adults (teachers and parents) and institutions (the schools involved) helped with the transition. Your child was one of the original 15 children. Thus, we are asking your permission for them to be re-interviewed.

**Project Procedures:**

Children will be asked to take part in a small group interview (10-15 mins) in particular who helped them and how and what things were most useful.

**Participants' Rights:**

All participants will be treated with care and sensitivity. My supervisor Carol Mutch will sit in on the interviews in case children become upset.

Participation in this study is completely voluntary. Participants reserve all the rights to choose to participate or not. They can withdraw from the interview at any time. They can also withdraw the information they provided up until four weeks after the data collection is completed.

Although, this study is gathering the stories of real people and real events, the participants reserve all the rights to remain anonymous. No-one apart from my supervisor and myself will know the real names of the participants. All publications related to this project will not disclose any names. Participants can choose an appropriate pseudonyms if they wish.

Parents are also entitled to ask for a copy of their child's transcripts prior to publication

and the link to the completed project.

**Data Care and Use:**

For this study, a voice recorder will be used to record the interview. After the interview is recorded, it will be transferred onto a pass-worded external hard drive for transcription. The data will be stored and locked in a secure cupboard in The University of Auckland for six years. Only my supervisor and I will have the access to this data. After six years the data will be destroyed.

The data will contribute to my masters thesis and my also be used in presentations and publications.

**Contact Details:**

If you have any questions or wish to acquire more information about this study, please feel free to contact me. My details are provided below:

**Name:** Chris Hu

**Email:** shu020@aucklanduni.ac.nz

**Phone Number:** 021 074 9681

**P.O box:** 9256 New Market Auckland New Zealand

**My supervisor's Contact detail:**

**Name:** Dr. Carol Mutch

**Email:** c.mutch@auckland.ac.nz

**Address:** School of Critical Studies in Education, Faculty of Education, University of Auckland, Private Bag 92019, Auckland. Work phone (09) 623 8899 Ext 48257. Cell phone: 021 081 28934.

The Head of School is: A/prof Carol Mutch, School of Critical Studies in Education, Faculty of Education, University of Auckland, Private Bag 92019, Auckland. Work

phone (09) 623 8899 Ext 48257. Cell phone: 021 081 28934.

Yours Sincerely

Chris Hu

# Appendix E: Participant Information Sheet (Adults)



## **PARTICIPANT INFORMATION SHEET (Adults)**

**Project title:** Children’s experiences of school closure in the aftermath of the Canterbury earthquakes.

**Name of Researcher:** Chris Hu

### **Researcher Introduction:**

I am currently a master’s student at The University of Auckland specializing in education, under the supervision of Associate Professor Carol Mutch.

### **Project Description:**

In 2013, I was involved in a UNESCO study with a number of schools in Christchurch, including xxx, about their earthquake experiences. This project was intended to record the important moment of our history and to document schools’ individual earthquake experiences for all of us to learn more about disaster response and recovery.

As part of the study we interviewed 15 students from xxx primary school. At that time those students were preparing for transition to their new schools. Currently, very little is known about the ways in which children cope with such events and how important adults and institutions can assist them. This has stimulated my interest in conducting a follow-up study on those 13 students in order to find out more about their unique experiences and the stories of their transition. This project is also a partial requirement of my master’s degree.

### **Project aim and invitation:**

The aim of this project is to provide an insight into how children coped with the transition and in what ways significant adults (teachers and parents) and institutions (the schools

involved) helped with the transition. Thus, you are being asked to participate as a significant adult.

**Project Procedures:**

Adult participants in this project will be asked to take part in an interview (30-40 minutes). During this interview participants will be asked to share their experiences and stories of school closure and transition, in particular what worked well and what could have been done differently.

**Participants' Rights:**

Participation in this study is completely voluntary. Participants reserve all the rights to choose to participate or not. They can withdraw from the interview at any time. They can also withdraw the information they provided up until four weeks after the data collection is completed.

Although, this study is gathering the stories of real people and real events, the participants reserve all the rights to remain anonymous. No-one apart from my supervisor and myself will know the real names of the participants. All publications related to this project will not disclose any names. Participants can choose an appropriate pseudonyms if they wish.

Participants are also entitled to ask for a copy of their transcripts prior to publication and the link to the completed project.

**Data Care and Use:**

For this study, a voice recorder will be used to record the interview. After the interview is recorded, it will be transferred onto a pass-worded external hard drive for transcription. The data will be stored and locked in a secure cupboard in The University of Auckland for six years. Only my supervisor and I will have the access to this data. After six years the data will be destroyed.

The data will contribute to my masters thesis and my also be used in presentations and publications.

**Contact Details:**

If you have any questions or wish to acquire more information about this study, please feel free to contact me. My details are provided below:

**Name:** Chris Hu

**Email:** shu020@aucklanduni.ac.nz

**Phone Number:** 021 074 9681

**P.O box:** 9256 New Market Auckland New Zealand

**My supervisor's Contact detail:**

**Name:** Dr. Carol Mutch

**Email:** c.mutch@auckland.ac.nz

**Address:** School of Critical Studies in Education, Faculty of Education, University of Auckland, Private Bag 92019, Auckland. Work phone (09) 623 8899 Ext 48257. Cell phone: 021 081 28934.

The Head of School is: A/prof Carol Mutch, School of Critical Studies in Education, Faculty of Education, University of Auckland, Private Bag 92019, Auckland. Work phone (09) 623 8899 Ext 48257. Cell phone: 021 081 28934.

Yours Sincerely

Chris Hu

For any inquires regarding ethical concerns, please contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland 1142. Telephone: 09 373 7599 Ext 83711.

## Appendix F: Interview Questions for the Children Participants

Interview Questions for the children participants:

When did you first hear that your school would close?

How did you feel at first?

What did the teachers and school do to help you adjust? Did you find it helpful? Which strategy you found mostly helpful?

What did the school do towards and at the end of year as your school prepared to close?

What your parents do to help you adjust?

What did you do to help yourself to adjust?

What helped you settle into the new school?

What things could have been done better?

What did you learn from the process?

What advice would you give to other children when their school closes?

Is there anything else you wish to add?

## Appendix G: Interview Questions for the Parents

Interview questions for the parents:

When did you first hear about the merger?

How did you feel about the merge?

How did children feel about the merger at first?

After hearing the merger what did the school and teachers do to prepare for it?

Did school organize any special event towards or at the end of the year as it closed down?

What did the teachers do to help them adjust during the transition? Which of the strategies were the most useful and why?

Did you do anything to support the children and/or the school?

Did your children do anything to help themselves through the merger?

How do they feel about the merger now?

Did you find difficult through the merger? What did you do to help yourself?

Did your child find anything difficult through the merger?

Did the new school do anything to help the children to cope with the new environment?

Was there anything that could have been done better to help the children and the parents through the transition?

Do you think that children have learned anything through the process?

Finally is there any advice or strategy you would like to share about how to help children cope with school closure if say another school is going through a similar situation that you have been through?

Is there anything else you would like to add?

## Appendix H: Interview Questions for the Teachers

Interview questions for the teachers

When did you first hear about the merger?

How did you feel about the merger?

How did children feel about the merger at first?

After hearing the merge what did the school and teachers do to prepare for it?

Did school organize any special event towards or at the end of the year as it closed down?

What did the teachers do to help them adjust during the transition? Which of the strategies were the most useful and why?

Did parents do anything to support the children and/or the school?

Did children do anything to help themselves through the merger?

How do they feel about the merge now?

Did you find difficult through the merge? What did you do to help yourself?

Did the new school do anything to help the children to cope with the new environment?

Was there anything that could have been done better to help the children and teachers through the transition?

Do you think that children have learned anything through the process?

Finally is there any advice or strategy you would like to share about how to help children cope with school closure if say another school is going through a similar situation that you have been through?

Is there anything else you would like to add?

# Appendix I: Sample Transcript

This is a sample transcript of the data analysis method, that is, a thematic analysis, applied in this study. This sample shows how the data of this study were analyzed in the initial stages of the process. The interesting or important points of the data were highlighted and underlined in relation to the literature, framework or other interview data of this study for future comparisons. Also, notes and comments were made on the side of the transcript. This sample is taken from the interview transcript of T1.

<b>Relations to literature, framework and other interview data</b>		<b>Notes and Comments</b>
<p>Identity-Macrosystem</p> <p>Not allowing BW students to wear their uniform- Identity Assimilation? (Match with what P1, T2 and T3 suggested).</p> <p>Making herself available for children as a listener and emotional supporter (match with many literatures on psychological support e.g. APS and NASP)</p> <p>Also, she knew what children were at risk- expert teachers -knowing "classroom narratives"</p>	<p>T1: But I think like the uniform thing for instance like you got <u>WZ kids still allowed to wear their WZ logo shirt, whereas BW school aren't</u>. So I think its just a little thing but for community that, <u>ex-BW community that was quite hard</u> and that looking at my son for instance he because he is autistic so he everything is very literal to him. So he things used to happen, <u>he can't understand why my friend from WZ why is that still happening for him that happened to him last year why is, why isn't to me not still happening</u>. So for him it's quite and <u>for me as a parent it's hard to explain to him</u> well I don't know why it's still happening that your BW way is not happening, so it would have been nicer I think to have way bit of more equal balance.</p> <p>IC: Ok, I see. So as a teacher did you observe any children that helped themselves to adjust through the process?</p> <p>T1: Yeah, <u>I think I just made myself available for students</u> like I saw a kid in the play ground like we obviously had registered of children and <u>we still have that we know that are risky that might burst into tears all of a sudden</u>. You know that has affected them. So you just made myself available for them and have done so like look I am here to talk you, you want to see me, are you alright or go out to the play ground a play with them for a bit or. <u>Just so they know you are still here. That they could still see you.</u></p>	<p>Unequal treatment between the two schools?</p> <p>An equal amount of identity didn't happen in the merged school</p> <p>The community didn't take it easily</p> <p>Where is the BW school ways of doing things?</p> <p>T1 as a parent had difficulty explaining the "loss of identity" to her son</p> <p>Making herself available for children to take about their emotions in relation to the merger (and the earthquakes)</p>