

*His brain has just gone haywire:*  
**The Development of Children and Young People's  
Concepts of Mental Illness**

by

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*Why do you think he's putting a carrot in his ear?*  
Because he's crazy. It's what crazy people do, because if they're crazy one crazy thing is putting carrots in their ear.  
(6-year-old boy from pilot study)



## Abstract

This thesis examines children and young people's ideas about mental illness. Frequently, previous research in this area has suffered from methodological flaws or a limited theoretical framework. Qualitative methodology was utilised in this thesis in order to both gather the range of ideas that children have about mental illness, and to propose a theoretical model to explain the development of these ideas.

In the first study, 63 children (comprising 4 age groups: 6 – 7, 9 – 10, 12 – 13, and 16 – 18 years old) participated in focus group discussions. Groups were presented with 3 illustrated vignettes, each depicting a story about an adult with a mental health problem (schizophrenia, agoraphobia, or depression). A thematic analysis was used to examine the ideas that children expressed in these discussions. Analysis found that children have a wide range of ways of explaining the characters' behaviours. Children and young people's ideas were grouped into 5 main categories: 'medical explanations', 'psychiatric explanations', 'abnormal behaviour explanations', 'psychological explanations', and 'event explanations'.

Following this, a second study was conducted to focus on children's ideas about causes and treatments for mental illness. 36 children (ages 9 – 10, 12 – 13, and 16 – 18) were interviewed individually. Participants were presented the same 3 vignettes and asked to create a story that explains why each character has their problem and how their problem is resolved. Grounded theory methods were used to analyse the stories, with 6 primary categories and 1 secondary category ('psychological explanations') emerging. All stories included a cause from one of the 6 primary categories, and sometimes that primary category also led to a thinking problem (from the secondary category). Resolutions to the stories either came from the same primary category as the suggested cause, or alternatively, treatment came from one of the treatments included in the secondary category ('think or act differently', 'counselling', or 'support from others'). The primary categories were 'event' (problem was due to an external event happening, and resolution comes from an external event occurring); 'physiological' (the problem is seen as a medical problem, and treatment came from doctors); 'neurological / psychiatric' (characters

have problems with their brains or a diagnostic label, resolutions include psychiatric medication, hospitalisation, and negative outcomes); 'drug' problems; 'spiritual' (discussion related to ghosts or religion); and 'responsibility' (the character had done something wrong, and must fix it to resolve their problem).

Further analysis then compared the data from both studies with previous theoretical literature. It is argued that as children grow older they develop a concept of mental illness, which they can then use when discussing vignettes or understanding abnormal behaviour. This domain-specific development occurs throughout late childhood and adolescence as children incorporate information they have learned from families, schools, and media, and build on pre-existing domains (in particular, naïve psychology and naïve biology). Evidence from the current study is used to support this proposed model, and implications for future research, school curriculum, and helping children with mentally ill relatives are discussed.

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## Overview

It seems  
like Sister is  
the crazy one, but what  
if it's really the other way  
around

and it's  
actually  
me who's the crazy one,  
only I'm so crazy, I think  
it's her?  
(Sones, 1999)

The poem above by Sonya Sones, an author who, as a child, had a sister with mental illness, illustrates the fear a child in this situation may experience, possibly due to having difficulty understanding what mental illness is. The way a child understands what is happening to a friend or family member with mental illness is likely to influence the child's own well-being.

When I first embarked on this exploration of children's ideas about mental illness, a number of people shared with me their personal stories of having difficulty as a child understanding what was happening to a relative with mental illness. I also spoke to mental health workers who expressed a desire for more guidance on how to talk to children that have parents with mental illness. Previous research was sparse and what had been done often lacked a theoretical framework to interpret the findings adequately, or suffered from methodological flaws. It was these gaps in research and an enthusiasm to help children that guided my research journey.

This thesis examines the way children understand mental illness, with a particular focus on children's ideas about causes, treatments and outcomes of

mental illness. Writing a thesis is a long journey, where the end is not clear, and often neither are the means to get there. This thesis reflects the progression I followed when researching this topic.

Initially I reviewed children's ideas about mental illness, identifying the gaps in existing knowledge and the flaws in the previous research. Chapter One presents this overview of previous research that examines children and young people's ideas about mental illness. I also read more widely, reviewing research on other related topics such as children's knowledge of physical illness, medicines, racism, and divorce. Additionally, I reviewed research on adults' ideas about and attitudes towards mental illness, and research that examines media portrayals of mental illness. Even defining the term 'mental illness' became a challenge, and is an issue that is debated in a number of forums. In this thesis, I do not enter into the debate of what behaviour should be classed as abnormal or whether mental illness can and should be classified. Instead the term 'mental illness' is used to refer to mental illnesses classified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, American Psychological Association, 1994), the classification system most commonly used by mental health professionals, despite the problems with classifying behaviours in this way.

Chapter Two introduces the methodological issues that are of concern in this research. The epistemology behind this research is discussed and the reasons for selecting qualitative methodologies over quantitative methodologies are described. Issues relating to researching with children are also discussed in this chapter.

Chapters Three presents the first study of this thesis. This study involved a series of focus groups with children in different age groups. In these groups, participants discussed their ideas about vignettes that depicted adult characters with mental health problems. Groups also discussed the words the children use to describe people with mental illness, and other places where they have seen people behave in the manner shown in the vignettes. The method for this study is described, followed by a summary of the analysis process and the results, as well as a more general discussion about the categories that emerged from the analysis of the group dialogues. The strengths and limitations associated with the chosen method are also discussed.

Initially, I had planned to follow the thematic analysis of Study One with a quantitative survey, exploring whether themes and age differences that emerged from the focus groups were present in a broader sample of children and young people. However, early on in my analysis of Study One, I was struck by the richness and informative nature of my qualitative data. I decided that a survey and statistical analysis would not be as enlightening in my research as further interviews with children. My goal became to hear more of the children's ideas in their own words. It was at this point that I began reading about grounded theory, and its systematic methods that allow for theoretical development to emerge from qualitative analysis.

Chapter Four presents the second study, which incorporated grounded theory methodology. In this study, individual interviews were conducted with 36 children and young people. Each participant was asked to create a story based on the cartoon vignettes they were presented. All the participants offered ideas about causes and treatments of mental illness. Grounded theory analysis of this data led to a set of primary and secondary categories emerging that captured the range of children and young people's ideas about causes of and resolutions for mental illness, and the relationships between these causes and outcomes. Chapter Five then compares and contrasts the categories that emerged from each of the two studies, and relates these back to previous research.

In Chapter Six, a theoretical model is proposed on the basis of further analysis. It is argued that as children grow older they develop a concept of 'mental illness', which, once developed, can then be used by young people in their explanations of mental illness. This chapter first reviews theoretical literature, and then returns to the data collected in the current research and uses the literature and the data together to support the proposed model. While it is not common in psychology theses to introduce theoretical literature midway through the presentation of the data, this structure has been used here as it seems to better reflect the inductivist data-driven analysis which I have conducted. The literature presented in Chapter Six was reviewed only because my data analysis process led me to those particular papers. Additionally, the two main theoretical papers reviewed in this chapter have both been published since my research began. It is

exciting to see that the theoretical model I am proposing in this chapter is in line with recent research programmes and current theoretical debates.

The final chapter of the thesis discusses the broader implications of the model I put forward. Approaching mental illness as a concept that develops in late childhood, as argued in this thesis, leads to a number of implications for educational programmes, monitoring media portrayals, and suggestions for ways in which families and clinicians can help explain mental illness to children with a mentally ill relative.

## **Chapter One - Literature review: Children's understandings of mental illness**

A number of qualitative methods, including grounded theory methodology demand that the researcher approach data without preconceived ideas about what will emerge. Nonetheless, it is also important to be aware of what has been done previously to avoid 'reinventing the wheel' (Morse, 1994). The way the literature review is presented in this thesis reflects the author's research process. Research that deals specifically with children's understandings of mental illness is reviewed in this chapter, whereas research in other areas and existing theoretical frameworks that were considered alongside data analysis and theory development will be described in later chapters.

The literature that is reviewed in this chapter is divided into two main sections. Firstly, the need for this current investigation will be discussed. In particular, previous research highlighting the importance of explaining mental illness appropriately to children with parents or other relatives with mental illness is presented. Secondly, research that has examined children's understandings of mental illness is reviewed. Previous research has investigated children's ability to recognise deviant behaviour and mental illness, as well as age differences in understanding. Research on children's attitudes towards people with mental illness is also discussed. This section concludes with an evaluation of previous methodological approaches to research in this area.

### **The need for research in this area**

A better understanding of the ways children think about mental illness will be useful in a number of areas. These areas include developing and improving educational programmes about mental health for school curriculum, examining the effects of media portrayals of mental illness on young people, and helping children and young people who have to deal with a family member or friend with mental health problems.

The New Zealand Health and Physical Education curriculum specifies that mental health is a key area of learning. Schools are required to provide learning opportunities for students to strengthen personal identity and enhance their self-worth, as well as for students to learn about the impact of discrimination and stereotyping on people's mental health (Ministry of Education, 1999). Teaching about psychological issues is also important within the Whare Tapu Whā model of health (Durie, 1994). This holistic model of Maori health views psychological well-being as one of the four cornerstones of overall health. Research that examines the way children understand mental illness can help with the development of a curriculum that is appropriate to the goals of the Ministry of Education guidelines and follows the Whare Tapu Whā model. More specifically, research that examines age differences in the way children think about mental illness may be useful in developing a curriculum that teaches mental health at a developmentally appropriate level. Studies evaluating the effectiveness of school programmes that teach about mental illness (e.g., Battaglia, Coverdale, & Bushong, 1990; Henderson, 1993) have found that appropriate programmes can increase knowledge and decrease stigmatisation of mental illness.

Mental illness is a common topic in television shows, movies, and books aimed at children (see Bokey, Walter, & Rey, 2000; Wilson, Nairn, Coverdale, & Panapa, 2000). Frequently, characters with mental illness and the treatments for mental illness are portrayed using negative stereotypes. It is important to be aware of the influence of these media depictions on young people.

Finally, research on children's understandings of mental illness is important to help children with friends or family members with mental illness. A large number of children will meet people with mental health problems and the way a child understands what is happening to someone with a mental illness could have an influence on the way the child thinks or feels.

### **The importance of appropriately explaining a parent's mental illness to young family members**

In New Zealand approximately one in five people will experience some sort of mental health problem each year (Wells, Bushnell, Hornblow, Joyce, & Oakley-Browne, 1989). Research in the U.S.A. estimates that 70% to 80% of people with a

mental illness return to live with family members, or remain in contact with family after discharge from psychiatric units (Johnson, 2000). A number of mental health care programs also depend on community support and involvement. Because of this, it is important to examine how family members and the community at large understand and perceive mental illness.

Children may encounter relatives, friends, or other people in their community who suffer from mental illness, and it is also common for adults with mental illness to have children. Research in the United Kingdom suggests that up to 60% of women with a serious chronic mental illness have children under the age of 16 (Oates, 1997). Ritsher (1997) found that in a sample of over 100 women from the Maryland area who had severe mental health problems, more than 80% reported raising or helping to raise a child.

Children who have a parent with a mental illness are more likely to develop a mental illness themselves, either as a child or when they become adults (Beardslee, Versage, & Gladstone, 1998). Within this group of children with a parent who has a mental illness, some children are at higher risk of emotional and psychological problems than others are (Feldman, Stiffman, & Jung, 1987). There are a number of factors that influence a child's risk to mental illness, including genetic predispositions and biological influences; socio-environmental factors; and individual differences (such as the child's temperament and intelligence level). However, as well as all these factors, it also appears that the way a child understands what is happening to her or his parent will have an influence on her or his own well-being.

Qualitative research suggests that the children's understanding of their parents' condition plays an important role in the well-being of those children. Those in families with a parent with psychiatric illness found that honest communication, dealing with guilt feelings, and being able to visit their hospitalised parent helped them deal with their difficult situation (Castleberry, 1988). Johnson (2000) interviewed 180 families that included one family member with some form of mental illness, and found that the way a family member viewed a relative's problem influenced their response. Siblings of the person with mental illness, who understood the problem as an illness responded more sympathetically than those who perceived the mental illness as stubbornness, laziness, or manipulation.



Scherer, Melloh, Buyck, Anderson, and Foster (1996) found that children's perceptions of their mothers' well-being were significantly associated with their own psychological functioning. Children who viewed their mothers as having symptoms of mental illness had more behavioural problems than other children did, regardless of their mother's actual mental health. Children's self-confidence was also affected by their perceptions of their mother's emotional distress, with more perceived distress leading to children feeling less confident in their self-competence and physical appearance. Scherer et al.'s findings suggest that helping a child to understand accurately what is happening to their parent may decrease the child's own risk of psychological difficulties.

Yet despite this research highlighting the importance of appropriate explanations for children of parents with mental illness, children are frequently ignored or not given explanations. Shachnow (1987) interviewed 22 parents with psychiatric problems, as well as 36 children of these parents. Shachnow reported that all the children interviewed were aware of their parent's psychotic or self-destructive behaviour prior to the parent being admitted for psychiatric care. Yet only five of the children had the opportunity to discuss the situation and talk about their feelings with a parent after the other parent had become ill, whilst the remaining children were told nothing about their parent's illness, given a cover story, or only told the bare facts. Only seven of the 36 children interviewed were offered assistance by a health professional, and 24 of the children never saw a health professional at all.

The Early Psychosis Research Centre at the University of Melbourne examined ways to support parents with mental illness and their children (Cowling, 1999). Focus groups were conducted with parents suffering from mental illness. Some of the most important needs for their children identified in these focus groups were the need for appropriate explanations of events surrounding their parents' illness; ensuring there was someone available for the child to learn to trust and talk to about fears, guilt and confusion; and programmes where children can meet with other children in similar situations. Similarly, in a survey of mental health professionals, 76% of respondents believed that a child's lack of knowledge and understanding about their parent's mental illness is a problem. Service providers also said that they would "like to know how to talk sensitively with children about

their parent's mental illness, as they are concerned that they could unnecessarily alarm or upset a child" (Cowling, p. 167). Finally, individual interviews were conducted with some parents with mental illness. Again, one of the biggest concerns for these parents was finding ways of explaining their illness to their children in a way that would not make the child feel guilty. Parents were also concerned that their children understand that the parent's behaviour and reactions will be affected by their illness. Two of the main recommendations from this study were firstly to increase support for children and parents, including appropriate opportunities for children to express their emotions and talk about what is happening in their family. Secondly, that it is important to provide appropriate resources for professionals, and to develop guidelines on how to work with these families and talk to children who have parents with mental illness.

In summary, research has shown that children who have a relative who suffers from mental illness will benefit from being given appropriate explanations about mental illness. Despite this, many children face such situations without being given appropriate explanations or sometimes any explanations at all. In order to develop guidelines for talking with children about mental illness, it is important to gain a better understanding about what children already know and think about such problems.

### **Previous literature examining how children understand mental illness**

Previous research has examined several aspects of children and young people's understandings of mental illness. This section initially reviews research concerning children's knowledge of words and labels to do with mental illness, and research examining children's ability to recognise deviant or emotionally disturbed behaviour is presented. Following this, research examining age differences in children's understandings of mental illness is reviewed. Thirdly, research focusing on children and young people's attitudes towards mental illness is presented.

**Awareness of words associated with mental illness**

Children will attempt to explain unusual behaviour and thinking only if they are aware that it exists, that is whether they understand that some behaviours are socially acceptable, and others are not. Before research on how children understand mental illness can begin, it is first important to assess whether children are aware of the term 'mental illness', and at what age they are able to identify deviant behaviour associated with mental illness.

From an early age, children are exposed to terms to do with mental illness, hearing words such as 'crazy' and 'nuts' from peers and television. Baker, Bedell and Prinsky (1982) interviewed 75 children in the USA aged between 5 and 13 years old, and found that most children had some form of awareness of mental illness. Each child was read a list of words associated with mental illness. For each word, the child was asked what the word meant, how such a person acts, if it was good or bad to be that kind of person, and if bad, what should be done about it. Most children (over two thirds) gave definitions for the words 'crazy', 'cuckoo', and 'nuts', approximately one third were able to define 'mental illness', 'insane', and 'emotionally disturbed', but less than 3% had heard of the words 'schizophrenic', 'neurotic', or 'psychotic'. Not surprisingly, the older children (those over 9 years) were able to define more words, and give more accurate definitions than the younger children were. However, this study may lack generalisability, because the study only used a small sample (15 children in each age group), all participants came from one elementary school, and no significance tests were reported. Using a larger sample (n=103), Conant and Budoff (1983) found that children below 11 years did not know the term 'psychologically disturbed', whereas most of the children in the 11-year-old age group expressed awareness of this term.

The children in Baker et al.'s (1982) study were also asked how they learned the meaning of each word. Children were most likely to cite adults (mainly parents and teachers) as the source of their knowledge of these words. Peers and mass media (most commonly television, but also books and movies) were also cited. It is not clear how accurate children are at knowing where they learned concepts; indeed 36% of children said that they did not know where they learned

the words. Nonetheless, parents, peers, and media do appear to be the main sources of knowledge about mental illness.

Some of the children (15%) cited mass media as their main source of knowledge about mental illness. In particular, children who defined words as meaning comical or silly behaviour were twice as likely to cite media presentations as their source of knowledge than other children were. While there has been a substantial amount of research examining portrayals of mental illness in mass media aimed at adults (see Wahl, 1992, for a review of this literature), there has been limited research examining portrayals of mental illness in children and adolescent's television shows, and printed media, such as novels written for young people. However, the research in this area has found that mental illness is frequently referred to in these media, and often portrayed in a negative light.

Wilson et al. (2000) analysed one complete week of children's television shows screened on public television in New Zealand. They found that 46% of all children's shows screened during that week contained some reference to mental illness, with the significant majority of these references occurring during cartoons. Six cartoon characters were consistently referred to as having a mental illness, and these characters were always presented negatively (in a comic or evil role). It is difficult to analyse the content of television based solely on the dialogue, as other factors such as context, images, and music also contribute to the experience of watching television. It is also not clear how many children, or of what ages, watch these shows, or how much the language used on these shows influences children. Nevertheless, the majority of New Zealand children watch some television, so it does seem likely that most New Zealand children will be aware that there is such a thing as mental illness or being 'crazy', and have knowledge of some of the negative imagery that is often associated with it.

A systematic examination of all 94 adolescent literary works recommended over three years by the Children's Book Council of Australia found that 69% of these books made some reference to psychiatric illness or some mental health treatment (Bokey et al., 2000). The majority of depictions of psychiatry were negative or mixed, with only 6% of references to psychiatry being positive. Characters experiencing mental illness were stigmatised or found mental health professionals and institutions futile or even abusive. It appears that the references to

psychiatric illness in novels written for adolescents are often more realistic, but also more negative and graphic than the references to mental illness on children's television shows (although the rates for mental illness and negative outcomes from treatment were much higher in the books than in 'real life'). Over recent years, the Internet has also become a common source of knowledge about mental illness. A review of web-sites about mental health problems found that these sites are often lacking in quality of unbiased information, promote particular treatments which may not be the most appropriate, and provide misinformation or information that may easily be misunderstood (Christensen & Griffiths, 2000). Therefore, it seems reasonable to assume, based on current research, that adolescents will have more knowledge about mental illness, albeit sometimes misinformed, and be aware of more negative aspects of mental illness than younger children will.

### **Children's ability to recognise deviant behaviour**

Even if children know words associated with mental illness, or have seen a cartoon character referred to as crazy, this does not mean that they will also associate craziness with psychologically disordered behaviour that they witness in real life or in realistic vignettes. Children's ability to identify deviant behaviour and mental illness has been assessed in a number of studies using both vignettes and examples described by the children themselves.

Coie and Pennington (1976) assessed children's ability to recognise deviant behaviour in real and fictional peers. Twenty children from each of four age groups (mean ages 7, 10, 13, and 17) were asked to describe a peer whom they felt acted differently from most people. The children's examples of deviant behaviour that they had witnessed were coded into seven categories: aggression, social norm violation, adult rule violation, social withdrawal, differences in interest or appearance, self-referent attributions (i.e., had done something personally against the child being interviewed), and non-scorable. All but seven children (five 7-year-olds, and two from older age groups) were able to give examples of some form of deviant behaviour that could be coded. This finding suggests that from as young as 7 years old, most children have some ability to recognise deviant behaviour.

However, Coie and Pennington's (1976) study did not require the children to distinguish between behaviour characteristic of mental illness and other forms of

deviant behaviour such as criminal or immoral behaviour. Several of the examples of deviant behaviour that children gave did not describe psychological problems. There are also ethical problems with encouraging children to think about peers as deviant. Asking children to label their peers could lead to discrimination, rejection, and further labelling of peers.

### **Children's ability to recognise psychologically disturbed behaviour**

Several studies have used vignettes describing children or adults suffering from a mental illness as a means of assessing children's ability to recognise psychologically disordered behaviour. Marsden and Kalter (1976) asked children (31 fourth and sixth graders, aged approximately 9 and 11 years old respectively) to describe the characters in five vignettes that were read to them. Each vignette depicted one school-aged boy in a different psychological state (normal, school phobia, antisocial character disorder, passive-aggressive character disorder, or psychotic). The researchers then coded the children's responses to each vignette using a 5-point scale. On this scale, 1 indicated that the child explicitly stated that the character was normal, 5 was an explicit statement that the character has serious emotional problems, and 2 – 4 indicated rising levels of perceived emotional difficulties. Almost all children (90%) rated the normal character as normal (1 or 2 on the scale), and all the other vignettes were rated with a higher level of emotional difficulty. The children's rankings of severity of emotional disturbance had a 90% correlation with the rankings of a group of clinicians, suggesting that children are able to identify emotional problems. Thus, while there were some age and gender differences in estimated severity of each emotional problem, almost all children were able to distinguish normal from disturbed behaviour.

However, children consider different factors from mental health experts when distinguishing between psychologically healthy and disturbed characters. Mental health taxonomies tend to categorise mental illness based on whether the behaviour interferes with the person's general functioning. Secker, Armstrong, and Hill (1999) found that children distinguished normal and abnormal behaviour based on whether the children can relate to the behaviour. The authors interviewed 12 – 14-year-olds about their understanding of mental illness; their sample included 102 people participating in discussion groups (six people in each group) and 18 other

students interviewed individually. Participants were read five vignettes, and discussed each. The authors' main finding was that children defined mental illness using three categories, based on how they related the character's behaviour to their own experiences. Behaviour that they could identify with quite closely was thought of as normal behaviour (e.g., a boy with behavioural problems after his father leaves, or a man with depression). There were certain behaviours that they could identify with, but not class as normal (such as anorexia); these were seen as mental or psychological problems, but were not specifically called mental illness. Finally, behaviours that the children could not identify with (such as hearing voices) were classed as being due to mental illness.

There are also inconsistencies in the way children identify and categorise mental illness and deviant behaviour. While children as young as 7 years old may have heard of the concept of mental illness, research suggests that they may still hold vague or conflicting views (Coie & Pennington, 1976). Norman and Malla (1983) found that even adolescents are still frequently inconsistent in their ideas about mental illness. They examined the relationship between different components of beliefs about mental illness, that is, whether there is consistency between an individual's view of aetiology, social desirability, treatment, and prognosis. High school students (N= 413, average age of 16 years) read three vignettes and then responded to a series of questions on a 7-point Likert scale. The vignettes featured one character displaying signs of paranoid schizophrenia; one character with schizoid personality disorder; and one that was healthy. The authors found that adolescents frequently contradicted themselves or became confused in their comments about the characters in the vignettes. For example, there was no significant correlation between attributing physical aetiology and a belief that medical treatment should be used. While there were some significant correlations between some of the different components discussed, these correlations were weak. This study suggests that adolescents are still in the process of forming clear ideas about what it means to be mentally ill, and their views on causes, treatments, definitions, and desired social distance are not yet consistent.

In summary, children as young as 7 years old appear to have a certain level of awareness of some words associated with mental illness, and are exposed to these words through parents, peers, and mass media. They are also generally able to

give examples of deviant behaviour, and recognise psychologically disordered behaviour. However, children may use different criteria and definitions for distinguishing deviant behaviour from normal behaviour from the criteria used by mental health professionals. Children and young people's ideas about mental illness also seem to be vague and inconsistent in many ways, particularly in the relationship between young people's ideas about causes and their ideas about treatments.

### **Age differences in the ways children understand mental illness**

While there appear to be a wide range of individual differences in children's understandings of mental illness, some studies have also found more general age differences in the way children perceive and understand mental illness.

De Rosa (1987) investigated social representations of mental illness in children and adults. Her studies involved asking Italian children and adults to draw a 'normal person', a 'madman', and 'as a madman sees himself'. De Rosa analysed the pictures for themes, and compared these themes to images and concepts of mental illness seen in media, art, and folk literature. In her analysis of social traditions and media, De Rosa found that mental illness could have either negative connotations (such as a buffoon, monster, or devil) or more positive connotations (such as a sage or mystic). The author found similar representations in the pictures of both children and adults. Children and adults typically depicted the 'madman' using themes of social deviance, whereas their pictures of 'how a madman would see himself' contained magic-fantastic elements. De Rosa's analysis also found age differences in the way young people represent mental illness. The youngest children (5 to 6 years) saw madness as a permanent illness, which is organic, hereditary, and contagious in nature, or viewed mental illness as a type of wickedness. Treatment is through physical elimination, punishment or imprisonment. The 8- to 9-year-olds were less likely to view mental illness as criminal behaviour, and more likely to understand it as a medical problem. This age group represented madmen as 'idiots', mentally retarded, and their deviant behaviour due to an effect of the illness, thus there is an absence of intentionality in their actions. By 12 to 13 years, psychological and social factors began to be used in descriptions and explanations. Madmen were described as having emotional disturbances, difficulties in social



adaptation; they may internalise symptoms, and still appear 'normal'. In summary, while all participants were influenced by media images, there were also age differences in the themes used by children in their pictures of madmen. Older children displayed a greater understanding of the role of internal and uncontrollable psychological processes in mental illness than did younger children. Interestingly, unlike in Norman and Malla's (1983) study, in De Rosa's study there was relative consistency between children's ideas about causes and their ideas about treatments. However, as often is the case with research that involves picture analysis by the researchers, it is not clear how the themes were assessed, pictures were coded, or how their images were contrasted with other historical and media depictions in De Rosa's study.

One well-designed study of children's understandings of mental illness, combining qualitative and quantitative methodology was conducted by Spitzer and Cameron (1995). In this study children were asked about characters in vignettes to assess their ability to identify and describe mental illness. Three of the same vignettes from Marsden and Kalter's study (1976) were used (normal, antisocial character disorder, and psychotic), but the gender of each characters was altered to match the participant being interviewed. Children (30 aged 6-7, 30 aged 9.5-10.5, and 30 aged 12 – 13 years) were read each vignette individually, and then asked a range of questions about each character.

One question children were asked was 'do you think this character is crazy or normal?' Children's responses to that question were each scored as 1 if they matched clinicians answers (i.e., seeing the normal child as 'normal', and the other two as 'crazy') or 0 if they did not, giving each child a total score out of 3 after all three vignettes were discussed. Spitzer and Cameron (1995) do not state what overall proportions of children were able to identify deviant behaviour, however, children's scores were compared by age. There was no significant effect for age, but analyses found that the 10-year-olds were best at identifying deviant behaviour followed by the 7-year-olds and then finally the 13 year olds. This result initially suggests that there may not be a developmental pattern behind children's understandings of mental illness.

Although there was not a developmental trend in distinguishing crazy versus normal behaviour, the older children did have more knowledge about mental illness

than younger children did. Spitzer and Cameron (1995) suggest that the oldest age group may be more permissive of children acting out than younger children are, because this age group are themselves more prone to act out, so they are less likely to view the behaviour as 'crazy'. If this were the case, then it would be expected that the children would be better at distinguishing between crazy and normal behaviour when the character in the vignette is an adult, instead of a peer of their own age. While this hypothesis is not explicitly tested in Spitzer and Cameron's study, the comments made by children of all ages during their interviews suggest that children have different views about 'crazy' adults (who act 'weird' or violent) and 'crazy' children (who violate everyday codes of behaviour). This result does however contradict the findings of Coie and Pennington (1976) that found that younger children were more likely to give rational explanations for abnormal behaviour, whereas older children would recognise the behaviour as abnormal.

As well as asking participants whether they thought the child was 'crazy' or not, Spitzer and Cameron (1995) asked children three other general questions, combined with further probing into their answers to each question. For each vignette the participants were asked what they thought about the character, how the character got to be this way, and what they thought they would be like in the future. Age differences were found in the way children answered all these questions. These included differences in the way children defined 'illness' and 'crazy'; as well as in the way they described behavioural characteristics, aetiology, and treatment of mental illness. None of the 7-year-olds claimed to know the term 'mental illness'; many suggested that it referred to a very serious physical illness. Many 10-year-olds also thought that mental illness was a serious physical illness, however a number also made some, albeit vague, connections between mental illness and the head or brain. The majority of 13-year-olds defined mental illness as thinking problems, mental retardation, or craziness.

As so few children were aware of the term 'mental illness', the term 'crazy' was used for the other questions in the study (pilot testing had suggested that this is a word the children were more familiar with). Most 7-year-olds gave definitions of 'crazy' that involved being weird, or acting out. The 10-year-olds also defined 'craziness' as acting weird, often connecting this to violating codes of accepted behaviour, or to drug and alcohol use. Unlike the younger children, 13-year-olds

saw 'crazy' and 'mental illness' as the same thing; they also frequently made references to violent behaviour. So the older the child, the more similar their definitions of 'crazy' were to health professionals' definitions of mental illness.

All children differentiated crazy behaviour in children and adults. 'Craziness' was viewed as something that only adults can have, so the children in the vignettes were generally not thought to be 'crazy' (Spitzer & Cameron, 1995). The children in the vignettes were seen as being naughty or acting out, whereas crazy behaviour in adults was described as strange or inappropriate (7-year-olds), involving drugs or living on the streets (10-year-olds), or acting violent (13-year-olds).

Children suggested a range of causes for crazy behaviour. Most 7-year-olds had no idea about aetiology, although some suggested 'wanting to be accepted by others', modelling other crazy people, or that crazy adults may have experienced traumatic events during childhood. The responses of the 10-year-olds were similar to those of 7-year-olds, however there was more emphasis on childhood traumatic events, as well as physical or biological changes (e.g., being hit on the head). The 13-year-olds most commonly suggested that crazy behaviour is due to traumatic events occurring during childhood. Children's views of treatment reflected their views of what craziness is. Frequently, 7-year-olds suggested doctors or hospitals, or sending the character to jail, either as punishment or treatment. The 10-year-olds also suggested medical treatments, such as having a 'brain operation', however some also had naïve and basic ideas of psychological treatment. Often 10-year-olds also suggested that they could treat people themselves through teaching or counselling. The children in the 13-year-old age group suggested psychiatric help or hospitalisation to help the crazy person and protect others. These treatment recommendations by 13-year-olds reflect their more complex understanding of mental illness.

Spitzer and Cameron (1995) presented a detailed study, discussing children's ideas about mental illness, and its causes and treatments. However, the authors offer no explanations as to why children think the things that they do, or as to why there may be age differences. Their study suggests that media exposure and other external influences, along with developing cognitive abilities may influence the way children understand mental illness. Nevertheless, without a theoretical

framework, the research offers few suggestions for planning guidelines for talking about mental illness with children and young people.

It may be that older children can give more detailed explanations of mental illness due solely to their higher vocabulary levels. Kalter and Marsden (1977) examined children's aetiological explanations for vignette characters' behaviours. This study used the same participants and vignettes as were used in Marsden and Kalter (1976, described above, page 13). As with other studies, there were grade differences in children's ability to explain behaviour, with the 11-year-olds producing more coherent accounts of why each character behaved the way they did than 9-year-olds were able to. Verbal IQs of all participants were also measured using the Lorge-Thorndike IQ test to assess whether the older children were better at identifying causes because they had a higher vocabulary level. It was found that there were no significant correlations between verbal ability and clarity of explanation, suggesting that the age differences are due to some factor other than verbal ability.

Overall, research (Coie & Pennington, 1976; De Rosa, 1987; Kalter & Marsden, 1977; Spitzer & Cameron, 1995) has found marked age differences in the way children understand mental illness. In general, these studies found that the youngest children thought being 'crazy' meant acting strange, but probably intentionally, and treatment was through punishment or education. The older children had a better grasp on the idea that mental illness is due to psychological processes, understood that the illness is due to factors beyond the person's control, and recommended psychiatric and medical treatments. Children's descriptions of mental illness do seem to follow a progression from vague external explanations to a more complex understanding of internal psychological processes. Younger children are also more likely to attempt to justify deviant behaviour, whereas older children are better at acknowledging that some behaviours are due to mental illness (although Spitzer and Cameron's study found results that conflict with this claim). While these studies give a comprehensive summary of children's ideas about mental illness, there are a number of inconsistencies in the results of different studies, and the studies they lack a link between findings and theoretical frameworks, which would give the research greater utility and generalisability.

Theory development is required in order to give explanations for why children think about mental illness in the ways that they do.

### **Children's attitudes towards people with mental illness**

Literature indicates that regardless of levels of understanding mental illness, children have negative attitudes towards people labelled 'mentally ill', or at least are aware of negative stereotypes associated with mental illness. The relationship between attitudes towards mental illness and understandings of mental illness is not clear. Firstly, children are aware of negative stigma towards mental illness even before they understand what mental illness is. Secondly, even once children are older and have a better understanding of mental illness, they still seem to use very different criteria for deciding what behaviour is due to mental illness, and deciding what their attitudes towards such a person may be, and their attitudes generally remain negative.

Adler and Wahl (1998) compared children's perceptions of people with mental illness to their perceptions of other people. Participants (104 8- 9-year-olds) were shown three neutral pictures (a man by himself; with another adult; or with a child) and told that the man was either mentally ill, physically disabled, or were not given a label to describe the man (one third of participants were in each condition). The children were asked to tell a story about the person, and then trained raters scored these stories, assessing for the presence of each of seven undesirable attributes that adults commonly associated with mental illness. The authors found that children were significantly more likely to use these undesirable attributes if they were telling a story about someone with a mental illness, than if they were telling a story about a physically disabled character or unlabelled character. Stories about physically disabled characters also contained significantly more negative attributes than stories about unlabelled characters did. However the scoring system would have been more informative if the stories had been scored on a wider range of attributes, including some associated with physical disability, and some desirable attributes. The only conclusion that can be drawn from this aspect of the research is that children are more likely to use negative words commonly associated with mental illness when talking about mental illness than when talking about other problems.

The participants were also asked questions about the character's ability to do certain tasks, and then asked if they knew anyone with a mental illness. There were significant differences between children's perceptions of unlabelled character's abilities and the abilities of the two labelled groups. However, the only significant differences between mentally ill and physically disabled characters were that mentally ill characters were seen as significantly less likely to 'help with homework' and less likely to 'smile a lot' when compared to the physically disabled characters. Furthermore, although 53% of children said that they did know someone with a mental illness, none of the descriptions they gave were descriptions of people with mental illness (instead they described people with medical problems such as cancer, flu, or broken bones). In summary, it seems that although children of this age (8 – 9 years old) do not have clear conceptions of what mental illness is, they may already be aware of some negative stereotypes associated with it.

Adler and Wahl's (1998) study suggests that awareness of negative stigma and understandings of mental illness are quite distinct. Secker et al. (1999) and Marsden, Kalter, Plunkett, and Barr-Grossman (1977) found similar results. Secker et al. found that children's attitudes towards mentally ill vignette characters did not reflect whether the character was seen as having a mental illness or not. Children, aged 12 – 14, discussed five vignettes, each vignette described a character experiencing psychological problems. Participants' attitudes towards the characters were based on each character's behaviour as well as the character's age. Sympathy was more commonly expressed for the three younger characters (behavioural problems, anorexia, and psychotic behaviour) than it was for the two adult characters (depression and schizophrenic), even though both the psychotic boy and the schizophrenic adult were both seen as having a mental illness, and the other characters were not. The characters with unpredictable behaviour (schizophrenic adult, psychotic teenager, and boy with behavioural problems) were viewed with more fear than the other two characters.

Marsden et al. (1977) further analysed the data from their study (see Marsden & Kalter, 1976, described above, page 13), rating the children's degree of liking for each vignette character on a 4-point scale. The authors found that 'liking' was not significantly related to the degree of perceived emotional disturbance. These studies (Adler & Wahl, 1998; Marsden et al., 1977; Secker et al., 1999)

suggest that children use different criteria when distinguishing healthy and mentally ill behaviour from the criteria they use to form their attitudes towards people.

Weiss (1986) compared developmental trends in attitudes about mental illness with attitudes towards other stigmatised groups. Children (577 participants aged between 5 and 14 years old) each drew a stick figure representing themselves next to seven 'attitude' objects. The 'attitude' objects were seven stick figures, each representing a convict, mentally retarded person, normal person, mentally ill, crazy person, physically handicapped, or emotionally disturbed person. The children were asked to draw themselves at a distance from each object they felt comfortable with. Distances between the heads of their stick figure and the object were measured. While there were age differences in social distances for each object, all age groups produced relatively similar preference hierarchies (the order the attitude objects were placed in). Children of all ages viewed mentally ill and crazy people with more fear and distrust than almost all other attitude objects, only convicts were placed at a greater distance. Eight years later, the children that were 5-6 years old at the time of the first study were given the same task again (Weiss, 1994). The author found that preferences were quite similar to what they were eight years earlier, although the object 'mentally retarded' had moved up the preferential hierarchy, and 'crazy' and 'convict' had switched places in the hierarchy (with 'crazy' moving from second from the bottom to bottom of the hierarchy). Weiss (1994) concluded that young people's attitudes are relatively similar at different ages, although as children mature negative attitudes towards mental illness may increase relative to attitudes towards other stigmatised groups.

In general, measuring attitudes is fraught with difficulties. Acknowledging that having a mental illness is a negative or undesirable thing does not necessarily imply negative attitudes towards people with mental illness. The attitudes children express will also be dependent on the setting in which they are asked and the way the question is asked. As well as this, as shown in the research described here, children's attitudes to people with mental illness do not seem to be influenced by their understandings of mental illness. Children express negative attitudes towards characters labelled mentally ill, even when they do not understand what mental illness actually is. Older children, who have some understanding of mental illness, still do not use this knowledge when forming perceptions about characters with

psychological problems. Instead children seem to base their perceptions on whether they can relate to the character, and whether the character's behaviour would affect them. While there appear to be age differences in children's understandings of mental illness, current research suggests that the use of negative stigma and attitudes towards mental illness appear to be more consistent throughout life.

### **Summary and critique of previous research**

Children have some awareness of mental illness, and have a range of ideas about causes and treatments for mental health problems. Research has often found that there are age differences in explanations for mental illness, with older children being able to give more detailed explanations. However, even adolescents are still quite inconsistent in their explanations, and have some views that often differ, and may even be contradictory, to the views of mental health professionals. People of all ages tend to express some negative attitudes towards people with mental illness, and these attitudes may reflect negative media portrayals of characters with mental illness.

Various methods have been used in studies that examine children and young people's understandings of mental illness. The most common approaches used have involved asking children for definitions of terms relating to mental illness; drawing pictures and writing stories; completing questionnaires; or discussing vignettes about people with mental health problems. Each method has its advantages and disadvantages.

Studies in which participants were asked to simply define a term such as 'mental illness' or 'mental health' have had some success in research with adolescents in assessing their ideas about mental illness (e.g., Villeneuve, Berube, Ouellet, & Delorme, 1996). However, studies with younger children have found much higher proportions of participants unable to give any explanations for these terms. Younger children were often able to give definitions for more derogatory words such as 'crazy' or 'nuts', but it is inappropriate for researchers to use phrases that may encourage negative attitudes towards people with mental illness. Similarly, studies in which children were asked to draw pictures or write stories about people with mental illness frequently encouraged children to use negative



stereotypes about mental illness, or the analysis only measured the use of negative stigma. Questionnaires utilising Likert scales or other measures have been shown to have some usefulness in assessing young people's attitudes towards mental illness. Nonetheless using scales can often lead to the same pitfall as asking children to define mental illness, that is the scale is only useful if children know what mental illness is. Another major criticism with attitude scales comes from researchers using discursive approaches. Discursive research on adults' attitudes towards mental illness argues that people's attitudes are flexible and people will present different attitudes depending on the context in which they are asked (Cowan, 1999). Similarly, children and adolescents may present different attitudes towards people with mental illness when they are talking to their friends from when they are answering a questionnaire given to them by a psychologist.

Vignettes have several advantages over asking children to define words, draw pictures, or complete questionnaires, and their usefulness is well documented (Barter & Renold, 2000). Vignettes can describe the way a character behaves without using any labels, enabling the children to describe what is happening to the character in their own words. While a word, such as 'crazy' may be ambiguous or encourage negative stigma when the researcher introduces it, it is useful in the context of a child using the term and then being asked what he or she thinks the word means. Vignettes also enable the discussion between the interviewer and the child to focus on particular behaviours, which allows for comparisons between the responses of all participating children. Children are still able to discuss what they believe is happening in a vignette, even if they have no knowledge of particular terms, thus making it possible to examine younger children's understandings of mental illness.

One of the biggest gaps in this area of research is that there have been few attempts to relate findings to any theoretical framework. Frequently, studies have described children's ideas without offering explanations as to why children may think about mental illness in the ways that they do. In the current research, children are shown illustrated vignettes concerning adults with mental health problems. The children and young people discussed what they think happened to the character to make them act in the ways that they are acting, what will happen to the character after the vignette, and how the characters can be helped. Participants' ideas are

analysed using qualitative analytical methods. Further analysis then is used to propose an explanatory model of the development of children's concepts of mental illness.

## **Chapter Two - Methodological issues**

This thesis uses qualitative methods to address the research question 'how do children understand mental illness?' There are several methodologies that are classed as qualitative research, and these are based on a variety of underlying theoretical assumptions. In this chapter, the theoretical underpinnings of the qualitative methods that are used in this research are discussed. Issues specific to researching with children are also discussed. The chapter then turns to the research in the present study. Firstly, there is a reflexive statement expressing the author's epistemological position, and this is followed by a discussion of the research aims and why the chosen data collection and analytical methods are appropriate.

### **What is qualitative research?**

Qualitative research allows for the richness and diversity of human experiences and ideas to be included in the research focus (Dunn, 1999). This is particularly important in areas of research where there are several different ways of understanding one concept, for example, when the research question asks how people think about their own experiences. Qualitative research considers individual differences in experience, and the influence of context on people's explanations.

### **Comparing qualitative and quantitative methods**

Quantitative studies play a vital role in psychological research. Quantitative research uses experiments and operational or measurable observations to test hypotheses about the relationships between different variables. This hypothetico-deductive framework forms the basis for most scientific knowledge, including the majority of psychological research. However, as Willig (2001) points out, there are some difficulties with this approach. Firstly, Willig argues that hypothetico-deductivism does not allow for theory development. As hypotheses are based on existing theories, the results of the studies are generally used only to support or refute support these theories; completely new ways of explaining phenomena will not emerge. Secondly, as this method requires an understanding of the concepts and

jargons of previous theories in order to make new predictions, hypothetico-deductivism is viewed by some as being elitist by discouraging novices from the process of knowledge generation. Finally, Willig argues that hypothetico-deductivism is a myth. Too often, researchers accept the results of their study only if their predictions are supported. If the researchers did not find what they have hypothesised, then they will often explain away these results as being due to experimental design, not a flaw in the theory.

Quantitative research is very important in adding support to particular theories, however qualitative research is often more useful for theory development in psychology (Buston, Parry-Jones, Livingston, Bogan, & Wood, 1998). Some qualitative researchers, such as researchers utilising grounded theory methodology, may approach data without preconceived expectations of what will emerge. This is particularly important when researching things that are difficult to quantify, such as how people explain phenomena.

Within qualitative research approaches there is a spectrum of views about the nature of reality. At one end of this spectrum are social constructionism approaches, such as discourse analyses and Foucaultian analyses. These approaches take an anti-essentialist perspective (Burr, 1995), arguing that identity and knowledge have a multiple fragmentary nature. That is, individuals, cultures and societies construct the world through social interactions and language. At the other end of the spectrum are the positivist approaches to qualitative data. These approaches follow a more traditional psychological perspective, and assume that there is an objective reality that can be measured. Frequently, these approaches utilise quantitative methods such as counting the number of times an utterance is made and comparing differences across groups or texts.

Grounded theory approaches lie in the middle of this spectrum, although there is a debate in the literature around the extent to which grounded theory has either a constructionist or objectivist orientation (Annells, 1996). Charmaz (1995) argues that grounded theory bridges the gap between the positivist approaches and the more interpretive or constructionist approaches. Grounded theory methodology (used in Study Two) acknowledges the importance of the individual's own experiences, and the influence of the interview context on the way an individual expresses their ideas, but at the same time offers systematic approaches to data

analysis that can be used to develop theory and draw more general conclusions about people's ideas and experiences. The thematic analysis used in Study One was also based on similar theoretical underpinnings as grounded theory.

### **Validity in qualitative research**

One of the main criticisms of qualitative research is that it can be difficult to judge validity and reliability in studies. Whereas a well-designed quantitative study will use a large sample size, random allocation of participants into control or experimental groups, and statistical tests to examine significance, these elements are not appropriate in grounded theory and some other qualitative methods.

Henwood and Pidgeon (1992) offer the following set of criteria for judging the quality of qualitative research in psychology. Firstly, proposed categories need to fit the data well, with comprehensive definitions summarising why phenomena have been labelled as such. Secondly, good theory should be complex and the connections between data and lower and higher level conceptual abstractions of categories and properties should be clear. Another important criterion is that sampling (i.e., participant selection and issues discussed with participants) should be driven by theoretical concerns, that is each interview must be planned with the goal of confirming or disconfirming the developing theory and categories as it emerges. Multiple examples of the same concept by different participants do not extend theory development in the way that finding one example of a 'negative case analysis' (cases that disconfirm a theory) would. It is also important that researchers deal sensitively with differences in interpretations by participants and researchers, and not misrepresent or invalidate a participant's perspective of their own experiences. The fifth criterion for evaluating validity in qualitative research is considering how transferable the findings are, that is, considering whether the findings apply to other contexts that are similar to the context in which research is taking place. The research process should also be reflexive, with the influence of the researcher and the research activity on the object of inquiry being constantly monitored and recorded. Finally, as well as being reflexive, all other values and concerns about the research process and data collection and analysis throughout the research process must be well documented.

## **Researching with children**

Increasingly, the importance of allowing children to express their own perspectives is being recognised in research and policy development (Morrow & Richards, 1996). The UN Convention on the Rights of the Child Article 12 states that a child has the right to express her or his opinions and for these to be taken into account for issues that affect that child. Article 13 states that children have the right to freedom to expression, and to share their ideas on any topic they wish. This convention was ratified by New Zealand in 1993 (New Zealand Ministry of Foreign Affairs and Trade, 1997). Children themselves have frequently expressed their desire to be listened to and taken seriously more often (Hill, Laybourn, & Borland, 1996).

When researching with children there are a number of ethical issues to consider. Several of these issues are the same as for research with adults. Researchers have the responsibility to establish rapport, ensure participants' confidentiality, and to pose questions clearly and concisely (Hill et al., 1996). As well as this there are some additional issues that need to be considered when conducting research with children. Although children cannot give legal consent to participate in research, it is still important that they give assent, and are made aware that participation is voluntary, and that their ideas will be kept confidential (Davis, 1998). All instructions, questions, and materials presented to the children must also be at an appropriate cognitive level (Gollop, 2000). Additionally, the environment should be one which the child is familiar and comfortable with, and extra care should be taken when building rapport to ensure that the child feels respected, accepted, and safe (Gollop).

## **Introduction to the current research**

### **Reflexive statement**

Researchers using qualitative methods may come from a variety of epistemological positions. Therefore, it is important that qualitative researchers are reflexive, and state their beliefs about the nature of the world and what can be researched (Henwood & Pidgeon, 1992).

I have had several years of experience working with children and young people in schools, youth groups, and as a youth counsellor. These experiences have led me to develop my particular views about the way that children think. Firstly, I believe it is important that children's voices are heard in the research process. Too often, research with children involves quantifying children's comments, pictures or behaviours into numbers, and then analysing these statistically. Frequently, this process neglects children's own words and priorities. Secondly, I believe that there is a level of stability and consistency in children's beliefs. It is important to acknowledge the context of all interactions when analysing children's responses. For example, children's responses will be influenced to some degree by the fact that they are being asked to express their ideas to an adult psychology student. Nonetheless, regardless of context, there are some more universal claims that can be made about the way children understand the world. In particular, I believe that ideas expressed by children within the context of research focus groups or interviews are somewhat representative of views that children or young people will express in other contexts as well.

### **Analytical procedures**

Content thematic analysis and grounded theory were two qualitative methods that were deemed appropriate for this research for a number of reasons. Firstly, one aim of the research is to examine the range of ideas that children have about mental illness, and its causes and treatments. The range of ideas that children have cannot be identified through quantitative measures, such as forced-choice questions or Likert scales. All these measures can do is assess whether children understand, or agree with, explanations of which the researchers are already aware. Secondly, the term 'mental illness' projects one particular explanation and description of certain behaviours, that is the behaviours are due to a sickness of the mind. By presenting children with vignettes which contained descriptions of characters behaving in particular ways, but no labels for these behaviours, and conducting open discussions with the children, children's own labels and ideas about behaviours which adults refer to as mental illness can emerge. This research aims to not direct the participants into any particular way of thinking about mental illness. Thirdly, qualitative methods are appropriate for this research, as they will

aid in theory development. As can be seen in the literature review in Chapter One, research that examines children's ideas about mental illness frequently suffers from a lack of theoretical explanations as to why children have the ideas that they do. Finally, these approaches were selected as they come from a perspective that is consistent with my views about the nature of the world and what can be studied.

In the current research, all the requirements related to researching with children were adhered to. As well as parental consent, children themselves gave read and signed assent forms. Care was taken to ensure that the children's confidentiality was protected, and all interviews took place in environments in which were familiar to the children, and in which they felt comfortable. The language of all interview questions and vignette texts were at an appropriate cognitive level, and at the start of each focus group or interview, the researcher spent time building rapport with the participants, discussing topics the children were interested in, and allowing the children to each listen back to initial tape recordings of themselves.



## Chapter Three - Study One: Exploring Children and Young People's Ideas about Mental Illness

- *Someone used the word 'nervous breakdown' before, who can tell me what that means?*

- Breakdown is probably when a car is out of fuel or it's got a flat tire.

- *Yep, have you heard of a nervous breakdown?*

- And nervous is when you're really scared, so it must be a car that's really nervous and has had a breakdown.

- It means she's so nervous that she feels like she'll break down or fall apart.

(Focus group of 9-year-old children)

According to Wolcott (1994) there are three aspects involved in presenting qualitative data; these are description, analysis, and interpretation. Description refers to describing and summarising the data, presenting what participants have said, without analysis or explanations as to why participants said what they said. Analysis involves transforming the data into categories by grouping common features and identifying relationships within these categories. Finally, interpretation is the process of putting the data in a broader context, or asking: "what is to be made of it all?" (Wolcott, p. 12). This chapter presents a description and analysis of the focus group study, and Chapter Four presents description and analysis of the individual interviews. The interpretation of data from both studies combined is considered in Chapters Five and Six.

The review of literature in Chapter One highlighted the gaps and flaws in previous research that examined children and young people's ideas about mental illness. Often previous studies suffered from methodological problems, such as inadvertently encouraging children to discuss only negative aspects of mental illness, or to express only negative attitudes towards people with mental illness (e.g., Adler & Wahl, 1998; Weiss, 1986). Other studies were flawed in their analytic methods, losing the rich and varied range of children's ideas by using Likert scales or focusing only on the most commonly cited ideas (e.g., Marsden & Kalter, 1976; Norman & Malla, 1983). Finally, a number of studies (e.g., Spitzer & Cameron, 1995) did not attempt to relate their findings back to broader explanatory frameworks.

Because of the weaknesses in previous research, it was deemed important to carry out exploratory research, examining children and young people's ideas about mental illness without preconceived expectations. The goal of this first study was to talk to children and young people in focus groups about their ideas of what mental illness is; to discover what words young people use when discussing mental illness, and how they explain particular behaviours that adults would consider to reflect mental illness.

Group discussions were used for Study One as they have been shown to be a useful way of eliciting a broad range of ideas about a topic (Horner, 2000). More importantly, it was hoped that the children would feel more confident discussing their ideas about mental illness in a group context.

Focus groups are commonly used for exploratory research, in areas of research where little is known, as they can be a useful way of gathering ideas quickly (Byers & Wilcox, 1991). Many studies have found that they are a useful way of encouraging participants to express their ideas on the topic being investigated. The researcher acts as a moderator facilitating and guiding the discussion. The moderator's role includes allowing the participants to get to know each other, providing triggers (such as questions or stimuli) to encourage discussion, and keeping the discussion to the general area of interest without stifling people's ideas or the natural flow of conversation (Willig, 2001).

Focus groups have been found to be an effective means of encouraging children to express their perceptions and understandings of mental illness. Secker et al.(1999) ran 17 group discussions, each group comprising six young people, aged 12 – 14 years old. These groups consisted of semi-structured interviews, based around discussing vignettes about different characters with mental illness. The researchers found that group discussions were a successful method of examining children's ideas about mental illness, as all groups interacted well, offering a range of ideas and considering each other's comments.

## **Method**

There were four main methodological components involved in Study One. Firstly, the cartoon vignettes were developed and prepared by the researcher, and

illustrated by a cartoonist. Secondly, participants from each age group were recruited from local schools. Thirdly, the group discussions were held, and finally, the transcripts were analysed. Details pertaining to each of these components follow.

### **Cartoon vignettes**

Vignettes were expected to be a useful way of eliciting participants' ideas about mental illness, as they present the characters' behaviour, without using any labels or jargon. It was expected that all children would have ideas about why the characters were behaving in the ways that they were, even if they had no knowledge of words such as 'mental illness'.

Three vignettes were planned. Each vignette concerned a fictional adult with a different mental health problem. Vignettes about adults were used because previous research has suggested that children respond differently to vignettes about adults and vignettes about children (Secker et al., 1999; Spitzer & Cameron, 1995). Because children often normalise behaviour problems by other children (Spitzer & Cameron), vignettes about adults were expected to give more information about children's views of mental illness than vignettes about children would.

The types of mental illnesses portrayed in the vignettes were depression, anxiety, and schizophrenia. Anxiety and depression were selected because they have a relatively high prevalence in New Zealand (Wells et al., 1989). Schizophrenia was selected because previous research has found that it is commonly the first disorder people name when asked to name a mental illness, therefore ideas about schizophrenia are likely to reflect people's general ideas of mental illness (Kalafatelis & Dowden, 1997). Each vignette was adapted from a relevant case study used in a postgraduate clinical psychology course. The vignettes do not give enough information about the characters' problems to classify them with any DSM-IV diagnosis; however, each suggests a particular likely diagnosis. In one vignette, the main character "Dad" is displaying symptoms of a Major Depressive Episode; in the second vignette, the character "Betty" suffers from Agoraphobia with Panic Disorder; and the third vignette's character, "Eddie" appears to be having a Psychotic Episode. The vignettes are presented in Appendix A.

It was important that the vignettes were detailed enough to describe a particular mental health problem, while at the same time being written in such a way that children as young as 6 years old would be able to understand all the words used in the text. Two clinical psychologists read each vignette and agreed on the most likely diagnosis for each character, based on the limited information available. A teacher of a class of 6-year-old children examined the vocabulary and language used in the vignettes and agreed it was at an appropriate level for children of that age.

After the text for each cartoon had been written, a university cartoonist drew the cartoons. The three cartoons all had similar cartoon style, and each vignette had the same number of frames and text boxes.

### **Pilot tests**

Once the three cartoons were prepared, pilot tests were carried out to assess the vignettes and to develop an appropriate interview guide. Ten participants were interviewed individually during the pilot stage (ages 6.5 years – 22 years). One pilot group discussion was also conducted; this group consisted of four students aged 10 – 12 years old.

These pilot studies were useful in several ways. Firstly, they helped to evaluate and improve the researcher's interviewing skills. Secondly, they were useful in developing and assessing the questions to ensure that the children could understand them, and that they facilitated discussion. Finally, these pilot studies assessed the usefulness of the cartoons and the effectiveness of group discussions as a means of examining how children understand mental illness.

Overall, the pilot studies supported the use of vignettes and group discussions. The cartoons elicited a range of ideas about three different mental health problems, and the language used in the cartoons seemed to be simple enough that 6-year-olds could understand them, but also detailed enough that the vignette still clearly described a situation involving a character with mental illness. The interview questions led to participants giving sufficiently detailed answers to begin analysing. Finally, it was found that the group discussion produced more detailed answers than the participants interviewed individually gave. Whereas individual participants generally gave short answers (perhaps because they may have felt

uncomfortable when they did not know how to answer a question), in the group discussion participants discussed ideas with each other, and expanded on what others had said.

## **Participants**

Four age groups were selected for Study One. The youngest age group was 6 – 7 years old. Based on previous research, such as Spitzer and Cameron (1995) this seemed to be the youngest age group that would be able to answer vignette based questions about mental illness. The other three age groups selected were 9 – 10, 12 – 13, and 16 – 18 year olds<sup>1</sup>. In total, 25 males and 38 females participated, with all groups containing both boys and girls, except for one group of 12-year-olds, which consisted of girls only, as in this age group more girls consented to participate. Each group was comprised of between five and eight participants.

Participants were drawn from two primary schools, one intermediate school, and one high school. These schools were selected on the basis of established contacts with school staff. Three of the participating schools were large suburban schools with quite high decile ratings<sup>2</sup>. The fourth participating school was a small inner city school that also had a high decile rating. The majority of participants were European / Pakeha<sup>3</sup>, and belonged to families with a high socio-economic status.

## **Procedure**

Principals selected classes to be approached to recruit participants. The author visited each class and gave the students a description of the study, and invited them to participate. All students in each class were then given an information sheet and consent form for their parents to complete, as well as an assent form for each child to sign if they chose to participate (all presented in Appendix B). The 17-year-old participants received information sheets and consent

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<sup>1</sup> For the rest of the thesis, these four age groups will be referred to as 6, 9, 12, and 17 years old respectively.

<sup>2</sup> Decile ratings are a rating of a school's socio-economic status, calculated by the Ministry of Education based on the household incomes, occupations, household crowding, parental education qualifications, income support, and ethnicity of the families of the students at the school; see [www.ero.govt.nz](http://www.ero.govt.nz).

<sup>3</sup> Pakeha is a Maori word used to refer to white or non-Maori New Zealanders

forms which were modified versions of the forms for parents, whereas the participants in the three younger age groups received a colourful booklet giving information about the study and asking the children for assent.

Initially, twelve discussion groups were planned, with three groups at each age. However, difficulty in recruiting participants meant that there were three groups of 12-year-olds and 17-year-olds, but only enough participants for two groups for the 6-year olds, and 9-year-olds. Only a small proportion of students in the two younger age groups invited to participate returned their consent forms. Only seven students in the 6-year-old class, and 12 students in the class of 9-year-olds returned affirmative parental consent forms to their teacher. It is not clear why the consent rates were so low. The consent rate in the 6-year-old class was so low that only one focus group could be held, thus the second primary school was approached, and a second group of participants recruited.

Recruiting 12- and 17-year-olds was an easier process. In the class of 12-year-olds invited to participate, 17 students gave assent to participate (and had parental consent). To recruit 17-year-olds, the author visited students during their study period at their high school, and introduced the research. In each study period visited, between five and eight students volunteered to participate, and the group discussion was carried out straight away, as parental consent was not required.

The group discussions were conducted at each school, in an empty classroom, during school time. Each participant looked at a copy of the cartoon strip that was being discussed and the researcher read it out loud. All groups looked at all three cartoon strips, with the order of presentation of cartoons varied across groups. Discussions lasted between 25 and 40 minutes.

For each cartoon vignette, participants were asked about what they thought was happening in the story, why it was happening, what could happen next, and whether they had ever seen anyone like the character on television or in other places. The author acted as facilitator, keeping the discussion focussed and ensuring that everyone was given a chance to talk.

There were differences in dynamics across groups. Some groups were more talkative than others, but almost all groups discussed a range of ideas for all three vignettes. The students appeared to enjoy the discussions, generally sounding interested and focussed. This was demonstrated by the students all joining in the

discussion, and afterwards asking questions about the utility of the research. One 12-year-old group even wanted to keep the discussion going after the bell that marks the end of the school day had rung. Unfortunately, as the interviews took place during school time, a number of groups were interrupted by teachers or other students entering the room, or other distractions. However these distractions were always brief and the discussion quickly resumed after the person left.

All discussions were recorded on a tape recorder, and transcribed by the author. The majority of the taped discussions were audible and could be transcribed. Unfortunately, the microphones did not work during one 17-year-old group discussion, and this entire discussion could not be transcribed or analysed. In the other nine recordings, there were certain parts that could not be clearly heard due to a participant not speaking clearly, or two participants speaking at the same time. When this happened, as much as possible was transcribed, and then those passages were underlined in the transcript. None of these underlined passages have been used in any quotes included in this report.

### **Ethical considerations**

This study was approved by the Victoria University of Wellington Human Ethics Committee. It was not anticipated that any of the issues discussed during the focus groups would be upsetting for any of the participants, and none of the participants appeared distressed by anything that was discussed. After each discussion, participants were given the name of a school teacher they could talk to if they wanted to discuss anything further. They were also given the contact details for the researcher, one of the research supervisors, and Youthline telephone counselling service.

### **Process of analysis**

As described above, the aim of this study was to gather the range of ideas that children and young people have about mental illness. For this reason, the transcription did not record which individual participant said each line of dialogue; rather, the ideas of the group as a whole were of interest. In the transcriptions, the researcher's comments are recorded in italic font, and each new speaker started on a new line, but speakers were not individually identified.

Following transcription, each transcript was read several times to identify themes. The analysis process followed recommendations by Patton (1980). This process involved reading the transcripts several times, and passages that concerned a particular theme, cause or treatment recommendation were grouped together. Then all the transcripts were reread looking for further examples of each of these themes, as well as counter-examples.

Initially, 53 themes were identified across the nine group transcripts. These themes were then grouped into broader categories. For example all the themes describing different mental illnesses ('depression', 'paranoid', 'phobia' etc) were grouped together as 'psychiatric problems' and then were combined with themes describing psychiatric treatments (e.g., 'psychiatric institutions' and 'taking antidepressants') into a broad category type called 'Psychiatric explanations'. This process of combining themes led to the development of five categories that describe the range of ideas that the groups had about mental illness, each category contained a number of themes or sub-categories describing either causes or resolutions for a character's problem.

## **Analysis**

Analysis of the transcripts of the group discussions identified a range of themes about what was happening to the characters, as well as the causes and suggested treatments for their behaviour. These ideas have been grouped into five main categories: 'medical', 'psychiatric', 'abnormal behaviour', 'psychological', and 'event' explanations. These categories are each summarised in Table 3.1, and described below, along with quotes from the transcripts that demonstrate each explanation type. In some places, quotes have been edited to make them clearer to read, removing repetitions and fillers, or joining two related passages, without including discussion about a different aspect that occurred in-between the passages. However, this has been done carefully to ensure that participants' meanings were not altered.



Table 3-1 Summary of categories

Category	Description of this category	Example of this category
Medical explanations	Character has a physical or medical problem or drug problem, and this problem is treated	- She [Betty] might have Parkinson's Disease. - <i>She might, what is Parkinson's disease?</i> - You can't stop shaking. (12-year-old group)
Psychiatric explanations	Character has psychiatric illness and is treated in a psychiatric hospital or with psychiatric medication	- I think he's [Dad is] mentally ill as well, but it would only be a mental illness if it was over a long period of time and nothing was done about it, and it was beginning to affect him. If it was over a week, then that would just be something, well I suppose everyone has bad weeks, but it was over a 6 month period, to a year, you'd think there was something wrong. Because there's that continuing factor (17-year-old group)
Abnormal behaviour explanations	Character is referred to in negative ways: abnormal, crazy, violent, or has no control over her / his behaviour	- One minute you're normal, the next minute you're smashing stuff. (17-year-old group)
Psychological explanations	Character's problem is due to the way she / he is thinking about herself / himself or about the world. Helped through therapy; by friends or family; or by thinking or acting differently	- I think it's just something with his [Eddie's] thinking, something that he couldn't get it out, like he bottled it up. (12-year-old group)
Event explanations	Something has happened to the character, such as experiencing a traumatic event in the past or has problems at work or in a relationship. Similarly, the character's problem is solved by others.	- It might be when he [Eddie] was little people might have teased him about something and he hears it now. People are teasing him about something. (9-year-old group)

### Medical explanations

The problems depicted in the vignettes were sometimes discussed as medical issues. There were several sub-themes within the medical explanations category. Firstly, participants described a character's situation as being due to medical problems or physical symptoms, for example suggesting that a character is acting this way because she or he is sick. Secondly, medical treatments, such as being checked by a doctor or prescribed medication, were recommended. Discussion questioning medical explanations or rejecting medical treatments was also included in these sub-themes. Thirdly, references to the character using drugs

or alcohol were included as medical explanations, as these drug references generally discussed the way the drugs affected a character's physical functioning.

### *Physical / medical symptoms*

Some groups discussed the characters' current behaviour as being a symptom of, or due to a medical condition or physiological problem. For example, a 6-year-old group suggested that Eddie (the character with schizophrenia) might be hearing voices because he has some sort of "ear disease". They recommended Eddie see a doctor or go to a hospital to have his ears checked. A 12-year-old group suggested that Betty (the character with agoraphobia) might have Parkinson's Disease because she "can't even talk on the phone without shaking", and another 12-year-old group suggested that Eddie might be "having a seizure".

Groups of all ages suggested that there might be something physically wrong with the schizophrenic character's brain, for example:

- Maybe there's something wrong with his brain ...  
... Yeah, probably, maybe his brain has just gone haywire. Maybe he's got a loose cell in his brain.  
(9-year-old group).

### *Medical treatment*

In the cartoon depicting Dad suffering from Depression, Mum asked Dad if she could call a doctor for him. Because of this dialogue in the vignette, all groups discussed whether a doctor would be able to help Dad, and whether other medical treatments would be helpful. Most groups also discussed whether a doctor or medical treatments would be able to help the other two characters as well. Often children suggested Dad's symptoms were due to him being sick or having a physical disability, so a doctor should check him.

There were age differences in the way groups thought that doctors would be able to help the characters. All the groups with children aged 9 years or older thought that the main role of doctors is to prescribe medication. Participants recommended sleeping pills or 'calming down' pills to each of the characters. For example in this following extract, participants seem to agree that Betty, the

agoraphobic character needs medicine, but offer a number of suggestions about the purpose of the medication:

- She [Betty] could take medicine.
  - *Do you think she takes medicine?*
  - She probably ran out and she's probably too scared to go to the doctor
  - And she's got to get some relief.
  - *What kind of medicine do you think she's taking?*
  - Probably calming.
  - She could be in pain or something.
  - What's it called? Depression pills or something.
- (12-year-old group).

Some children however suggested that medical treatments or medical doctors may not be able to help one or more of the characters, as the character's problem was due to the way he or she thinks, not a medical issue. The following extract is an example of children viewing Betty's problem as a psychological problem ('it's just a feeling'), but also serves as a counter-example for the medical explanations category. In the extract the children consider whether a doctor or medication would be helpful, and build on each other's comments to decide that there is no medical illness, and so no need for a doctor:

- *Could a doctor help Betty?*
  - No, I don't think so...
  - There's nothing that you could really do.
  - No medication that you could give people for that.
  - Because there isn't really an illness.
  - It's just a feeling
- (12-year-old group).

Even when participants said that they did not believe a character would be helped by medication, they still often suggested that doctors might prescribe medication, as this is what they thought doctors do:

- *How could a doctor help Dad?*
  - By giving him special treatment or something like that.
  - Pills.
  - Antibiotics.
  - *Give him antibiotics? Do you think that's what will help Dad?*
  - No, but doctors do that.
  - *Is there something a doctor could do that could help Dad?*
  - Not really
- (9-year-old group).

Other ways that participants in the 9- and 12-year-old groups suggested that doctors would be able to help the characters include helping Dad find a job, brain surgery (to remove a possible tumour), or by using x-rays (on the brain). The following extracts present examples of the groups considering different medical treatment options. These extracts also demonstrate the usefulness of focus groups in allowing children to listen to each other's ideas and build on the ideas, or alternatively disagree with the ideas suggested by other group members:

- *So you think a doctor could help him?*
  - Nah.
  - A doctor might help him find a job.
  - What's the doctor going to help him find a job for?
  - ...
  - Maybe he could be a doctor or a nurse or something.
- (12-year-old group)
- 
- They might have to do surgery on his [Eddie's] brain
  - *What could surgery on the brain do?*
  - He might have like a nervous system wrong with him.
  - He might have a tumour.
  - They might have to treat it by cutting it out or doing something else
- (12-year-old group).
- 
- *What could a doctor do?*
  - Check his brain.
  - *How would they do that?*
  - With the special stuff that they've got.
  - X-rays.

- *X-rays?*
  - You can't actually read their thoughts through x-rays.
- (12-year-old group)

Compared with the older groups, the two 6-year-old groups seemed to have very different ideas about what doctors could do to help the characters. Whereas older children suggested doctors could examine a character's overall health, and even their emotional state, the 6-year-olds focused on very specific things, and often seemingly unrelated things that doctors might do. For example, one 6-year-old group suggested that both the schizophrenic character (Eddie) and the depressed character (Dad) might have had ear diseases, and doctors and hospitals could check for this:

- *So what could a doctor do to help Eddie?*
  - Check his ears for disease
  - Get his ears tested
- (6-year-old group)

The second 6-year-old group offered a humorous response to the interviewer's question about the doctor. During this extract, the children were all laughing and adding to each other's suggestions. It may be that the children in this group provided a humorous answer to this question because they did not see any non-humorous or plausible reason for asking a doctor to help Dad:

- *Mum says here 'can I call a doctor', what could a doctor do?*
- Chop off his head.
- *He could, would that help him?*
- No.
- *What else could a doctor do?*
- Chop off his arms.
- *Would that help him?*
- Yeah (laughs).
- I know, he could chop off his legs, and chop off his fingers and hands (laughs).
- *How would that help him?*

- I know you could chop off his head and his nose and his fingers and his nose.
  - Everything
- (6-year-old group).

### *Drugs and Alcohol*

The older groups (all three 12-year-old groups, and one 17-year-old group) suggested using drugs, or not being able to get drugs, may be the cause of Eddie's psychotic behaviour. They suggested that drugs may have caused Eddie to "lose his memory", "make you go stupid", "hear voices", or "throw big tempers". Being drunk was also used as an explanation of Eddie and Dad's behaviour by some 12-year-olds. Because these groups discussed the ways drugs and alcohol affect the characters' brains and physical behaviour these have been classed as medical explanations.

### **Psychiatric explanations**

When groups used diagnostic labels to describe a character as having a psychiatric problem or a mental illness, these passages were grouped as psychiatric explanations. Some group members used specific psychiatric jargon or labels to describe a character's behaviour; examples of these labels include 'depression', 'claustrophobia', and 'paranoid'. Other group members used more general descriptions; such as saying a character was hearing voices or had a mental problem. Treatments recommended for psychiatric problems included psychiatric medication, psychiatric hospitals and "special machines". This category had a strong diagnostic focus, following a medical model. Characters' problems were viewed as psychiatric illnesses, differing from the medical category, which viewed the problem as physiological. This category differed from the psychological category, which viewed problems as being due to the way the characters are thinking, but did not label the problem as being due to a specific psychiatric illness.

### *Psychiatric Illness*

Often groups would explain what was happening to a character by labelling the character's behaviour as a psychiatric illness. Sometimes these labels would be

used as a causal explanation, without explaining why the character has that illness. For example:

- *How come this is happening?*
  - She's [Betty is] claustrophobic
- (17-year-old group).

Groups with participants aged 9 years and older used different psychiatric labels or symptoms to describe each of the three characters. Eddie was described as hearing voices, Betty was described as having a phobia, anxiety, or having a mind problem, and Dad was described as being depressed. Both Betty and Eddie were referred to as being paranoid. The terms mental illness and mentally ill were discussed in relation to all three characters.

*Hallucinating / Hearing voices:* In one cartoon vignette, Eddie says that he is hearing voices, so all groups mentioned this. However, there were age differences in the ways that groups seemed to understand what the voices were. The two 17-year-old groups both suggested that Eddie was hallucinating when he heard the voices. The two 6-year-old groups said that Eddie was hearing voices but did not use any psychiatric explanations when discussing what these voices were or why Eddie was hearing them. Participants in the 9- and 12- year old groups suggested some different ideas about what these voices might be, and why he is hearing them. These ideas include that he might be hearing his conscience; hearing mean things that other people have said to him previously; hearing ghosts; or simply hearing voices because he is 'nuts' or 'crazy'.

The word schizophrenia was only used by one participant from one 17-year-old group, and she had learnt about this illness from family experience:

- Sounds like schizophrenia.
  - *Schizophrenia? How come you think it's schizophrenia?*
  - Because my second cousin has got it, and he always hears voices and stuff.
- (17-year-old group).

Other members of that group did not seem to have an accurate understanding of schizophrenia, even after that participant mentioned it. Instead these participants drew on a popular misconception of the nature of schizophrenia:

- Is that [schizophrenia] double person?
  - It's split personality
- (Two 17-year-olds from the same group as above).

*Phobia:* Betty was frequently described as being scared, worried, or anxious. Participants said that Betty was scared of other people and what they might think of her, going out, car crashes, or just scared of everything.

All five of the 12- and 17- year old groups suggested that Betty had some sort of phobia. While no groups used the word 'agoraphobia' (which is the most appropriate classification for Betty's behaviour), they often described the symptoms of it. For example:

- She might have some kind of phobia about going places.
  - I think she's scared of crowds and other people
  - ...
  - like people-phobia
- (12-year old group).
- 
- It's phobia
  - *What does phobia mean?*
  - It's like you're scared of something, like there was a guy on the radio who was scared of having peanut butter stuck to the top of his mouth.
  - *Ok, do you think that's what she's got?*
  - No, she's got a phobia, I don't know what it's called, but it's kind of fear of crowds or something.
  - One about breathing
- (12-year-old group).

All the 12- and 17- year old groups mentioned the word 'claustrophobia', even if they did not think Betty's problem was claustrophobia. Claustrophobia is the most widely known and talked about phobia, so many of the participants had heard of it and discussed whether Betty had claustrophobia or some other sort of



phobia. The following extract is an example of children responding to each other's ideas to expand the explanation so that the problem depicted in the vignette fits in with their knowledge about claustrophobia:

- I think she could kind of have claustrophobia or something in some ways because she's scared of crowds and people, like small spaces, kind of.
  - Or enclosed spaces with people.
  - Because if she's scared of a movie theatre, that's like an enclosed space, and there's lots of people on the bus as well.
  - But home wouldn't be because lots of people wouldn't be at home, unless she had a really big family
- (12-year-old group).

*Depression:* All participants described Dad as feeling depressed or sad. Groups discussed what it means to have depression, and the thoughts Dad was having because he was feeling this way. From as young as 9 years old, children gave definitions of depression that incorporated the role of both thoughts and behaviour in depression, similar to a cognitive-behavioural model of depression used by clinical psychologists:

- He could have had something happen to him and that's all he thinks about, he can't describe it.
  - Maybe he's really really depressed and he lost his job, and doesn't feel good enough for another one.
- ...
- *What does depression mean?*
  - Depressed means like you don't really feel like doing anything or you're really sad
- (9-year-old group).
- 
- Maybe he lost his job and he's getting all depressed
  - *So what does it mean to be depressed?*

- Like feel down, and start to hate yourself, and feel like everything in your life has gone wrong
  - Life's not fair
- (12-year-old group).

- Maybe he's a bit sort of stereotypical because at the start I think he probably felt like he provided for his family by working, and now that he doesn't, he's got some sort of depression...because he sort of lost his role and responsibilities
- (17-year-old group).

Some participants also said that they thought that Eddie might be sad or suffering from depression:

- *How do you think Eddie is feeling?*
  - Sad...
  - *How come you think Eddie is feeling sad?*
  - Because of the voices
- (6-year-old group).
- *What kind of words would people use to describe Eddie?*
  - Paranoid.
  - *Paranoid, yep, what does that mean?*
  - Like, thinking differently, and they're a bit worked up about something.
  - Depressed.
  - *Do you think Eddie is depressed?*
  - He might be.
  - He said 'people are watching me and following me all the time' – that might be causing it.
  - Might have bottled up his depression, and is trying to let it out somehow, or its just coming out.
- (12-year-old group)

*Paranoia:* Both 17-year-old groups used the word 'paranoid' to describe Eddie and Betty, although they said that Betty and Eddie were paranoid about different things. One girl in 17-year-old group defined paranoid as:

- When you constantly think that someone is after you or something's going to go wrong or constantly getting thoughts going through your head and some of them are just irrational, but they'll just be thought of all the time.

With the exception of the passage on the previous page, where participants in a 12-year-old group used the word paranoid to mean depressed, no groups of younger participants (aged 12 years or below) used the word paranoid or described the concept when talking about either Betty or Eddie.

*Mental Illness:* All participants were asked if they had heard the term 'mental illness' before, and what they thought it might mean. The younger children tended to use the terms 'mental health' and 'mental illness' interchangeably, and tended to use the terms as diagnostic labels, in a similar fashion to the ways the older participants used more specific psychiatric jargon. The children's use of the term 'mental health' to refer more specifically to 'mental illness' is likely to have been influenced by the text of the consent form (Appendix B), which invited children to discuss mental health followed by vignettes depicting examples of mental illness. Early on in the discussions the 6-year-old groups said that characters were suffering from 'mental health', suggesting that that is what they expected the vignettes to be about. In particular two children from one of the 6-year-old groups appear to be repeating definitions of 'mental health' that their parents or teachers had told them prior to the study, or possibly definitions they derived from the consent form, which refers to how the current research may be able to help children in the future. In two different part of that focus group, the children made very similar comments:

- *So what do you think is happening [to Eddie]?*
  - I do. I think he's got mental health. He's got mental health.
  - *Yeah? What does mental health mean?*
  - It means his brains not working.
  - No, it means helping other children.
- (6-year-old group)

- *What do you think mental health means?*
  - It means your brains not working and you can't think about something and you go to a school that can help you.
  - Mental health is about poor children, and you can go help these people.
  - And get money for them.
  - I think mental health is metal health [sic]. I think mental health is metal (laughs).
- (the same 6-year-old group at a later point in the discussion)

There were two ways in which older participants tended to describe the term 'mental illness'. The term was sometimes used to refer to abnormal behaviour (as presented in the abnormal behaviour section) or alternatively to mean a psychiatric illness or brain problem, as demonstrated in the following examples:

- Maybe he's [Eddie] going mental
  - *What does mental mean?*
  - It means totally out of control.
  - *Out of control. Other ideas?*
  - They do things which is wrong, which they actually think is right.
  - *Other ideas?*
  - Some special illness comes over them and they keep hearing things, like real bad things.
  - They're going nuts and all that stuff.
  - *They're going nuts? What does nuts mean?*
  - Something rude.
  - Trying to get words out of his head.
  - Its like they don't really want to hear it and they're sick of it. They just can't put up with it anymore.
- (9-year-old group)

*Ok, earlier R mentioned mental illness, who thinks they can try and tell me what mental illness is?*

It's a problem with your brain. Your brain's not functioning in some way. Whether you're hearing voices, or this guy's [Dad has] got depression, they're all mental problems

(17-year-old group).

Presenting three different vignettes to the groups also allowed the participants to make comparisons between the different characters. Comparisons were most notable when groups were considering whether each of the characters had a mental illness. For example, in the following passage, the group suggests that each character has a different mental illness, even though they do not give more specific labels for any of the mental illnesses:

- There could be different forms of mental illness, so this guy [Eddie] might have a big one, and Betty might have slight mental illness, or a different sort of one to him, and the other guy [Dad] might have a different one to all of them  
(12-year-old group).

### *Psychiatric treatments*

Psychiatric treatments included prescribing medication, using 'special machines', and hospitalisation in a psychiatric or mental hospital. These mental homes were described as places people go to keep themselves and others safe, or to help them become less stressed. For example:

He needs to go to a mental home, and they have those sponge things around the walls, so he could just run at them, and eventually he'll just punch his anger out  
(12-year-old group).

Doctors could be involved in the psychiatric treatment process, prescribing anti-depressants, giving injections, or putting a character in a 'special machine':

- *Ok, so what could help Eddie?*  
- Well he could always go to the doctor.  
- *What could a doctor do with Eddie?*  
- Well, he could help him.  
- They've got a special clinic.  
- They could calm him down.  
- They could give him an injection  
...

- They could put him in a – I'm not quite sure what they're called, but they have this special machine, that can make people control themselves sometimes.

(9-year-old group).

- [A doctor could prescribe] antidepressants

- *What do antidepressants do?*

- Stop you being depressed I guess.

- When you're depressed, or when you're in this sort of situation, there's an unbalance of chemicals in your brain, that, I'm not too sure, this is just something I read about ages ago, it's this unbalance of the chemicals that can often cause depression. You've got pills and stuff, which often help balance it out a bit more

(17-year-old group).

Participants were never asked about their own personal experiences, but some participants did refer to things they had seen elsewhere. In this extract, a 9-year-old girl describes what she has seen at the mental hospital (a psychiatric treatment) in which her aunt is a patient. The other children were interested in this girl's example, and asked her questions about it, as well as adding in information about their own situation as well:

- At my auntie's mental hospital, she has friends and she does stuff with them like they play tennis

- Is that mental health or mental exercising?

- And you can do paintings together.

- My granddad worked with a whole lot of mental people, he helps them and they just feel real happy when they do

- My mum and dad don't do anything about mental health, my mum plays croquet and organises the games and my dad does insurance.

(9-year-old group).

### **Abnormal behaviour explanations**

There were a number of ways in which children and young people could describe the way the characters were behaving, and these sub-categories have been grouped into a category called 'abnormal behaviour'. This category included discussion concerning the ways in which people with mental health problems

differed from 'normal' people. The characters were referred to as 'not normal', 'crazy', 'weird' or a range of other words that often have negative connotations. People with mental illness were also described as naughty or bad. Sometimes these people were described as having no control over their behaviour, or at risk of being violent. These characteristics were attributed to the character with mental illness, rather than being viewed as separate from the character, and instead caused by a previous event or a psychiatric illness. As this category only encompasses children and young people's descriptions of behaviour there are no treatment sub-categories within this category.

### *Abnormal*

There were participants from each age group that described a character's problem, or the word 'crazy' as meaning 'not normal', for example:

- *Who wants to tell me what crazy means?*
  - You start acting sometimes really all weird, and you start doing things that you wouldn't normally do.
  - And silly things
  - (6-year-old group).
- 
- *Ok, R mentioned 'out of control' before, what does out of control mean?*
  - It means you're out of control
  - *What makes you think Betty might be out of control?*
  - Because the things that most people take for granted, she can't do.
  - Things that would be relatively easy for normal people to do without any problem. She can't live her life, or go on as normal.
  - (17-year-old group)

Similarly, participants in the older age groups (12- and 17-years old) decided whether a character had mental illness based on whether the character behaved in ways in which people would normally behave in their situation:

- Because even though he [Dad] is not as bad as the others, as bad a mental illness as the others, I just think he does [have a mental illness],

because say if someone else lost their job I think they'd probably go looking for another job  
(12-year-old group).

- I think Betty, yeah Betty has got a mental illness, because everyone in a sense gets paranoid about things, but it's when you get paranoid and anxious to such an extent that it starts affecting you, as it has Betty, and you're looking at quitting your job, then you start to think that it's mental illness. And something should be done about it because it's affecting the way she's living her life  
(17-year-old group).

### *Crazy*

Often participants referred to one or more of the characters being crazy, but were not able to define what crazy means:

- *What would it mean to be crazy?*
- Like, I know what it means, but I can't really say it.
- Like woooo [indicates circling her ear with her finger]  
(12-year-old group).

However, even when the children could not give a definition for crazy or other words, they still used these words to mean that 'crazy' people are different from most people. Participants described being crazy as doing stuff that people wouldn't normally do, having a bad temper, being naughty, out of control or violent. Other words that were used to mean the same things as 'crazy' were 'mental', 'loon', 'nuts', and 'weird'.

### *Control*

There were age differences in the way participants attributed level of control to the characters, especially Eddie (the character with schizophrenia). Children aged 6 – 9 years old often described Eddie as being bad, naughty, or doing things that other people would think is wrong. These words imply that Eddie had some control over his actions, and was choosing to misbehave, for example:



- *Why do you think he smashed his TV?*
- Because he wanted to get the bad thoughts out of his head.
- He looks like Frankenstein.
- *He does a bit doesn't he. How come he's got bad voices in his head?*
- Because he's being doing kind of bad things.

(6-year-old group)

Conversely, the 12 – 17-year-old groups (as well as a few children in the 9-year-old groups) often suggested that Eddie had no control over his behaviour, for example: "he's got a problem with him that he can't help or something" (9-year-old girl). A 17-year-old boy described being paranoid (a word the group had used to describe Eddie) as losing control:

- So how come people get paranoid?
- Stress
- They think they can hear voices in their heads and none of the people around can hear it, except for you, and it will keep on going around in your head so that your totally losing it in some way or lose your sense of control.

(17-year-old group)

As described in the psychiatric illness category, the terms 'mental illness' and 'mental health' were used in two ways, either to refer to an illness or to refer to behaviour that is uncontrollable. In the following extract, a 9-year-old boy describes Eddie as having 'mental health' problems and should be sent to a 'mad hospital' (a psychiatric treatment), but then continues to describe times when his own behaviour is uncontrollable as 'mental':

- That was a pretty bad question you asked [asking more about their reference to mad hospitals] because it's about mental health so I'm making mental. I can go mental myself. After ice cream or chocolate, maybe fizzy drinks.
- *What do you do?*
- Or M&Ms especially that really. Well I start bouncing on the furniture then I'll start messing up the place and if I have more of those I get really bad and start talking really stupid, I bounce all over the furniture

and I make a mess. Sometimes I might even break something and didn't even feel it.

- *How come you think that's mental?*

- Well, I can't control myself, so I just keep on going round and round in circles again, keep repeating myself, like bounce on the sofa, go play with the toys or I go get a train or start running through the trains and my brother will start going no no no. because he loves Thomas the Tank Engine.

(9-year-old group)

In the passage above, this group member was describing times in his own life where he is in control and does something (in this case, eating ice cream or chocolate), and that action causes him to go "mental" and not be able to control himself. Thus the participant appears to equate being "mental" with being out of control, but also suggests that he becomes "mental" by doing particular things.

### *Violence*

Participants (aged 9 – 17) often cited examples of movie and television characters they had seen who were crazy and acted violently. One character from 'Home and Away' (an Australian soap opera) was described by a 12-year-old group as 'crazy' because he held people hostage. A 9-year-old boy described a movie where "people got guns and shot people because they thought they were crazy, because they were acting real crazy".

Groups often considered whether a character is violent or at risk of becoming violent as a criterion for deciding whether the characters, Dad or Eddie, were crazy or not, for example:

- [Eddie is] not fully crazy, but he is a little crazy.

- *Why is he a little bit crazy?*

- Because those are only little things what he's doing, some people might just go and kill a whole lot of people or like blow up something...

- *Why do you think he is a bit crazy?*

- Because he started smashing his TV

(12-year-old group).

Children also suggested that Dad or Eddie were at risk of hurting other people. This first extract is also a good illustration of how the focus group encouraged children to add more details to other group members' ideas:

- He [Dad] could have done something bad.
  - *What makes you think he did something bad?*
  - Because he's depressed, and he might go around taking depression pills, he could have killed someone or something like that.
  - Maybe he did something bad at work or something, that's why he's killed his boss
- (12-year-old group).

- They [Eddie's parents] could maybe talk to him and calm him down, because I don't think he's going to hit his parents. More chance that he won't hit them, than a stranger.
  - *Do you think Eddie is at risk of hurting other people?*
  - Yeah
- (17-year-old group).

### **Psychological explanations**

The fourth category that emerged from the analysis was psychological explanations. This category included discussion concerning the way characters thought about their situation or problem. Psychological explanations were used frequently by all groups with participants aged 12 and 17 years old, as well as sometimes by members of the 9-year-old groups. The two 6-year-old groups made virtually no mention of any themes that have been grouped as psychological causes, but did recommend some treatments that have been grouped as psychological. The older participants used psychological themes when discussing what is happening for each of the characters as well as causes and treatments.

#### *Psychological causal explanations:*

There were two types of psychological explanations that participants used to explain why a character was in his or her situation. Some participants suggested that a character's problems were due to the way they think about the situation, and

some participants suggested that the problems were due to a character's personality or self-esteem.

*Thinking problems:* The older groups (12 and 17 years) used 'thinking problem' explanations for each of the three characters. In this extract, the depressed character's problem was described as being due to the way he thought about the events that have happened to him, and his difficulty thinking of positive things:

- A lot of negatives being piled on at once which make it hard for him to be able to see the positives. Things like, your job being lost, not being the main worker in the family, feeling that he can't provide for his family and all these things piled on to him with stress, making it hard for him to actually see the light at the end of the tunnel, so to speak (17-year-old group).

The agoraphobic character's fears were described as being due to the way she thinks about the world and herself:

- *So how come you think it's happening then?*
- Because she's getting older and she's thinking that people might just grab her (12-year-old group).

Eddie's psychotic behaviour was also described as being caused by the way he thinks:

- I think it's just something with his thinking, something that he couldn't get it out, like he bottled it up
- Or it could have just been something temporary (12-year-old group).

Having thoughts of guilt was an explanation 12- and 17-year old participants sometimes used when discussing why Eddie was hearing voices. The voices were speaking to Eddie because he had done something bad, and he felt guilty about it:

- It looks like it might be his own guilt telling him that. Like he might have done something bad, and it feels like that there's people around him telling him that constantly

...

- *So what do you think he's actually hearing?*

- His conscience?

(12-year-old group).

*Self-esteem:* All the 12- and 17-year-old groups suggested that at least one of the characters had their problems because they lacked self-esteem, felt timid, or felt that they were not good enough:

- *So how come this is happening?*

- Low confidence, as in she [Betty] cares what other people think, she doesn't believe in herself to think that it doesn't matter what other people think

(17-year-old group).

- He [Eddie] doesn't like people watching him

- Maybe he thinks he's not good enough for anything

(12-year-old group).

- I don't know why he [Dad] lost it [his job], but if he was fired, he may feel like he's useless, and now he's like 'oh, I can't get out there and get another job, I can't do anything'. He's just sitting there, and the more he thinks about it, it's taking the positivity away that he thinks he can get another job

- He's lost his confidence and the ability to actually say hey yeah well, I lost a job, but there's always another one out there

(17-year-old group).

### *Psychological treatments*

There were three main types of treatment or outcome ideas that were grouped as psychological. These were counselling or other talking treatments; helping oneself; or getting help from friends or family. These have all been classed as psychological treatments because even when the help comes from an outside

source, such as a counsellor or a friend, the character still has to change the way she or her thinks or acts to solve their problem.

*Counselling:* All groups of children aged 9 years and older discussed counselling or psychological treatments for all three characters. The two 6-year-old groups did not discuss counselling. The groups were only asked what a counsellor does if one of the group members had already mentioned that word. All the older groups suggested that all three characters might benefit from talking to some sort of mental health worker. The role of this person is to talk to the character about their problems, and also possibly talk to them about ways of solving their problems or help them build up their self-esteem or confidence:

- *What could counselling do?*
- Help her [Betty] sort out her problems, so she can talk to someone about it.
- Like if you've got any problems you can just say them without having to worry about anything  
(12-year-old group).
  
- *What would a psychologist do?*
- Help [Dad] get his confidence back, then he can get a job and support his family.
- Make him feel worthwhile, perhaps  
(17-year old group).

One innovative suggestion by a 9-year-old participant was to have psychologists help people increase their confidence by creating a new television channel dedicated to this:

- Maybe if they started a new channel called the psychology channel for people who aren't sure or don't have enough confidence, they could suggest ideas or they could tell you what to do and you could try it and if it doesn't work they could give you like this thing that would help, like a free pass to a camp or free pass on a holiday.

The person who could help a character was referred to by different groups as a counsellor, therapist, psychologist, or psychiatrist, or a mental doctor. These words were generally all used to mean the same thing, someone who would talk to the character about their problems. Only the 17-year-old groups distinguished between these different jobs:

- *Ok, what could a counsellor do, then?*

- Talk to him about his problems and ask him what's going on and why he might think these things may be affecting him and if the counsellor thinks they can help up to an extent. And if it does get into a medical stage where they can't help him, then they might refer him to a psychologist or doctor or something like that.

- *What could a doctor or psychologist do that a counsellor couldn't be doing?*

- I think that counsellors, the view generally is that counsellors have the basic skills to help look after people, like the ability to talk to them and be able to give them advice. A psychologist goes into the area where they're actually trained professionally to be able to do this, provide medicines and stuff, which could help, which a counsellor can't do (17-year-old group).

One group of 12-year-olds even began role-playing stories based on the vignettes, in these role-plays, the characters went to see psychiatrists. As well as the role-plays being informative about the participants' ideas about what psychiatrists do, the fact that spontaneous role-plays also occurred in the focus group suggests that the group members were enjoying participating in the study, and highlights the success of the focus group method as a way of eliciting children and young people's ideas. In the first-role play, the children suggest that psychiatrists diagnose problems as a way of fixing them, and also use hypnotherapy:

[Child playing Betty's friend]: maybe you need a psychiatrist.

*Ok, who wants to be a psychiatrist?*

[Child as psychiatrist talking to Betty]: Hi.

[Child as Betty]: Hi.

['Betty's friend']: My friend Betty has a problem that she's worried about everything.

['Betty' to 'friend']: I think you should leave.

['Friend']: Ok I'll wait outside for you.

['Psychiatrist'] – I don't know what to say.

[Another child watching the role play]: They'll say – what is your problem, tell me all about it, then you make her lie down on the bed.

And you do this with your hands (swings hand – hypnotising motion?).

[Pause]

*Let's let someone else try and be psychiatrist.*

[Another child as psychiatrist]: Your problem will be over in a minute, watch my finger [moves finger in a side-to-side motion]. Ok your problem is that you've got mental illness.

(12-year-old group)

In the second role-play, the children demonstrate an awareness of the importance of a psychiatrist respecting confidentiality, this was also alluded to in the first role-play when the 'friend' offered to wait outside. It appears that children are aware that psychiatrists respect confidentiality, even though they may not know what a psychiatrist actually does:

*Ok, does some one want to be Eddie, and someone wants to be the psychiatrist?*

[Child as psychiatrist]: ok, what's the problem?

[Child as Eddie]: I keep hearing voices in my head.

['Psychiatrist']: what are they saying?

['Eddie']: they're telling me I'm bad.

['Psychiatrist']: I'm just going to tell you now nothing said is going out of this room – umm, I've finished.

*Why do you think its important to say what you just said?*

[Child that had been the psychiatrist]: Because they might feel they don't want everyone knowing.

(12-year-old group)

*Helping themselves, and help from friends and family:* All groups discussed ways that all three characters could help themselves or be helped by friends and family. There were both age differences and vignette differences in the way participants recommended characters should help themselves or be helped by others.



Groups with participants aged 9 – 17 years old all suggested that a friend could help Betty with her anxiety. A friend would listen to her problems and be able to help her develop confidence and do some of the things that she is having difficulty doing. The second extract below is also an example of participants comparing the usefulness of different treatment recommendations (psychologist and help from a friend):

- She might meet an old friend or something, she takes her out and she says that there's nothing to be afraid of anymore  
(9-year-old group).

- I think she needs more than a psychologist or something, she needs a friend she can start trusting and actually start talking to and it's only once she starts talking to this friend and telling them what's going on that anyone else can really help her. You can't help someone unless you know what's wrong.

- *You think she needs a friend before she needs a psychologist?*

- Yeah, but that's going to be hard, considering her antisocial status at the moment.

(17-year-old group).

Groups suggested that Dad, the depressed character, should also do things to cheer himself up, or do things that will raise his self-esteem and make himself feel better. In the first extract below, the 6-year-old group suggest that Dad should do things that the participants themselves would enjoy. There were a number of examples of 6-year-olds describing things they personally would like, without making any reference to the fact that adults tend to like different things from what 6-year-old children like. The 17-year-olds on the other hand, described things that Dad could do that were more specific solutions for a character who has lost his job, instead of suggesting things that make themselves happy:

- He should watch telly and he'll cheer up

- *It will cheer him up?*

- I know what he could do – he could turn on the TV and watch 100 movies a day and then you would get stuck in the TV, and then you would be in every show all day.

- I know, he could have one lollypop and then go to the movies and then eat popcorn and have a rest  
(6-year-old group).

- Meet more people, go out and do stuff that makes him feel happy, helps build up his confidence level. Some people when they're in this sort of thing, like they've been unemployed for a long time, they go on courses where they can be helped and people target what it is that's wrong. And so they can actually say if you go and do this and this, it will increase the likelihood of getting a job, or it increases your likelihood of being able to do this

- *So what sort of things would they target?*

- I think the first thing they'd target is his confidence and his self-esteem. And then his appearance because at the moment, as D was saying he looks quite scruffy.

(17-year-old group).

There were also some psychological explanation resolutions suggested by groups for Eddie's problems. Participants in 6- and 9-year-old groups recommended Eddie should change the way he thinks. Similar to the previous extract from a 6-year-old group, the 6-year-old girl in this extract appears to be describing things that she enjoys, there is nothing in the vignette that suggests Eddie particularly likes trampolines:

- He could think about nice things...He could think about trampolines and bouncing really high  
(6-year-old group).

- Well maybe he could think it over again, and it wasn't too bad and he was just overreacting.

- *Yeah, he could do that*

- He could think about his friends and what they've said, rather than his enemies, then he could have like positive thoughts, and try and buy a new TV for his mum and dad  
(9-year-old group).

Older groups suggested that Eddie may require help from family members, in particular, his parents should take on a counselling role:

- Maybe his parents need to talk to him and find out what he's talking about. Instead of being vague and saying that he can hear voices, finding out what the voices are saying. Find out why they're telling him he's bad, why he thinks they're telling him he's bad.  
(17-year-old group).

### **Event explanations**

Event explanations were sometimes used when discussing causes and treatments for the characters' problems. In this group of explanations, the characters are not seen as different from other people, or having medical or psychological problems, and professional help may not be required. Instead, a character's problem is due to things such as relationship or work difficulties, or due to experiencing some sort of traumatic event. Whereas in the psychological explanations, characters were viewed as having problems with the way they themselves were thinking or acting, in this category, social stressors were considered to be the cause of the characters' problems. Similarly, the character's problem was solved through other people doing things, without the character themselves making any changes to the way she or he thinks or acts.

#### *Past relationship difficulties*

Some group members suggested that Betty's fears were due to having past relationship difficulties. These relationship difficulties may have been losing a good friend or family member, or never having made any close friends:

- Maybe she has problems making strong friendships with someone, or like maybe if she did, they could have had a falling out, and she could be scared of having a really close friend or something like that. And she's probably too scared to go and mix and mingle with everybody else  
(17-year-old group).

#### *Work problems*

Since both the vignettes about Eddie and Dad mentioned them not being at work, it is not surprising that many participants considered problems at work as

being the cause of their problems. Interestingly, groups did not refer to Betty's fears being due to work problems, even though that vignette also refers to the character not being at work.

Several groups considered how Dad was feeling after he lost his job, however there were age differences in the reasons participants thought that work might influence his mood. The younger participants thought that Dad was sad because he liked something specific about his job, whereas older participants considered more generally what it means to have a job, and why losing a job would have an emotional impact. The first two extracts also demonstrate that there was good rapport established in the groups between the interviewer and the group members, with participants correcting the interviewer or other participants:

- *So how do you think Dad is feeling?*

- Sad

- *How come he's feeling bad?*

- Sad, I said.

- *How come he's feeling sad?*

- Because he lost his job

- And it may have been his favourite job ever.

- Maybe it was jumping on a trampoline

(6-year-old group).

- Well, there might have been something he really liked in that job, maybe a woman or something

- He's married

- And he really misses her

- Hey, he's married

- I know

(9-year-old group).

- He's lost his job, so he feels worthless and can't do anything for the family

- He could have lost his job because he was feeling that way, I don't know.

- Was he feeling like this after or before he lost his job?

- *It doesn't really say*

(17-year-old group).

Some younger participants also suggested that the voices that Eddie is hearing come from people at work or, as demonstrated in this extract, people in his past being mean to him:

- Could be that sometimes people are being mean and he's got it stuck in his head and he keeps hearing it
  - *He keeps hearing it stuck in his head? So do you think there really are people speaking to him?*
  - Nope. It might be when he was little, people might have teased him about something and he hears it now.
- (9-year-old group).

#### *Traumatic event*

Several groups suggested that Betty might have experienced a traumatic event earlier in her life, which led her to be so afraid. While older groups mooted vague previous experiences, such as having been trapped somewhere or being assaulted in the past, younger groups offered a great deal of imaginative detail to explain Betty's fears. For example:

- She could have got trapped in a burning building or something when she was little, like her house caught on fire, or her car broke down and rolled off a hill, or she could have got – this is probably very unlikely, but she could have got trapped in a hungry cheetah's cage in a zoo, and it was chasing her around.
  - When she was a teenager she might have had a boyfriend and she really liked him but he might have hurt her feelings in some way and they broke up. She might think that all of her friends might reject her.
- (9-year-old group).

#### *Problem solved by others*

In general, groups suggested that the characters had to actively seek treatment or think or act differently to deal with their problem. There were, however, some examples of participants suggesting that the depressed character's problem could be solved by family members without the character modifying their behaviour or making any attempt to get help. In the extracts below, some of the

participants suggest that if Dad's problem is that he has lost his job, then the problem could be solved by family members getting jobs or looking for new jobs for Dad instead. In the second extract, participants suggest that the problem could either be solved by Dad acting differently (a psychological treatment) or Mum finding Dad a job or getting a job herself (so the problem is solved by others).

- *What could Ian (Dad's son) do?*

- In his spare time he could go around the street for him and find him a new job

(6-year-old group).

- His wife could help him find a job that he wanted to do, for half a day or something

- He could actually try and go to the job centre

- He could try and get a job

- He could look in the newspaper

- His wife should probably get a job if he can't

(12-year-old group).

It is also interesting that in the extract above, one participant suggests that Mum should get a job, when there is nothing in the vignette that suggests that Mum does not have a job, except that she happens to be home when the son comes home from school. Similarly, as described above, participants never referred to Betty having work problems, even though that vignette specifically mentions Betty having a job. It may be that some gender stereotyping has come into play in the children's interpretations of the stories, which leads to the question of whether children would have responded differently to the vignettes if the characters had been of the opposite gender.

## Discussion

The purpose of this first study was to gather exploratory data about children and young people's ideas about mental illness. The study was successful in a number of ways. Firstly, it demonstrated that children aged six years and older are able to discuss vignettes concerning characters with mental illness. Secondly, it has shown that children and young people use a wide range of explanations when

discussing mental illness. Five different categories were identified through the analysis, along with a number of sub-categories within each category. Thirdly, some age differences were identified.

The wide range of ideas that children and young people had suggest that there is no single explanation that all children from an age group use when talking about mental illness. Frequently previous studies have not presented the range of children's ideas, but instead focus solely on the most common explanation types used by children. For example, Spitzer and Cameron (1995) described a developmental pattern of children's ideas about mental illness derived from a content analysis. It could be assumed from their presentation of data, that all children of a particular age have similar ideas about mental illness and all follow a similar developmental progression of knowledge. Their analysis found that younger children tend to discuss mental illness using social and physiological causes, whereas older children incorporated more psychological themes into their explanations. The analysis presented in this study differs from previous studies, such as Spitzer and Cameron's, by presenting the range of ideas that children had. Although there do appear to be some age trends emerging from the current analysis, some children from each age group used each of the five categories.

This diversity of ideas children have about mental illness is often unable to be illuminated in studies that used quantitative methods, such as asking participants to rate characters on Likert scales (e.g., Callan, Wilks, & Forsyth, 1983; Norman & Malla, 1983) or in the case of Marsden and Kalter (1976) where the researchers rated participants responses using Likert scales. Quantitative studies are generally able only to measure the ways children and young people understand concepts that adults associate with mental illness, rather than to examine the range of ideas that young people have. Further comparisons between the findings from this study, Study Two, and previous research are addressed in Chapter Five.

### **Age differences in children's ideas**

The current analysis suggests that there were some age differences in the way groups used each of these categories. For example, there were differences in the comments made by younger participants and older participants about what doctors do. Whereas older groups suggested that doctors would assess a person's

overall health, and this may even include their mental health, younger groups tended to suggest that doctors check people out for specific ailments. Another age difference was in the way groups attributed control and responsibility to the character. Younger children often implied that the characters had control over their behaviour, and they just need to think or act differently and their problems would be solved. This differed from older groups that often suggested that a character did not have control over her or his behaviour, and required help from others, generally a mental health professional, to resolve the problem. Older groups also considered the role of thoughts in the causes and treatments for each character's problem, whereas the younger participants did not often discuss these psychological factors.

The groups of 6-year-olds appeared to have more difficulty discussing what they thought was happening in the vignettes than the older participants did. These youngest groups often resorted to saying that they did not know what was happening, or they gave explanations, which they did not seem to believe were correct. An example of this is a 6-year-old group's description of what a doctor could do (page 44).

However, even children in the youngest age group were able to suggest some ideas about causes and treatments for each character's behaviour. Common treatments recommended by children of this age include practical and specific suggestions such as cheering up the character with presents or encouraging them to return to work. It can therefore be concluded that illustrated vignettes are an effective means of investigating children's ideas about mental illness, as children as young as 6 years old were able to give some explanations.

The older groups tended to use more psychiatric jargon and labels than the younger groups. For example, only 17-year-old participants used the terms 'schizophrenic' and 'hallucinating' when describing Eddie. Similarly, the term 'phobic' and 'paranoid' was only used by groups with participants aged 12- and 17-years-old.

The goal of this first study was to gather exploratory data and there were only two or three discussion groups with each age group. However, even with only a small number of focus groups at each age, age differences appeared salient enough to suggest that this is an area that should be investigated further in future



studies. Therefore, the second study in this thesis also involved participants from different age groups.

### **Evaluating research methods**

This focus group study gathered a broad range of ideas about mental illness held by children and young people. Focus groups were found to be an effective way of examining these ideas, and the findings were used to plan the next study. There were some advantages and some disadvantages to using cartoon vignettes and these are considered here. The types of questions and the main areas of enquiry were also evaluated.

#### *Focus groups*

Focus groups were planned for this first study because previous research and pilot testing found that children often felt more comfortable expressing their ideas in a group context, rather than in an individual interview with a researcher. In focus groups, participants also consider ideas suggested by other group members, which in turn leads to more ideas being discussed. Focus groups were found to be a successful tool in this study. As highlighted in a number of places during the analysis section, there were many times in the group discussions when participants added to or reflected on the ideas of other group members or made suggestions even if they were not sure that they were correct. As described earlier, in one focus group of 12-year-olds, the participants even spontaneously started role-playing, indicating that the vignettes were capturing the children's imagination.

There are, however, some disadvantages to using focus groups as a means of investigating participants' ideas. Firstly, all participants were influenced by the mood of the overall group. There were some times when one participant would make a comment that was clearly intended to be a joke for his or her friends, not a serious idea about what they thought was happening in a vignette. However, it was generally clear when groups were joking and when they were offering ideas that they thought might actually explain something, and for the majority of the time groups were all able to keep relatively focused on the discussion about the vignettes. Participants made it clear that they were joking by saying things such as

“no, not really” or “just joking”, or by laughing and then changing the subject slightly to show that it wasn't a comment worth investigating further.

There is also a risk in focus groups that some participants may be too shy to talk in the group or contradict their peers if they disagree with them. In all focus groups, some participants dominated the discussion more than other participants did. However, the participants in each group were from the same class so they all knew each other well, which would have made the environment less intimidating, and every participant in every group added comments to the discussion.

Another difficulty with using focus groups in this study was that the groups were encouraged to give as many ideas as they could think of, so it is not clear which ideas the participants actually thought were likely scenarios, and which they thought were less likely. The focus group method and the thematic analysis also did not allow for examining relationships between individual children's ideas about causes and outcomes, that is, whether participants thought that different treatments would be appropriate depending on the cause of the characters' problems. Therefore, the relationships between causes and outcomes were addressed in Study Two.

### *Vignettes*

Vignettes were found to be a successful method of eliciting participants' ideas about mental illness. There were several advantages to using three cartoon vignettes. The illustrations encouraged discussion, even when participants appeared to not understand what was happening in the vignettes, they were still able to comment on what they saw. Some groups even began with discussion about what the group members thought about the illustrations, thus the illustrations also served as a group 'warm-up' activity.

As none of the vignettes contained any labels for the characters' behaviours, the vignettes were also a useful way to find out what words children use to describe people with symptoms of mental illness. The older participants sometimes used psychiatric labels, such as depressed or phobic, to describe the characters. All groups used words such as 'crazy' or 'nuts' to describe characters, although often group members had difficulty explaining what they meant by these words.

Using vignettes that depicted three different mental illnesses encouraged groups to discuss a variety of aspects of mental illness. There were some words and ideas that were used in discussion about all three vignettes, such as getting doctors to help, or discussing the character's problem as being caused by low self-esteem. Other ideas were only discussed in terms of one or two of the characters, for example even though all three vignettes mention the characters' jobs, participants only discussed work problems for Eddie and Dad, but not for Betty. The groups also compared the three vignettes with each other, as is demonstrated in the extract where participants consider if each of the characters has a mental illness (page 52).

One difficulty with using illustrated vignettes was that the groups were very influenced by the words and pictures presented to them. Characters often made suggestions about what they thought was happening, based on the way a character looked. For example, groups suggested that Dad looked drunk or had a hangover, and so discussed alcohol problems he might have.

The text in the vignettes influenced participants' ideas and the direction that the discussion took. For example, in the vignette about Dad, Mum suggests that maybe Dad should see a doctor. This suggestion led to all groups discussing medical treatments for Dad. The vignette about Betty also said that she has seen a doctor, which led to medical discussion. Another influential phrase in the vignette about Dad was that Ian, the son said that Dad has been like this ever since he lost his job. This led to a number of groups suggesting that Dad's depression was due to him losing his job, and therefore limited the range of other ideas about causes for depression that children and young people might have otherwise suggested. As discussed earlier, the gender of the characters also may have influenced the groups' ideas.

### *Questions asked in discussions*

While the actual questions the researcher asked groups varied across groups, there were some issues that all the groups were asked about. These included the groups' ideas about what was happening to the characters, the cause for this, treatments and resolutions for the problems, and groups were asked about other places they have seen people like this. Some groups were also asked how they

would feel if there was someone like one of the characters in their class, and asked about healthier ways of dealing with some of the emotions they were discussing.

The issues that seemed to lead to the most interesting range of responses were the questions about causes and outcomes. These particular issues were followed up in the second study, where the connections between causes and treatments recommended by individual participants were examined (see Chapter Four).

The other areas of questioning did not generally lead to groups giving a range of ideas. When they were asked what is happening to the characters, the groups tended to paraphrase the vignettes or repeat words that were in the vignettes, so it was difficult to assess how the participants understood the words they were using. Some participants used labels to describe what is happening (e.g., 'he is crazy', or 'she is claustrophobic'), yet these labels led to interesting discussion only when the groups were asked "how come they are like this". When participants were asked if they had ever seen people like the vignette characters on television or in books, older participants could usually name something that they had seen, but this question did not seem to capture the interest of participants, or lead on to much discussion.

## **Summary**

This study has indicated that children aged 6 – 18 years all have a range of ideas about mental illness. In order to further investigate children's ideas about mental illness, a second study was planned. The goal of this second study was to examine the relationships between children's ideas about causes of mental illness and their ideas about treatments for mental illness. This second study is described in the following chapter.

## **Chapter Four - Study Two: Children and young people's ideas about the causes of and resolutions for mental health problems**

Following on from the analysis of data gathered in Study One, a second study was planned. In Study One, five categories emerged from the analysis of the group discussions, and covered the range of ideas about what was happening in the vignettes; causes for the problems; and resolutions for the problems. The first study also demonstrated the effectiveness of using cartoon vignettes as a tool in research investigating children's ideas about mental illness. However, due to the nature of focus group discussions, it was not possible to examine the relationship between children and young people's ideas about causes and their ideas about treatments and resolutions for the problems.

Knowledge about the relationships between children and young people's ideas about causes and resolutions is important for a number of reasons. Firstly, it will enable an examination of primary and secondary causes. That is, a child may suggest a number of causes, but believe that one is the first in the causal chain, that in turn led to other factors, which then contributed to the problem. When explaining mental illness to a child or young person it is important to address the concerns they have based on their current understanding, an awareness of what children believe are the primary causes will be useful in preparing appropriate explanations. Secondly, children may believe that some causes lead to positive resolutions, whereas other causes for mental illness do not lead to a positive outcome. An understanding of which explanations children associate with positive outcomes may be helpful when developing explanations of mental illness that encourage hope and positive affect. Thirdly, on a more theoretical level, an examination of children's beliefs about the relationships between causes and outcomes of mental illness may be useful in furthering our understanding of how children and young people construct the concept of mental illness. Previous research is divided on the relationship between children's ideas of causes and outcomes for mental illness. While Norman and Malla (1983) found there were a number of inconsistencies in adolescents' ideas, other studies (e.g., De Rosa, 1987; Spitzer & Cameron, 1995)

found that children and young people's ideas about treatment often followed logically from their ideas about causes.

In the present study, children and young people, interviewed individually, were asked to create a story that expanded each vignette, adding in details about what happened to each character before and after the section presented in the vignette. The vignettes were modified versions of those used in Study One. The stories created by the children and young people were fictional, so they give no indication of how likely or realistic the children thought their stories were. Nevertheless, this story method was expected to be useful for a number of reasons. Firstly, it meant that all children would describe a causal chain and treatment recommendations for each vignette. Secondly, pilot testing suggested that this was a task that participants would find enjoyable and interesting. Thirdly, asking children to make up a story was expected to reduce the chance that participants felt as if an adult was testing them, hence reducing their fear of getting an answer 'wrong'. Finally the story method would lead to transcripts that could be analysed using grounded theory methods.

## **Grounded theory**

Grounded theory is an inductivist approach to analysing qualitative data. Transcripts are analysed without any preconceived notions or hypotheses about what will emerge. Rather, data are analysed by grouping themes that appear similar, asking questions of the data to further advance the theory being developed, and looking for relationships between emerging categories, as well as for potential disconfirming examples.

Grounded theory was developed by Barney Glaser and Anselm Strauss in the late 1960s, initially used in their research on death and dying (Glaser & Strauss, 1965). They developed grounded theory methods as a process of allowing theory to emerge from data. Instead of being influenced by any pre-existing hypotheses, grounded theory is very much 'grounded' in the data (Willig, 2001).

Like many forms of qualitative methodology, data is gathered through interviews and field observations, but the major difference between grounded theory and other qualitative methodologies is its emphasis on theory development.

In grounded theory, there is also continual verification of developing hypotheses within the data set, instead of assuming follow-up quantitative data is required for verification (Strauss & Corbin, 1994).

Grounded theory aims to produce 'conceptually dense' theory by its coding methods. This process moves from descriptive coding to more analytic coding. Initially data is coded by naming discrete elements, giving similar phenomena the same name, and grouping concepts into categories. Names for codes may be derived from common elements or words in the data, or be borrowed from technical literature. The properties and dimensions of each category are identified, and this in turn helps with identifying relationships between categories and subcategories (Strauss & Corbin, 1990). This coding may be line-by line, or by looking more generally at sentences, 'meaning units' (passages divided according to topic), paragraphs, or the whole document. Gradually these codes are grouped together into more broad theoretical categories, with the aim of looking for an overall core category that can be used to describe the general phenomenon that is being studied.

Concepts are developed through constant comparison across data, as well as comparison with other sources of data and previous literature in the area (Urquhart, 2001). After a piece of text has been labelled as a particular concept, constant comparison with other similar instances in the data is required to see if they are consistent with this proposed code. Once no new instances appear that either add new information to a concept or disconfirm the appropriateness of a particular category, 'theoretical saturation' has been reached.

Ideally, theoretical saturation is achieved through 'theoretical sampling', that is, for later interviews, participants are selected and questions are planned to further elaborate categories that are emerging from analysis of earlier data. However, there are usually limits to the theoretical sampling and the level of theoretical saturation that can be achieved. It is always possible that the next interview that could be done will challenge the emerging theory, and in research there are limits to which participants can be interviewed and what questions can be asked of them. In reality, a researcher has to acknowledge the constraints imposed on their particular research by various factors that limit the ability to achieve theoretical saturation. The particular constraints that were imposed on the current research are described in the discussion section of this chapter.

As the critical review of previous literature (Chapter One) has demonstrated, there have been few attempts to relate research on children's understandings of mental illness to any pre-existing theoretical frameworks. Grounded theory methods require constant comparison with previous literature and theoretical sampling in order to develop an explanatory model, which may draw on pre-existing theoretical frameworks, but also add new theoretical ideas as required. For these reasons, grounded theory methods were utilised in the current study.

This chapter describes the methodology and the analysis process. This is followed by a summary of the categories that emerged from the analysis and discussion of the way these categories related to each other. Following grounded theory methods, no preconceived predictions or hypotheses based on previous research were made prior to data collection. Initial coding and category development were also aimed to be independent of the categories that were derived in Study One. While coding decisions were frequently similar in Studies One and Two, categorisation for Study Two was based on the data gathered through individual interviews, regardless of whether it supported or contradicted the analysis from Study One. In the next chapter, the two separate analyses that emerged from each study are considered together, and the results are compared to results found in previous research. In Chapter Six, the data collected in both studies are combined for further analysis and compared to theoretical literature.

## **Method**

### **Participants**

Thirty-six children and young people were interviewed, 14 participants aged 9 – 10 years old; 10 aged 12 – 13 years; and 12 in 16 – 18 year old age group. In total, 18 females and 18 males participated. Participants all attended schools with relatively high decile ratings<sup>4</sup> and students were predominantly from Pakeha<sup>5</sup> / European middle class families, according to the school principals.

Children aged below 9 years were not included in this second study. Pilot testing had found that children below 9 years old tended to find the vignettes

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<sup>4</sup> See footnote 2, page 36

<sup>5</sup> See footnote 3, page 36.



difficult to explain when they were interviewed individually. During pilot testing, children below this age tended to continuously change their answers and stories as the adult interviewer asked them further questions about their ideas, these changes may be due to children assuming that they had made an error or else the adult would not be repeating the question.

## **Materials**

The illustrated vignettes used in Study One were used again in this study. However, three minor changes to two of the vignettes were made, based on the evaluation of the vignettes described in the previous chapter (page 74). Firstly, the references to medical treatments in the depression and anxiety vignettes were removed, and the suggestion that Dad has been acting this way ever since he lost his job in the depression vignette has been removed. The amended depression and anxiety vignettes are in Appendix C.

## **Procedure**

Participants in the two younger age groups were recruited through schools. Students in four co-educational public schools in Wellington suburbs were invited to participate. These schools were selected based on established contacts with school staff.

The researcher visited classes selected by the school principals in the participating schools. Students were invited to participate, and all students that returned signed parental consent forms and gave assent participated (these forms were very similar to the forms used in Study One and presented in Appendix B). As with Study One, consent rates were low. Although every student in the designated classes were invited to participate, only between one and eight children from each class returned parental consent forms and their own assent forms. Participants in these age groups were interviewed during school time, in a quiet space at the school.

The 17-year-old participants were recruited through advertising in a high school newsletter and through an email chain letter (Appendix D). Students in this age group who were interested in participating contacted the researcher, and were given a movie ticket if they participated. The first 12 students to contact the

researcher participated, and were interviewed in a variety of places. These locations included their school, the city public library, or the researcher's office at university.

The researcher read the vignettes to each participant, while the participant looked at the illustrations. After each vignette was read, the researcher said the following:

*We have just read the middle part of a story, we're now going to make up a longer story about Betty / Dad / Eddie. So we're going to make up a story about what happened before this part of the story, what's happening during this part of the story, and what's going to happen after this part of the story.*

For some participants, that was virtually the only trigger needed to encourage talk about what was happening to each character, why it was happening, and what could happen next. These children proceeded to create elaborate and detailed stories about the characters. Other children initially gave less information, and so required more direct questioning from the researcher to fill in details in their stories. In these interviews the interviewer would ask questions about things the participant said, or ask about broad areas of the story (e.g., 'what could happen next?') in order to encourage the participant to speak without influencing any particular ideas to emerge. Interviews lasted between 20 and 45 minutes.

### **Ethical considerations**

This study was approved by the Victoria University of Wellington Human Ethics Committee. As described in Study One, participants were given names of people they could contact if they wished to discuss further issues that came up during the discussion. However, during the discussions, none of the participants showed concern or distress as a result of anything that was discussed.

### **Process of analysis**

All interviews were transcribed by either the researcher or a research assistant. After each interview was transcribed, it was read several times by the researcher. The first ten interviews from each age group were used for analysis, and the remaining transcripts were used for testing out the proposed model at a later stage in analysis. Each story by each participant was analysed separately. As there

were 30 participants, and three vignettes, this led to 90 stories being analysed. Three participants from the youngest age group were excluded from the analysis. One participant was already 11 years old, so he was too old to be included in the youngest age group. A second boy approached the task differently from the other participants, and created fanciful and humorous stories about each character, which made his ideas difficult to compare with other children's stories. Finally one girl found the task too difficult and could not give any suggestions at all about causes or treatments for the characters' behaviours.

There were two stages to the analysis of the data. This chapter presents the first stage of this analysis. During this stage grounded theory methods were used to analyse the transcripts and examine children's ideas about causes of and resolutions for mental health problems, as described in the children and young people's stories. In the second stage of the analysis, data sets from both studies were combined to further examine age differences and compare the analysis with previous theoretical literature. This further analysis is presented in Chapter Six.

The analysis of the Study Two data was in accordance with widely accepted practices of grounded theory. While grounded theory methods are generally used in studies where participants are asked to describe their personal experiences, the data collected in the current study, which consisted of stories created by participants, comprised sufficient detail and consistency to analyse with grounded theory methods. Following the procedures used by Rennie, Phillips, and Quartaro (1988) and Urquhart (2001), transcripts were divided into 'meaning units' and analysed accordingly. Meaning units were used instead of the line-by-line or sentence analysis recommended by some other researchers, as it was deemed a closer match to the way the children spoke. Passages were divided according to topic, with each new topic being coded separately. There were variations in passage size from two or three words (e.g., "he's having hallucinations"), to longer passages of 100 words or more. Parts of a passage could be coded more than once. For example the entire following paragraph was coded as 'therapy', and the underlined sections were also coded as other topics as well:

*Ben: Ok, you talked about ways that, you talked about in your story Betty got better with the help of counsellors and psychologist and groups. What did they do?*

Marcus: Um, they seemed to do various, they put her in various courses, sort of with other people with similar problems to those that she had, and certain social skills courses she went to. And they talked about the improvement of certain social skills, how, ways in which she could do this. And they talked about, about ways in which she could feel more comfortable around other people. And they recommended for her to take some medication to relieve her anxiety in some ways [coded as 'psychiatric medication'], and yeah and they also gave her a lot of information on the causes of social phobia, claustrophobia and autism [coded as 'psychiatric problem'] which helped her to understand herself better (17-year-old boy).

Transcripts were coded using N-Vivo software, a computer programme designed for coding and organising qualitative data. Data were coded by dividing passages into topics and naming these passages. Further passages that seemed to be about the same topic were given the same name. Gradually, a long list of initial open codes was developed and these codes were compared with each other in order to identify topics that could all be grouped as one category. Subcategories also began to emerge, and the relationships among different categories were considered. For each of the 90 stories, created by the 30 participants, the link between the proposed cause and the proposed resolution was examined. The relationships between these different categories and sub-categories were then arranged into a chart (Figure 4.1).

This coding process was a long one. All transcripts were read several times, with constant comparisons being made between different passages to ensure that coding was consistent across transcripts. Throughout the coding process, memos were written. These were notes about why passages were coded in particular ways, as well as ideas about possible sub-categories, broader categories, or theoretical ideas that were emerging. Appendix E gives some examples of memos written during the grounded theory analysis process.

Seven categories emerged from this grounded theory analysis, and are presented in Figure 4.1. These categories were event; physiological; psychiatric /

neurological problems; spiritual; drugs; responsibility; and psychological. All the characters' problems were explained using one of the first six categories, and then the resolution described for each character generally used the same explanation type. For example, if a character's problem was seen as being due to cancer (a physiological explanation), then the participant would resolve the story by suggesting that the character sees a doctor about his or her illness (a physiological outcome). These first six categories have been termed 'primary explanations'. The final category, psychological, was used in interaction with any of the other six categories, and is a 'secondary explanation'. That is, when discussing each character's problem, participants might also have considered the way the character was thinking, and whether they also have a thinking problem. However, all thinking problems were described as having an earlier cause involving one of the other six categories. As well as recommending treatments and resolutions that were from the same category as the suggested cause, participants also sometimes suggested resolutions or treatments that came from the psychological category, either instead of, or in conjunction with the treatment type that matched their causal explanation. These three psychological resolutions were therapy; support from others; and thinking or acting differently.

After these categories and sub-categories were defined, 200 meaning units were randomly selected from the transcripts. These passages were presented, along with a list of category definitions, to a second-coder who coded the passages according to the prepared categories and subcategories. There was an inter-rater reliability Kappa of 0.75; a coefficient of 0.7 or greater is generally considered acceptable. Disagreements between categories could all be resolved through discussion.

## **Analysis**

Using grounded theory methods of analysis, seven main categories emerged. Causes and resolutions that fit with each category are described here, supported by quotes from the transcripts, and presented graphically in Figure 4.1. Some of these categories were used more often than others. However, in this section all causes and resolutions are described, regardless of frequency of usage. As the goal of this study

was theoretical development, it was important to develop a model that could incorporate every idea offered by every participant, rather than putting more value on some categories over others solely based on how often they were each used. Also for this reason, this analysis does not include an 'other' or 'miscellaneous' category; instead it acknowledges the importance of all participants' ideas. Age differences in the way children and young people used categories are also noted.

As in the previous chapter, quotes have been edited to remove repetition of words, and make them clearer to read. This editing has been done carefully to ensure that the meanings are not affected. All names used in this chapter are pseudonyms (chosen by the author).

### **Event explanations**

As in Study One, participants sometimes used event explanations when discussing the causes of the characters' problems or behaviours and the resolutions to these problems. Event explanations forms a broad category that refers to a range of external problems, such as suggestions that something happened to a character, a character witnessed something happen to someone else, someone else did something to the character, or a character's problem was due to current life stress, such as problems at work.

#### *Event causes*

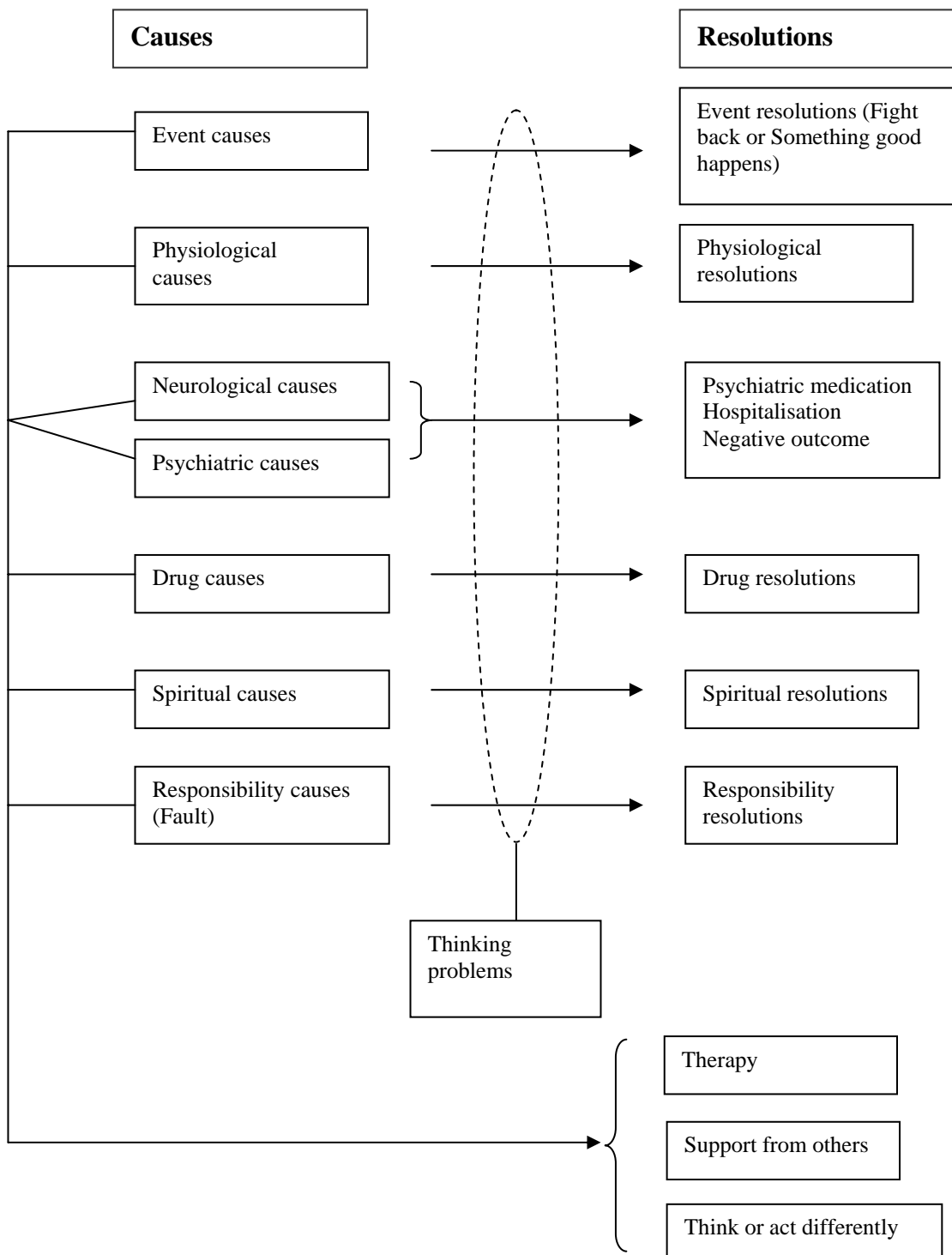
All three of the characters were described by some participants as having their problems as a result of losing a friend or relative at some point in their life. Dad (the character with depressive symptoms) felt sad because someone he loved died; Betty (the character with agoraphobic symptoms) lost her mother when she was a child, or more recently lost a family member or partner; and Eddie (the character with schizophrenic symptoms) was described as hearing the voice of someone (often a friend) who died, for example:

Natalie: Or maybe some childhood thing is resurfacing or something like that. You know, like they tell you in the movies and yeah it's just triggered it off and something's gone wrong in his head...maybe someone died and he thinks he's hearing the dead person's voice in his head.

*Ben: Ok. So what kind of thing might have triggered it off?*

*Natalie: Maybe he saw someone that looked like that person or maybe he heard a voice that sounded like their voice or something. But it would have to be someone who had a really big influence on him for them to tell him that he's bad and him believe it and for him to do all that stuff just cause they told him (17-year-old girl).*

**Figure 4-1 Children and young people's suggested causes and resolutions for mental illness**



Event explanations were commonly used to explain Betty's anxiety. Participants suggested that the character had been trapped somewhere small, such as in an elevator, a theatre, or a shed, or involved in a car accident or a robbery. Alternatively, some participants suggested that Betty was feeling scared after witnessing something bad happen to someone else on the news or in a movie. As with the focus group discussions, some participants gave detailed descriptions of traumatic events that may have happened to Betty, for example:

Colin: She was in her garden shed and it, and then there was like an earthquake and the supporting posts fell down beside her and went on the side and they held the roof up. But she was trapped for a couple of hours and she was pretty traumatised by that.

*Ben: She was traumatised?*

Colin: Yeah.

*Ben: Yeah? How did she feel?*

Colin: She felt pretty scared and she felt as if she didn't really want it to happen again so that's why now she's being protective and trying to prevent it happening. Make it better by not going to the theatres and stuff (13-year-old boy).

Some participants suggested that the characters were facing their problems due to someone else doing something negative to them. Betty and Eddie were described as being picked on or treated badly by other children or by their parents when they were young. Other children suggested that the characters were mugged or attacked recently, or that people were treating Dad or Eddie badly at work. For example:

Penelope: He could have been a grocer...He might have been working at a counter or something and he could have got like one of the, when you add up all the costs, he could have got something wrong. And someone might have started telling him he's really bad at the job and that sort of stuff so he doesn't want to go there anymore. And so he's just believing what people are saying so he's like smashing everything up (12-year-old girl).



Finally, stress from work or other life stresses were sometimes suggested to be the cause of a character's problems. Even though the vignette about Dad (with depression) had been amended so that it no longer mentioned that he lost his job, participants still often suggested that Dad was feeling sad because he lost his job or was having work difficulties. The idea that Dad lost his job was a particularly common suggestion by 17-year-olds, although a few younger children also mentioned Dad having stress at work or losing his job. Notably, even though the vignettes about Betty and Eddie did both specifically mention work and the vignette about Dad did not mention work, participants did not attribute Betty or Eddie's problems to stress from work (although some participants suggested people at work were picking on Eddie). This may suggest that Dad's behaviour is seen as a common or almost acceptable way to act after work difficulties or losing a job, whereas the ways Eddie and Betty behaved are not appropriate or expected responses to losing a job.

Thinking problems were sometimes incorporated into stories that used trauma explanations. That is, some participants considered how the traumatic event influenced the way a character would think, which in turn would influence his or her behaviour. In the following example, the participant suggests that after Dad lost his job, he began to think that nothing matters and that no one can help him, which led him to act the way he did:

Terry: He [Dad] felt no one could help him [after he lost his job] ... he just sat watching TV and sleeping all day because he didn't care about anything else anymore. He just wanted to take his mind off being sad  
(10-year-old boy)

### *Event resolutions*

There were two types of event resolutions used in participants' stories. Firstly, a character could have a positive experience, causing a change in the way they are thinking, for example, Stewart, a 9-year-old boy suggested Betty might "win Lotto and get a car", which would resolve her problem. In another example, Terry, a 10-year-old boy suggested Dad might get re-offered the job he lost. Only children in the youngest age group (9-10 years) incorporated this type of event resolution into their stories. A second type of event resolution was revenge or

justice based resolution, that is something happening to the person who was the cause of the character's problem. For example, Katie, a 13-year-old girl suggested that the police might catch the person who mugged Eddie. Event resolutions involved the character's external world changing without necessarily any internal or psychological change occurring, or the character acting or thinking differently.

Generally, however, participants suggested that when the character's problem was due to an external event psychological resolutions were required. These resolutions were therapy, support from others, and thinking or acting differently, and are described later on in this chapter.

### **Responsibility explanations**

Whereas in event explanations a character had a negative experience happen to them, responses that suggested that a character had behaved in a negative way were categorised as responsibility explanations. The cause of a character's problem was attributed to the character being at fault or doing something wrong. Resolutions came through the character taking responsibility for their wrongdoing or performing a good deed.

#### *Responsibility causes (fault)*

Extracts grouped in this category described a character's behaviour as being due to she or he doing something bad, such as teasing, harming, or killing someone else, and usually the character felt guilty about it. The voices that the character heard may have been the character's conscience or guilt, or the voice of a person that the character had killed or mistreated.

Generally, this category was used when talking about Eddie. Some participants who used this category suggested that Eddie killed someone and he is imagining the voices of people who know about what he did, hearing the voice of the ghost of the person he killed; or is hearing his own conscience, for example:

Ginny: Maybe he killed someone... by accident. Maybe the people at work know about him killing someone by accident, and that's why he feels like they're watching him and following him. And he's hearing voices telling him that he's bad, it could be the person he killed, possibly (17-year-old girl).

Other participants suggested that Eddie felt guilty for doing something wrong, such as teasing someone or shoplifting. For example:

Gabrielle: Maybe it's like his conscience...maybe he was the meanest little kid and teased people or something (12-year-old girl).

Only one participant used a responsibility explanation when discussing one of the other vignette characters. In Malcolm's story (10 years old) Dad hit someone with his car by accident and then felt guilty about it, which is why he was acting the way that he was in the vignette.

### *Responsibility resolutions*

All the stories that described Eddie hearing voices because he had done something wrong included resolutions in which Eddie had to fix his problem by doing something good or if possible righting the wrong. Examples include Eddie apologising for his wrongdoing, returning something that he stole, or resolving an issue with a ghost that was haunting him:

Colin: Since he's still got that stuff or money [he stole from an old lady], it's [the guilt or voices] constantly there. And that's harder to forget, those sort of things make you feel more guilty because you've actually got something physical there that you've still got with you... And I think that the only thing that can really help him in the end is that if he does go back and give the money back or somehow make up for what he's done. And that would put his mind at rest and then... since he's got nothing on his conscience the voices will go away, and he'll be able to return to work.

*Ben: So to get better, he has to find the old lady again?*

Colin: Yeah and, and repay her the money. Even, and if he really feels really bad about it he can like do the lawns or something for her (13-year-old boy).

As with event causes, some participants incorporated psychological causes into their responsibility explanations as well, such as suggesting that Eddie did something bad, and then felt guilty (a thinking problem). Similarly, a number of

participants also recommended one of the three psychological resolutions (i.e., therapy, support from others, or think or act differently) as well as Eddie doing something positive to make up for his misdeed.

### **Spiritual explanations**

Spiritual explanations included references to both religious causes and resolutions, such as God or the Devil, and references to supernatural phenomena such as ghosts.

#### *Spiritual causes*

Some participants attributed spiritual causes for characters' problems. Examples of spiritual problems include being possessed or haunted by Satan or a ghost, as in the following example:

Neville: Like, I'm a Christian myself, so obviously my Christian view to this is a case of what I think is schizophrenia and hearing voices could be - it might sound a bit heebie-jeebie to you - but spirits or the way the devil is trying to kill him. Because that's the ultimate aim of Satan (18-year-old boy).

Younger participants that used spiritual explanations used them in combination with responsibility explanations, that is, Eddie would hear the voice of a ghost that he had killed. For example, Fred, a 12-year-old boy said: "he might have killed someone and the ghost is speaking to him".

#### *Spiritual resolutions*

Participants that suggested that Eddie was hearing the voice of a ghost, often suggested that to solve the problem he needs to do something for the ghost. For example, Fred (12 years old) suggested Eddie could save one of the ghost's friends, and then the ghost would forgive Eddie and the voices would stop.

Other spiritual treatments include praying to remove the devil inside him, or developing one's spiritual side. The following extract comes from a story in which Dad's problem is solved by going to India or to church. The extract also demonstrates the participant's awareness that stories generally have happy endings.

This belief that stories require happy endings will have influenced the way participants created their stories, and will be discussed further in the discussion section of this chapter:

Natalie: He's [Dad is] going to go to India and find himself or something... Or else he joins a church or something like that and they all live happily ever after...

*Ben: You said to help him to fix his problems, Dad could go to India or church or something?*

Natalie: Well, I don't know. I just suppose that's what he's going to end up doing. I mean in books, you know, they end up happily ever after and that's all because he's gone to church or something like that (17-year-old girl).

### **Drug explanations**

The problems in the vignettes were sometimes attributed to the character using drugs or alcohol. In these stories, the character's problems were resolved by dealing with the drug or alcohol problem.

#### *Drug causes*

The problems of all three characters were attributed to drug causes by some participants. Vincent, a 10-year-old boy suggested that Betty was on speed because "she's a bit alert". Other participants suggested that Dad had a drug or alcohol problem:

Stewart: He could have been getting weed or something, or like nicotine...smoking too much and he's trying to do it all the time but he can't and that's why he's all stressed out. And he's real tired and he can't sleep at night because he's so addicted and it drives him crazy (9-year-old boy).

Eddie's hallucinations were also seen by some participants as being due to drugs, for example:

Justin: Maybe he'd been doing some drugs for a couple of years, some heavy stuff. Sort of hadn't been looking after himself and from there he

started hearing the odd voice, and paid no attention, and then it just got worse and worse, and then once he got it, he couldn't work or anything (17-year-old boy).

### *Drug resolutions*

All the participants that thought that Dad's behaviour was due to using drugs or alcohol recommended story resolutions that involved dealing with the drug or alcohol problem. These resolutions included putting Dad in jail until he learns not to take drugs anymore (Stewart, 9 years old); Mum imposing strict rules on Dad to ensure he stops drinking (Emma, 12 years old); or Dad attending Alcoholics Anonymous (Natalie, 17 years old).

The participants that suggested that Eddie or Betty took drugs then discussed how the drug problem led to a more general psychiatric problem. Those participants then recommended treatment for that psychiatric problem, for example seeing a psychiatrist or being put in an institution, instead of treatment for the drug or alcohol problem.

### **Physiological explanations**

Another type of explanation participants sometimes used when creating stories about the vignette characters was physiological. Stories in this category involved characters with health problems, and doctors or medicine generally treated these problems.

### *Physiological causes*

Betty and Dad's behaviours were both sometimes attributed to specific physiological problems. Some participants suggested that Betty had asthma, epilepsy, or a heart condition. Dad was thought to have glandular fever, cancer, or even "maybe there was a nuclear war and he got radiation" (Fred, 12 years old). Some other participants explained Dad's behaviour as being due to more general health issues, such as not getting enough exercise, or getting older.

Participants who used physiological explanations when discussing Dad's behaviour described the physiological problem as being the direct cause of his behaviour. This differed from participants who used physiological explanations when discussing Betty's problem. Betty's physiological problem was described by

these participants as being an influence on the way she thought, and this thinking problem in turn led to her behaving the way she did. For example, participants may have said that Betty has had an asthma attack in the past, and so she is now worried about having another one, which is why she was scared of going out.

### *Physiological resolutions*

Participants who suggested that Dad or Betty's problems were due to a physiological problem generally concluded their stories with physiological resolutions. The characters were helped by seeing a doctor, being given medication, or the disease just healing itself. Other participants suggested that Dad might die because of his illness. The participants that suggested that Betty's physiological problem led to a thinking problem also included a psychological treatment, such as therapy, to help her.

### **Neurological / Psychiatric explanations**

The final primary category is neurological / psychiatric explanations. This category included neurological problems, such as suggestions that the character had a head injury or a chemical imbalance, and psychiatric problems, (e.g., labelling a character's problem as 'schizophrenia'). Many participants included elements of both neurological and psychiatric explanations in their stories (e.g., suggesting that Eddie had schizophrenia because of a chemical imbalance in the brain), although some stories contained solely neurological or psychiatric explanations without the other. Resolutions for neurological and psychiatric problems have been grouped into three categories – 'medication', 'hospitalisation and neurological improvements', and 'negative outcomes'.

### *Neurological causes*

A number of participants described a character's behaviour as being due to a problem with the character's brain. This problem could be due to physical damage to the brain or to a chemical imbalance. For example, in the following extract, Eddie is described as accidentally damaging his brain:

Terry: [Eddie] can work in a factory that makes cars... then he accidentally trips over and smashes his head really hard on a car door or something, a piece of car. And then he goes to hospital and then they tell him that he has a little bit of brain damage in the part that hears voices (10-year-old boy).

While ideas classed as neurological problems were most often used by participants when discussing Eddie, all three characters were considered by some older participants to have a chemical imbalance in the brain. Participants who discussed chemical imbalances still often admitted to not really knowing how a chemical imbalance leads to these behaviours, as can be seen in the following extracts. Only 17-year-old participants incorporated story elements which were then followed by a comment that they do not necessarily understand or agree with the element. As will be argued in Chapter Six, incorporating story elements that the participant then follows with a comment that they do not necessarily agree with indicates that the participant has developed a concept of mental illness which they are then using when they create their stories.

Angela: Some kind of chemical's being overproduced or something, I don't know, they could just do some kind of operation and fix it all up (17-year-old girl).

Justin: The whole chemicals in your head thing. I'm sure that, like, I can understand how there are chemicals in your head, and I can also understand that if you've got a chemical imbalance you're probably sort of, you know, you might have a bit of a thing going, and that drugs can clean that imbalance up. That bit all makes sense. But you know when you're looking at someone that is actually hearing voices, its pretty crude looking at like it's just a chemical imbalance. It seems to me like it's more a personality thing, rather than just a chemical stuff up. So I'm not too sure about the whole chemical thing, it's a pretty crude way of looking at it (17-year-old boy).

### *Psychiatric problem*

As in the focus group discussions, many participants, particularly older participants, used psychiatric labels / diagnoses to describe a character's problem



and behaviour. Betty was described as being claustrophobic or paranoid; Dad was described as being depressed; and Eddie was labelled as schizophrenic or paranoid. Several younger participants also used the term 'mental problem' in similar ways to the ways the older participants used more specific labels.

In the case of Betty, 'claustrophobia' served as an explanation in itself. Instead of suggesting a cause for Betty's claustrophobia, some participants simply said that she is behaving this way because she is claustrophobic (a label which is itself based on behaviour). For example, a 13-year-old boy suggested that Betty's behaviour was either due to something happening to her in her past (an event cause), or because she had claustrophobia:

Colin: Well before that she's probably gone and she may have been in a car accident or had something happen to her before. Like she might have been trapped in a house when she was a kid... And she might also have claustrophobia, [in] tight spaces or dark spaces, or just scared of not able to get out of places easily when she wants to (13-year-old boy).

Older participants also often used the labels 'depression' and 'schizophrenia' as explanations for behaviour as well, for example:

Marcus: This sounds like he might be, he's schizophrenic, that's what would bring it on, I think. But he hears voices telling him he's bad, can't go to work because people watching me and following me all the time, even now, he talked about even now, because he's seeing things which aren't there, in his head. Schizophrenia, it's hearing voices and hallucinating people (18-year-old boy).

The nine-year-old participants often used the term 'mental problem' the way the older participants used more specific psychiatric labels. That is, they said that a character behaved in a particular way because they had a mental problem:

*Ben: He says he doesn't want to go to work, so how come he doesn't want to go to work?*

Vincent: Because there's too much stress and he's mental...

*Ben: So he's a bit stressed, he doesn't like the people at his work and he's mental? What's happening here, when he says 'I'm hearing voices'?*

Vincent: Um, because he's mental.

*Ben: Okay, what does it mean to be mental? What does mental mean?*

Vincent: Um, crazy, insane.

*Ben: Yeah, crazy and insane. Yep. How do people get mental?*

Vincent: I'm not sure (9-year-old boy).

Specific psychiatric labels were rare in stories told by the 9-10 year olds. The only exceptions were two nine-year-olds who suggested that Betty was claustrophobic; one story describing Dad as suffering from depression (this boy, Terry, then compared Dad's situation with his own experience of depression) and Malcolm suggested that Eddie (the character with schizophrenia) was depressed. Notably, Malcolm said that Eddie was depressed, but did not use the label when discussing Dad, even though he did give a good description of depression when talking about Dad, as can be seen in these two passages:

Malcolm: It's either depression or something about like he's [Eddie] hearing something that's not real (9-year-old boy describing Eddie).

Malcolm: He's one of those people, if he gets sad he can't get back up and ... he just can't get out of his bad mood...he's just sad like a normal person except for his brain can't get back out of the thinking about it. And he can't get out of his sadness (the same boy discussing Dad).

### *Neurological and psychiatric resolutions*

As well as the three psychological resolutions described in the next section, there are also three more specific resolutions used in stories describing neurological or psychiatric problems. These three resolutions were medication, hospitalisation and neurological improvements, and negative outcomes.

*Psychiatric medication:* several of the 17-year-old participants suggested that there might be medication to help with a character's psychiatric problem. These participants recommended that Dad take antidepressants (e.g., 'PROZAC - the

happy pill', Justin, 18 years); or that Betty takes medication to calm down; or that there might be medication to help Eddie.

Only three participants in the two younger age groups mentioned medication. Malcolm (10 years old), suggested medicine to help Dad "get out of his mood", as well as suggesting "special medicine that can make Eddie stop feeling down". Terry, another boy from that age group suggested that there might be a drug for Betty that "made her really calm and relaxed and easy to co-operate with and stuff". Finally, Harry, the only 12-year-old boy to use the word 'schizophrenia' was also the only participant in the 12 – 13 year old age group to mention medication. It seems likely that Harry knew someone with schizophrenia, since his ideas about that vignette were more specific than suggestions by other children his age, yet he did not seem to know more about the causes and outcomes for the other two vignettes than others in his age group did. The influence of personal experiences on knowledge of mental illness is discussed in Chapter Six.

*Hospitalisation and neurological improvements:* Another story resolution categorised as neurological or psychiatric problems was termed 'hospitalization and neurological improvements'. This category referred to taking the character to a hospital or institution to help him or her, as well as treatments or events such as brain operations that healed or improved the character's brain or neurological functioning.

Mental hospitals, psychiatric wards, and institutions were most commonly suggested as places to treat Eddie, the character with schizophrenia, but some participants also recommended that Betty or Dad be helped in such a place. These hospitals were described as places where the characters can be treated, kept safe, or prevented from hurting other people. For example in the following passage Susan, a 10-year-old girl, suggests that Eddie will be able to be treated at a mental hospital, as well as keep himself and others safe if he continues trying to smash things:

Susan: They'll probably take him to a professional doctor. Not just a doctor like that, a GP, probably would go like beyond that and see or maybe take him to a mental hospital or something to see if they can figure it out...

Ben: Ok. What would a mental hospital do?

Susan: Um, they would probably figure out what it is. And they would tell the parents and probably keep him there. And that would probably be it, because he might get treated and all this and that. But he probably won't get properly better or anything like that...

*Ben: Do you think he'll keep smashing things?*

Susan: Um, he'll probably get over that if he gets treated properly and all this and that. But he might every now and then just want to smash something and go do it. Yeah, and they'll probably maybe put him in a room with no windows... If he gets to that, where he's really crazy, put him in a room with nothing, just walls.

*Ben: What's that room for?*

Susan: Um, to maybe calm down 'cause he is really hyped up and ready to smash things and so they'll put him in there until he calms down (10-year-old girl).

Examples of neurological improvements included operations, or ironically further damage to the brain. For example, in Terry's story, Eddie was hearing voices after injuring his brain in an accident (see page 95), and injuring his head a second time solved the problem:

Terry: Then he got really mad at all the voices in his head. And he ran, started running away. And then he tripped over a tree root when he was running and he smashed his head again. And then when he woke up in hospital the second time, it was ok [the voices were gone] (10-year-old boy).

Terry also suggested that if Eddie "waited a long time until his brain healed" then the voices would stop and Eddie would be okay. Terry's story was typical of stories by younger participants in that this age group created stories based on the vignettes but gave no indication as to whether they believed a particular treatment was likely or would be helpful. This differed from stories by a number of 17-year-olds, who gave consideration to whether they agreed with a particular treatment that they thought a character might receive. This process of evaluation was especially apparent in the neurological and psychiatric treatments. For example, some participants in the 17-year-old age group expressed reservations about psychiatric wards or institutions. They suggested that while a mental hospital might help, it

could also be bad for a character, or the character could just be kept there until they died. The following extracts also demonstrate that movies are a source of knowledge about treatment for mental illness:

*Ben: You talked about an institution, what could an institution do?*

Justin: It's difficult, because we watched, we studied *One Flew Over The Cuckoo's Nest*, and that gave me, I guess, probably a warped by now idea of what an institution is. I guess I'm led to believe that it's almost, well the movie led us to believe that its almost like a jail. They're going to lock you up, I'm sure its not quite that bad. But they've got nurses on 24 hour stand-by. But, seriously I don't think, well, because they've always got that problem with people escaping or walking out of Sunnyside Institution [a former New Zealand psychiatric hospital], I'm sure that its not that locked up. Probably, you've probably got different wards (17-year-old boy).

Sally: I could see him [Dad] having a brief stint in a psych ward or something, just because he's feeling so useless and stuff, because he hasn't looked after himself for a while, but then that could screw him up more.

*Ben: Psych ward could screw him up more?*

Sally: Yep.

*Ben: What do they do in a psych ward?*

Sally: I don't know, I've never been in one myself, but [I've seen them] in movies and stuff. I'd imagine that he'd go in there feeling mildly hopeless and stuff, and probably he'd get all withdrawn and it brings everything out, every little issue and stuff, and then it would sort of, maybe he'd resolve that and stuff. Or he could just get worse and worse and become completely crazy (17-year-old girl).

In the examples above, Justin and Sally have separated what they believe is likely to happen to a character from what they believe would be helpful for the character. These examples suggest that the older participants at least are attempting to create stories that they believe are realistic or likely.

*Negative outcome:* All participants in the oldest age group and a small number of younger participants ended at least one of their stories with a negative

ending, generally followed by an alternative positive ending as well. These negative outcomes always followed psychiatric or neurological problems, and the problems are not solved, or get worse. There were some negative outcomes incorporated into stories about each of the three characters. Examples of negative outcomes include:

Sally: She [Betty] could just get worse and worse and go into her little house and stay there. And lose contact with friends and stuff. They'll start coming over, but then they'll get sick of doing that and then they'll stop, so she'll just get more and more hermitic (17-year-old girl)

Malcolm: He [Eddie] still hears voices and he doesn't get a job and he just gets drunk all the time...He keeps on trying to get over it and his parents keep on saying that they're [the voices are] not real. And he says that yes they are, because I can hear them. And he keeps on thinking of death threats and he keeps on doing damage, thinking that there's another person beside him that's going to kill him or something (10-year-old boy)

Neville: He [Eddie] might be thrown in prison, for doing something violent or stupid (18-year-old boy)

Laura: I think he'll [Eddie] commit suicide...I think he's gone too far. He's either going to hurt someone else or hurt himself (18-year-old girl)

### **Psychological explanations**

All explanations used by participants when discussing reasons for a character's behaviour were grouped into the six primary explanation types described above. However, as part of a story involving one of the above categories, some participants also used the secondary category, termed 'psychological explanations'. This category included discussion describing how the suggested cause led to a thinking problem, which in turn led to the character behaving in the way that they did. Thinking problems were discussed in combination with any of the six primary categories.

Similarly, when participants described resolutions for each character's story, they either recommended a resolution from the same category as the cause they

suggested (e.g., a drug resolutions for a drug problem), or alternatively they recommended one of the three psychological resolutions.

### *Thinking problems*

A number of participants discussed the way that a character's behaviour was influenced by his or her thoughts, for example:

Sally: She's got a fear of drawing attention to herself, of being acknowledged, but then, I don't know, she's drawing herself into this hole, she's convinced herself that she's going to panic or something, but she panics because she thinks about it. Like she'd be fine, but then she goes 'oh my God, what if this happens, and what if this happens, and oh my God, it might happen, I've got to get off the bus', but if she just watched the trees go by, she'd be all right (17-year-old girl).

Thinking problems were discussed by participants of all ages, and used by some participants for all three characters. Some participants also considered personality factors, that is, characters were described as feeling shy, vulnerable, or having low self-esteem.

Participants often created stories about characters developing thinking problems or developing particular personality traits after an external event happened to them. For example, in the following passage Justin, 17 years, tells a story about Dad losing his job, which impacts the way he feels (and presumably thinks) about himself, which then affects his behaviour:

Justin: Dad is probably, he might be out of a job or something, he looks quite depressed. So he doesn't have much to do, not feeling too great. Because he's not earning any money, he feels like he's letting down the whole family sort of thing. Just feels pretty useless, and doesn't do much around the house, he just sort of sinks into depression, sleeps a lot. And just mucks around. Doesn't feel too great because he feels like he's not helping out (17-year-old boy).

This differs from the participants who suggested that the event was the direct cause of Dad acting the way he is, without considering Dad's thoughts:

George: Think he might have lost his job.

*Ben: You think Dad lost his job? So Dad loses his job and then what happens?*

George: He can't find a job so he just sits in front of the TV all the time and he doesn't have anything to do, he just sleeps all day.

*Ben: He sleeps all day because he's got nothing to do? How does he feel?*

George: Feels, um, I think he feels, I don't know (12-year-old boy).

All the other categories could also be used with or without the thinking problems subcategory, just as event explanations were. Participants could either create a story where a problem influenced the way a character thought, which lead to the character's behaviours, or alternatively not discuss the character's thoughts and feelings and their role in each character's behaviour.

### *Psychological resolutions*

There were three resolutions categorised as psychological. These were 'think or act differently'; 'support from others'; and 'therapy'. These resolutions followed problems from any of the primary categories described above.

*Think or act differently:* In some stories, the character's problems were solved by the character changing the way she or he thinks or acts. Examples of changing the way one thinks include deciding to not be scared or sad, deciding to not listen to the voices, slowly introducing oneself to a feared place or object, or choosing to stop believing that people are following him or her. Examples of changing the way one acts include returning to work, finding an alternative method of getting to work, starting a new job or career, or developing a hobby or interest.

Resolutions in this subcategory sometimes included descriptions of the way a character dealt with his or her feelings, but in other stories the way the character was feeling was not considered. When discussing solutions for Betty's fear, some participants (generally 9-10 year-olds) suggested that if she finds an alternative method of getting to work (because she is scared on the bus) then her problem would be solved, as demonstrated in the first extract below. Other participants,



usually from the older age groups, suggested that Betty needed to face up to her fears and possibly slowly expose herself to whatever she fears in order to be free of her problem (as shown in the second extract):

*Ben: And then Betty says 'I may have to stop going to work because the bus ride to work is too worrying.*

Vincent: She could walk.

*Ben: She could walk.*

Vincent: Or bike.

*Ben: Yep, so what could happen after this part of the story?*

Vincent: Um, she might have to walk every time and run every time or get a taxi (10-year-old boy).

*Ben: Is there something that Betty could do to make things different?*

Mandy: Try and overcome her fear.

*Ben: Yep, how do you overcome fears?*

Mandy: You like do something that is your fear, but you only do a little bit of it, instead of doing the whole thing.

*Ben: So what's something little Betty could do?*

Mandy: Go for a walk outside each day or something.

*Ben: Then gradually you think she'll get braver?*

Mandy: Yep (12-year-old girl).

Similarly, in stories about Eddie or Dad, some younger participants suggested that those characters should just go back to work or get a new job, whereas older participants often suggested that Dad or Eddie should do things that increase their self-esteem or find new challenges that interest them. For example:

*Ben: What do you think happens next in the story?*

Owen: Well he [Dad] might just try and go to work, and see what happens. Maybe if he goes to work sometimes he might be more energetic (10-year-old boy).

Marcus: To improve your self-esteem, you've got to get out of the circle, you know, you've got to get out of that circle and actually try doing something. Even though it's really, really hard, you've got to actually try doing things. And until some time, you do something that does build your self-esteem up, such as joining certain clubs, doing

anything you think is really hard and you're not going to be any good, try your best through that. Just see how well you do (18-year-old boy).

*Therapy:* In some stories, characters were helped by talking to a health professional. This professional was given a range of names, including a psychiatrist, psychologist, counsellor, therapist, or something more general (e.g., "those people who talk to you and help you figure out your problems").

Participants described ways in which professionals could assist the characters. One way was for the health professional to advise the character how to overcome his or her problem; another was to listen to the character's problems, for example:

*Ben: You mentioned counselling before. What's counselling?*

Penelope: You can talk to someone about your problems and they'll listen to you. And that's kind of confidential so you don't have to worry about anyone else knowing what you've said.

*Ben: Ok, why does that help?*

Penelope: Cause then he'll at least know there's someone he [Dad] can talk to... if he's not ready to talk to his family then he can at least know that he's told someone.

*Ben: What kind of things would they talk about in counselling?*

Penelope: Like um, sort of more detailed stuff, like why he's upset and why he hasn't been walking around and doing stuff and why he was blocking it out and stuff.

*Ben: And what would the counsellor do?*

Penelope: Listen and try and see what he could do to go on with life (12-year-old girl).

In some stories, mental health professionals did more specific things, such as discussed particular events, prescribed medication, taught social skills, used hypnotherapy or normalised the character's problem.

*Ben: So what do they do in therapy?*

Sally: Talk about why, they'd talk about how, she might need help in therapy. They'd talk about where this fear has come from and then they'd deal with what. Like say it was a childhood thing, they'd deal with that at the source, they'd deal with the fear there, how they could

have, maybe they couldn't have avoided that and maybe that's the problem, she feels she could have avoided it, and they'd talk about it. They'd overcome that source of fear and then she could, it could help her get through. It would be a process but it would help deal with it now, kill it at the root (17-year-old girl).

*Ben: If he went and saw a counsellor, what would a counsellor do?*

Ginny: Talk to him about his problems and see what's making him sad and try and give him suggestions and maybe give him some tablets, antidepressants (17-year-old girl).

Marcus: So she [Betty] realised that she was different and she started getting depressed a lot and so she went and got help from counsellors and psychologists and they gave her certain advice and they talked about various ways to help her problems. She went to various groups and stuff and she helped to build her self-esteem around other people (18-year-old boy).

Laura: I can suggest she goes to a hypnotherapist.

*Ben: Hypnotherapist? What would they do?*

Laura: What do they do? Um, they just get you to sleep and just kind of get it out of you where that fear comes. Like how did it start, I guess, and how's it's affecting your life and what sort of things you could do about changing it. And telling your mind not to be scared of it anymore. Yeah. I guess that's kind of what they do. I don't really know (18-year-old girl).

Susan: They'd [counsellors] probably try and talk to her about it and then she might calm down about it. And then maybe tell her like how many people this has actually happened to. And like the percentage or something, like what it does. And just talk to her and maybe just try to calm her down. She might have appointments once a week so after four appointments or something she feels back to normal (10-year-old girl).

*Support from others:* All three vignettes depicted the character talking about their problem with a friend or family member, so it is not surprising that several participants discussed ways that friends or family could help a character. In a number of stories about Betty, she was helped by having friends cheer her up, reassure her, or accompany her to places she finds fear-provoking, for example:

*Ben: How could friends help?*

Penelope: By doing stuff with her and supporting her and maybe even if she had to catch the bus, they could like catch the bus with her and sit a bit far, like a little way back. So that she'd know that someone's there but she'd get her confidence back (12-year-old girl).

*Ben: How could the friends help?*

Fred: Oh they could, they could ah, go and give her a game of chess.

*Ben: Yeah, how could that help?*

Fred: Might take her mind off the whole thing (12-year-old boy).

Another strategy used to resolve problems in some stories was having family members help the character. Stories described family members supporting Eddie or Dad by making them feel loved or more confident:

Laura: I guess having his [Eddie's] family come round [to the institution], making sure that his parents are committed to seeing him every so often and then moving on to him going out with them on a Sunday afternoon sort of thing. Just so that he still feels that he's loved and that. Yeah, I mean, I've kind of seen this case before and I think that a lot of people would not want their kids institutionalised or anything or just be sent away anywhere else...But the family's still supportive and they said we didn't send you away because of this. We still love you and we still want you to be aware of that (18-year-old girl).

*Ben: Mum says here 'can I help?' Is there something that Mum could do?*

Harry: Um, yep. She could help, going to the counselling with him, sort of helping him out more at home.

*Ben: What could she do at home?*

Harry: Well, she could help him with his confidence... she could say stuff that would make him feel better, instead of stuff which makes him feel worse (13-year-old boy).

## Discussion

The range of ideas that children have about adults with mental health problems has been analysed using grounded theory methods, and summarised into six primary categories and one secondary category. The primary categories were event; physiological; neurological / psychiatric; drug; responsibility; and spiritual. These types of explanations were used by participants when discussing both causes and resolutions for characters in vignettes about mental illness. These primary categories had a clear cause → resolution pattern, that is, in an individual story a resolution from a particular category would only be used if the suggested cause came from the same category. For example, a story would only conclude with a spiritual resolution, if the participant said that the character's behaviour had a spiritual cause. The secondary category, 'psychological', had a different function. Causes from this category (named 'thinking problems') were always used in conjunction with a cause from another category. Stories that discussed thinking problems would describe a cause from another category which in turn led to the thinking problem. Similarly, psychological treatments (divided into three sub-categories: 'therapy', 'think or act different', and 'support from others') were also used to conclude stories that had causes from any of the categories (see Figure 4.1 for a graphical representation of these relationships).

While some categories were used more frequently than other categories, it is not appropriate to argue that any particular category or group of categories is the main way in which children understand mental illness. Rather, as in the focus group study, this study captured the range of children's and young people's ideas about mental illness. This study advanced the findings of the previous study by also examining the relationships between children and young people's ideas about causes and their ideas about resolutions and treatments. It has shown that a child or young person's understandings of how a person with mental illness can be helped is heavily influenced by their perceptions of the cause of the person's problem. This finding has important implications for the development of guidelines explaining mental illness to young family members of a person with psychiatric problems. In the next chapter, the current findings are compared to the findings from Study One, and discussed in the context of previous research. Implications for mental health

and educational programmes that emerge from this research are discussed in Chapter Seven.

All categories were used by some participants from each age group in their stories, however there were some age trends. The 16-18-year-old participants used a number of sub-categories more often than younger participants did. These sub-categories included 'medication', 'negative outcomes', 'psychiatric problems', 'therapy', and 'support from others'. Also within the event category, the oldest age group tended to refer to current life stresses, such as difficulties at work more often than the younger participants did. The 9-10-year-old age group tended to use the psychological subcategory named 'think or act differently' more often than older participants did.

Further analyses revealed that as well as some age trends in which categories were used in participants' stories, there were age trends in the way children and young people of different ages used the same categories. That is, it appeared that the participants in the oldest age group used different approaches to creating their stories than the younger participants did. These further analyses are described in Chapter Six.

### **Limitations of Study Two**

As with Study One, this current study suffered from low consent rates, and context effects. As these limitations affected both studies, they are discussed in Chapter Five. Two specific limitations with Study Two were the influence of asking children to create stories as a means of examining their ideas, and the practical difficulties associated with theoretical saturation.

#### *Story-telling*

In the individual interviews, children were not asked what they believed was the most likely explanation for a character's behaviour, but instead were asked to create a story based on the vignettes. There were a number of advantages to this method. Firstly, by asking participants to tell a story, they could offer their ideas without thinking they might give an 'incorrect' answer, which may have occurred if they were asked directly to give an explanation for a vignette character's behaviour. Secondly, the story structure ensured that every participant offered ideas both about

causes and resolutions of the vignette stories, even if they had no previous knowledge or ideas about one of the depicted mental illnesses.

While participants were not asked specifically to discuss what they believed were the most likely causes and outcomes for the problems presented in each vignette, it is reasonable to assume that generally participants did create stories that they considered to be realistic and probable. Some participants even made it clear that the story they were telling was based on their knowledge, for example in the following extract, Justin noted that he had been led to believe a particular outcome will occur:

*Ben: So let's make up an ending for this story [about Eddie], what could happen next?*

Justin: Well, I'm led to believe that a lot of people with this sort of problem, probably schizophrenic, often kill themselves, so you know, those sort of voices could drive them off the wall. So he could just kill himself. (17-year-old boy).

Conversely, some participants included aspects in their stories that were clearly intended for narrative effect. One 17-year-old participant, Natalie, commented on how stories generally have a happy ending, and so finished her story with a happy resolution as well (see page 92 for this extract). Other examples of elements added for narrative effect include making up details about a character's job or elements of the treatment. In the following example, Marcus told a story about Dad (the depressed character) being helped by a psychologist, and Dad did things to improve his self-esteem. Marcus then continued the story to describe Dad's success after his self-esteem had improved:

Marcus: And he [Dad] was told by a psychologist that when he says that nothing can help me, the first step is the very, the hardest part. To improve your self-esteem, you've got to get out of the circle, you know... So he tried doing that and two years later he joined a squash club and he found out that he had a hidden squash talent that he never knew about before. And he ended up playing for the country in the squash championships! (18-year-old boy).

Although in Marcus' story Dad becomes a champion squash player, Marcus was not implying that playing squash was the treatment for Dad's depression, but rather that the treatments that Marcus described in his story were so successful that Dad could turn his life around. This was one of many examples that demonstrated that participants were creating fictional stories, but were still offering treatment recommendations that they appeared to believe were helpful or realistic.

One 10-year-old boy, Luke, was clearly creating stories that he did not think were likely scenarios, but instead were interesting and humorous precisely because they were not typical. His stories included descriptions of doctors and psychiatrists giving advice which he knew was inappropriate, and characters doing odd things, and all three stories built up to punch lines. As Luke approached the task differently from all other participants, his interview transcript was not included in the analysis. Having this one example of an alternative method of approaching the story-telling also allowed for greater confidence that the other participants were creating stories that they did believe were realistic, as they did not follow the same format as Luke's stories did.

At least two previous studies have asked children to create stories about people with mental illness (Adler & Wahl, 1998; Poster et al., 1986). In both these studies, participants included numerous negative references, often implying that the characters with mental illness were violent or unpredictable. These negative themes were not common in the ideas proposed in the current study; negative outcomes were particularly infrequent in the stories created by the 9-year-old participants. It may be that children express attitudes that researchers consider negative when specifically asked about 'people with mental illness' or other labels (Adler & Wahl; Marsden et al., 1977), but do not express similar views when presented with unlabelled vignettes, and thus are given more context and information about a character, rather than just a label.

#### *Theoretical saturation*

One of the goals of grounded theory methodology is theoretical saturation. Theoretical saturation is achieved when no new categories or codes are emerging from new interviews. Participants are ideally selected through theoretical sampling, that is, once categories begin to emerge from the analysis process, further



participants are selected based on their likelihood to give new categories or counter examples of current categories.

However, as noted in Chapter Four, there are a number of practical factors that limit the researcher's ability to achieve theoretical saturation. Although Study Two used grounded theory methods, there were several factors that prevented pure theoretical sampling. First of all, as described above, only a small proportion of children invited to participate consented to take part or had parental consent to participate, thus limiting the researcher's ability to select appropriate participants for theoretical saturation. Secondly, there were time constraints on how long the researcher could spend at each school, and how much time the researcher could spend on data collection. Due to the requirements of the University Human Ethics Committee there were also limits to the amount of variation allowed in the questions participants were asked. The Ethics Committee required an approximate interview schedule, and once this had been approved the researcher could not deviate significantly from this.

Nevertheless, theoretical saturation was achieved to some level within the data collected in this study. Whilst the majority of the data had to be collected within a short space of time, data collection proceeded by first analysing interviews conducted earlier in the process, and then using later interviews to look for further confirmation or refutation and elaboration of emerging categories and sub-categories. Although there were limits to the amount of variation allowed of the interview schedule, the questions were sufficiently broad that a useful range of children's ideas about mental illness was collected.

## **Summary**

Grounded theory methods were used to analyse stories based on illustrated vignettes created by participants aged between 9 and 18 years old. A number of categories emerged from the data. The following chapter compares the categories that emerged from each of this thesis' two studies, and then relates these findings back to previous literature on children's ideas about mental illness and other specific areas. Chapter Six then compares the current data with more general developmental and cognitive psychological theoretical literature.

## **Chapter Five - Discussion of Analyses**

Two separate studies have been carried out for this thesis. In Study One, children and young people were presented with illustrated vignettes as a trigger for discussion about their ideas on mental illness. The data collected in the focus groups were analysed using a thematic analysis; comparing and summarising the themes that emerged from the data. This approach was a useful way to gather the range of ideas that children and young people have about mental illness. Indeed, one of the study's strengths was that it demonstrated that children and young people have a broad range of ideas about this topic. The first study was then followed by Study Two. In this study, 36 children and adolescents were interviewed individually, and each asked to create a story that elaborated on each of the illustrated vignettes. These stories were analysed using grounded theory methods. This analytical method allowed for further examination of children and young people's beliefs about mental illness, and in particular their ideas about causes of and resolutions for mental illness.

Initially, the data collected in Study Two was coded without reference to the categories that were derived from Study One or from previous research. Instead meaning units in the data in Study Two were coded and grouped into categories independently. However, it is also important when using grounded theory methods to compare current emerging codes with previous analyses, literature, and theoretical frameworks. Although, the analysis section of the previous chapter only referred to the data and categories that emerged from that study, as categories began to emerge, they were compared with the data from the focus group study, and with analyses done in previous research. These comparisons are presented in this chapter and at a more theoretical level in Chapter Six.

### **Comparing analyses from focus group study and individual interviews**

In both the focus group study and the individual interviews study, participants were shown the same three illustrated vignettes (although there were

small modifications made to two of the vignettes). It is therefore not surprising that the independent analyses conducted in each of the studies led to relatively similar categories emerging. In the former study, five categories emerged from the analysis, these were: 'medical'; 'psychiatric'; 'abnormal behaviour'; 'event; and 'psychological' explanations. In the second study, six primary categories and one secondary category emerged. These were 'physiological'; 'drugs'; 'psychiatric/neurological'; 'responsibility'; 'event'; 'spiritual', and 'psychological' (the secondary category). Although a number of categories have different names in each of the studies, and different methodological approaches were used in each analysis, there is considerable overlap. In fact, the categories that emerged from the second study can be thought of as a further refinement of the categories that emerged from the first study. The main differences between the categories that emerged in Study One and those from Study Two are summarised in Table 5.1

Table 5-1 Category refinements from Study One to Study Two

- |   |
|---|
| <ul style="list-style-type: none"> <li>• Study One's 'medical' explanations was divided into two categories in Study Two: 'physiological' and 'drugs'</li> <li>• 'Spiritual' explanations were used in Study Two, but not in Study One.</li> <li>• The types of comments that were categorised as 'abnormal behaviour' explanations in Study One did not emerge in Study Two, due mainly to differences in questions. The exceptions were suggestions that a character had done something wrong, and these ideas were categorised as 'responsibility'.</li> <li>• 'Psychological' explanations were used in both studies, although in Study Two, these were classed as secondary causes.</li> </ul> |
|---|

Ideas that were categorised as medical explanations in Study One can be classified in Study Two's physiological and drug categories. In the focus group discussions, ideas about drugs and alcohol tended to have a physiological or medical component, that is they discussed the effects of using drugs on the character's brain or body. In the individual interviews, references to drugs and alcohol were used in a broader context, not solely at a physiological level,

necessitating the creation of a separate category. Stories in the second study described drug problems leading to characters losing their jobs, or getting in trouble with the law, as well as discussing medical effects such as a character being “alert all the time” or hallucinating.

Another new category that emerged from the second study was ‘spiritual’; four participants interviewed individually created stories involving Eddie hearing the voices of ghosts, other participants described spiritual treatments for Eddie’s problem, such as prayer or going to church. In the focus group discussions, only one group mentioned ghosts or religion at all, and this reference was used when describing the movie *The Sixth Sense*, not in relation to Eddie. It is not clear why spirituality emerged only in the second study, and not in the first.

Abnormal behaviour explanations were not evident in the analysis in Study Two. In the analysis of Study One, this category included discussion around whether a character was crazy or weird; naughty or bad; violent, or lacking control over their behaviour. Groups frequently used these types of descriptions when they were asked particular questions, such as what they thought was happening in the story, or how the groups would feel if there was someone behaving like this in their class. In the second study, participants created stories based on the vignettes, which allowed the participants to place these descriptions in context, that is the stories would include a beginning to the story that would give a cause for a character’s behaviour. Instead of simply discussing a character as being ‘crazy’, participants would draw on their ideas about the character’s experience or health to explain the current behaviour. A number of stories in Study Two did include descriptions of characters experiencing their problems as a result of behaving badly or hurting someone, and these have been categorised in the ‘responsibility’ category. References to a character behaving violently, and harming him or herself or someone else as a result of their mental illness were categorised in the ‘negative outcome’ subcategory of the psychiatric category.

The most significant refinement made by the grounded theory analysis of Study Two was the change in the role of psychological causes in explanations. The analysis of the focus group study led to a category termed ‘psychological explanations’ emerging. This category referred to problems described as being due to the way a character was thinking or to the character’s personality or level of self-

esteem. In the second study, the story methodology allowed for a better understanding of children and young people's ideas about the role of thinking problems within an overall explanation. That is, in children's stories a character was only described as developing a problem in the way they think about their situation after another cause had occurred. For example, some participants told stories about Betty having a thinking problem or developing low self-esteem after a traumatic experience (categorised as 'event'). Whereas the other categories that emerged in Study Two were used as a sole explanation for a character's problem, psychological causes were only used in conjunction with a causal explanation from another category.

In general, while there was considerable overlap between the categories that emerged from the analyses from Study One and Study Two, there were differences in the research goals of each study, and these led to variations in the information that emerged. Study One's analysis was useful for a number of reasons. Firstly, it led to the development of a broad description of children and young people's ideas about mental illness. In the focus groups children and young people discussed a number of issues relating to the vignettes, including their ideas about the causes of and treatments for the depicted problems; their descriptions of the characters' behaviours; and other places they had seen similar characters. Study One demonstrated that there is a large range of ideas that children and young people have about mental illness, contradicting more homogenous models proposed in many previous studies. It also highlighted the usefulness of illustrated vignettes as a means of gathering children's ideas in this area. Finally, the analysis from Study One led to the development of Study Two's research question.

The grounded theory analysis from the Study Two led to a refinement of the categories that emerged from Study One's thematic analysis. More detailed categories emerged, and the relationships between causes and outcomes from within each category, as well as across different categories could be considered.

Thus, in combination, the two studies illuminated the range of children's ideas about mental illness and the relationship between these ideas. In addition to examining the content of young people's ideas, further analysis was also conducted to develop hypotheses to explain why participants of different ages offered the

explanations and created the stories that they did. This analysis and the proposed theory are presented in the next chapter.

## **Comparing current findings with previous research**

### **Children's ideas about mental illness**

A number of previous studies have examined children's ideas about mental illness, although no previous studies have used illustrated vignettes about adult characters with mental health problems as a method for assessing these ideas. As described in Chapter One, previous research has tended to use vignettes about children, definitional approaches, picture drawing approaches, or questionnaires. Grounded theory has also not been used in previous research in this area. Other research has instead used picture analysis (e.g., Poster et al., 1986), more general content analysis methods (e.g., Secker et al., 1999; Spitzer & Cameron, 1995), or quantitative methods, such as using Likert scales (e.g., Callan et al., 1983).

However, despite these methodological differences, some comparisons between participants' ideas in this current study and results from previous research can be made. The first consistent finding from vignette studies is that participants' responses are heavily influenced by the information given in the vignettes, so that depictions of different mental health problems led to different responses. Certain behaviours are more likely to be pathologised or referred to as mental illness than other problems that may also be considered to be mental illnesses by a psychologist. For example, Secker et al.(1999) found that 12 – 14 year olds were more likely to view hearing voices as a mental illness than they were to label depression as such. Previous research also found that different causes and treatments are discussed when participants talk about different vignettes. Villeneuve, Berube, Ouellet, and Delorme (1996) found that participants were more likely to recommend inner control and professional help for a character with drug problems, whereas fate/avoidance and help from friends and family were the most highly recommended treatments for a character feeling depressed.

The current studies also found that there were vignette differences in ideas about causes and treatments. For example, responsibility and spirituality causes and treatments were generally only used by participants when talking about the

character who was hearing voices, or occasionally the depressed character, whereas event causes were used more frequently by participants when discussing the problems of the woman with agoraphobia, than when discussing the other two vignettes.

The present research appears to have gathered a broader range of children's ideas than the range of ideas reported in previous studies. This is probably due to the fact that the studies reported here were aiming to capture the range of children's perspectives, not only the most commonly cited suggestions. Some previous studies only described a concept if it was mentioned by a certain number of participants (e.g., Callan, Wilks, and Forsyth, 1983). However, if a model is to be useful in developing recommendations about ways to talk about mental illness with young people, it is important to be aware of the entire range of ideas that children have, not just the most common ones. The methodologies used in both the current studies have proved to be useful in encompassing this range.

More general comparisons between the current analyses and previous studies that have proposed overall frameworks of children's ideas of mental illness can also be made. Spitzer and Cameron (1995) and De Rosa (1987) both found considerable consistency in children's ideas about causes and treatments. As in this current study, children's ideas of treatments were influenced by their ideas about causes of mental illness (although other studies, such as Norman and Malla, 1983, did not find this consistency). Both those studies found a general age shift from external and physical causes to more internal and psychological causes. In the current study, there appeared to be a trend for older children to use more thinking problems and psychiatric jargon in their explanations, a finding similar to previous research. De Rosa and Spitzer and Cameron also both found younger participants (5 – 6 year olds) placed quite a strong emphasis on describing mental illness as wickedness and requiring punishment. In the current research, characters were not referred to as being 'wicked', although some stories described characters doing something wrong (responsibility explanations). The differences in findings may be due to differences in questions the participants were asked. In De Rosa's and Spitzer and Cameron's studies, participants were asked to describe 'crazy' or 'mad' people, whereas in this study participants were not asked about any such labels, unless a participant specifically mentioned one. It may be that children associated

those labels with wickedness, but do not actually consider the characters portrayed to fit those labels.

A review of the literature suggests that virtually all ideas discussed by participants in other studies could be coded according to the current set of primary and secondary categories. For example, Callan et al. (1983) found that when adolescent Australian participants were asked questions about what mental illness is, participants most commonly suggested that mental illness was due to genetic causes, stress, overwork, accidents, or bad environment as a child. With the exception of 'genetic causes' all those suggestions fit clearly into the current proposed model, all as event causes or brain problems. Unfortunately, Callan et al. do not give examples of statements that were categorised as 'genetic causes', so it is not clear whether these are ideas that were not mentioned in the current study, or that they would be categorised differently, probably as psychiatric causes. Even ideas from other cultures appear to fit into the current proposed model. For example, Callan et al. also found that as well as the causes suggested by Australian adolescents, Papua New Guinea students also mentioned witchcraft (a spiritual explanation), or thinking too much about certain things, such as sex, bad foods, or alcohol, which depending on context could be classed as thinking problems or drug explanations.

As well as comparing the current analysis with previous research that examined children and young people's ideas about mental illness in general, the constant comparison approach used in grounded theory methods also requires that more specific ideas that emerged from the current study are compared with previous research in those areas. In particular, a number of children and young people in the current studies made reference to ghosts, alcohol and drug use, the role of psychologists, and psychiatric jargon, so previous research examining children's ideas about these areas are summarised here.

### **Children's ideas about ghosts**

There has been very little research on children's ideas about ghosts or spiritual matters. The research that has been done has generally examined what age children begin to understand that ghosts do not really exist. For example, Harris, Brown, Marriott, Whittall and Harmer (1991) tested whether children aged 6 years



and under are able to distinguish real objects from imagined items. The authors found that whilst children are tempted to believe in the existence of things they have imagined, they are generally able to recognise that supernatural creatures do not exist. It is unfortunate that research tends to take the view that as children develop, they necessarily begin to view ghosts and other supernatural creatures as non-existent. It would be interesting to compare age differences in ideas about what these creatures are like, rather than just assuming that believing in them at all represents a lower stage of cognitive development. In Study Two, participants were asked to create stories about the characters in the vignettes, and a number of participants aged between 9 and 18 mentioned ghosts. This does not necessarily mean that all those participants believe that ghosts exist. Nevertheless, some children who according to previous research would be expected to know that ghosts do not exist, included ghosts in their causal explanations in their stories. It would be interesting to see further research examining children's ideas about the nature of supernatural creatures using techniques that are more open to examining the range of views.

### **Children's ideas about alcohol abuse**

The drug treatments recommended by participants in this study are similar to the treatments suggested by participants in Prinsky and Bedell's (1984) study. In their research examining children's awareness of words and labels to do with alcohol abuse, they found that the most common intervention recommended by children aged 5 to 12 years was telling a drunk person to limit their alcohol. Older children (those over 9 years) were also more likely to recommend psychiatric or medical help than younger children were. Spitzer and Cameron (1995) found that children aged 6 – 13 years frequently made reference to drug or alcohol use when discussing vignettes about characters with behaviour problems. The authors found that the older children had a better understanding of the role of physiological processes in alcohol or drug abuse than the younger children did. The older children's ideas about drug treatments also reflected this more complex understanding, suggesting psychiatric treatments and hospitalisation, instead of suggesting punishment or education as the younger children were more likely to do.

Similar age differences emerged in stories in Study Two that involved drug or alcohol problems. The 9- and 12-year old participants that told stories about Dad having alcohol or drug problems concluded their stories with Dad being put in jail until he decided to stop taking drugs, or having family members tell Dad to stop drinking. Participants in the 17-year-old age group that featured drug or alcohol problems in their stories about Dad or Eddie concluded with the character being helped in a psychiatric institution or through Alcoholics Anonymous. Thus the older participants revealed more of an understanding of the physiological and psychological processes involved in addictions, whereas younger participants implied that the characters could choose to control their addictive behaviours.

### **Children's ideas about psychologists**

There has been little research that has examined children's ideas about psychologists or other mental health professionals and what they do. Dollinger and Thelen (1978) asked 1051 children (grades 5-6, 7-9, and 10-12) a series of questions to assess their level of understanding about psychology. One of the questions children were asked was 'what do psychologists do?'. Most children cited 'help' activities, although the proportion of children also citing 'research' activities increased with age (from 8% to 34%). Few children knew the difference between psychologists and psychiatrists, although a greater proportion of older children were able to answer this question than younger children were (from 9% to 28%). There was also very little difference in attitudes towards psychologists and knowledge levels of participants who had been to a psychologist or knew someone who had been to a psychologist, and between those who did not have any personal experiences with psychologists. In a follow-up study (Dollinger, Thelen, & Walsh, 1980), 818 children (aged 10 – 18 years old) were asked what kinds of problems they thought clinical psychologists helped with. The four most commonly cited reasons for seeing a clinical psychologist were 'family problems', 'marital problems', 'interpersonal problems' (all grouped as 'social' problems) and 'mental problems' (classified by the authors as 'internal'). There were age differences in the way participants answered, with older children citing more 'internal' problems than younger children.

The findings in this current study followed a similar pattern to the above study (Dollinger et al., 1980), with more children in the older age groups mentioning psychologists, and these children appearing to have more of an idea about what psychologists do. The participants in the 17-year-old age group created stories that featured psychologists, psychiatrists, or therapists doing a number of specific tasks, such as discussing particular events or problems with a character, prescribing medication, or teaching a character social skills.

A number of children in the current studies noted that mental health workers respect confidentiality. In the 12-year-old focus group where children role-played characters being seen by psychiatrists (see page 63), it appeared that confidentiality may be the only thing that some participants knew about psychiatrists. In a study on Australian adolescents' views towards help-seeking for mental health problems (Commonwealth Department of Health and Family Services, 1997), young people reported often having a reluctance to seek help for fear that confidentiality would be broken. It is pleasing to see that even relatively young participants in the current research are aware that mental health professionals respect confidentiality.

### **Children's use of psychiatric jargon**

The current studies concur with previous research that older children have a greater understanding of psychiatric jargon, and use these words more often than younger children do. As summarised in Chapter One, Baker et al.(1982) found that children over 9 years were more likely to be able to define words related to mental illness than younger children were, although still less than 3% were able to define specific words like 'schizophrenia'. Conant and Budoff (1983) found that most children over 11 years expressed awareness of the term 'psychologically disturbed', whereas younger children did not. Finally, Dollinger et al.(1980) found that the use of particular psychiatric 'labels' varied with age in their sample. Younger children were more likely to use labels such as 'psycho', whereas older participants used more jargon like 'schizophrenia'.

In the current study, participants in the oldest age group (16 – 18 years) used more psychiatric jargon than younger participants did. The terms 'claustrophobia', 'phobia', 'schizophrenia', and 'depression' were used commonly by the oldest participants to describe various vignette characters. Participants in the younger age

groups rarely used these terms at all. The implications of having a greater awareness of psychiatric labels and jargon are discussed in the next chapter.

### **Limitations of current studies**

Two different methods were used in the two studies in this thesis. In the first study, children participated in group discussions, and in the second study, children and young people were interviewed individually. Each methodology has its own strengths and weaknesses, which have been discussed in earlier chapters, but are briefly revisited here. The main limitations that influenced both studies are the lack of ethnic and socio-economic diversity across participants; context effects on data collection; and the low consent rates.

In both studies there was a lack of ethnic and socio-economic diversity in the sample, and the analytical methods used did not allow for examination of gender, ethnic, religious, or socio-economic differences in ideas about mental illness. The studies also examined children and young people's ideas about vignettes concerning fictional adults with mental health problems, without considering participants' own experiences with mental illness or other factors that may have influenced the knowledge of particular participants. These considerations are discussed in the future research section of Chapter Seven.

*Context effects:* It is important to consider the influence the context of a group discussion or interview can have on the data. Focus groups and individual interviews each have their own advantages and disadvantages, and it was expected that using these two methodologies in combination would compensate for some of the context effects of each. Focus groups were useful because they allowed the participants to reflect upon and respond to ideas offered by other group members. By discussing their ideas with peers, participants were probably less concerned about giving a 'wrong' answer to an adult expert (Buckingham, 1991). Group discussions were also a format that participants generally found enjoyable and interesting. This may have encouraged the group members to participate for longer and therefore offer a greater range of ideas and more detailed suggestions.

Focus groups do have some disadvantages. Firstly, some children may have felt disinclined to speak if they felt others in the group would disagree, particularly

if one participant's views differed from a majority view. Focus group settings also did not easily allow for gathering detailed ideas from one participant without interference and interruption from other group members. However, collecting individual ideas was not the goal of the first study. Rather, the goal of Study One was to encourage children and young people to use illustrated vignettes to discuss a range of causes, treatments, and other ideas about mental illness with their peers. The breadth of the data collected demonstrated that this method was effective in achieving its goal.

The individual interviews used in Study Two allowed individual participants to narrate a full story, without interruption or fear of being contradicted or ridiculed by other group members. The semi-structured interview format also allowed for the interviewer to ensure that certain topics were discussed while at the same time encouraging the natural flow of the conversation. However, as noted earlier, participants may have been influenced by the context of the interview situation, and felt like they were being tested by an adult expert.

Using a combination of focus groups and individual interviews was a successful way of drawing on the advantages of each method, while at the same time overcoming each method's disadvantages. Talking to children and young people in focus groups was a successful means of gathering the broad range of ideas about mental illness. Specific questions and topics that led to in-depth responses could also be identified. The group discussions showed that children had a number of complex ideas about causes and treatments for mental health problems. This information was then used in planning the second study, and children's ideas about causes and treatments were the areas which were followed up in more detail.

*Low consent rates:* In both studies, consent rates were quite low, especially within the younger age groups. The classes invited to participate each had 25 – 30 students in them, yet the number of students assenting to participate in each class ranged from one to seven. It is not clear whether these assent rates were so low because parents did not want their children participating, the children did not want to participate, or the children forgot to return their forms. The teacher of one class of 12 – 13 year olds where only one child assented to participate said that she thought that it was the children who were not interested in participating in the study. This lack of interest by students may be due to the fact that the researcher did

not tell the students much about the study for fear of influencing participants' ideas. In only one class did the teacher require every student to return forms whether they were allowed to participate or not. In this class of 6 – 7 year olds, it was the parents who did not give consent for participating. The low rates of consent from all schools may suggest that mental health is a topic that some parents do not want their children to talk about, as well as a topic in which children themselves are not particularly interested.

This apparent lack of interest by students and the unwillingness by parents for their children to discuss mental illness have implications for the implementation of school programmes teaching about mental illness. It appears likely that as well as designing programmes for schools that address issues around mental illness at age-appropriate levels, some effort will also be required to market these programmes so that schools, students, and their families are willing to participate.

## **Summary**

This thesis has presented two studies utilising a combination of data collection methodologies and analyses. These analyses led to the emergence of a framework capturing the range of children and young people's ideas about mental illness, and in particular, it has been shown that there is a relationship between participants' ideas about causes of mental illness and outcomes and treatments for these problems.

Children's ideas from Study Two have been grouped into the six primary categories, and one secondary category, which account for all ideas about causes and treatments of mental illness offered by participants in their stories (this summary is presented in Figure 4-1). Both the thematic analysis from Study One and the grounded theory analysis used in Study Two also suggest that there are qualitative differences in the way children think about mental illness. Older children appeared more likely to discuss internal or psychological factors involved in mental illness, whereas younger children's stories often only discussed external influences when explaining a character's behaviour, or at least neglected to describe any psychological processes.

Thus far, the analyses have presented the range of beliefs that children and young people may hold when discussing vignettes about mental illness. However, as the following chapter will present, further analysis was carried out to examine how children and young people use each of the categories described in the last two chapters. Children from each age group used each category, indicating that for all ages there was a range of ideas proposed when discussing these vignettes. However, as the next chapter will argue, there do appear to be qualitative differences in the way children of different ages think about mental illness. Developmental cognitive differences, combined with age differences in the amount of exposure to mental health issues children receive through media and school will play important roles in the development of children's ideas about mental illness. The following chapter reviews theoretical frameworks proposed by Hatano and Inagaki (2000b) and Kim and Ahn (2002) that are then combined to identify age differences in the way children and young people have approached the tasks asked of them in the current studies. A more general hypothesis to explain the development of children's ideas about mental illness is also proposed.

## Chapter Six - Children's developing concept of mental illness

Justin: I watched a Baywatch about it once.

*Ben: What happened on Baywatch?*

Justin: No, it was more to do with split personalities, but it was the same sort of thing, ... there was this chick and she started going really nuts, because it was like a split personality, like she had this other sort of psych, which made her do stuff. And then she would wake up in the morning, and she would have been like real crazy. And David Hasselhof fell in love with her, which made it pretty difficult (17-year-old boy).

In the extract above, Justin describes watching a 'Baywatch' (an American television programme) about "it" once. Justin made this reference to Baywatch while discussing Eddie, the character having a psychotic episode. In that vignette, Eddie hears voices telling him that he is bad, and because of the voices he smashes his television and furniture. In the example Justin cites, the woman does not appear to be hearing voices or smashing things. Therefore when Justin says that he saw a "Baywatch about it once", what is "it" referring to? It appears that Justin understood the cartoon about Eddie as being one example of a category, and he followed this by giving another example from the same category. Earlier in the discussion, Justin says that Eddie has "some sort of mental disease thing", and the quote about the "chick from Baywatch" seems to be another example of mental disease. Therefore, in order to make this comparison, Justin must have some concept of mental disease.

This chapter argues that as children grow older they develop a concept of mental illness which they can then use when discussing issues related to mental illness, such as the depictions in the vignettes. This concept develops throughout late childhood and adolescence according to particular developmental patterns. Evidence for this argument comes from the data collected from both studies, and then comparing this data with pre-existing theoretical frameworks. The content of the focus group discussions and stories created by children have been analysed and the categories were presented in Chapters Three and Four, and compared with



relevant previous research in Chapter Five. This chapter now continues the grounded theory analysis by comparing the data collected in both studies with theoretical literature.

The grounded theory analysis presented in this chapter followed the procedure described in Chapter Four. Briefly, the process involved coding particular elements of data into categories, and then searching the rest of the data for further examples and counter-examples of the same category, in order to be able to identify the properties of the category and to understand when each category was or was not used. For example, the extract at the start of this chapter was coded as a 'psychiatric explanation', but additionally, the 'it' in the extract was coded as a 'comparison with information from other sources'. After creating this additional code, all other transcripts from both data sets were then examined to look for other instances when children or young people compared aspects of the vignettes with things they have seen elsewhere. As will be described later on in this chapter, there were some instances where comparisons were made at a conceptual level (i.e., comparing the vignette with another depiction of mental illness), and some where comparisons were at a more concrete level (i.e., comparing an aspect of the vignette with another depiction of the same object or behaviour). Following this, all transcripts were examined for other elements that suggest that a particular participant was or was not calling on a concept of mental illness when discussing the vignettes. As a number of examples of concept use emerged from the data, theoretical literature concerning the way children develop concepts was examined. This review of theoretical literature inspired further related questions to be asked of the current data. In this way, grounded theory analysis of the data collected in the two studies led to the development of the model proposed in this chapter.

It is argued that older adolescents have a concept of 'mental illness', which they use when discussing vignettes about characters with certain behaviour problems. Younger children do not yet appear to have a well-formed concept of 'mental illness', thus limiting their ability to think about the vignettes as part of a broader category of behaviour. This concept of 'mental illness' is created through a combination of developing domain-specific cognitive abilities and an increased exposure to mental illness through school, popular culture, and life experiences.

Although the theoretical literature review was performed concurrently with the analysis, in this chapter the theoretical frameworks are presented first. This literature review focuses in particular on Hatano and Inagaki's (2000b) post-Piagetian model of cognitive development. Following this, the term 'concept' is defined, and a number of ways of conceptualising 'mental illness' are presented. Examples of data from this current research are then incorporated to argue that mental illness should be thought of as a concept that children gradually acquire as they cognitively develop and gain more knowledge about the world.

### **Post-Piagetian theory of children's conceptual development**

Jean Piaget's theory of cognitive development in children may well be the most influential theory in developmental psychology. Certainly, research based on Piaget's theoretical framework has dominated developmental psychology for the last 50 years, particularly in the 1960s and 1970s (Hatano & Inagaki, 2000b). There are, however, a number of critiques and limitations with Piaget's theory. Firstly, the theory has been criticised for not actually explaining how children's cognitive abilities develop. Secondly, the theory seems to underestimate children's abilities and sometimes overestimate adult's abilities. There are methodological criticisms, particularly focusing on the way children are interviewed in Piaget-type studies. Furthermore, the theory does not give enough consideration to the influence of external stimuli and individual experiences. Finally, Piaget's assumption that stage development is domain-general is questioned (see Scholnick, 1983 for a full review and critique of Piagetian ideas on conceptual development).

Over the last two decades, new theories have been developed that build on Piagetian ideas, but also take into account many of the limitations of the original theoretical framework. Hatano and Inagaki (2000b) have summarised this more recent view of conceptual development. They argue that there are four important characterisations of conceptual development and knowledge acquisition. Firstly, knowledge is acquired by construction. Secondly, knowledge acquisition involves restructuring. The third characterisation is that knowledge is acquired domain by domain, and finally the process of knowledge acquisition is constrained by innate, cognitive, and socio-cultural constraints.

**Knowledge is acquired by construction**

The first characterisation suggested by Hatano and Inagaki (2000b) follows Piagetian ideas. Piaget argued that humans are not passively influenced by the environment, and neither is all knowledge innate, but rather children actively work using developing cognitive processes to make sense of the world around them. The idea that knowledge is constructed is still at the core of more recent developmental theories. Knowledge is not simply transmitted to cognitively-passive children, but rather children and adults actively construct meanings based on their interactions with the environment. During these interactions, humans construct knowledge based on regularities and condition-action rules they observe (Hatano & Inagaki, 2000a). Transmitted knowledge must be reconstructed and connected to an individual's prior knowledge before it becomes useful. This process of actively constructing knowledge allows people to develop or invent knowledge that has not been presented to them, through the ability to problem-solve (Hatano & Inagaki, 2000b).

**Knowledge acquisition involves restructuring**

The second characterisation proposed by Hatano and Inagaki (2000b) is also based on Piagetian theory. Piaget claimed children form cognitive structures or 'schema' based on their life experiences, and that as they grow older, they replace these cognitive structures with more complex ones through a combination of two processes: 'assimilation' and 'accommodation'.

Assimilation refers to a child's ability to explain new phenomena using pre-existing cognitive structures. So, for example, a child may see that living things move, and therefore when they see another object move, such as the sun rising, they may also infer that the sun is alive. Accommodation, on the other hand, is required when a child's current cognitive structures do not adequately explain a new experience, so they modify their existing structures. A child may see that while a ball can move, it only moves when it is pushed, and therefore the child learns that not all moving objects are necessarily alive, and adapts her or his scheme about what is alive accordingly. Obviously a child's journey to understand the world requires a combination of both assimilation and accommodation; development could not occur if a child either assimilated every new phenomenon they

experienced into pre-existing schema, nor would it occur if a new schema was created for every new experience. This balance between assimilation and accommodation is referred to as 'equilibration' (see Meadows, 1993, for a review of these concepts).

Carey (1985) described this process of restructuring knowledge as 'conceptual change'. Her research examining the way young children distinguish living things from non-living things led to claims that children develop a concept of biology at around 8 –10 years old. Ten-year-olds are able to consider more elements than 4-year-olds are when deciding if something is alive or not. However, the older children do not simply know more than the 4-year-olds do; rather, they have developed a concept of 'what is alive', which 4-year-olds do not have. This naïve theory of biology, along with other theories, is developed by restructuring concepts formed earlier, in order to incorporate new information a child perceives.

Hatano and Inagaki (2000b) argued that as well as major conceptual changes occurring, milder forms of change can also be considered to be cognitive reconstructing. As well as creating new concepts, children are able to expand or modify existing concepts to explain new phenomena. For example, a child's concept of 'animals' may at an early age only include mammals, but later may be modified to include fish or birds.

### **Knowledge is acquired domain by domain**

Hatano and Inagaki's (2000b) characterisations of conceptual development departed from traditional Piagetian theory by arguing that knowledge is acquired domain by domain. This characterisation follows the domain-specific theory of development proposed by Carey (1985). A domain is defined as "a body of knowledge that identifies and interprets a class of phenomena assumed to share certain properties and to be of a distinct and general type" (Hirschfeld & Gelman, 1994, p. 21). The ability to use domains enables people to categorise the world into useful concepts. For example, there are a number of ways to categorise different groups of animals, but all these categorisations are possible because an individual has an overall useful domain of beliefs about what a 'living thing' is (Hirschfeld & Gelman).

Piaget's theory predicted that children's cognitive development occurs in a domain-general manner, that is, children's cognitive abilities in different areas all develop at roughly the same rate, with children developing through a series of general cognitive stages. Carey (1985) argued that there are no general cognitive stages, but rather some domains develop at different rates from others.

The difficulty for researchers with abandoning a Piagetian idea of domain-general development is that research becomes overwhelming if every single domain a child learns about has a different developmental pattern. Carey (1985) proposed that while there is no one domain-general series of cognitive stages, young children do only have a few theory-like cognitive structures. As children grow older, their understanding of the world develops by building new concepts out of these older ones.

Three important domains of thought that children have acquired by six years old include 'naïve physics', 'naïve psychology'; and 'naïve biology' (termed the "big three" by Hatano & Inagaki, 1994, p. 172). Naïve physics refers to a child's basic understandings of how physical objects move. A domain of naïve psychology allows children to begin to make predictions about what other people are thinking and explain why they are acting in the ways that they do (generally based on intentionality or desire). Finally, a naïve theory of biology consists of a body of knowledge that allows children to distinguish living and non-living things; confers the ability to make certain predictions about how some biological entities will behave; and gives an explanatory framework that does not attribute biological behaviours to psychological factors such as intentionality (Hatano & Inagaki, 1994). While Carey (1985) claimed that children developed a naïve theory of biology at only around 10 years old, more recent studies have found that younger children already have some understanding of biological phenomena (Hatano & Inagaki, 1994).

### **The process of knowledge acquisition is constrained**

The final characterisation of cognitive development is that there are constraints in knowledge acquisition. Hatano and Inagaki (2000b) claimed that there are cognitive constraints, and socio-cultural constraints that enhance knowledge acquisition. While children are not born with innate domain-specific

knowledge, they do appear to be born with certain innate tendencies to focus on some perceptual information over other information and prefer some explanatory hypotheses to others. These cognitive constraints enable them to acquire a range of domain-specific knowledge early on.

Knowledge acquisition is also constrained by a child's environment and experiences, particularly later on in the child's development (Hatano & Inagaki, 2000b). Throughout children's development, their experiences and culture will teach them which elements of their environment are worth attending to as they actively work towards understanding the world. This means that children from different cultures will develop different ideas about the world around them. For example, Hatano and Inagaki's cross-cultural research (summarised in Hatano & Inagaki, 1994) found that children from different countries agreed on some attributes of what makes an object alive or not, but disagreed on other attributes.

Even within one culture, individual experiences will influence a child's cognitive development within a specific domain. These individual experiences will place specific constraints on the way children reason about issues within that domain, and which features the children focus on when making inferences. For example, Inagaki (1990) found that 5-year-old children that had pet goldfish not only had more factual knowledge of the biology of goldfish than other children their age, but also had more conceptual knowledge. The children with the pet goldfish were able to make more accurate predictions about the biology of another similar aquatic animal (frogs) than other 5-year-olds, even though their general knowledge about typical mammals did not differ from the control group. Thus, a child's experiences not only increase her or his specific knowledge of an area, but also influence her or his abilities to make predictions and draw analogies about related fields.

As well as children's individual experiences, their knowledge acquisition and conceptual development will also be influenced or constrained by what they have learned at school, seen on television and in books, and learned from other sources. One example of a school-based programme that influenced conceptual development is that of Au, Romo, and DeWitt (1999). The authors reported that a programme designed to teach school children about AIDS by increasing children's concepts of what the AIDS virus is was more successful than a control programme

that taught children a series of often unrelated facts about AIDS. In their programme, children learned that AIDS is a living virus that can reproduce, stay alive, or die depending on the environment, and children were able to experiment and observe how germs are transmitted. Au et al. found that children participating in their programme had a better developed sense of what AIDS is, and how the virus can and cannot be transmitted, than the children in the control, fact-based, programme. Participants in the experimental programme were even able to make more accurate predictions about whether the AIDS virus could be transmitted in situations they had not specifically learned about, whereas participants in the control group gave irrelevant explanations or no explanations at all when presented with these novel situations.

In summary, Hatano and Inagaki (2000a; 2000b) have argued that there are four main characterisations of conceptual development. Firstly, children acquire knowledge through actively constructing the world that they perceive. Secondly, this knowledge acquisition develops through restructuring previously developed concepts into new concepts as children perceive and experience more. Knowledge acquisition is also domain specific, with an initial few domains that are then gradually restructured as children develop. Finally, knowledge acquisition is constrained by both innate constraints and socio-cultural constraints, so children will attend to certain pieces of information and experiences before others, enabling them to develop new concepts. Before relating this theoretical framework to children's understandings of mental illness, this chapter will discuss theories that define concepts and how they are developed, followed by more specific literature that considers mental illness to be a concept.

## **The concept of 'mental illness'**

### **Defining 'concept'**

There has been considerable theoretical debate over what makes a concept, and how children learn to categorise objects into taxonomic categories. This section briefly describes the difference between classical and prototype definitions of concepts, and compares these definitions with a theory-based approach to

categorisation. A theoretical framework that explains the development of children's ability to categorise objects is then described.

A concept is a mental representation of a category of objects or behaviours grouped together based on some sort of useful commonality. A 'useful' concept provides "maximum information with the least cognitive effort" (Rosch, 1978, p.28), that is, concepts are ways in which we classify objects in order to understand the world as efficiently as possible. For example, while a wooden chair has common features with both a pinecone (both burn easily) and a kitchen stool (both can be sat on), it is generally considered to be more useful to group the wooden chair and the kitchen stool into a concept of 'chairs', than to group all objects that burn easily.

According to the classical view, a concept is a set of objects that all share common attributes (Smith & Medin, 1981). For example, all squares must have four sides and four right angles. However, there are many concepts that do not conform to this rule, but rather contain group members that do not necessarily hold all the required attributes. For example, there are a range of attributes that people would generally agree that a chair would be expected to have, such as four legs, a seat and the ability to be sat on, yet there are things which are considered to be chairs even though they do not hold all of these attributes, such as deck chairs or car seats.

Eleanor Rosch proposed a different view of concepts, which can be termed the 'prototype' or 'best example' view. According to this perspective, concepts do not necessarily have clear-cut boundaries, but instead have better and worse examples of a concept (Rosch, 1978). While there may be some disagreement over whether some ambiguous examples fit into the concept, most people will generally agree on the best examples. So a penguin is considered to be a bird, but a robin is generally to be considered a better example or more typical bird (Mervis, 1980).

Rosch (1978) argued that there are two dimensions to categorisation; vertical and horizontal. Any object can be categorised at a number of levels, and this is referred to as the vertical dimension. So Ben's wooden kitchen chair could be grouped into several levels of categorisation, including 'Ben's chair', 'chair', 'kitchen furniture', and 'furniture'. Rosch claims that there is one 'basic level' of abstraction or categorisation, which is generally the most useful because it has the



highest 'category resemblance' (all members of a category are similar) and 'cue validity' (all members of the category are easily differentiated from non-category members). In the example of Ben's wooden kitchen chair, the basic level of categorisation would be 'chair' because it is easier to recognise all chairs as chairs and distinguish all chairs from non-chairs than it is to distinguish all Ben's chairs (a subordinate level) from other chairs, or all pieces of furniture (a superordinate level) from all non-furniture. Research has found that both children and adults are faster at categorising objects at their basic level, than at other levels of abstraction and children learn basic levels of concepts before other levels (see Mervis, 1980). The horizontal dimension refers to different objects at the same level of abstraction, such as different types of chairs that all fit into the category 'chair'. As described above, at each level of categorisation, there are some objects that can be considered more prototypical of the concept.

The classical view also argued that boundaries and attributes for categories are absolute, and therefore universal (Mervis, 1980). Rosch's prototype theory of concepts would make no such claim. Rather, it is argued that people from different cultures and even different individuals within the same culture might have different boundaries for a category, but are all likely to agree that prototypical objects are the best examples of a particular concept. So, there may be disagreements over whether a tree-stump is considered a chair, but it can be assumed that most people would agree that Ben's kitchen chair is a chair.

While the classical view and the prototype view differ on how attributes are used in the formation of a concept, they both depend on attribute similarity as the guide for recognising members of a category. The classical view requires an object to meet all the criteria to be considered part of a category, and the prototype view requires an object to resemble a 'best-example' on most attributes, but both views assume that a category is no more than the sum of its attributes (Murphy & Medin, 1985). Yet, there appears to be more to categorisation than solely an awareness of a category's attributes.

Murphy and Medin (1985) put forward a theory-based approach to categorisation. The authors argued that in order for a person to decide if an object fits a category, she or he uses both knowledge of what attributes category members need to have, along with a set of underlying principles or beliefs of how and why

those attributes are related. Thus Ben's kitchen chair is considered a chair not because it shares a number of attributes with other chairs, but because it shares with other chairs the particular attributes that are believed to be important for chairs to have. That is, Ben's kitchen chair fits into the theory of what a chair should be, regardless of how many attributes it actually shares with a prototype chair.

### **Concept of mental illness**

Definitions of mental illness vary according to a range of scientific, socio-cultural, and political factors. There has been great debate about what behaviours should be included in a category of 'mental illness', or indeed how to define the concept of mental illness.

Over the past decade, three different ways of viewing mental illness as a concept have emerged. Firstly, Wakefield (1992; 1999) argued that mental illness fits into the classical view of concepts, as every mental disorder can be considered to be a 'harmful dysfunction'. Wakefield argued that "harmful is a value term based on social norms, and dysfunction is a scientific term referring to the failure of a mental mechanism to perform a natural function for which it was designed by evolution" (p. 373).

Lilienfeld and Marino (1995) rejected this classical view, and instead view 'mental disorder' as a Roschian concept. As stated above, Rosch' prototype view of concepts is probabilistic, with some examples of a concept having more attributes and therefore being a more typical example of the concept than other examples of the same concept. If mental disorder is considered to be a Roschian concept then some mental illnesses will be clear-cut examples or prototypes of the concept, and majority of people would agree on this, whereas there will also be boundaries of the concept that tend to be "inherently fuzzy" (Lilienfeld & Marino, p. 417). For example, the authors argued that while most people agree that schizophrenia is a mental disorder, there is more controversy around whether Self-defeating Personality Disorder fits the criteria.

As described above, Rosch (1978) claimed that there are both horizontal and vertical dimensions to concepts. The vertical dimension refers to the different levels in which an object can be categorised. Within this dimension there is one basic level which children learn before the other levels, this basic level of categorisation

has the highest 'category resemblance' and 'cue validity'. Mental illness is considered to be the basic level of categorisation, whereas 'schizophrenia' is a subordinate level and 'life problems' may be considered to be a superordinate level. If mental illness is thought of as a Roschian concept, then it follows that children will be able to label behaviour as 'mentally ill' or 'crazy' at a younger age than they will be able to label behaviour as 'schizophrenic' or 'anxious'. 'Schizophrenia', 'anxiety' and 'depression' are all different examples of the concept of 'mental illness' within the same horizontal dimension.

Kim and Ahn (2002) argued that the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) also follows this prototype view of mental illness. In order to be diagnosed with a particular DSM-IV diagnosis, a person must meet a certain number of criteria from a list of possible criteria. For example, in order to be diagnosed with Obsessive-Compulsive Personality Disorder, a person must be deemed to have any four of the eight criteria listed for this disorder. This method of diagnosis is purely attribute-based, and does not give any consideration to underlying theories of the causes of the disorder, or how different criteria might be related to each other or influence each other (Kim & Ahn).

Kim and Ahn (2002) instead proposed a theory-based approach to considering mental illness as a concept. The authors argued that people have lay theories of mental illness, and they use these theories to give different categorisation weight to different criteria of a disorder. In order to demonstrate this, the authors presented adult participants with information about a series of disorders, and asked them to rate from 0 (definitely no) to 100 (definitely yes) whether someone would be considered to have each particular disorder if they had all the listed criteria except for X. If all criteria for a DSM-IV disorder were considered equally important for diagnosis of a disorder (as implied by the DSM-IV list of criteria), then each criterion should be given the same rating. However the authors found that this was not the case. Instead some criteria led to lower ratings, and thus greater categorisation weights, than other criteria, implying that some criteria are considered to be more central to a disorder than others. The participants were also asked to rate how causal each criterion was deemed to be (i.e., did it cause other symptoms, or was it caused by other symptoms). The criteria that were given the

highest categorisation weight were also the ones that were judged to be the most causal.

Other research has also shown that adults have lay theories about different mental disorders. Furnham and Bower (1992) found that people had lay theories about schizophrenia, and Furnham (1995) found that people had lay beliefs about phobias. In both these studies, it was found that there is a connection between people's beliefs about causes of a disorder and appropriate treatment for that disorder. Kim and Ahn (2001) demonstrated that clinical psychologists are also influenced by their own theories of mental disorder and do not treat DSM-IV criteria as if they are independent of each other.

In summary, a number of researchers have argued that adults have a concept of mental illness, although there are disagreements over which theoretical framework for concepts and categorisation is the most appropriate to use when understanding this concept. The following section discusses children's concepts of mental illness, and presents data from the current study that suggests mental illness is a concept that develops as children grow older. This model combines Hatano and Inagaki's (2000a) developmental framework with recent theory based approaches to categorising mental illness, such as that of Kim and Ahn (2002).

### **Children's concept of mental illness**

As children grow older their ability to group objects into taxonomic categories develops. Traditionally, research has claimed that children below the age of 8 years old are not able to form such categories, instead grouping objects based on more concrete features, such as grouping 'rabbit' and 'carrot' together, instead of grouping 'rabbit' and 'cow' according to the taxonomic category of 'animals' (Mervis, 1980). More recent studies have found that younger children do demonstrate some ability to understand and use categories (see Carey & Markman, 1999). Ahn, Gelman, Amsterlaw, Hohenstein, and Kalish (2000) found that just like adults, children aged 7 – 9 years gave more categorisation weight to causal features than to other attributes, indicating that children's categories may also be theory-based. Once children have developed the ability to categorise objects, they can then begin to use these initial categories and theories to develop a broader range of

categories. It is argued in this thesis that as children grow older, and have developed initial theories about the world, they are then able to develop a concept of 'mental illness', which they can use when discussing vignettes about mental illness.

As with the development of all concepts, the concept of mental illness is likely to develop according to a logical progression, as set out by Hatano and Inagaki (2000b). Very young children develop a naïve theory of psychology, influenced by both socio-cultural constraints (what the child is exposed to) and innate constraints (what information the child attends to). This naïve theory of psychology (or 'theory of mind') enables them to gradually understand that other people can think differently from how they themselves are thinking. By 4 – 5 years old, children develop an understanding that person's behaviour is determined by both her or his beliefs and desires. It can be assumed that a child will need a well-developed theory of mind in order to attempt to explain behaviours such as that of a character who would like to take a bus, but cannot anyway, as presented in the vignette about Betty.

Young children also develop a naïve theory of biology. Carey (1985) claimed that this develops at around 10 years old in most children; below this age children tend to explain biological phenomena as being intentional (a psychological attribution). More recently, researchers have argued that there is a stage between intentional causality and mechanical causality that children use to explain biological phenomena. This in-between stage has been termed 'vitalistic' causality (Hatano & Inagaki, 1994), and during this stage children attribute 'agency' to internal organs. Regardless of when this naïve theory of biology first appears, a child will require quite a well-developed theory in order to understand that some behaviours can be influenced by biological factors, such as brain problems, instead of being governed purely by desires or beliefs.

Before children are able to develop a concept of mental illness, they need to first develop other concepts that they can cognitively restructure to form this new concept. To form a concept of mental illness, children need to understand the role of internal and psychological processes in behaviour (theory of mind), as well as the possible influence of biological processes on a person's actions (naïve theory of biology). Analysis of focus groups and individual interviews from this research

suggests that children from the older age groups were most likely to discuss both the internal processes and biological influences in mental illness.

There are also socio-cultural constraints on a child's ability to form a concept of mental illness. A child has to first learn to recognise what behaviours are deemed appropriate or normal within society before she or he is able to recognise deviant behaviour. Children learn appropriate social norms from family, peers, school, and mass media. As children grow older, they have more experiences and observe more, enabling them to form a concept of what is acceptable behaviour, and recognise deviations from it.

Increased exposure to portrayals and personal experiences of mental illness can also be expected to lead to an increased knowledge of labels and jargon associated with mental illness. The older a child is, the more exposure to portrayals of mental illness through school and media she or he can be expected to have. This exposure will help a child develop a concept of mental illness. As media generally depict mental illness in negative ways, children who have developed a concept of mental illness and view the vignette characters as fitting this concept will be more likely to include negative outcomes in their stories as well.

Thus, it is argued that older children appear to have developed a concept of mental illness, which they used when discussing the vignettes, whereas younger children did not have this concept available to aid them in creating their stories. This concept was demonstrated by older children using more internal and psychological explanations; more biological explanations; more jargon and labels; more references to other depictions of mental illness; and more negative endings than younger children. The following sections present data giving examples of these trends.

### **The role of internal and psychological processes in explanations**

When creating stories about characters with mental health problems, the older children were more likely to discuss the character's thoughts as well as their actions. Internal processes were more commonly considered by older participants for ideas about both causes and treatments. Considering how a character is thinking about their situation suggests that the story-teller has a well-developed theory of mind. While children as young as 4 or 5 years old are expected to have developed

theory of mind to some degree, a child's theory of mind will need to be more advanced before she or he can consider the role of thoughts when thoughts and desire do not correspond (e.g., when the agoraphobic character is having thoughts that prevent her from doing what she wants to be doing). The previous chapters have a number of examples of participants considering how a character is thinking about their situation. Participants could discuss thinking problems in conjunction with any of the other causes described (see Figure 4.1, page 86, for a chart depicting possible causes and resolutions that emerged from Study Two).

Internal processes were also considered by older participants when they were discussing treatments. Story resolutions that involved a character thinking or acting differently have been grouped together into one category. However, within this category there were age differences. Children in the 9 – 10 year old group would recommend that a character should do something differently, but did not discuss the character dealing with the way that she or he is feeling. They would suggest treatments such as that Betty, the character with agoraphobia, should find other ways of getting to work; and Eddie (with schizophrenia) and Dad (with depression) should just go back to work or get a new job. The older participants tended to consider the way the character was feeling, and suggested that they act or think differently to change those feelings. Examples of characters thinking differently include Dad or Eddie doing things that will increase their self-esteem, and Betty facing up to her fears by slowly exposing herself to them or developing a more optimistic perspective.

When recommending therapy, younger children also tended to make general statements that did not suggest that they were considering psychological processes. Instead younger children tended to create stories where a counsellor or psychiatrist just tells the character how to fix the problem or tells him or her that everything will be okay. Older participants were more likely to suggest that the counsellor would focus on more specific thoughts, emotional problems, or teach social skills. Some older participants also considered the character's own role in the counselling process, for example:

Neville: It could be an issue that a counsellor could help with, and she [Betty] could work it out with a counsellor. Because obviously a

counsellor can't solve your problems, but they can help you work through them (18-year-old boy).

### **The role of biological processes in explanations**

Carey (1985) argued that children develop a concept of biology at around 10 years old, whereas younger children use psychological explanations to explain biological phenomena. A more basic understanding of some biological processes may first appear at a younger age (Hatano & Inagaki, 1994). However, even if young children do have some initial domain of biology, this domain will need to be quite well advanced before a child will be able to understand that biological processes can sometimes influence psychological phenomena.

In this study some younger children did suggest that a character might have a brain problem. However, these younger children did not appear to understand biological processes. Instead, their explanations reflected the stage in biological explanations which Hatano and Inagaki (1994) termed 'vitalistic causality'. Those authors argued that young children describe biological processes using intentional causality, and much older children give mechanical explanations for these processes, but in between these two stages there is another intermediate stage called 'vitalistic'. At this stage, children are reluctant to use intentional explanations, but they have not yet developed the vocabulary or theory to discuss biological processes as mechanical processes, so they discuss biological phenomena as if the organs (instead of the person) have their own vital force, or are choosing to function. While Hatano and Inagaki's (1994) research was with Japanese children (who may be influenced by the concept of a vital force from traditional Japanese science), vitalistic reasoning has been shown to be used by English speaking children as well (Morris, Taplin, & Gelman, 2000). Examples of 9-10 year-old participants discussing brain problems in vitalistic ways in this study include:

Malcolm: Because he's [Dad is] so sad he just, his brain doesn't work it out. He wants to but his brain just doesn't (10-year-old boy).

Terry: And then he [Eddie] goes to hospital and then they tell him that he has a little bit of brain damage in the part that hears voices (10-year-old boy).



A number of 17-year-old participants, however, did demonstrate an ability to use a higher level of causality, mechanical causality. These participants suggested that a character's behaviour was due to specific biological processes such as a chemical imbalance. Even these participants though, generally commented that they did not understand how a chemical imbalance might actually influence behaviour. Examples of passages discussing chemical imbalances are given in Chapter Four, page 95.

In order to develop a concept of mental illness, a child's concepts of psychology and biology both need to be reasonably well developed. It is apparent in this study that older children were more likely to incorporate both psychological and biological processes into their explanations about causes and treatments of mental illness, suggesting that these older children have a more developed concept of mental illness.

### **Incorporating information from other sources**

As children grow older, they have more opportunities to learn about mental illness. Approximately half of children's television shows screened in New Zealand make some reference to mental illness or to being crazy (Wilson et al., 2000). In adolescence, presentations of mental illness are even more common, and more detailed. Bokey et al.(2000) found that close to 70% of popular teenage fiction in Australia contained a character with psychiatric problems, and these portrayals of mental illness were almost always negative.

Mental health is prescribed in the New Zealand school curriculum, so the longer a child has been at school, the more likely they are to have learned about mental health and mental illness. Similarly, the older a child is the more likely she or he is to have encountered a friend or family member with mental health problems or of developing her or his own mental health problems.

Children will be able to compare the behaviour of vignette characters with other media portrayals of mental illness only if they have a concept of mental illness they can use to group all the behaviours together. All transcripts from group discussions and individual interviews were examined to see how and when young people explicitly referred to things they had seen or read about elsewhere. In the group discussions, groups were asked directly if they had seen anyone on TV or in

books who acted like the characters in the vignettes did. Participants interviewed individually for the second study were not specifically asked about things they had seen elsewhere, but some 17 – 18 year old participants still referred to things they had seen or read about (an example of this is the quote by Justin at the start of this chapter).

There were two main ways in which participants incorporated media references into their discussions about the vignette characters or their definitions of mental illness. Some participants compared details from the vignettes with similar details they had seen elsewhere. Alternatively, participants compared a character with other examples of people with mental illness that they had seen, even if there were no similar specific details. The latter demonstrated that the participant has some form of mental illness concept.

There were several examples in the group discussions of participants comparing specific details shared by a vignette character and a character from television, movies or books. The characters were similar to the vignette character in some specific way, such as hearing voices or acting funny, but not thought of as crazy or mentally ill:

- *Why do you think he's [Eddie is] crazy?*

...

- It's like Harry Potter.

- *Is Harry Potter crazy?*

- Well he's not crazy, but he hears voices.

(Group of 9 year olds)

- *Ok, has anyone seen anyone like Dad on TV?*

- Yep.

- Yeah, on the news.

- *On the news people act like that?*

- Yeah they look very boring just sitting there.

(Group of 12 year olds)

These are examples of participants focussing on specific details from the vignettes, and do not require the participants to categorise the vignette characters as 'mentally ill'. In the first passage, the 9-year-olds noted that both Eddie, the

character with schizophrenia, and Harry Potter hear voices, but only considered Eddie crazy, and not Harry Potter. In the second passage, the 12-year-old group said that both Dad and people on the news look boring and sit still, but did not say that they thought the people on the news are sad or depressed, although that group did use those words to describe Dad. Most focus groups with participants aged 9-years or older used these kinds of comparisons. However, these quotes do not give any indication of whether a particular participant or group of participants have a concept of mental illness they could use when discussing the vignettes.

This differs from the extract by Justin at the start of this chapter (page 127), which suggests that he has a concept of mental illness, which he can use when explaining the vignette. In that extract, Justin appears to be comparing the schizophrenic character, Eddie, with a woman from a television show because they both fit within his concept of mental disease, even though they do not appear to share in concrete similarities. In the group discussions, these kinds of conceptual comparisons were also sometimes made, for example:

- *Has anyone seen anyone with mental illness on TV?*
  - Yep.
  - Only on hospital programmes.
  - I think I have, but I don't really remember where.
  - I think there's one on Shortland Street [a New Zealand soap opera].
  - *What did they do?*
  - They killed someone and now they're scared.
  - [it was] Kate.
  - *Do you think Kate has got a mental illness?*
  - She was trying to jump off a cliff.
- (Group of 12 year olds)

In this passage, Kate, a television character, was described as having a mental illness because she tried to jump off a cliff. This group was asked about the term 'mental illness' because one of the group members had used the word when discussing two of the characters, Eddie and Betty. Neither Eddie nor Betty tried to jump off a cliff, so it appears that the participants were comparing these characters to Kate based not on specific behaviours, but because they all fitted into the participants' broader concept of mental illness. Group members demonstrated that

they had an awareness of what mental illness is by citing examples from the media of characters with mental illness. Characters from soap operas such as 'Shortland Street' or 'Home and Away' were the most commonly cited examples of people with mental illness seen on television. 'Patch Adams' and 'Sixth Sense' were movies that were referred to by a number of participants as well. However, the characters described from those movies were described as hearing voices so it is difficult to distinguish whether participants were mentioning those characters because they were similar on a behavioural detail (hearing voices) or in the overall category of 'mental illness'.

Personal experience also appeared to increase a child or young person's understanding of mental illness. Children were never specifically asked about their own experiences or their family's mental health history, however some children did compare what they were seeing in the vignettes with their own experiences. In Chapter Three, one 17-year-old girl is quoted as having knowledge about schizophrenia because she has a cousin with the disease. The only 9- or 10-year-old interviewed individually to use the word 'depression' when describing Dad, said that he knew it was depression because he had experienced something similar:

Terry: I think he's depressed...because when I went to England I was depressed because I had to start a new school, and then I had no friends for a while. And something might have happened [to Dad] in his life, or at his work (10-year-old boy).

This example of a 10-year-old child with personal experience of depression having a more advanced concept of that illness than his peers reflects a similar pattern to Inagaki's (1990) finding that children with pet goldfish had more conceptual knowledge of aquatic animals than other children their age did.

An ability to make comparisons between vignette characters and other examples of people with mental illness was one way for participants to demonstrate that they have at least a rudimentary concept of mental illness. Most groups with participants aged 9 years or older were able to make at least one comparison at this conceptual level. Characters from the vignettes were compared to other portrayals of mental illness from television, or from something in the child's personal experience. No participants in either of the 6-year-old groups referred to other

portrayals of mental illness, nor were they able to give any definition for the term 'mental illness', suggesting that children this young do not have any concept of 'mental illness'.

### **Use of jargon and labels**

One way for a child to demonstrate that have developed a concept of mental illness is to demonstrate an awareness of some of the jargon and labels associated with it. There were age differences in the way participants defined the terms 'crazy' and 'mental illness', and names of specific mental disorders were used frequently by older participants, and very rarely by younger participants.

In the group discussion, all groups were asked to explain the terms 'crazy' and 'mental illness'. In the individual interviews, participants were asked what a word meant only if the child had used it. There were different ways in which children and young people could use the word 'crazy'. Groups of 6-year-olds and 9-year-olds used the word 'crazy' to mean acting silly, or acting naughty or out of control. For example:

- *Who wants to tell me what crazy means?*
- You start acting sometimes really all weird, and you start doing things that you wouldn't normally do.
- And silly things.
- *You start doing silly things?*
- Like it's something expensive but it costs one dollar.
- I think crazy is like a handicap.
- You're making funny faces.
- Being all wobbly.

(6-year-old group).

- *How could you tell they're mad?*
- Well if they're going crazy and start or they haven't had sleep in days you know they're going mad. It's like they just keep on going crazy and they're still full of energy.
- They do stuff that they wouldn't usually do, and sometimes they do something bad like naughty, that shouldn't be done.

(Group of 9 year olds)

Older participants also discussed the way that being 'crazy' means acting different from normal or acting different from everybody else:

- *What does it mean to be crazy?*
  - Nuts.
  - It's hard to explain.
  - The second person [Eddie] is kind of close to it, but not classified as being crazy.
  - It is really weird, because you talk about people being crazy, but when you say who's crazy, no one really is, because everyone is different to their own amount of way. Yeah but he gets pretty close to it.
- (17-year-old group).

Participants in the two younger age groups used the word 'crazy' only to describe behaviour. There did not seem to be any consideration of the way a 'crazy' person might think. Eleanor, a 10-year-old girl, even separated the words 'mental' and 'crazy' by implying that 'crazy' is only to do with behaviour, whereas 'mental' could also mean thinking strange thoughts:

- Ben: Okay, what kind of thing could be wrong with Dad?*
- Eleanor: Oh, I don't know, he might have some kind of mental problem.
- Ben: Dad might have a mental problem?*
- Eleanor: Not mental like crazy, but mental like he thinks what he thinks
- (10-year-old girl).

Participants in the older groups discussed behaviour when defining 'crazy', but also incorporated consideration of the 'crazy' person's thoughts, for example:

- *You mentioned before crazy, what does it mean to be crazy?*
  - Crazy means like you hear voices, you can't sleep, you're always angry, like someone is following you, and stuff like that.
  - I think it's like you're out of your mind sort of.
  - You're imagining things.
  - You're acting unusual and taking your anger out on objects, like TVs and furniture.
- (Group of 12 year old)

Sally: I'd imagine that he'd go in there [a 'psych ward'] feeling mildly hopeless and stuff, and probably he'd get all withdrawn and it brings everything out, every little issue and stuff, and then it would sort of, maybe he'd resolve that and stuff. Or he could just get worse and worse and become completely crazy (17-year-old girl).

It appears that participants of all ages were able to define the word 'crazy', using the word to refer to acting silly, naughty, or different from other people. However, only children 12 years or older considered the way a person might think in their explanation of the word. This finding is consistent with findings from previous studies, such as Poster et al.(1986) and Spitzer and Cameron (1995). The children's ideas are also consistent with the ways that being 'crazy' is presented on children's television shows (Wilson et al., 2000).

As with previous research described in Chapter One, the older participants (12 years and older) appeared to use the terms 'crazy' and 'mental illness' as synonyms. Group members described 'mental illness' as involving brain problems (an example of this is in Chapter Three, page 51); being different from other people; not being able to do everyday things; or overreacting, as the following passages illustrate:

- *Ok, who's heard of the phrase mental illness before?*

- Yeah.

- *What's it mean?*

- That you're mentally ill or something, you're not quite the way the rest of the people around you are, or something.

- *Not like the rest of the people around you?*

...

- I think its when you're just not working at your best, and thinking at your best, and there's something in your head, or some thought or some paranoia, or anything that is preventing you from doing things, living an ordinary life, so to speak.

(17-year-old group).

- I reckon this person [Betty] does have a mental illness.

- *Why do you think that?*

- Because she's overreacting and stuff about starting to panic and not be able to breathe and stuff.  
(12-year-old group).

Not surprisingly, there appears to be a developmental progression in ability to explain the term 'mental illness', with only participants aged 12 years and older giving clear definitions of the term. The ability to use labels for more specific psychological problems, such as schizophrenia or claustrophobia, lags behind this progression, so it is not until around 17 years that young people can use such terms. It may be that these age differences are not due to cognitive abilities to form categories, but instead solely to differences in verbal skills. Kalter and Marsden (1977) found that sixth graders (11 years old) gave more coherent explanations of the aetiology of mental illness, than fourth graders (9-year-olds) did, but found there was no correlation between coherence of answer and verbal IQs, suggesting that age differences were due to some factor other than verbal ability. In the current study verbal ability of participants was not measured, however it is likely that the age trends found here also reflect differences in ability to form categories, not vocabulary.

As described earlier, children appear to learn concepts at the basic level before they learn more superordinate or subordinate categories along the vertical dimension of categorisation (Mervis, 1980). If mental illness is viewed as the basic level of a concept, then children can be expected to understand the term 'mental illness' before they are aware of more specific subordinate concepts. This appears to be the case; while children as young as 9-years-old appeared to have at least some limited ability to think of mental illness as a concept, it was only generally the 17-year-old participants who were able to use more specific labels. The participants in the 17-year-old age group commonly used specific jargon, indicating knowledge of a number of subordinate categories along the same horizontal dimension. These participants referred to Betty as 'claustrophobic'; Dad as 'depressed'; and Eddie as 'schizophrenic' or 'paranoid'. On the other hand, very few participants from the younger age groups used any of these more specific labels at all, and those that did tended to have had some personal reason to be aware of that word, such as knowing someone with similar symptoms.



When explaining the vignettes, younger participants may have had to think of explanations for each character's behaviour, whereas the 17-year-olds often appeared to quickly recognise that the vignette characters were behaving in ways that fit into pre-existing concepts, which the participants then discussed. Participants in this oldest age group often said things such as "Eddie is obviously a schizophrenic" (Natalie, 17 years), or "this sounds like depression that he's going through, I figured that out pretty quickly" (Marcus, 18 years). By using words such as 'obviously' or 'I figured that out', the participants are demonstrating that they already have developed a concept of 'mental illness', along with some more specific subordinate concepts, and these vignettes can be assimilated easily into this concept.

### **Alternative endings and negative outcomes**

Older participants often suggested a number of different outcomes for their stories, and every 17-year-old suggested a possible negative outcome for at least one of their stories. The negative outcomes mentioned by participants are summarised in Chapter Four. Younger children tended to only suggest one ending for each of their stories and the only negative outcomes they suggested involved things staying the same for the character (e.g., Eddie continues to hear voices).

The ability to suggest a range of likely outcomes, and in particular negative outcomes, may imply that a participant had a more developed concept of mental illness. Media portrayals of characters with mental illness generally present them in negative ways, such as acting violently; committing suicide; or becoming reclusive or homeless. If participants included these sorts of endings in their stories, it may imply that they were comparing the vignette characters with other portrayals of mental illness they have seen elsewhere. As stated earlier, an ability to compare the vignette characters with other examples of mental illness requires a concept of mental illness, so the higher occurrence of negative outcomes in older participants' stories lends support to the argument of a developing concept of mental illness.

## Summary and conclusions

In this chapter, it is argued that as children get older, they develop a concept of mental illness that they can use when discussing vignettes concerning adults with mental health problems. There are a number of different elements that suggest whether a child has developed a concept of mental illness or not. Children with a concept of mental illness displayed the ability to compare the vignettes with different examples of mental illness they have seen elsewhere; the ability to use particular labels and jargon associated with mental illness appropriately; an awareness of the role of both psychological and biological processes in mental illness; and an ability to suggest a range of possible outcomes, including negative outcomes.

The data collected in the two studies described here contain a number of examples of each of these elements. While none of these elements alone would be enough to demonstrate whether a child has developed a concept of mental illness or not, when analysed together the elements provide a compelling argument that 'mental illness' can be viewed as a concept that develops as children grow older. All the elements described above were more commonly used by older children than by younger children, supporting the claim that as children grow older they begin to form a concept of mental illness, which they can use to explain the vignettes. This concept is likely to be formed by restructuring categories formed earlier in development, and is influenced by socio-cultural constraints, such as media and personal experiences. As described earlier, the 6-year-old participants were not able to give any definition of the term 'mental illness', nor compare the vignettes with other portrayals of mental illness, suggesting that children this young have not yet formed a concept of mental illness. The 9-year-old participants appeared to have some initial concept of mental illness, but their concept lacked the coherence of the mental illness concept that the older participants had. The 9-year-olds did not tend to discuss changing a character's thought patterns as a part of treatment, nor refer to thoughts in definitions of the term 'crazy'. In contrast, the 17-year-olds, and to a lesser extent, 12-year-olds demonstrated in a number of ways that they have a concept of mental illness, as described above. This age progression is consistent with previous research on concept formation (Carey, 1985; Mervis, 1980)

An increasing number of studies have begun to examine adults' concepts or lay theories of mental illness (Furnham, 1995; Furnham & Bower, 1992; Kim & Ahn, 2002). Similarly, a large survey of Australian adults found that adults have set beliefs about the causes and treatments of mental illness (Jorm et al., 1997). But how does this adult concept of mental illness develop? Adults do not simply know a series of unrelated facts about mental illness; instead they have lay theories that they then use to explain particular kinds of difficulties that people face.

Previous studies on children's understandings of mental illness have tended not to examine relationships between different ideas, nor view mental illness as a concept. Instead, research has tended to focus solely on either the influence of mass-media and other external sources on children's knowledge (e.g., Baker et al., 1982) or conversely, taken a purely Piagetian cognitive perspective (e.g., Szajnberg & Weiner, 1996), and thus ignored external influences. The theory proposed here considers the role of both cognitive development (i.e., the restructuring of theories formed earlier in childhood) and external influences, and argues for a conceptual developmental model of children's understandings of mental illness.

The model that is proposed grew out of qualitative analytical methods. The next chapter will offer some recommendations for quantitative studies that could be undertaken to assess further the validity of the current claims. But well designed qualitative studies do not require quantitative support before the claims can be accepted. This thesis has followed Henwood and Pidgeon's (1992) guidelines for ensuring reliability and validity. The model proposed in this thesis has categories that fit the data appropriately, with the connections between different levels of categorisation clearly explained. The categorisation process was driven by theoretical concerns; that is, for every category or sub-category that was proposed, negative case examples were searched for, and if present, these were noted and accommodated. The data analysis process was also well documented and reflexive. Henwood and Pidgeon also argue that good theory should be transferable, and it is argued that the developmental model proposed in this research is relatively transferable. This has been shown by comparing two different studies within the research process, and discussing how findings from previous research support the current claims.

In the concluding chapter, limitations with this research are discussed, and recommendations for future research are suggested. The proposed model has a number of implications for the way mental illness should be taught in schools and talked about with children who have a family member with mental illness, and these are discussed.

## Chapter Seven – Conclusions and implications

This thesis has presented two studies, both of which used qualitative methodologies to analyse children and young people's understandings of mental illness. Study One's thematic analysis led to the emergence of five main categories that children used when discussing vignettes depicting adults with mental health problems. Using grounded theory methods in Study Two, the relationships between children's ideas about causes of, and treatments for mental illness were analysed. From this analysis, six primary categories and one secondary category emerged.

Following this, the two data sets were then combined for further analysis. This analysis led to the development of a new hypothesis to explain age differences in the way children and young people understand mental illness. It is argued that as children grow older, they develop a concept of mental illness, which they can then draw upon when creating stories about characters with mental illness. Children below 12 years old do not yet appear to have developed a concept to specifically explain mental illness, and so instead draw upon other concepts they have already developed to use to explain the vignettes. It is recommended that the current research should be followed with research that can further test the proposed model and address some of the limitations within the current studies.

The hypothesis that mental illness is a concept that develops throughout late childhood and adolescence emerged from the qualitative analyses of the two data sets, and comparing the emerging trends with current theoretical frameworks. Two particularly influential frameworks were Hatano and Inagaki's (2000b) characterisations of conceptual development in children, and Kim and Ahn's (2002) research on adults' lay-concepts of mental illness. This thesis combines elements from those theories to propose a new model. The emergent model proposed here has implications for the development of appropriate school education programmes, explanations of mental illness for children who have a parent with mental illness, and highlights the influence of media portrayals of mental illness on children's understandings.

## **Future research directions**

The overall goal of this thesis was theory development in an area where there is a lack of explanatory models. This has been achieved by the development of a model that explains the age differences found in the ways children understand mental illness. The model grew out of an inductivist approach, with the data analysis process leading to the development of a model which builds on recent theory explaining children's conceptual development. Theoretical frameworks have been used to explain the development of a domain which previous research has not addressed from a conceptual perspective before. Additional research that could support and advance the proposed model is beyond the scope of this thesis. Instead, this section outlines a number of useful directions that future research might be encouraged to follow.

As described in Chapter Two, both quantitative and qualitative methods are important in the research process. This thesis has used qualitative methods because these methods allowed the children and young people to express their ideas about mental illness in their own words, without the researcher having preconceived notions about what will emerge. The qualitative analyses used in this research were an effective tool to aid in the theory development. Nevertheless, caution is required when generalising the results of a qualitative analysis to a broader population.

Whereas quantitative analyses use significance tests that predict whether a difference found in the data can be generalised across a broader population, grounded theory and a number of other qualitative methodologies do not allow for significance tests. Instead, the research presented here followed Henwood and Pidgeon's (1992) recommendations for reliability in qualitative data, and because of this a reasonable degree of transferability can be claimed.

Well-designed quantitative studies, however, could further validate the model proposed in this thesis. Caution would be required in planning these studies in order to ensure that children's own words and ideas were still being expressed, and that the research questions were not encouraging any particular labelling or stigmatisation, as a number of previous studies have done. But appropriate quantitative studies would compliment the current research.

A replication of Kim and Ahn's (2002) study of adults' lay-concepts of mental illness using age-appropriate methodology would be one way to further examine the process of children's development of a concept of mental illness. In order to make the study age-appropriate, illustrated vignettes could replace the prose descriptions of different mental illnesses that the participants were given in Kim and Ahn's study. By showing children a series of cartoon frames, each depicting different symptoms or DSM-IV criteria of a particular mental illness, children's lay-theories of disorder and their categorisation weights for different criteria could be assessed. If the model proposed in this thesis is correct, it would be expected that older children would give similar categorisation weights to criteria as adults would, whereas younger children may be less consistent in their weighting choices, or possibly even give all criteria the same weight.

Further qualitative research is also required within this area. In particular, research that incorporates children's personal experiences of having a relative with psychological difficulties is still needed. Grounded theory would be an effective method for this area of investigation. It is argued in the proposed model that children who have had personal or family experience with mental illness will have a more developed concept of mental illness than other children their age. Future qualitative research could examine these experiences, and how different aspects of the experiences aided children's development of the concept of mental illness, and possibly helped the child cope at a difficult time.

As the goal of the current research was initial theory development, it was deemed important to examine overall age patterns, without also focusing on within-group differences. Future research, however, might investigate whether there are other demographic variables besides age that have an influence on the development of children's concept of mental illness. These demographic variables include gender, ethnicity, and socio-economic status of the participants.

Previous research has found that there may be gender and socio-economic differences in young people's attitudes towards people with mental illness (Lopez, 1991; Norman & Malla, 1983; Roberts, Johnson, & Beidleman, 1984), but no differences in understandings of mental illness due to these variables. There have not, however, been any comprehensive studies that examined all these variables

together, and this would be useful in furthering the research on children's concepts of mental illness.

Similarly, previous research that examined cultural differences in attitudes towards the mentally ill found that ethnicity can influence attitudes towards and understandings of mental illness. Callan et al. (1980) compared the views of Australian and Papua New Guinean adolescents and found some cross-cultural differences in perceptions of mental illness. For example the Papua New Guinean youths were more likely to believe that the psychological problems were caused by a curse or magic than the Australians were.

It is likely that within New Zealand society children's ideas about mental illness will be influenced by these demographic variables, and future research to investigate this research question is recommended. In particular, Maori children may have a more holistic view of health than Pakeha / European children, and future research should address this area. However, it is still argued that regardless of ethnicity, gender, or socio-economic status, all children will develop a concept of mental illness as they grow older, although there may be differences in the content of these concepts. If this is the case, then group differences are expected to be more profound for older children who have a well-formed concept of mental illness, than for younger children that do not. No previous research has examined both ethnic and age differences in ideas about mental illness in the same study.

As well as examining cross-cultural differences, further comparisons between children and adult's ideas about mental illness are needed. Coley (2000) argued that comparative research between children and adult's ideas about folk-biology is vital. In order to understand the process of conceptual development, it is important to be aware of adult's knowledge and beliefs, that is what knowledge is expected to be in a concept once it has developed. Although it is expected that there will be more variation in adults' concepts of mental illness, than there would be for some other folk-biology concepts, Coley's argument holds true for research on development of mental illness concepts, and future research could address this.

The final variable that is likely to influence children and young people's ideas about mental illness that was not addressed in this study was the personal experiences of participants. While a number of children chose to compare elements of a vignette with their own experiences (for example, see page 147), they were



never directly asked to do so. Children's knowledge of mental illness may be influenced by knowing someone who has a mental illness or who works with people with mental illness. It would be interesting to see future research address this area.

The methodologies used in this research were shown to be successful ways to examine ideas about mental illness in children aged 9 years and older. Children in this age group were able to create stories based on the illustrated vignettes, or participate in focus groups. Illustrated vignettes represented a useful methodological innovation made in this research, and could usefully be incorporated in future research.

The 6-year-olds appeared to have more difficulty answering questions about the vignettes in Study One, and for this reason, children this young were not included in Study Two. It is argued that children this young are not able to discuss vignettes about mental illness because they have not yet formed a concept of mental illness. However, it is possible that the methodology used in the study was not appropriate for 6-7 year olds. The language of the vignettes was checked by a teacher of a class of 6-year-olds, and she expected that the vocabulary level was acceptable for children of that age, and the children were able to discuss the vignettes to some degree. Nonetheless, future research would benefit from developing other ways of assessing the ideas about mental illness of children aged 6 years old or younger.

Future research is also required to examine the effectiveness of the applications of this research. For example, school programmes that teach mental illness as a concept might be compared to other programmes that teach only facts about mental illness without encouraging conceptual development. More examples of applications of this research are described in the following implications section.

### **Implications of the model**

This thesis argues that as children grow older, they develop a concept of mental illness. This model has a number of implications for helping children with parents that have mental illness, for education programmes, and for assessing the influence of media.

**Implications for helping children with a parent who has a mental illness**

Scherer et al. (1996) found that children who had a parent with mental illness displayed more behavioural problems than children whose parents did not have a mental illness. As well as this, the authors found that regardless of *actual* level of disorder, there is a relationship between child's *perceptions* of their mother's level of disorder, and the child's own behaviour, that is the more mentally ill the child perceives the mother to be, the more behavioural problems the child will have.

Cowling (1999) surveyed Australian parents with mental illness and mental health workers that worked with families who had a mentally ill parent and found that both groups lamented the lack of information on how to talk to children appropriately about what is happening to the parent. It is envisioned that the model proposed in this thesis can be used to develop guidelines on how to explain to children with a mentally ill parent about mental illness at an appropriate level. Appropriate explanations are expected to have a positive influence on the child's well-being and behaviour, as well as assist in rebuilding parent-child relationships.

According to this model, young children (below 11 – 12 years) do not have a concept of mental illness, but as they grow older this concept develops. Needless to say, there will be a large difference between the ways children respond to vignettes about fictional vignette characters from the way they would respond if a parent was displaying symptoms of mental illness. Nevertheless, the model suggests age-appropriate ways of explaining mental illness to children and young people. If young children do not have a concept of mental illness, then their parent's symptoms should initially be explained to them in specific terms. Very concrete explanations should be used that relate only to the actual symptoms that the child will see. When discussing the vignettes younger children often used responsibility or event explanations. In a similar fashion, young children may think that their parent is behaving in the way due to she or he doing something wrong (a 'responsibility' explanation), or someone else doing something bad to her or him (a common 'event' explanation). In order to address this, the child should be told about all the symptoms she or he will see, and explained that these difficulties are

due to psychosocial problems that the parent is facing, and not due to anything the child has done, nor to the parent having done something wrong.

Young children are not expected to have made the connection between their parent's behaviour and other depictions of mental illness they may have seen, so comparisons between different sorts of mental illness are not initially required. Similarly, children's books that describe a character who has a parent with mental illness will be useful only if the parent in the book and the child's own parent are experiencing similar symptoms. The child is not likely to yet have the capability to draw comparisons on a broader conceptual level, so books about parents with different symptoms or behaviours are not expected to be helpful.

On the other hand, it can be assumed that adolescents will automatically begin to make comparisons between the way their parent is behaving and things they have seen on television or heard at school. Books and television shows aimed at adolescents frequently feature characters with mental illness, and often there are negative outcomes for these mentally ill characters or their families. Therefore, it is important to address these concerns in explanations about mental illness to an adolescent. An adolescent should be told that although her or his parent has a mental illness, that does not necessarily mean that the family will experience the same negative outcomes and difficulties that they have seen elsewhere.

With children of all ages, it is important to emphasise that the parent's problems are not due to anything that the child has said or done. It is also important to ask children what their understandings are in order to address their particular concerns, and ensure that they have enough opportunities to talk about what is happening and have their questions answered.

### **Implications for education**

It is valuable to teach about mental illness for a number of reasons. Firstly, it will be helpful for children to understand what is happening, should a friend or family member develop a mental illness. Secondly, it will make children and young people more aware of symptoms of mental illness, which is likely to increase the chance that they seek appropriate help if required. Thirdly, appropriate mental illness education programmes will serve to reduce stigma and negative attitudes

towards people with mental illness by facilitating a better understanding of the problems.

The goal of an effective mental illness education programme should be to help children and young people develop a concept of mental illness that includes appropriate information. As described in Chapter Six, Au et al. (1999) found that an education programme designed to teach about AIDS to school children was more successful if it facilitated concept development, rather than just teaching a series of seemingly unrelated facts about the disease. The current research and proposed model suggests that education programmes designed to teach about mental illness would benefit from similar goals. That is, instead of teaching children unrelated facts such as 'people with schizophrenia sometimes hear voices' and 'people with mental illness should be treated like everybody else', conceptual development should be encouraged. This concept might follow a biopsychosocial model, incorporating the influence of physiological aspects on mental illness; the ways in which thoughts and behaviours can influence each other and both influence emotions; and finally the role external stressors can play on psychological well-being.

This research has demonstrated that there is a strong relationship between children and young people's ideas about causes of mental illness and their ideas about treatments for mental illness. Therefore it can be expected that the way causes for mental illness are taught will have an influence on young person's help-seeking behaviours. If children view mental health difficulties as being solely due to responsibility causes, that is they have done something wrong, then they may be less inclined to seek help than if they view mental illness as being due to biopsychosocial causes.

### **Implications for media**

Studies examining the way mental illness is depicted in children and adolescents' books and television programmes (Bokey et al., 2000; Wilson et al., 2000) have found that mental illness is generally presented negatively. Particularly concerning is the propensity of media to present mental illness in incorrect or ill-informed negative ways. The characters that experienced psychological difficulties were treated badly by others or were portrayed as villainous. Often the stories had

negative outcomes, even when help was sought (Bokey et al.). This barrage of negative depictions is likely to discourage children and adolescents from seeking help when required, and reinforce negative attitudes towards people with mental illness. Studies involving adult populations have found that there is a relationship between the amount or type of television shows and movies a person watches and their attitudes towards mental illness (Granello & Pauley, 2000; Wahl, 1992).

Within the studies described here, older participants referred to television characters with mental illness more often than younger children did, and these older participants also tended to include more negative outcomes in their stories. While these studies cannot make any claims about causality, or the specific influence of negative media depictions, it is likely that the media portrayals have contributed to participants' negative ideas about mental illness. Therefore, it is important to continue campaigning against negative depictions of mental illness in the media aimed at children and adolescents, as well as in media aimed at adults.

## Conclusions

In the week that I write the conclusion to this thesis, the news reported that a mother suffering from a mental illness stabbed two of her children and tried to burn down the family home. One of the children, a 6-year-old boy, suffered a wound to the spine, and is likely to be paralysed. How will those children begin to understand what has happened to their mother and why she hurt them? How should health professionals, friends and family best explain to these children what mental illness is? There are also wider implications of this tragedy. This sad story has been on the news for a number of days, meaning that other children will also be hearing about and talking about this case. How should other families and teachers explain to children what mental illness is? How should the television coverage present this news item in a way that relates the horror of the event, without implying that all people with mental illness are violent?

This thesis examined children and young people's ideas about mental illness. On the basis of my findings, I argued that as children grow older they develop a concept of mental illness. While younger children have to draw on knowledge from other domains to explain unusual behaviour, children aged 11 – 12

years begin to develop a concept of mental illness, and by 17 years this concept is developed enough to use to explain a range of behaviours which they deem abnormal. While the research presented here will not directly be able to help the children recovering from an attack by their mother, it is hoped that the work I have done here will make a contribution to overall strategies that will help children and young people with a parent suffering from mental illness. Similarly, I believe that my research has some important applications in helping plan education programmes teaching about mental illness and can make a contribution to campaigns arguing for fairer representations of mental illness in the media. If children and young people have a better understanding of what is mental illness then they are more likely to seek help if they require it, and have less negative attitudes towards others with mental health difficulties.

By teaching children about mental illness in age-appropriate ways it is hoped that children will develop a concept of mental illness that will facilitate acceptance and support for those with mental health difficulties, and encourage young people to seek help more readily should they face such problems. It is through appropriate support for children with parents that have mental health problems, well-constructed school programmes, and more active monitoring of media depictions of mental illness that changes can be made that will improve understandings of mental illness within society.

## **Appendices**

- A. Illustrated vignettes used in Study One
- B. Children's information and assent form, participant's and parent's information and consent form (Study One).
- C. Amended vignettes used in Study Two
- D. Email chain letter to recruit participants
- E. An example of memos written during the analysis of Study Two

## Appendix A: Illustrated vignettes used in Study One







## Appendix B: Children's information and assent form

### What do I do now?

Tick the boxes if the words are true.

I know all about the project 😊 ☐

I know I can leave the discussion at any time 😊 ☐

I know my talk will be taped 😊 ☐

I know what will happen to my talk 😊 ☐

Yes,  
I'd like to  
take part
 ☐


No, thank-  
you
 ☐

Name: \_\_\_\_\_

Age: \_\_\_\_\_

4

### What do children think about mental health?



1

### You are invited

To take part in Ben's special project

A lot of children meet people who have trouble with their mental health, but nobody knows much about how children understand what is happening to people with these problems. If we can learn more about what children think about mental health then we will be able to help a lot of children.

For Ben's project for university he will talk to children about what they think about mental health. Ben has spent lots of time talking with children about what they feel and think about different things.

2

If you are happy to help us with this study, you will talk to Ben during school. We will look at some comic strips, and we will talk about what is happening to the people in these comic strips. You won't have to talk about anything that you don't want to and you can end the talk anytime you want. There are no right or wrong answers, and it doesn't matter if you are not sure what to say.

The talk will be taped and then Ben will write down what all the children say. Then Ben will write about what children told him about mental health. The project will be very helpful to people who work with children or young people.

Only Ben will be allowed to listen to the tape of you talking, and nobody else will even be told the names of the children that Ben speaks to. Your name will not be printed in anything that Ben writes for the project.

If you have any questions, or want to know more you can call  
Ben Sedley at university on 472-1000, ext. 8063, or  
email me: Ben.Sedley@vuw.ac.nz

3

## **Parent's information and consent form**

### **Children's understandings of mental health**

Dear Parent,

I am a psychology student at Victoria University of Wellington. As part of this programme, I am undertaking a PhD thesis. For my thesis I am examining age differences in the way children understand mental health. This is an area we know very little about, and research into this area could help a lot of children.

I will carry out group discussions with children, where they will discuss their understandings of mental health with other children from their class. During the group discussion, there will be no specific questions relating to the mental health of any of the children's own families or themselves. Rather all questions will be about fictional comic strip stories about adults with mental health problems. The discussion should take approximately half an hour, and will be audio-taped. Children can leave the discussion and return to class any time they wish, without having to give any explanation. Parents also have the right to withdraw their child from the study at any time. Group discussions will be conducted in your child's school.

No identifying material about particular children will be used in any publications about my research. I will be the only person with access to the tape recordings and transcripts of the interviews. My research supervisors and a research assistant may also read the transcripts once all material that could identify participants has been removed. At the end of my research all tapes will be destroyed.

If you have any further questions about my research, please feel free to contact me on 472-1000, ext. 8063, or email me: [Ben.Sedley@vuw.ac.nz](mailto:Ben.Sedley@vuw.ac.nz). My supervisor, Dr. Jan Pryor can be contacted on 472-1000, ext. 8130, or email [Jan.Pryor@vuw.ac.nz](mailto:Jan.Pryor@vuw.ac.nz). If you consent to your child participating in this research, please return the attached consent form to your child's teacher. I have also attached a letter for your child explaining my research, this letter should be brought to the interview, and your child can sign it after they have had the opportunity to ask me questions about the study. If you would like to receive a summary of my results, please include your address on the consent form.

I thank you for considering allowing your child to participate,

Yours Sincerely,

Ben Sedley

## Children's understandings of mental health

### Parental consent form

Please complete this consent form and then give it to your child to return to the school.

I have read and understood the information given to me regarding Ben Sedley's research on children's understanding of mental health. I have also had the opportunity to ask questions about the study, and have them answered.

- I \_\_\_\_\_ consent to my child participating in this study
- I understand that the discussion will be audio tape recorded
- I understand that I have the right to withdraw my child from the study at any time, and that my child also has the right to withdraw from participating or leave the discussion and return to class when they wish without having to give an explanation..
- I understand that the tapes and transcripts of the discussion will be stored securely until they are no longer needed and then destroyed.

Signed.....

Date.....

Name of child.....

I would like to be sent a summary of the report. Please circle: Yes / No

My address is:

.....  
.....  
.....

THANK YOU VERY MUCH FOR YOUR HELP.

## Appendix C: Amended vignettes used in Study Two



## **Appendix D: Email chain letter to recruit participants**

FREE MOVIE TICKET!!!

Ben Sedley, a psychology student at Victoria University of Wellington is doing some research on young people's ideas about mental health. This research will help a lot of families who have a family member with mental health issues.

I am hoping to interview some people aged 17 - 18 for this study. Each interview will only take 15 - 25 minutes and we can schedule it at any time that suits you. During the interview we will look at some cartoon strips and make up stories about what we think is happening in each one. The discussion will only be about fictional characters, there will be no questions about any participants or their families and friends. All people in this age group are invited to participate, regardless of experience or knowledge.

Everyone who participates will receive a free movie ticket, which can be used at any HOYTS cinema any time.

If you are interested in participating, call Ben on 463-5233, extension 8063 (if you get the answer machine, leave your name and number), or email me:  
[Ben.Sedley@vuw.ac.nz](mailto:Ben.Sedley@vuw.ac.nz)

Thanks for your help

Ben Sedley  
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## **Appendix E: Example of some memos written during the analysis of Study Two**

The following sentence is taken from the transcript of the interview with Derek, a 9-year-old boy. In this sentence he is explaining why Eddie is hearing voices:

Maybe he did something really really bad, and he hears people saying  
how bad he is.

During the coding process, the following memos were made about the sentence above:

- a) This passage looks like it is talking about responsibility, guilt or fault [memo about naming the code].
- b) Is the bad thing always intentional? Compare with 9-year-old Dennis: 'maybe he accidentally killed somebody' [Memo discussing what whether intent is required in this code definition].
- c) Think about the relationship between fault and guilt – you can have fault without guilt – but would it affect the character the way it has? You can have guilt without fault, but doesn't seem likely in stories by children. Could Guilt be a better name for this category? Could this whole category be a sub-category of psychological explanations? [This memo considers possible elements for this category].
- d) Connections between passages marked as 'Fault' and 'Do Something Good': This participant said Eddie did something bad, and to fix the problem Eddie should do something good [memo considers the relationship between different categories].
- e) Two 9-year-olds suggest doing something good now, instead of actually resolving the earlier wrong-doing, whereas the 12-year-olds that mentioned fault all suggest ways of righting the wrong, and the 17-year-olds bring in some

psychological aspect of dealing with the guilt psychologically as well [memo considers age differences in the way participants use categories].

f) This participant says 'maybe he did something really bad, and he hears people saying how bad he is' – could this connect back to Kohlberg's stages of moral reasoning? Stage 2 – would be egocentric – he is bad if he gets punished; Stage 3 would be good boy – he is bad if he looks bad; Stage 4 would be law and order – he is bad because he is breaking rules? Or he isn't bad because it's not his fault? (or is this Stage 5?). None of the characters get punished, so maybe I wouldn't expect any Stage 2 (?), and maybe higher stages (4 – 5) wouldn't consider his 'badness' – does everything categorised as Fault fit into stage 3? [This memo considers possible theoretical explanations for the participant's ideas].



## References

- Adler, A. K., & Wahl, O. F. (1998). Children's beliefs about people labelled mentally ill. *American Journal of Orthopsychiatry*, 68, 321-326.
- Ahn, W. K., Gelman, S. A., Amsterlaw, J. A., Hohenstein, J., & Kalish, C. W. (2000). Causal status effect in children's categorization. *Cognition*, 76, B35-B43.
- American Psychological Association. (1994). *Diagnostic and statistical manual of mental disorders (4th Ed.)*. Washington, DC: Author.
- Annells, M. (1996). Grounded theory method: Philosophical perspectives, paradigm of inquiry, and postmodernism. *Qualitative Health Research*, 6, 379 - 393.
- Au, T. K., Romo, L. F., & DeWitt, J. E. (1999). Considering children's folkbiology in health education. In M. Siegal & C. C. Petersen (Eds.), *Children's understandings of biology and health* (pp. 209 - 234). Cambridge: Cambridge University Press.
- Baker, D., Bedell, J., & Prinsky, L. (1982). Children's perceptions of mental illness: A partial test of Scheff's hypothesis. *Symbolic Interactions*, 5, 343-356.
- Barter, C., & Renold, E. (2000). 'I wanna tell you a story': exploring the application of vignettes in qualitative research with children and young people. *International Journal of Social Research Methodology*, 3, 307 - 323.
- Battaglia, J., Coverdale, J. H., & Bushong, C. P. (1990). Evaluation of a Mental Illness Awareness Week program in public schools. *American Journal of Psychiatry*, 147, 324-329.
- Beardslee, W. R., Versage, E., & Gladstone, T. (1998). Children of affectively ill parents: A review of the past 10 years. *Journal of the American Academy of Child Psychiatry*, 37, 1134 - 1141.
- Bokey, K. M., Walter, G., & Rey, J. M. (2000). From Karrawingi the emu to Care factor zero. *Medical Journal of Australia*, 173, 625 - 628.
- Buckingham, D. (1991). What are words worth? Interpreting children's talk about television. *Cultural Studies*, 5, 228-245.
- Burr, V. (1995). *An introduction to social constructionism*. London: Routledge.
- Buston, K., Parry-Jones, W., Livingston, M., Bogan, A., & Wood, S. (1998). Qualitative research. *British Journal of Psychiatry*, 172, 197 - 199.
- Byers, P. Y., & Wilcox, J. R. (1991). Focus Groups: A qualitative opportunity for researchers. *Journal of Business Communication*, 28, 63 - 78.
- Callan, V. J., Wilks, J., & Forsyth, S. (1983). Cultural perceptions of the mentally ill: Australian and Papua New Guinean high school youth. *Australian & New Zealand Journal of Psychiatry*, 17, 280-285.
- Carey, S. (1985). *Conceptual change in childhood*. Cambridge, MA: MIT Press.
- Carey, S., & Markman, E. M. (1999). Cognitive development. In B. M. Bly & D. E. Rumelhart (Eds.), *Cognitive science: Handbook of perception and cognition* (2nd ed., pp. 201-254). San Diego, CA, US: Academic Press, Inc.
- Castleberry, K. (1988). Helping children adapt to the psychiatric hospitalization of a parent. *Psychiatric Hospital*, 19(4), 155-160.
- Charmaz, K. (1995). Grounded theory. In J. A. Smith, R. Harre & L. Van Langenhove (Eds.), *Rethinking methods in psychology* (pp. 27 - 49.). London: Sage.

- Christensen, H., & Griffiths, K. (2000). The Internet and mental health literacy. *Australian & New Zealand Journal of Psychiatry*, 34, 975-979.
- Coie, J. D., & Pennington, B. F. (1976). Children's perceptions of deviance and disorder. *Child Development*, 47, 407-413.
- Coley, J. D. (2000). On the importance of comparative research: The case of folkbiology. *Child Development*, 71, 82-90.
- Commonwealth Department of Health and Family Services. (1997). *Research and consultation among young people on mental health issues: Final Report*. Canberra, ACT: Author.
- Conant, S., & Budoff, M. (1983). Patterns of awareness in children's understanding of disabilities. *Mental Retardation*, 21, 119 – 125.
- Cowan, S. (1999). Understanding public opinion relating to the establishment of community mental health facilities: Implications of a discourse analytic approach. *Journal of Community & Applied Psychology*, 9, 289 - 307.
- Cowling, V. (1999). Providing services to children and families where the parent has a mental health problem: the Australian experience. In A. Weir & A. Douglas (Eds.), *Child protection and adult mental health: Conflict of interest?* (pp. 163 - 172). Oxford: Butterworth Heinemann.
- Davis, J. M. (1998). Understanding the meanings of children: A reflexive process. *Children & Society*, 12, 325 - 335.
- De Rosa, A. S. (1987). The social representations of mental illness in children and adults. In W. Doise & S. Moscovici (Eds.), *Current Issues in European Social Psychology*. (Vol. 2, pp. 47-138). Cambridge: Cambridge University Press.
- Dollinger, S. J., & Thelen, M. H. (1978). Children's perceptions of psychology. *Professional Psychology*, 9, 117-126.
- Dollinger, S. J., Thelen, M. H., & Walsh, M. L. (1980). Children's conceptions of psychological problems. *Journal of Clinical Child Psychology*, 191-194.
- Dunn, D. S. (1999). *The practical researcher: A student guide to conducting psychological research*. Boston, MA: McGraw Hill College.
- Durie, M. (1994). *Whaiora: Maori Health Development*. Auckland, New Zealand: Oxford University Press.
- Feldman, R. A., Stiffman, A. R., & Jung, K. G. (1987). *Children at risk: In the web of parental mental illness*. New Brunswick, NJ: Rutgers University Press.
- Furnham, A. (1995). Lay beliefs about phobia. *Journal of Clinical Psychology*, 51, 518 - 525.
- Furnham, A., & Bower, P. (1992). A comparison of academic and lay theories of schizophrenia. *British Journal of Psychiatry*, 161, 201 - 210.
- Glaser, B. G., & Strauss, A. (1965). *Awareness of dying*. Chicago: Aldine.
- Gollop, M. M. (2000). Interviewing children: A research perspective. In A. B. Smith, N. J. Taylor & M. M. Gollop (Eds.), *Children's voices: Research, policy and practice*. (pp. 18-36). Auckland, New Zealand: Longman.
- Granello, D. H., & Pauley, P. S. (2000). Television viewing habits and their relationship to tolerance toward people with mental illness. *Journal of Mental Health Counseling*, 22(2), 162-175.
- Harris, P. L., Brown, E., Marriott, C., Whittall, S., & Harmer, S. (1991). Monsters, ghosts and witches: Testing the limits of the fantasy reality distinction in young children. *British Journal of Developmental Psychology*, 9, 105 -123.

- Hatano, G., & Inagaki, K. (1994). Young children's naive theory of biology. *Cognition*, 50, 171 - 188.
- Hatano, G., & Inagaki, K. (2000a). Domain-specific constraints of conceptual development. *International Journal of Behavioral Development*, 24, 267-275.
- Hatano, G., & Inagaki, K. (2000b). Knowledge acquisition and use in higher-order cognition. In K. Pawlik & M. R. Rosenzweig (Eds.), *International handbook of psychology* (pp. 167 - 190). London: Sage.
- Henderson, P. (1993). Coping with mental illness: A program for middle school students. *Elementary School Guidance & Counseling*, 27(3), 198-208.
- Henwood, K. L., & Pidgeon, N. F. (1992). Qualitative research and psychological theorizing. *British Journal of Psychology*, 83, 97 - 111.
- Hill, M., Laybourn, A., & Borland, M. (1996). Engaging with primary-aged children about their emotions and well-being: Methodological considerations. *Children & Society*, 10, 129 - 144.
- Hirschfeld, L. A., & Gelman, S. A. (1994). *Mapping the mind: Domain specificity in cognition and culture*. New York: Cambridge University Press.
- Horner, S. D. (2000). Focus on research methods: Using focus group methods with middle school children. *Research in Nursing & Health*, 23, 510 - 517.
- Inagaki, K. (1990). Young children's use of knowledge in everyday biology. *British Journal of Developmental Psychology*, 8, 281 - 288.
- Johnson, E. D. (2000). Differences among families coping with serious mental illness: A qualitative analysis. *American Journal of Orthopsychiatry*, 70, 126-134.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). Mental health literacy - a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166(4), 182-186.
- Kalafatelis, E., & Dowden, A. (1997). *Public knowledge of, and attitudes to, mental health and mental illness*. Wellington, New Zealand: Ministry of Health, Business Research Centre.
- Kalter, N., M., & Marsden, G. (1977). Children's understanding of their emotionally disturbed peers. II. Etiological factors. *Psychiatry*, 40, 48 - 54.
- Kim, N. S., & Ahn, W. K. (2001). *Theory-based reasoning in clinical psychologists*, from <http://www.hcrc.ed.ac.uk/cogsci2001/pdf-files/0494.pdf>
- Kim, N. S., & Ahn, W. K. (2002). The influence of naive causal theories on lay concepts of mental illness. *The American Journal of Psychology*, 115, 33 - 65.
- Lilienfeld, S. O., & Marino, L. (1995). Mental disorder as a Roschian concept: A critique of Wakefield's "Harmful Dysfunction" Analysis. *Journal of Abnormal Psychology*, 104, 411 - 420.
- Lopez, L. R. (1991). Adolescents' attitudes toward mental illness and perceived sources of their attitudes: An example of pilot data. *Archives of Psychiatric Nursing*, 5(5), 271-280.
- Marsden, G., & Kalter, N. (1976). Children's understandings of their emotionally disturbed peers I: The concept of emotional disturbance. *Psychiatry*, 39, 227 - 238.

- Marsden, G., Kalter, N., Plunkett, J. W., & Barr-Grossman, T. (1977). Children's social judgements concerning emotionally disturbed peers. *Journal of consulting and clinical psychology*, 45, 948.
- Meadows, S. (1993). *The child as thinker: The development and acquisition of cognition in childhood*. London: Routledge.
- Mervis, C. B. (1980). Category structure and the development of categorization. In R. J. Spiro, B. C. Bruce & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension: Perspectives from cognitive psychology, linguistics, artificial intelligence and education*. (pp. 279 - 307). Hillsdale, NJ: Lawrence Erlbaum.
- Ministry of Education. (1999). *Health and physical education in the New Zealand curriculum*. Wellington, New Zealand: Learning Media Limited.
- Morris, S. C., Taplin, J. E., & Gelman, S. A. (2000). Vitalism in naive biological thinking. *Developmental Psychology*, 36, 582 - 595.
- Morrow, V., & Richards, M. (1996). The ethics of social research with children: An overview. *Children & Society*, 10, 90 - 105.
- Morse, J. M. (1994). "Emerging from the data": The cognitive processes of analysis in qualitative inquiry. In J. M. Morse (Ed.), *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage.
- Murphy, G. L., & Medin, D. L. (1985). The role of theories in conceptual coherence. *Psychological Review*, 92, 289 - 316.
- New Zealand Ministry of Foreign Affairs and Trade. (1997). *Convention on the rights of the child: Presentation of the initial report of the government of New Zealand*. Wellington, New Zealand: Author.
- Norman, R. M. G., & Malla, A. K. (1983). Adolescents' attitudes towards mental illness: Relationship between components and sex differences. *Social Psychiatry*, 18, 45-50.
- Oates, M. (1997). Patients as parents: The risk to children. *British Journal of Psychiatry*, 170(Suppl 32), 22-27.
- Patton, M. Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- Prinsky, L., & Bedell, J. (1984). Children's perceptions of deviance: Labeling theory and alcohol abuse. *Journal of Drug Issues*, 14, 509 - 525.
- Rennie, D. L., Phillips, J. R., & Quartaro, G. K. (1988). Grounded theory: A promising approach to conceptualization in psychology? *Canadian Psychology*, 29(2), 139-150.
- Ritsher, J. E. B., Coursey, R. D., & Farrell, E. W. (1997). A survey on issues in the lives of women with severe mental illness. *Psychiatric Services*, 48, 1273-1282.
- Roberts, M. C., Johnson, A. Q., & Beidleman, W. B. (1984). The role of socioeconomic status on children's perceptions of medical and psychological disorders. *Journal of Clinical Child Psychology*, 13, 243-249.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and categorization* (pp. 27 - 48). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Scherer, D. G., Melloh, T., Buyck, D., Anderson, C., & Foster, A. (1996). Relation between children's perceptions of maternal mental illness and children's psychological adjustment. *Journal of Clinical Child Psychology*, 25, 156 - 169.

- Scholnick, E. K. (1983). *New trends in conceptual representation: Challenges to Piaget's theory?* Hillsdale, NJ: Lawrence Erlbaum.
- Secker, J., Armstrong, C., & Hill, M. (1999). Young people's understanding of mental illness. *Health Education Research*, 14, 729 - 739.
- Shachnow, J. (1987). Preventive intervention with children of hospitalized psychiatric patients. *American Journal of Orthopsychiatry*, 57(1), 66-77.
- Smith, E. E., & Medin, D. L. (1981). *Categories and concepts*. Cambridge, MA: Harvard University Press.
- Sones, S. (1999). *Stop pretending: What happened when my big sister went crazy*. London: Orion Children's Books.
- Spitzer, A., & Cameron, C. (1995). School-age children's perceptions of mental illness. *Western Journal of Nursing Research*, 17, 398 - 415.
- Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Thousand Oaks, CA: Sage.
- Strauss, A., & Corbin, J. M. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273 - 285). Thousand Oaks, CA: Sage.
- Szajnberg, N. M., & Weiner, A. (1996). The child's conception of psychiatric cure. *Child Psychiatry & Human Development*, 26, 247 - 254.
- Urquhart, C. (2001). An encounter with Grounded Theory: Tackling the practical and philosophical issues. In E. M. Trauth (Ed.), *Qualitative research in information systems* (pp. 104 - 140). Hershey, PA: Idea Group.
- Villeneuve, C., Berube, H., Ouellet, R., & Delorme, A. (1996). Prevention concerning mental health: the adolescent's perspective. *Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie*, 41, 392-399.
- Wahl, O. F. (1992). Mass media images of mental illness: A review of the literature. *Journal of Community Psychology*, 20, 343 - 352.
- Wakefield, J. C. (1992). The concept of mental disorder: On the boundary between facts and social values. *American Psychologist*, 47, 373 - 388.
- Wakefield, J. C. (1999). Evolutionary versus prototype analyses of the concept of disorder. *Journal of Abnormal Psychology*, 108, 374-399.
- Weiss, M. F. (1986). Children's attitudes towards the mentally ill: A developmental analysis. *Psychological Reports*, 58, 11 - 20.
- Weiss, M. F. (1994). Children's attitudes towards the mentally ill: An eight-year longitudinal follow-up. *Psychological Reports*, 74, 51 - 56.
- Wells, J. E., Bushnell, J. A., Hornblow, A. R., Joyce, P. R., & Oakley-Browne, M. A. (1989). Christchurch Psychiatric Epidemiology Study: I. Methodology and lifetime prevalence for specific psychiatric disorders. *Australian & New Zealand Journal of Psychiatry*, 23, 315-326.
- Willig, C. (2001). *Introducing qualitative research in psychology: Adventures in theory and method*. Buckingham, United Kingdom: Open University Press.
- Wilson, C., Nairn, R., Coverdale, J., & Panapa, A. (2000). How mental illness is portrayed in children's television: A prospective study. *British Journal of Psychiatry*, 176, 440-443.
- Wolcott, H. (1994). *Transforming qualitative data*. Thousand Oaks, CA: Sage.