Adolescents' Stigmatisation of Mental Illness

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Abstract

Mental illness stigma has a harmful impact on individuals experiencing mental illness and reduces help-seeking behaviour. Adolescents in particular may be the most vulnerable to the effects of stigmatisation. This means that identifying possible stigma within the adolescent population is the first of several important steps to increase social support and help seeking behaviour and support adolescents with mental illness. This study examines how the knowledge that someone has a mental illness affects cognitions about that person.

The hypothesis is that adolescents will stigmatise mental illness, and that that stigma will be similar to adults' stigma of mental illness. The study also hypothesises that adolescents' experiences with mental illness will impact of their thoughts or stigmatisations. One hundred and nine adolescents were randomly assigned to one of two groups who watched a video depicting a person being interviewed for a job. Only one group was told that this man had a mental illness. The two groups completed Likert scale measures which evaluated their perceptions of the man. After the questionnaire had been completed, the experimental group completed a questionnaire about their experiences of mental illness and their contact with people experiencing mental illness. The results showed that overall the adolescents did not stigmatise the man with mental illness, however three individual responses to the questions showed stigmatisations about hostility, competence as a parent, or as someone to go to for help with problems. The results also showed that the adolescents' experiences with mental illness did not impact on their cognitions about the man. These findings are contrary to the literature which although limited, particularly in New Zealand, reveals that

adolescents stigmatise mental illness similarly to adults, with experience as a

mediating factor. Implications of the findings are discussed.

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"Mā te kōrero ka mōhio, mā te mōhio ka mārama, mā te mārama ka mātau, mā te mātau ka or ate iwi. Whaia te pae tawhiti kia tata Whaia te pae tata kia tū."

"Through discussion we learn, through learning we are enlightened, through enlightenment we are empowered, through empowerment the well-being of the people is achieved. Pursue your dreams until they become a reality."

God Bless.

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CHAPTER ONE: INTRODUCTION

Introduction

Stigmatisation of individuals with mental illness has a negative effect on their quality of life, help seeking behaviour, treatment outcomes, and on the individual's self-esteem and self-efficacy. Reducing stigmatisation of individuals with mental illness will improve help-seeking behaviour, treatment participation, quality of life, self-esteem and self-efficacy, and the course of the individual's mental illness (Link & Phelan, 2006). Although some interventions to reduce stigmatisation have been aimed at adolescents, few studies have looked at what type and degree of stigmatisations about individuals with mental illness are made by adolescents. Typical stigmatising ideas that the general public have about individuals experiencing mental illness are that they lack competence, are unpredictable, unreliable and dangerous (Link & Phelan, 2006).

This study aims to identify cognitions and possible stigmatisations of mental illness that exist in a sample of New Zealand adolescents. A better understanding of this may enable more targeted interventions to reduce any stigmatisations, support positive cognitions, and provide a baseline to aid in the measurements of any future intervention's success.

Background

Research estimates that in New Zealand in 2006 the life time prevalence for a mental illness was 39.5%. The prevalence's for all disorders were higher in younger age groups and the estimated projected lifetime risk of any disorder at

age 75 was 46.6%, with the average age of onset as 18. (Oakley Browne, Wells, & Scotts, 2006).

Despite these high prevalence rates and the relatively common occurrence of mental illnesses such as depression and anxiety, negative attitudes towards mental illness remain common place. The way in which the majority of individuals conceptualise mental illness has a harmful impact on people with serious mental illness (Vaughan & Hansen, 2004). The majority of public attitudes towards and beliefs about individuals with mental illness negatively label and characterise those individuals and can therefore be described as 'stigmatisations'(Arboleda-Florez, 2003).

Defining Stigma

Several theories of stigma exist, the most parsimonious being the social cognitive model of stigma which states that stigma is comprised of three components: a stereotype, knowledge structure learned by most members of a social group which leads to prejudice, and endorsement of the negative stereotype which leads to discrimination and a behavioural reaction to the prejudice (P.W Corrigan, 2004; Watson, Ottati, & Corrigan, 2003). It is theorised that there are three types of stigma. Firstly, self-stigma is a stereotyped prejudice and discrimination about oneself for belonging to a stigmatised group. Secondly, structural stigmas are policies of organisations that yield consequences that hinder the options of people with mental illness. Thirdly, public stigma is the way in which the public reacts to a group based upon stigmatisations about that group (P.W. Corrigan, Markowitz, & Watson, 2004; P.W Corrigan & Watson, 2002;

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Watson, et al., 2003). While all three levels of stigma are important, this paper focuses on public and self-stigma.

Popular public stigmatisations

A discourse analysis of New Zealand media and government print materials involving mental illness found themes of vulnerability, risk, dangerousness, and threat (Coverdale, Nairn, & Claasen, 2002). An Australian national survey found that Australians were more likely to endorse stigmatizing statements individuals with mental illness, particularly the items concerning dangerousness and unpredictability (Reavley & Jorm, 2011). These findings are consistent with international findings of public stigmatisation of mental illness (P.W Corrigan et al., 2010; P.W Corrigan, River, & Lundin, 2000; Coverdale, Nairn, & Claasen, 2002; El-Badri & Mellsop, 2007) . The dominant impression of the general public was that mental illness leads to unpredictable behaviour, non-responsibility and loss of control. It is also thought that individuals with mental illness are responsible for their condition, have a low IQ, are weak and unable to function, to hold down a job, or have anything to contribute in comparison to individuals without mental illness. (Canadian Mental Health Association & Ontario division, 1994; P.W Corrigan, et al., 2010; P.W Corrigan, et al., 2000). Another dominant stigmatisation found both overseas and in the New Zealand media, was that individuals experiencing mental illness were more violent and dangerous than the general population. (Canadian Mental Health Association & Ontario division, 1994; Coverdale, et al., 2002; Link, Phelan, Bresnshan, Stueve, & Pescosolido, 1999). In a recent pilot study, completed in New Zealand, it was found that even children hold the stigmatisation that individuals with mental

health difficulties are more dangerous that the general population (Riley, 2009).

In a study by the Ontario Division of the Canadian Mental Health Association,

88% of participants interviewed held the stigmatisation that individuals

experiencing mental illness were dangerous and violent (1994). The National

Stigma Study in America indicated that stigmatizing reactions from the public are

highest toward adolescents and in particular adolescents who demonstrate

emotional and behavioural disorders (Martin, Pescosolido, Olafsdottir, & Mcleod,

2007). Research has also found that individuals who sought assistance for

depression were rated as more emotionally unstable, less interesting and less

confident than those described as seeking help for back pain or those described as

not seeking help for depression. It therefore appears that stigma is not only

associated with having a mental illness but also seeking help for it (Ben-Porath,

2002). As a result, it seems that it is not just having a disorder but seeking help for

that disorder that is stigmatized (Vogel, Wade, & Hackler, 2007).

Common Self Stigma

Self-stigma is the internalisation of these popular stigmatisations by

individuals experiencing mental illness. For example, they may think that they are

weak, inferior or inadequate. This self-stigmatisation causes loss of self-efficacy

and self-esteem (P.W Corrigan, et al., 2010; P.W Corrigan & Watson, 2002). Self-

efficacy refers to an individual's beliefs about their capability to achieve

designated levels of performance (Blankertz, 2001). Self-esteem is defined as a

person's appraisal of himself or herself at an emotional level (Blankertz, 2001).

This self-stigmatisation, loss of self-efficacy and low self-esteem also has a

negative effect on the daily quality of life that individuals with mental illness

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experience (Blankertz, 2001; P.W Corrigan, et al., 2010; P.W Corrigan & Watson, 2002). For instance, stigmatisation and self-stigmatisation can reduce the individual's sense of self-esteem and self-efficacy by creating an expectation that people with mental illness are unable to live up to the responsibilities of everyday living (P.W Corrigan & Watson, 2002).

The effects of Stigma

Stigma and help seeking

Stigmatisation of mental illness has a negative effect on help-seeking behaviour. The most often cited reason for why individuals do not seek help for mental illness is the stigma associated with mental illness and seeking treatment (P.W Corrigan, 2004). Stigmatisation of mental illness has several harmful effects on individuals experiencing mental illness. The first is that stigmatisation and fear of stigmatisation by individuals or groups about mental illness, as well as self-stigmatisation by those experiencing mental illness can result in a delay and reduction in help-seeking behaviour (P.W Corrigan, 2004; P.W Corrigan & Kleinlein, 2005; Link & Phelan, 2006). Help-seeking behaviour by individuals experiencing mental health difficulties enables early treatment, which leads to positive outcomes (P.W Corrigan & Kleinlein, 2005). In light of the previously discussed stigmatizations, that others have of those who seek psychological services, it is not a surprise that individuals hide their psychological concerns and avoid treatment in order to limit the harmful consequences associated with being stigmatized (P. W Corrigan & Matthews, 2003).

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Stigmatisation and treatment participation

Stigmatization can also result in a lack of ongoing participation in treatment from people who are suffering from mental illness (P.W Corrigan, 2004; P.W Corrigan & Kleinlein, 2005; Link & Phelan, 2006). Both processes, the avoidance of seeking treatment and lack of participation in treatment is damaging for those experiencing mental illness. This is because help seeking behaviour, treatment and treatment adherence have been shown to contribute to positive outcomes for people experiencing mental illness (P.W Corrigan & Kleinlein, 2005; Freidl, Spitzl, & Aikner, 2008; Link & Phelan, 2006).

Stigma and social disadvantage

Not only does mental illness stigmatisation cause a reduction in help seeking behaviour and participation in treatment but this stigma also places individuals experiencing mental illness at a substantial social disadvantage with respect to resources and life chances (Link & Phelan, 2006). For example, mental health stigmatisation has an effect on the distribution of employment opportunities, housing, and medical care (Link & Phelan, 2006). The stigmatisation of individuals with mental illness also increases their exposure to risks and limits their protective factors, both of which may also add to their difficulties (P.W Corrigan, 2004; Link & Phelan, 1995, 2006). For instance, stigmatisation of individuals experiencing mental illness may cause a loss in access to services or positive reinforcement through social activities (P.W Corrigan & Watson, 2002). The stress involved with the above processes as well as the experiences themselves can worsen the clinical course of the individual's stigmatised illness (Link & Phelan, 2006). Even the constant threat of being

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stigmatised can have negative effects on physical and mental health (Link & Phelan, 2006).

Stigma's and quality of life

Popular stigmatisations also affect the quality of life for individuals experiencing mental illness. It impacts negatively on their work, living, and health goals, their self-esteem and self-efficacy (P.W Corrigan, et al., 2010; El-Badri & Mellsop, 2007; Vaughan & Hansen, 2004).

Self-stigmatization

Stigmatisation by others and self stigma can also contribute to the deterioration of mental health and the course of an individual's illness (Link & Phelan, 2006). Illness perceptions are found to predict patients' wellbeing and outcomes across a variety of chronic physical illnesses (Cameron & Leventhal, 2003) as well as mental illness (Lobban, Barrowclough, &Jones, 2004; McCabe & Priebe, 2004).

Reducing Stigmatisation

A study by Corrigan (P.W Corrigan, et al., 2010) suggested that disclosure of mental health difficulties was found to reduce self-stigma. Another earlier study demonstrated that stigmatisation and lack of social support contributed to continuing psychological distress (Regehr, Vicki, Blank, Barath, & Gaaciuk, 2007). Together these findings illustrate the need for a supportive and stigma-free environment to encourage disclosure of mental illness and reduce psychological distress. Another study found that individuals who have more contact with people experiencing mental illness perceive them to be significantly less dangerous than

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those without such contact; even though they are more likely to have been exposed to threatening or violent behaviour (Phelan & Link, 2004).

Adolescent Stigmatisation of Mental Illness in New Zealand

Anti stigma campaigns

As discussed above, the reduction of mental illness stigma is important for the quality of life, help-seeking behaviour, self-efficacy and self-esteem, and treatment outcomes. This is recognized as important in New Zealand as evidenced by the *Like Minds, Like Mine* campaign with ex All Black John Kirwan. The campaign is a Ministry of Health national, publicly funded public education programme aimed at reducing the stigma and discrimination associated with mental illness (Vaughan & Hansen, 2004). This campaign has developed interventions designed to reduce stigma of mental illness within New Zealand (Vaughan & Hansen, 2004). The results of this campaign were positive. All the attitudes targeted showed improvements. In particular the attitudes of shame, social rejection, and dangerousness in regards to mental illness showed positive changes (Wyllie, Cameron, & Howearth, 2008). Similar results have been found by anti-stigma campaigns in Australia. The Australian Beyond Blue campaign was found to have a positive effect on beliefs and benefits of help seeking for depression (Jorm, Christensen, & Griffiths, 2005). Neither of these campaigns look specifically at adolescent stigmatisation of mental illness (Jorm, Christensen, & Griffiths, 2005; Wyllie, et al., 2008).The result of this limited research is that targeted interventions and evaluation of anti-stigma campaigns or education interventions aimed specifically for adolescents is difficult. This also means that

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with no valid baseline of data about existing youth stigmatizations of mental illness, there is no way to monitor whether anti-stigma campaigns, such as the Like Minds, Like Mine campaign are having a positive impact on any existing youth attitudes towards mental health.

Reasons to address Adolescent stigmatisation of mental illness

Addressing stigmatisation of mental health within the adolescent population is seen by many as important because the symptoms of mental illness are often present during adolescent years (Sartorius & Schulze, 2005) and will affect up to thirty six percent of young people by the time they reach the age of eighteen years (Disley, 1997). The most common mental health problems that Australian adolescents will experience are depression, anxiety and substance use disorders (Rickwood & White, 2007). Roughly 2-9% of adolescents under 18 will experience depression, 6-9% anxiety. Other common problems include attention deficit hyperactivity disorder, conduct disorder, problems with body image, self-evaluation, eating disorders, self-harm and suicide (Rickwood & White, 2007). Developmental precursors are highly likely to be evident in childhood and mental illnesses that have their origin in childhood and adolescence, like attention deficit hyperactivity disorder (ADHD), learning disorders, child onset conduct disturbance, and depression are likely to persist into adulthood. This means that identification of mental illness stigmatisation, which reduces help-seeking and therefore early assessment and intervention during adolescence is important (Beauchaine & Hinshaw, 2008).

Another reason to address mental illness stigma within the adolescent population is the relationship between some mental illnesses and suicide. Some of

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the factors associated with suicide include having a mental illness, most commonly a mood disorder like depression, being a youth between the ages of fifteen and twenty four, a perceived lack of social support and stressful life events. In New Zealand suicide is the second leading cause for death after accidents, for young people. Each year there are approximately 5,000 non-fatal suicide attempts which need hospitalisation (Ministry of Health, 2006). Ninety percent of those who die by suicide or make attempts in New Zealand, have at least one mental disorder at the time of the attempt (Beautrais, 2001). Other precipitating factors for suicide that many adolescents face include stresses such as separation of parents, conflict with parents or partner, a high stress family and exam failure (Beautrais, Collings, Ehrhardt, & Henare, 2005; Carr, 2006).

Factors which influence adolescent cognitions

There are several factors which impact on adolescent's cognition. Their developmental level is one important factor. Typically, as an adolescent, the expression of emotions becomes governed by self-presentation strategies which are used for impression management (Saarni, 1999). Adolescents also learn to recognise their and others' emotions, and manage these in ways that are increasingly informed by moral principles (Saarni, 1999). In addition adolescents become aware of the importance of mutual and reciprocal emotional self disclosure in maintaining friendships (Saarni, 1999). Based on Piaget's stages of cognitive development (Piaget, 1932), most adolescents like most adults, have reached the final stage of cognitive development, the formal operational period. This means that they are able to use relativistic thought and see that others' behaviour is influenced by situational factors. Nevertheless, for some this stage is

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also characterised by cognitive egocentrism, the inability to realise that others have different philosophical positions to themselves. It compromises their ability to solve interpersonal problems which involve logical contradictions (Piaget, 1932). In addition to these stages it has been proposed that cognitive egocentrism is overcome in an additional final stage of cognitive development, dialectical thinking. This is the ability to reason logically, with a sensitivity to practical and ethical considerations and the capacity to tolerate ambiguity and re-evaluate apparently insolvable problems in solvable terms (Riegel, 1973).

Another factor that may impact adolescent cognition is intelligence. Higher functioning youth show characteristics of conforming less to peer opinions and being more independent in their decision making, showing leadership characteristics (Gottfried & Gottfried, 1996; Roeper, 1992). Some higher functioning children are acutely aware of issues of ethical and social justice. Empathy can be thought of as a facet of social development (DiBiase, Gibbs, & Potter, 2005; Silverman, 1994) and can be highly developed in youth who are cognitively advanced as these youth have an increased capacity for moral reasoning (Derryberry, Wilson, Snyder, Norman, & Barger, 2005; Lee & Olszewski-Kubilius, 2006). Furthermore literature suggests that higher functioning children are thought to be socially sensitive, empathic and have a high capacity to understand others. Their perspectives and emotions show a heightened sensitivity towards the feelings of others (Berkowitz & Hoppe, 2009; Lovecky, 1997).

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Adolescents are unlikely to have a large amount of knowledge, or have been provided with information about mental illness and its symptoms. Nevertheless this does not prevent them from forming attitudes acquired through family, friends and/or the news media (David et al., 2005). Overseas research shows us that like adults, adolescents have a tendency towards negative stereotypes of people with a mental illness, for example, that they are more violent and dangerous than people without mental health difficulties. Similarly a New Zealand pilot study showed that adolescents may stigmatise individuals with mental illness as more aggressive than those without mental illness (Riley, 2009). A survey of Australian adolescents' found that they stigmatise people with mental illness as more likely to be unpredictable and that they were unwilling to work on projects with a person with mental illness (Reavley & Jorm, 2011). It also found that there was a desire for social distance; however that was generally lowest for developing a close friendship with someone with a mental illness (Jorm & Wright, 2008).

This stigmatisation of mental illness is a barrier to adolescents seeking help (Wade, Johnston, Campbell, & Littlefield, 2007). In particular, the experience of being stigmatized for having a mental illness may be critically influential to youth, because it is in the adolescent years that identity, self-esteem and peer relationships are highly valued and are in the process of being established. Adolescents are sensitive to acceptance and image management, which may make their perception of stigmatisation all the more influential in their decision of how to respond to and seek help for their own and a peer's mental

health difficulties (Hinshaw, 2005; Wisdom, Clarke, & Green, 2006). An analysis of predictors of stigma and help-seeking intentions from a survey of a national sample of Australian youth found that age, gender, the particular mental illness, familiarity with mental illness and awareness of mental health promotional campaigns predicted different aspects of stigma. The analysis also found that help-seeking intentions varied according to disorder and age group (Jorm & Wright, 2008).

Adolescent Self Stigma and its impact on mental illness

As with adults, stigmatization from others not only has a negative effect on help seeking for adolescents, but both stigmatisation from others and self-stigma can contribute to the deterioration of mental health and the course of an individual's mental illness (Link & Phelan, 2006). This is thought to be because perceptions of public stigma contribute to the experience of self-stigma, which in turn influences help-seeking attitudes and eventually a willingness to seek help (Vogel, et al., 2007). For example, self illness perceptions are found to predict patients' wellbeing and outcomes across a variety of chronic physical illnesses (Cameron & Leventhal, 2003) including mental illness (Lobban, Barrowclough, & Jones, 2004).

A study looking at 60 adolescent clients of Mental Health Services and their parents, suggested that approximately 20 per cent of adolescents and parents reported significant concerns related to self-stigmatization (Moses, 2010). The study found that the three most prominent factors associated with adolescents' self stigmatisation of mental illness included: adolescents' perceptions of social skill deficits, trauma as causal factors pertaining to their mental health challenges and

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parents' inclination to conceal their child's Mental Health problems from others.
It is theorised that this may indicate a stigma ''contagion effect'', whereby
parents' attitudes affect the self-stigma of their adolescents (Moses, 2010).

This self-stigma, similar to stigmatisation of mental illness by others is a
concern in particular, for adolescents. As previously stated, stigma has the
potential for being particularly detrimental to youths' self concept. This is thought
to be because they are in the midst of important developmental processes
including the consolidation of identity, which motivates youth to feel like they
belong within their social group(Wisdom, et al., 2006).

Seeking help for mental Illness

Young people have been found to be among a group of individuals less
likely to seek help for mental illness (Oliver, Pearson, Coe, & Gunnell, 2005).
Adolescents who do not request help even though they were at risk for common
mental health problems, have been found more likely to be Caucasian, have
higher grades, fewer school absences and detentions compared to those who seek
help. They were also found to be significantly more likely to report suicide
ideation (Reavley & Jorm, 2011).

Culture and Stigmatisation of mental illness

Literature suggests that there are significant differences among cultures
and ethnic groups in the scope and severity of stigmatisation(Loya, Reddy, &
Hinshaw, 2010). A heightened level of mental illness stigma experienced by
ethnic minorities is thought to be why help-seeking is reduced in these
populations. Research in regards to cross-cultural differences in stigmatizing

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attitudes and their relation to help-seeking attitudes to date has been limited (Ng, 1997; Snowden & Yamada, 2005). A recent study showed that Caucasian American college students had more positive attitudes toward seeking help for mental illness than did Asian students. It also showed that Asian students had a high level of personal stigma for mental illness than did Caucasian American students (Loya, et al., 2010). Another study found that stigma and social distance were typically greater among the Japanese public than the Australian public (Griffiths et al., 2006). It is thought that Asian cultural values which emphasize beliefs about honour, interdependence and obedience, may influence mental illness stigmatisation and avoidance of help-seeking. Beliefs about societal stigma and avoidance of shame, such as the notion of "saving face" are thought to be particularly influential (Das & Kemp, 1007; Leong, Gupta, & Kim, 2010; Tata & Leong, 1994). Consequently, mental illness help-seeking is highly stigmatized, bringing shame to the individual and the family (Das & Kemp, 1007; Leong, et al., 2010; Tata & Leong, 1994). The relationship between cultural beliefs and stigmatisation of mental illness is supported by a study which showed that the level of adherence to such values correlated with help-seeking attitudes for Asian university students (Leong, et al., 2010). Asian immigrants are thought to retain these cultural values, which may stigmatise individuals who seek help for mental illness, over successive generations (Blake, 2012; Kim, 2007; Tucker-Drob, Rhemtulla, Harden, Turkheimer, & Fask, 2010).

Reducing adolescent stigmatizations

The need for social support of peers who are non-stigmatising, to increase disclosure of mental health difficulties and help-seeking behaviour, is particularly

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relevant for adolescents. Stigmatisation and lack of social support are predictive factors for continuing psychological distress. Non-stigmatising social support provides opportunities to express emotions and disclose feelings; this has been found to be a positive environmental influence, which can facilitate improved cognitive coping skills (Stephens & Long, 1999). Disclosure of mental health difficulties in itself has been found to reduce self-stigma (Corrigan et al., 2010). This emphasises the benefit that creating a supportive non-stigmatising environment can have for individuals with mental health difficulties. It also lends support to the need for research that leads to a basic understanding of cognition amongst adolescents in regard to mental illness. Research shows that adolescents are more likely to seek help from informal sources, such as their peers for mental health difficulties. This also supports the need for understanding adolescents' possible stigmatisation of mental health (Griffiths, et al., 2006).

It is thought that familiarity with mental illness mediates the strength of an individual's stigma of mental illness. Contact with individuals with mental illness has been found to reduce fear and stigma (S. Couture & Penn, 2003; S. M. Couture & Penn, 2006). For example, attitudinal and emotional responses toward persons with mental illness, including beliefs about responsibility and dangerousness, are likely to be positively influenced by familiarity with serious mental illness (P.W Corrigan, Green, & Lundin, 2001). There is one study of adolescents where the opposite was found (P.W Corrigan et al., 2005). In this study adolescents who reported being more familiar with mental illness endorsed greater negative stigmatizations about the individual's responsibility for their mental illness and level of dangerousness. Therefore, in this study, rather than

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diminish stigma, contact with individuals with mental illness seemed to increase adolescents stigmatization of mental illness (P.W Corrigan, et al., 2005).

Summary

It is clear that stigmatisation of mental illness has a negative influence on help-seeking, quality of life, social and treatment gains, preventing individuals from seeking help even when they have significant problems. It is also apparent that adolescents are particularly vulnerable to mental illness and the effects of mental illness stigmatisation and that stigmatisation of mental illness varies across different populations. Because of a lack of literature, the above review is a peripheral look at adolescents' cognitions and possible stigmatisation regarding mental illness. It illustrates the need for more specific research in this area, focusing specifically on New Zealand adolescents' cognitions and possible stigmatisations of mental illness. The literature review also emphasises the need to work towards identifying and lowering adolescent stigmatization of mental illness and the importance of an environment which is supportive of individuals experiencing mental illness.

This preliminary investigation aims to investigate a group of New Zealand adolescents' cognitions and possible stigmatisation of mental illness. The study's first hypothesis is that adolescents' perceptions of a person will be affected by prior information to suggest that the person has a mental illness. The second hypothesis is that the degree of stigmatisation will be related to prior personal experience of mental illness or exposure to people with mental illness. It is

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expected that experience with mental illness will decrease the degree of

stigmatisation.

CHAPTER TWO: METHODOLOGY

Method

The methodology of using a video questionnaire was modelled in two previous studies. One completed in the United States (Langer & Abelson, 1974) and the other completed in New Zealand (Riley, 2009). The first study investigated the effects of labelling on a clinician's judgment, and the second was a pilot study which looked at teenager's cognitions around mental illness. The method is a single-factor experiment and was chosen for its simplicity; an astute way of generating information.

Participants

Ethical approval was obtained from the University of Waikato, School of Psychology Human Research Ethics Committee. Participants in this study were 109 senior students (aged 16-18 years) from a decile 10 secondary school in a large New Zealand city. A school's decile rating indicates the extent to which it draws its students from low socio-economic communities. A decile10 rating is applied to the 10% of schools with the lowest proportion of low socioeconomic students. This is calculated by looking New Zealand census data for households with school-aged children in each school's catchment area (Ministry of Education, 2012).

 Students were assigned to either the experimental (N=56) or control (N=53) condition on the basis of their association with one of two school 'houses'.

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In the experimental group, 33 (58.9%) of the participants were male and 23 (41.1%) female. The majority of participants identified themselves as being of Asian ethnicity, followed by Pakeha, Other, and Maori (Table 1). In the control group, 24 (45.3%) of the participants were male and 29 (54.7%) were female. Similar to the experimental group, the majority of the control group described their ethnicity as Asian, followed by Pakeha, Other, and Maori (Table 1). Of the 56 students in the experimental condition, six (10.7%) reported that they had experienced mental illness themselves, and 27 (48.2%) reported having some or exposure to people who had experienced mental illness. The adolescents were between the ages of 16 and 17 and were seniors at Macleans College.

Table 1

Frequencies of Participants' Ethnicities

Ethnicity	Experimental Condition		Control Condition	
	N	%	N	%
Asian	37	66.1	20	37.7
Pakeha	12	21.4	15	28.3
Other	6	10.7	17	32.1
Maori	1	1.9	1	1.8
TOTAL	56	100.0	53	100.0

Materials

The materials used in this study were:

Video of a job interview

Personal Perceptions Questionnaire (Appendix A)

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Mental Health Experiences Questionnaire (Appendix B)

Video

The participants were recruited to evaluate a ten minute video which was produced and edited for the purpose of this study. In the video a volunteer posed as a job interviewee for a position as a teacher. The volunteer interviewee was a Caucasian, middle aged man of slim build, clean shaven, dressed casually. The interviewer was off screen with the camera focused on the interviewee. The interview itself was unstructured but focused on the interviewee's experiences of his past work and questions about his suitability for the teaching role he applied for. The interest is in evaluating the interviewee so the interviewer is not visible in the video tapes.

Personal Perceptions Questionnaire (PPQ)

The PPQ was developed by the primary researcher supervisor. It was used to gather demographic information and assess attitudes and perceptions of participants in both conditions. The PPQ had been used in previous research (Riley 2009). It was designed with reference to methodologies employed in similar experiments (Langer & Abelson, 1974; Riley, 2009). The questions were relatively simple and selected to measure the dependent variables, thoughts, feelings and possible stigmatisation of an individual with a mental illness. This anonymous questionnaire included instructions, and three demographic questions regarding age, sex and ethnicity. The PPQ asks respondents to rate 16 statements on a 7-point Likert scale indicating to what degree they agreed with each statement (1 being 'strongly disagree and 7 being 'strongly agree'). The

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statements in the PPQ relate to participants' perceptions of the man in the video; in particular, his tendency for violence, ability to cope with life's challenges, trustworthiness, judgment, control, quality as a friend, ability to get on with colleagues, vulnerability, parenting quality, quality as an associate, hostility, interpersonal skills, level of fun, helpfulness with problems, level of emotional problems, and agitation. A final section of the PPQ asks participants to provide any further comments that they consider may be relevant.

Mental Health Experiences Questionnaire (MHEQ)

The MHEQ was presented to the experimental group in addition to the first questionnaire. This questionnaire was designed by the researcher and her supervisor, and contained questions regarding the individual's experiences with mental illness (Appendix B). It includes six questions about participants' personal experiences of mental illness and their exposure to others who have experienced mental illness. Participants responded 'yes', 'no', 'unsure' or 'not relevant' to each question. Examples of how to answer the questions are given on both of the two questionnaires. Space for extra comments was also provided alongside each question.

Procedure

Participants were recruited from a secondary school in a large New Zealand city. An information sheet was provided to the senior students a day before the research was to take place. The sheet explained the research, about

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informed consent and confidentiality and outlined who they could talk to and where they should go if they were interested in participating in the research.

Interested senior students from the two houses selected to participate were asked to meet in their houses' common room. The research and procedure, as well as issues of consent and confidentiality were explained to the students. The informed consent forms were provided and subsequently collected. One group was randomly selected to be in the control condition and the other in the experimental condition. The video was introduced and screened. After the video screened the survey PPQ (Appendix A), was given out and, subsequent to completion, collected by the researcher. The experimental condition group was also given a second questionnaire (MHEQ) which asked about their mental health experiences (appendix B).

The video was introduced with the control group being told that this is simply a man applying for a job. The experimental condition group were told that this was a man with a mental illness who is applying for a job. Both groups were told that the video would take ten minutes. The control group were read the following instructions:

"Thank you for all taking the time to be here. I am from the University of Waikato and I am completing some research which I am grateful for your help with. Please view the following 10 minute video taped interview with a man applying for a new job in a teaching position. Once this is finished please turn over questionnaire in front of you and fill it out evaluating the job applicant. Let's begin"

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The experimental group were provided with almost identical instructions, except the man was described as "a man who has a mental illness". The participants were then asked to complete the questionnaires. Completion took approximately 20 minutes for the control group and 30 minutes for the experimental group. Questionnaires were then collected by the researcher.

Additionally, a Mental Health Experiences Questionnaire (MHEQ) was presented to the experimental group. The MHEQ contained six questions asking participants about their personal experiences and expectations of mental illness (Appendix B). The aim of the MHEQ was to record respondents' experiences with mental illness to see if responses on the PPQ were related to respondents having personal exposure to mental illness.

Data Analysis

Data analysis was conducted using SPSS 20.0. The data was entered into SPSS, and was checked for data entry errors. Data analyses focused on describing the pattern of results and the reliability of the PPQ, and testing the main hypothesis using independent samples t-tests.

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CHAPTER THREE: RESULTS

Results

The results section will begin by presenting demographics of participants. The next section will present the reliability analysis conducted for the PQQ measure. Item-total correlations and Cronbach's alpha were calculated. This is followed by analyses related to each of the study questions.

Demographic Information

56 participants in the experimental group and 53 in the control group completed the PPQ. Additionally, 51 participants in the experimental group completed the MHEQ. Demographic information relating to gender, age and ethnicity is described in the methodology section.

Reliability Analysis: Personal Perceptions Questionnaire

Internal reliability statistics for the PQQ are presented in Table 2. The overall internal consistency reliability (Cronbach's α) is good at .82.

Table 2

Item-Total Correlations and Cronbach's Alpha for the Personal Perceptions Questionnaire

Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16
.377	.447	.578	.685	.569	.479	.506	.167	.482	.441	.292	.462	.475	.323	.322	.169

Cronbach's α = .820

Hypothesis One

The study's first hypothesis is that adolescents' perceptions of a person will be affected by prior information to suggest that the person has a mental illness, thus resulting in a significant difference in perceptions between the experimental and control groups. This was tested using an independent samples t-test which compared the perceptions of both groups. Equal variances were not assumed (F=5.9, *p*=0.017). There was no significant difference in the total scores of the sixteen questions on the PPQ for the experimental (M=84.18, SD=8.48) and control (M=86.6, SD=10.73) conditions; t (99)=1.34, *p*=0.185

A T test (Appendix E) was conducted to compare the experimental and control conditions responses to individual questions on the PPQ. There was no significant difference found for the individual question scores between the experimental condition and the control condition for 13 of the questions on the PPQ. There was a significant difference in the individual question scores on the PPQ between the experimental condition and the control condition for questions 9, 11, and 14. Question 9 asked whether the adolescents thought the man in the video was a good parent. There was a significant difference in the scores on the PPQ question nine for the experimental (M=4.64, SD=1.327) and control (M=5.17, SD=1.205) conditions; t (107)=2.16*, p*=0.32. This means that on average for this question the experimental condition stigmatised the man in the video as being less of a good parent than the control condition because he had a mental illness.

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Question 11 asked whether the adolescents thought the man in the video was hostile. There was a significant difference in the scores on the PPQ question nine for the experimental (M=5.80, SD=1.135) and control (M=5.23, SD=1.) conditions; t (107)=-2.595, p=.011. This means that on average for this question the experimental condition stigmatised the man in the video as being more hostile than the control condition because he had a mental illness.

Question 14 asked whether the adolescents thought they would go to the man in the video for help with their problems. There was a significant difference in the scores on the PPQ question nine for the experimental (M=5.43, SD=0.970) and control (M=5.85, SD=.988) conditions; t (107)=2.242, p=.027. This means that on average for this question the experimental condition stigmatised the man in the video as being likely to go to for help if they were having problems than the control condition because he had a mental illness.

Table 3

T-Test significant results

Question	T	Sig. (2-tailed)
This person would be a good parent	2.173	.032
This person is hostile	-2.595	.011
I wouldn't go to this person for help if I had problems	2.242	.027

Hypothesis Two

The second hypothesis is that the degree of stigmatisation (as reflected by scores on the PPQ), will be related to prior personal experience of mental illness or exposure to people with mental illness (as measured by the MHEQ). In order to

assess this, participants' answers to questions one and two on the MHEQ were re-coded as a dichotomous variable (i.e. the presence or absence of mental health experience).   An independent samples t-test was conducted to examine PPQ score differences between participants in the experimental group with or without mental health experience. No significant differences were found between those with experience of mental illness (M=86.21, SD=9.0) and those with no experience (M=83.0, SD=6.78); t(49)=1.414, p=0.164.

In order to explore this hypothesis further, the relationship between scores on the PPQ and participants' mental health experience was examined. A point-biserial correlation was chosen because of dichotomous and continuous nature of the variables (i.e. the MHEQ responses and the experimental groups' total scores on the PPQ). No significant correlation was found (see Table 3 below).

Table 3

Pearson Correlation between Mental Health Experience and Perceptions total score

		PPQ Total Score
Mental Health Experience	Pearson Correlation	.198
	Sig. (2-tailed)	.164
	N	51

Mental Health Experiences and Expectations

The 56 participants in the experimental group provided information relating to their mental health experiences and expectations by completing the MHEQ. Fifty-one (91%) completed the MHEQ. Questions one and two related to

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prior or current personal experience of mental illness or exposure to an individual

with mental illness. Response frequencies are detailed on the next page in Table 4.

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Table 4

Frequencies of Participants' Mental Health Experiences

	Q1. Experience with people with mental illness		Q2. Previously or currently experiencing mental illness	
Response	N	%	N	%
Yes	27	52.9	6	11.8
No	13	25.5	38	74.5
Unsure	11	21.6	7	13.7
Not relevant	0	0.0	0	0.0
TOTAL	51		51	

Questions three through six of the MHEQ relate to participants' expectations regarding the degree of support they might expect to be able to obtain from peers or teachers if they were to experience mental illness. Response frequencies are detailed in Table 5.

Table 5

Frequencies of Participants' Mental Health Support Expectations

	Q3. I could share mental illness experiences with peers		Q4. Peers would think less of me		Q.5. Peers would be supportive		Q.6. I could ask for help from my teachers	
Response	N	%	N	%	N	%	N	%
Yes	21	41.2	8	15.7	23	45.1	17	33.3
No	11	21.6	21	41.2	2	3.9	14	27.5
Unsure	14	27.5	16	31.4	21	41.2	15	29.4
Not relevant	5	9.8	6	11.8	5	9.8	5	9.8
TOTAL	51		51		51		51	

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Qualitative information

Quantitative information was provided by the respondents in a section labelled 'comments' at the end of the PPQ. The comments were typed up (Appendix E) and key themes were recorded. Both the experimental group and the control group made similar positive comments about the man in the video. Twenty two positive comments were made in total. The groups both commented positively on the man's trustworthiness, skills and knowledge, and stated that he appeared confident and relaxed, and appeared to be a passionate 'nice guy'. Most comments for both the control and experimental condition were that the man was a 'nice, passionate and friendly guy'. The experimental condition made fewer comments than the control condition about the man's confidence and relaxed attitude. Both of the conditions also made similar negative comments about the man. Twenty four negative comments were made in total. Both of the conditions commented that the man appeared vague and unfocused or undetermined, unreliable, and agitated. In addition to positive and negative comments about the man, both conditions made comments that they felt they could not judge this man as they did not know him, had not seen him in situations other than the interview, or that the circumstances of the interview made this difficult for them to judge. Six of these comments were made in total. This shows that both conditions showed similar themes in their comments; critical thinking, positive themes that he was trustworthy, relaxed, and a nice guy, with good skills and knowledge. Negative themes were that he was unfocused, unreliable, and agitated.

CHAPTER FOUR: DISSCUSSION

Discussion

The study's first hypothesis is that adolescents' perceptions of a person will be affected by prior information suggesting that the person has a mental illness. This knowledge about mental illness will result in a significant difference in the adolescent's perceptions between the experimental and control groups. The results indicate no significant difference for the total scores on the PPQ for the experimental and control conditions. This means that knowledge that the man had a mental illness did not impact significantly on their overall cognitions about the man and did not cause the adolescents to stigmatise the man. However, the adolescents did show stigmatisation of mental illness when looking at the individual questions on the PPQ. The adolescent's endorsed the man as more hostile, lacking competence as a parent and as a problem solver that the control condition did. These further findings mean that in most areas covered by the questions the adolescents do not stigmatise the man with mental illness. That the adolescents stigmatised mental illness on just three out of sixteen individual questions, appears to be a good result. Previous research shows that reduced stigmatisation against mental illness improves quality of life, help-seeking behaviour, self-efficacy and self-esteem and treatment outcomes for individuals with mental illness (P.W Corrigan, 2004; P.W Corrigan & Kleinlein, 2005; Link & Phelan, 2006).

The adolescents' lack of stigmatisation for most of the16 PPQ questions is inconsistent with international literature which states that adolescents, like adults,

stigmatise mental illness. (Canadian Mental Health Association & Ontario division, 1994; P.W Corrigan, et al., 2010; Coverdale, et al., 2002; El-Badri & Mellsop, 2007; Link, et al., 1999).

When considering individual questions, the adolescents stigmatised the man in the video as hostile. These results reflect those of Riley, who found that New Zealand children hold the stigmatisation that individuals with mental health difficulties are more dangerous that the general population (Riley, 2009). Other similar findings include those from the Australian Nation Survey. This survey found that Australian adolescents endorsed individuals with mental illness as dangerousness and unpredictable (Reavley & Jorm, 2011).

Furthermore, the specific questions show that the provision of knowledge that the man had a mental illness caused the adolescents to rate him as having a reduced quality of parenting and state that they would be less likely to go to him for help if they were having problems. These specific questions ask the adolescents about their confidence in the man as a provider of help and as a parent, both of which are roles which require particular competencies or knowledge. In contrast, the remaining 16 questions ask about the man's personal characteristics or skills in general, or as a friend. Some of the more popular stigmatisations the general public hold about individuals with mental illness include that they have low IQ, are weak and lazy and cannot hold down a job (Canadian Mental Health Association & Ontario division, 1994; P.W Corrigan, et al., 2010; P.W Corrigan, et al., 2000; Coverdale, et al., 2002; El-Badri & Mellsop, 2007). These stigmatisations appear to have the common theme of competence. It is possible that adolescents hold stigmatisations about the man's competence, and these

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stigmatisations are more apparent when they are asked about specific roles which require more competence, as opposed to a friendship role or personal characteristics. In support of this, a survey of Australian adolescents found that they stigmatised people with mental illnesses and were unwilling to work on projects with them, however they showed lower stigmatisation for developing a close friendship with someone with a mental illness (Reavley & Jorm, 2011). Unfortunately the questionnaire did not ask why the adolescents responded as they did, or specifically about competence. This makes it difficult to draw any conclusions about why the adolescents stigmatised the man as a poorer parent or problem solver.

An analysis of predictors of stigma and help-seeking intentions from a survey of a national sample of Australian youth found that an awareness of mental health promotional campaigns predicted different aspects of stigma. Perhaps this is also true for the New Zealand adolescent population. If so, it may explain the current study's findings of limited stigmatisation of mental illness. The New Zealand *Like Minds Like Mine* campaign, run by the Ministry of Health began in 1997 has shown positive results within New Zealand (Vaughan & Hansen, 2004). All the attitudes targeted have shown improvements. In particular the attitudes of shame, social rejection, and dangerousness in regards to mental illness showed positive changes (Wyllie, et al., 2008). Some of these attitudes were assessed through the PPQ. The campaigns targeting stigma have been running since the oldest of this study's participants were infants. Although not within the scope of this research, it would be interesting to see if individual's knowledge of the anti stigma campaigns was correlated with their answers. This knowledge may explain

the finding that most questions on the PPQ showed no stigma. The three significant results for individual questions on the PPQ demonstrate that adolescent stigmatisation of individuals with mental illness is still evident for particular themes of competence and hostility. These stigmatisations identified are considered to be among the most prevalent of stigmatisations, which may explain why they are more resistant to change (Canadian Mental Health Association & Ontario division, 1994). Future anti-stigma campaigns could target these specific themes.

The second hypothesis is that the degree of stigmatisation (as reflected by scores on the PPQ), will be related to prior personal experience of mental illness or exposure to people with mental illness (as measured by the MHEQ). Of the adolesecents in the experimental condition 11.8% reported that they had experienced a mental illness and 13% reported that they were unsure whether they had experienced a mental illness or not (see table 4 in the results section). Over half, 52.9% of the adolescents had experience with others who have or have had a mental illness. No significant differences on the PPQ questions were found between adolescents with experience of individuals with mental illness, or personal experience of mental illness and those with no experience. This suggests that contact with or experience of individuals with mental illness did not significantly impact on the adolescents' cognitions about the man with mental illness. This finding contradicts the majority of the literature which shows familiarity with mental illness mediates the strength of individual's stigma of mental illness. For example, attitudinal and emotional responses toward persons with mental illness, including beliefs about competence and dangerousness, are

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likely to be influenced by familiarity with serious mental illness(P.W Corrigan, et al., 2001). Past studies have also shown that contact with individuals with mental illness reduces fear and stigma (S. Couture & Penn, 2003; S. M. Couture & Penn, 2006). One study on adolescents and their contact with individuals who are experiencing mental illness suggested the opposite occurs. Rather than diminishing stigma, contact with individuals with mental illness seemed to increase adolescents stigmatization of mental illness (P.W Corrigan, et al., 2005). The current research found results that contrast both the literature by Corrigan (2005) and Couture and Penn (2005, 2006). These results indicate that there was no correlation between adolescents' experiences of mental illness and their thoughts and beliefs about mental illness.

Another fascinating finding was that the majority of adolescents in the study indicated that they felt that they were supported by their peers and could share personal experiences of mental illness with them without being stigmatised. The data shows 41.2% of this group of adolescents felt they could share with their peers that they had a mental illness and 45 % felt their peers would be supportive of them. It is possible that the finding that a large proportion of adolescents felt that they would be supported by their peers may be related to the current study's findings of limited stigmatising attitudes towards mental illness. It has been shown that social support can be a positive environmental influence on adolescents, particularly if it is non-stigmatising support (Stephens & Long, 1999).

Results also showed that the adolescents would be more likely to seek help from their peers than their teacher. This aligns with literature which suggests that

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adolescents are more likely to seek help from informal sources such as their peers, for mental health difficulties (Griffiths, et al., 2006).

In seeking to explain the findings of limited stigmatisation of mental illness where some of the more prevalent stigmatisations continue to exist, and the lack of relationship between experience of mental illness and cognitions about the man in the video, the characteristics of the children's environment and developmental stage could be considered. The specific characteristics of the school, area and adolescents may mean that the study's findings cannot be generalised to other New Zealand adolescents.

The school that the adolescents attended is not representative of most New Zealand High Schools. Macleans College claims to have a highly prized values based system and an environment which encourages high levels of independent thinking, critical evaluation, creative problem solving, and leadership. It also places value on the cultivation of higher functioning and special ability students through special ability and accelerated learning programmes (Ministry of Education, 2012). The school recognises special abilities within the fields of academia, cultural, socio-affective, leadership, creativity and kinaesthetics. Courses may also have entry requirements as laid down by New Zealand Qualifications Authority (NZQA) and Cambridge International Examinations (CIE) (Ministry of Education, 2012). A recent study found a correlation between school values in their mission statement and with student's performance. They found that a properly worded mission statement can contribute to the success of a school (Blake, 2012). However the school environment and values is not representative of other New Zealand High Schools. Although beyond the scope of

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this research, it would be interesting to research the affects of school values and encouragement of independent critical thinking impacted on the students' decision making process when they were deciding what they thought about the man in the video.

Another consideration as to why most of the area's covered by the questionnaire showed no stigmatisation and the lack of relationship between experience and mental illness stigma is the adolescent's developmental stage in combination with their environment. The concrete operational stage of development allows adolescents to give thought out and logical answers. Piaget's model of development states that adolescents should be able to engage in relativistic thought. This is the ability to take into account situational factors when looking at others behaviour (Piaget, 1932). The suggestion here is that the adolescent's developmental capabilities interacted with their school environment, which emphasised critical thinking, to enable them to judge then the man in the video as he was. This means judging him without conforming to 'popular' stigmatisations of mental illness, or relying heavily on their past experiences. This theory and the quantitative results of limited stigmatisation of mental illness are supported by qualitative statements from both the experimental and control condition adolescents used critical thinking. Their comments included statements such as "You never know until you see him in a teaching environment", "I cannot answer, I do not know this person", and "Interview was not good, so it is hard to analyse his responses".

Maclean's College is a decile 10 school. A decile10 rating is applied to the 10 per cent of schools with the lowest proportion of low socioeconomic students

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in New Zealand (Ministry of Education, 2012). This means that Macleans College has a high socio economic status (SES). This is another reason why the current study's results may not generalise well to the general New Zealand adolescent population, and why there is limited stigmatisation of mental illness by the adolescent participants. SES is calculated by the education, occupation and income of parents (Ministry of Education, 2012). Literature states there is a gene and environment interaction in which heritability of cognitive ability is increased with SES (Tucker-Drob, et al., 2010; Turkheimer, Haley, Waldron, D'Onofrio, & Gottesman, 2003). In support of this a recent twin study in this area reported significant moderation of the genetic component of children's cognitive ability, by their parents' SES (Tucker-Drob, et al., 2010). Although none of the students were given cognitive tests of intelligence prior to taking the test, given the relationship between SES, and the environment gene interaction, it would be interesting to discover how many of the adolescents who participated are higher functioning.

The literature shows that some characteristics of higher-functioning students include conforming less to peer opinions, more independent decision making, and leadership capabilities (Gottfried & Gottfried, 1996; Roeper, 1992). Higher functioning adolescents can also be socially sensitive and empathic and able to take on other peoples perspectives (Derryberry, et al., 2005; Silverman, 1994). Empathy and social cognition can be more mature in children who are more cognitively advanced (Berkowitz & Hoppe, 2009; Lovecky, 1997). These possible characteristics may have influenced the participating students' decision making processes and answers to the questions. Future research may need to

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complete similar studies on stigmatisation of mental illness looking at schools which more accurately represent the general New Zealand adolescent population. Future research could also address variables within the adolescent population such as developmental level, SES, and cognitive ability to see if these impact on the cognitions and possible stigmatisations of mental illness

There was an interesting composition of ethnicities within the current research. This too may impact on the study's ability to generalise to the larger New Zealand adolescent population. The adolescents lived in high socioeconomic areas and the majority of the students were of Asian ethnicity with fewer Pakeha and even less Maori adolescents. Literature suggests that there are significant differences among cultures in the scope and severity of stigmatisation of consumers of mental health services (Griffiths, et al., 2006; Loya, et al., 2010). It is thought that cultural values which emphasize beliefs about honour, interdependence and avoidance of shame may influence Asian stigmatisation of mental illness (Das & Kemp, 1007; Loya, et al., 2010; Ng, 1997; Tata & Leong, 1994). This makes the results of this study intriguing. On most areas covered by the questions, students is not stigmatise, even though over half of the sampled adolescents were part of an ethnicity which literature supports as more stigmatising of mental illness and mental illness help seeking than Caucasian ethnicity (Griffiths, et al., 2006; Loya, et al., 2010; Ng, 1997). A large body of cross-cultural literature suggests that Asian immigrants are thought to retain their cultural values over successive generations (Kim, 2007; Tucker-Drob, et al., 2010). As many of the Asian adolescents in the current study were born in New

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Zealand, or are acculturated to New Zealand European culture, it is possible that appears this trend may be changing in a New Zealand context.

Limitations of the research

As mentioned above, a limitation of the current study is that the ethnic representation of participants in this study did not reflect the wider New Zealand population. This was particularly evident in that the majority of adolescent participants were of Asian ethnicity, resulting in a lack of information regarding the thoughts and feelings of New Zealand European and in particular Maori adolescents. The unique characteristics of the adolescents' sampled is not representative of the New Zealand adolescent population, therefore the study's results may not generalise to the wider community. Further research may need to deliberately approach a group of adolescents whose ethnic composition is more representative of the New Zealand high school population. In addition further research examining the views and beliefs regarding mental illness held by New Zealanders of Asian descent would be worthwhile.

Another limitation of the study is that the PPQ and MHEQ forms developed by the researcher and her supervisor are non-validated measures and the psychometric properties of these tools are largely unknown. They were simply questions that the researcher and her supervisor put together based on literature and a list of questions used in a pilot study which asked about stigmatisation of mental illness. Internal reliability statistics for the PQQ showed that the overall internal consistency reliability was good, however no further tests were run. This may have resulted in limitations; for example questions may have been excluded

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which may have shown significant stigmatisation of mental illness. Another limitation of the study is that the second MHEQ was given to half of the participants. This means that the sample size was relatively small, and may lack power.

Another limitation of the study is that there is little literature about adolescent's stigmatisation of mental illness, and even less New Zealand literature. This means that the study's results have mostly been compared to a few studies which were conducted several years ago outside of New Zealand.

CHAPTER FIVE: CONCLUSION

Conclusions and Future Directions

The stigmatisation of mental illness has a harmful impact on the individual experience of mental illness and is found to reduce help-seeking behaviour. Adolescents in particular, are theorised to be the most vulnerable to the effects of stigmatisation and vulnerable to mental illness. This makes the identification of possible stigma within the adolescent population the first of several important steps on the road to reducing stigmatisation of mental illness and increasing help-seeking behaviour within this population. This study examined how the knowledge that someone has a mental illness affected adolescent cognitions about that person. The results indicate no significant difference for the total scores on the PPQ for the experimental and control conditions. However, the adolescents did show stigmatisation of mental illness when looking at the individual questions on the PPQ. They saw the interviewee as hostile, less competent as a parent, and as someone they would be less likely to go to for help in solving their problems. This research supports international literature which suggests the most prevalent mental illness stigmatisations are related to dangerousness and competence. There was only one New Zealand pilot study which investigated adolescents' cognitions and possible stigmatisation of individuals with mental illness to compare this research to and it confirmed this study's findings. The findings suggest that anti-stigma campaigns which have been found to reduce stigma for the general population, may also have an impact on adolescents, but that they could further focus on targeting adolescents' cognitions of hostility and competence stigmatisations of mental illness. The study also found that the adolescents'

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experiences of mental illness and contact with individuals with mental illness did not impact on their cognitions or stigmatisations about mental illness. This finding is in contrast to available international literature. Given the unique population of adolescents in this study, the results could reflect the interaction of several variables; the adolescents' individual characteristics, school environment, developmental capabilities, SES and cognitive abilities and ethnicities of the adolescents.

In the future, further validation of the PPQ and the MHEQ as well as use of a larger and more representative sample of New Zealand adolescents may yield a greater understanding of New Zealand adolescents' cognitions and possible stigmatisations of mental illness. It may also provide insight into whether New Zealand adolescents' experience with mental illness impacts on their cognitions and stigmatisation of individuals with mental illness. Future studies could have a particular focus on understanding stigmatisations of individuals with mental illness as hostile, less competent, and making comparisons of adolescent and adult stigmatisations of mental illness. This will provide opportunities to examine differences and similarities between the age groups which may be useful when planning anti-stigma campaigns which target a range of age groups. Future research could also measure adolescent awareness of anti stigma campaigns and see if this correlates with their cognitions and possible stigmatisation of mental illness. Furthermore, as previously mentioned research could be conducted to investigate adolescent variables such adolescents' individual characteristics, school environment, developmental capabilities, SES and cognitive abilities, and ethnicities of the adolescents and their relationship to adolescents cognitions and

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possible stigmatisation of mental illness. Finally future research could look at cultural differences in the way adolescents think about and possibly stigmatise mental illness.

All of these future areas of research appear to have the potential to broaden and deepen our understanding of stigmatisation of mental illness. They could lead to potential interventions to either maintain the current general lack of stigmatisation or decrease specific, more prominent stigmatisations. The more that is known about adolescent stigmatisation of mental illness, the more that can be done to reduce this stigmatisation, increase help seeking and reduce the negative impact of this stigmatisation on the lives of individuals experiencing mental illness.

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Appendices

Appendix A

This is an appendix of the PPQ given out to both groups of students. It contains likert scale questions and also questions about sex, age, and demographic information.

Questionnaire

Please read the following statements carefully and rate your responses according to the instructions below.

Please CAREFULLY read each statement below and rate your responses on the scale of 1-7, 1= strongly disagree, to 7 = strongly agree. Write your corresponding number in the space beside each statement.

1	2	3	4	5	6	7
strongly disagree	disagree	slightly disagree	undecided	slightly agree	agree	strongly agree

Example:

i) I like reading novels	6

Questions:

1. This person has a tendency for violence	
2.This person can cope with life's challenges	
3.This person is **not** trustworthy	
4. This person appears to have good judgement	
5. This person is in control	
6. This person would **not** be a good friend	
7. I believe this person would get on well with his/her colleagues.	
8. This person is vulnerable	
9. This person would be a good parent	
10. This is a person I would prefer **not** to be associated with	
11. This person is hostile	
12. This person has good interpersonal skills	
13. I expect this person is fun to be around	
14. I would **not** go to this person for help if I was having problems	

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15. This person does **not** seem to have emotional problems	
16. This person seems agitated	

Comments about the job applicant:

_____

_____

Demographic Information:

Pakeha ☐ Maori ☐

Asian ☐ Pacific Island ☐

Other ☐

_____

Country of Birth _____

D.O.B_____

Gender: male☐ female ☐

Thank you for your time and participation.

Appendix B

This MHEQ was presented to the experimental group in addition to the

first questionnaire. This questionnaire had questions regarding the individual's

experiences with mental illness.

Questionnaire

> Please read the following statements carefully and answer according to the instructions below.

Please read each statement below and answer either with a cross **X** in the **yes** column if the statement is true, a cross **X** in the no column if the statement is **false**, and a cross **X** in the **unsure** column if you are unsure. Place a cross in the not relevant column if you have not experienced mental illness and the question is not relevant to you.

Example:

	Yes	No	Unsure	Not relevant
i) I am allergic to peanuts		*X*		

Questions:

	Yes	No	Unsure	Not relevant
1. I have had some experience with people with mental illness (For example Anxiety, Depression, Post Traumatic Stress).				
Details optional:				
2. I have in the past or am currently experiencing mental illness (For example Anxiety, Depression, Post Traumatic Stress)				
Details optional:				
3. If I had a mental illness, I feel like I could share my mental illness experiences with my peers.				

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4. If I had a mental illness and I disclosed my experiences to my peers, they would think less of me				
5. If I had a mental illness and I disclosed my experiences of it to my peers they would be supportive of me.				
6. If I had a mental illness I feel I could ask for help from my teachers.				

*Comments:*_____

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Thank you for your time and participation.

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Appendix C

This is the information Sheet which was given out too students the day before the research took place.

Information sheet

What is this study about?

The anonymous study is aimed at better understanding adolescents thinking feelings and beliefs about individuals by recording their responses to a brief video. The study's goal is to better understand adolescent attitudes and support Adolescents. This is a preliminary study conducted by a Master's student and researcher at the University of Waikato. The researcher has worked as a student and professional with adolescents, and believes understanding their thoughts and feelings is important, so that they can feel supported by their peers and within their school.

Am I eligible to take part?

You are eligible to take part if you are a 16 or older at this school.

What am I being asked to do?

You will be asked to fill out a consent form, but will have the option to decline to continue at any time, and that is absolutely okay. You will be asked to watch a video and fill in a brief survey. The survey is aimed at recording responses individuals have in reaction to a video presented to them. This study will involve approximately 20 minutes of your time.

What will happen to my information?

Be assured that no one will be able to identify you from the survey. All forms with your name on them will be stored in a locked file and each participant's name will only be known to the researcher who will then allocate a number to your name. It will not be possible to identify you in any articles produced from the study. The study has received ethical approval from the School of Psychology Ethics Committee and you are more than welcome to contact Dr Nicola Starkey at nstarkey@waikato.ac.nz with any ethical enquires.

Where do I go to participate?

Go to room: Auditorium **Day**: Wednesday 6th June **Time**:11.15am.

What can I expect from the researcher?

If you participate in the study the researcher will respect your right to: ask any questions; decline to answer particular questions; withdraw from the study; and/or be given an electronic copy of the findings. She will also feedback the results to the school in a way that should adolescents.

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Who can I contact about my participation in this project?

You may contact Ali (researcher) at 021 1499477 or aligreenman@gmail.com

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Appendix D

        This is the sheet given to participants after the surveys were completed. It was designed to give interested adolescents information about where they can go and who they could talk to if they or their friends and family were having difficulties with mental illness. It also listed who they could talk to if they had any concerns with the study or if they had any questions about issues that the study brought up for them.

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Further Support

If you have any questions, concerns, or if this project brought up any issues that you would like to talk about, or receive support for, please feel free to contact any of the suggested contacts below. Alternatively please feel free to contact me.

Researcher (Ali)

Phone: 021 1499477

Email: aligreenman@gmail.com

Ali's Supervisor

Jo Thakker

Email: jthakker@waikato.ac.nz

School Counsellor

The school counsellors are available at any stage during or after this process for you or your family to contact   You can access them by coming to the Student Advisory Service (SAS) area and speaking with the secretary or through email at the school website, going to the SAS link and contacting one of the counselling staff directly to request a meeting.

Internet

Other places you can go to find support are on the web. John Kirwin and the New Zealand Government have worked to create a web site which shares information about depression, finding a way through it, and has resources for helping yourself and others.

Web page: www.depression.org. nz/content/home

Free Phone: 0800 111 757.

Youth line

Youth line has a number you can call for support. It has a web site where you can access help within your community.

Web page: http://www.youthline.co.nz/find-help/help-for-young-people.html

Phone: 0800 37 66 33. Or text 234

Face Book: Youth Line

Email: talk@youthline.co.nz

Appendix E

This is an appendix of the T-test conducted on the PPQ individual

questions

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Q1 Equal variances assumed	.000	.990	1.109	107	.270	.235	.212	-.185	.656
Equal variances not assumed			1.108	106.432	.270	.235	.212	-.185	.656
Q2 Equal variances assumed	.529	.469	.307	107	.759	.072	.234	-.391	.535
Equal variances not assumed			.307	106.154	.759	.072	.234	-.392	.535
Q3 Equal variances assumed	.227	.634	1.554	107	.123	.286	.184	-.079	.652
Equal variances not assumed			1.550	104.137	.124	.286	.185	-.080	.653
Q4 Equal variances assumed	4.256	.042	.711	107	.479	.156	.219	-.279	.591
Equal variances not assumed			.708	103.221	.481	.156	.220	-.281	.593
Q5 Equal variances assumed	1.085	.300	.030	107	.976	.008	.272	-.531	.547
Equal variances not assumed			.030	102.776	.976	.008	.273	-.534	.550
Q6 Equal variances assumed	2.140	.146	.459	107	.647	.087	.189	-.288	.462

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances not assumed			.457	102.787	.648	.087	.190	-.290	.464
Q7 Equal variances assumed	.571	.451	1.260	107	.210	.332	.263	-.190	.854
Equal variances not assumed			1.253	100.160	.213	.332	.265	-.194	.857
Q8 Equal variances assumed	2.768	.099	.364	107	.717	.070	.192	-.310	.450
Equal variances not assumed			.362	101.895	.718	.070	.193	-.312	.452
Q9 Equal variances assumed	.043	.836	2.167	107	.032	.527	.243	.045	1.009
Equal variances not assumed			2.173	106.820	.032	.527	.243	.046	1.008
Q10 Equal variances assumed	2.016	.159	1.776	107	.079	.346	.195	-.040	.732
Equal variances not assumed			1.781	106.865	.078	.346	.194	-.039	.731
Q11 Equal variances assumed	1.192	.277	-2.595	107	.011	-.577	.222	-1.018	-.136
Equal variances not assumed			-2.592	105.930	.011	-.577	.223	-1.019	-.136
Q12 Equal variances assumed	.217	.643	1.492	107	.139	.377	.253	-.124	.879
Equal variances not assumed			1.497	106.388	.137	.377	.252	-.122	.877
Q13 Equal variances assumed	5.354	.023	1.227	107	.223	.333	.271	-.205	.871

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	Equal variances not assumed			1.217	95.981	.227	.333	.274	-.210	.876
Q14 Equal variances assumed	.152	.697	2.242	107	.027	.420	.188	.049	.792
Equal variances not assumed			2.241	106.408	.027	.420	.188	.048	.793
Q15 Equal variances assumed	2.074	.153	-.280	107	.780	-.053	.190	-.430	.324
Equal variances not assumed			-.279	103.539	.781	-.053	.191	-.431	.325
Q16 Equal variances assumed	.016	.901	-.732	107	.466	-.137	.188	-.510	.235
Equal variances not assumed			-.732	106.847	.466	-.137	.188	-.510	.235

Appendix F

This is an appendix of the adolescents' comments that were put in the "comments section.

Control condition comments

- Interview was not good, so it is hard to analyse his responses
- Confident speaker, knows his stuff
- Confident in his ability, down to earth
- Answered the questions well
- Seems to care about his subject, passionate.
- I cannot answer, I do not know this person
- Cannot judge them
- Genuine passionate
- Confident competent,
- Seems like a nice guy
- Not very determined, seems vague and not articulate.
- He seemed passionate and confident about his job
- Appears to be relaxed (crossed legged) very articulate and answered questions with thoughtfulness but was a little vague.
- Applicant has a calm collected manner, a passion for his job and seems friendly and easy to approach.
- Nice man with an honest history, he looks nervous but that is to be expected with a job interview.
- Seems like a good person for the job. He has good skills and has been teaching for a long time, so a lot of experience
- He seems pretty solid, but you never know until you see him in a teaching environment.
- He seems fidgety, unreliable, and defensive.
- Extensive hand gestures and rambled at times, which made him appear nervous. Possibly not as easy going as he comes across at times.
- He seems relaxed his skills appear sound.
- Composed and experienced, able to overcome possible challenges.
- He seems intelligent, passionate interesting.

Experimental condition

- Seems like he could totally change after a certain situation
- Seems nice I wouldn't mind him being my teacher.
- Desperate for job, but appreciative of interviewers courtesy.
- Seems approachable, calm, trustworthy.

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- Seems, suitable but not determined but a bit vague.

- Not many trustworthy people these days.

- Sociable.

- Seems to know what he is talking about, had a lot of experience in the field of teaching.

- Seems like a normal person.

- The way the applicant was answering questions, it seemed as though he was nervous and stumbling over his words at times.

- He seemed fine, but agitated and seemed to lie as he was stuttering.

- You can't really tell, you never know.

- Seems normal

- He seemed to have a good knowledge and passion for teaching; he appeared approachable with a calm temperament.

- Overall the interview went well. He was confident and responded to the questions well.

- Very beta, does not look solid. Tight. Strong. Should defiantly consider acquiring aesthetics to gain a alpha way of life.

- Seems to know what he is talking about, and it feels like he overall understands.

- He seemed honest and open, though he could have answered more specifically.

- The applicant seemed honest and knew a lot about his field.

- Keeps calm, not irritated or agitated. Sometimes off topic or a little unfocused on the main points.

- He seems to have a sense of humour and is very polite. He smiles a lot giving a positive feel to his personality.

- Seems like a nice person, adventures and wanting to enjoy life. Seems a little agitated and slightly confident.

- He seemed normal and pretty nice.

- He seems normal, but sometimes started talking really loud, stopping the interview from asking questions.

- The applicant looks relaxed and reasonably confident. Ready to compromise.

- Although he seems nice and calm there is a aura of distrust about him. He kept moving his hands which could be due to agitation or nervousness.

- A caring and loving teacher that cares about his wife's parents and students.

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- The job applicant tends to avoid the answer expected, twisting scenarios he provides to fit the question. Provides the best answer, but is unable to provide evidence, which may indicate he lies.

- A nice guy, seems to be easy to get along with. Can be a reasonable guide. No bad impression. Always smiles, makes him looks friendly.

- His voice rises and falls in volume leading me to think that he could be violent and volatile. Large harm dangerousness.

- Articulate