Thesis

An Exploration of Implicit Associations Regarding Mental Illness, Self-reported Internalised Stigma, and their Links to Help Seeking Symptom Thresholds Amongst Individuals Experiencing Depressive Symptoms

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Abstract

Objectives

It has been theorised that individuals have less awareness of implicit attitudes (Greenwald & Banaji, 1995). Amongst a currently depressed sample, implicit associations regarding mental illness were measured using the Brief Implicit Association Test (BIAT; Sriram & Greenwald, 2009). Self-reported, internalised stigma was also explored. It was hypothesized that negative implicit associations regarding mental illness would positively correlate with increased help seeking depressive symptom thresholds. The relationships between stigma and depression severity and between depression severity and help seeking symptom thresholds were also explored. The associations between stigma and self-esteem and between implicit and explicit measures were also explored.

Method

This study utilised a cross-sectional design. Individuals with current depressive symptoms (N = 35) were recruited from mental health teams and voluntary organisations. Participants completed self-report measures and two computerised BIATs, which measured implicit associations regarding mental illness compared to physical disability and implicit self-esteem.

Results

Contrary to the hypothesis, implicit associations regarding mental illness were unrelated to help seeking symptom thresholds. Implicit associations were also unrelated to depression severity or implicit self-esteem. Furthermore, implicit associations were positive amongst over half of the sample, in comparison to physical disability. Self-reported internalised stigma was positively associated with increased help seeking symptom thresholds, depression severity, and self-reported

self-esteem. Consistent with Dual Process Theory (Fazio & Olson, 2003), implicit and self-report measures were unrelated. Despite evidence of positive implicit associations regarding mental illness, self-reported internalised stigma amongst the sample was high.

Conclusions

Future research should continue to explore implicit associations regarding mental illness amongst clinical populations. These should experiment with different measurement tools, to further the understanding of implicit associations regarding mental illness and their potential application to mental illness stigma. Efforts to improve help seeking and overall treatment outcomes for depressed individuals should consider the impact of mental illness stigma.

Chapter 1

Introduction

1.1 Overview

The stigma associated with mental illness is widespread. One of the key objectives within the recently published government strategy, "No Health without Mental Health" was for a reduction of stigma towards mental health problems, as this worsens outcomes for people experiencing such difficulties (HM Government, 2011). Stigma may be associated with barriers in accessing work, health services, and community resources. The nationwide "Time to Change" campaign was led by the mental health charities Mind and Rethink and involved anti-stigma interventions through the media (Time to Change, 2008). In 2009, the National Institute for Health and Clinical Excellence (NICE) published guidance for employers, to promote mental well-being within the workplace. This stressed that mental illness stigma should be reduced in all areas of employment, including job design, selection, recruitment and training (NICE, 2009). Research has suggested that stigma can be associated with negative outcomes (e.g., Link, Struening, Neese-Todd, Asmussen & Phelan, 2001; Link, Struening, Rahav, Phelan & Nuttbrock, 1997; Lysaker, Davis, Warman, Strasburger &Beattie, 2007).

Depression has been highlighted as a chronic, global condition (Holden, 2000, Kessler & Walters, 1998) with widespread consequences at both individual (Kennedy & Paykel, 2004) and societal (Thomas & Morris, 2003) levels. Furthermore, this is often a recurrent disorder, with evidence suggesting that overall functional impairment may worsen over time (Judd, 1997). Research has found that many individuals with depression have not sought help (Lepine, Gastpar, Mendlewicz & Tylee, 1997). Of particular relevance to the current study is help

seeking symptom thresholds (Sherwood, Salkovskis & Rimes, 2007), which refer to the perceived degree of depression severity needed before various forms of help would be sought.

This study explored implicit associations relating to mental illness. These are automatic processes which are less available for introspection (Greenwald & Banaji, 1995) and may therefore have a unique impact upon depressed individuals. It has become increasingly recognised that self-report measures may be inaccurate measures of mental illness attitudes, as a result of biases such as social desirability (Hinshaw, 2007). Research literature regarding implicit associations around mental illness is scarce. The study also explored self-reported internalised mental illness stigma. This relates to an individual's awareness of mental illness stereotypes and their internalisation of these, once a mental illness diagnosis has been received (Link, 2001).

Negative implicit associations regarding mental illness, for instance between the categories "mental illness" and "bad", may be indicative of negative implicit attitudes (Rusch, Corrigan, Todd & Bodenhausen, 2010; Teachman, Wilson & Komaroyskaya, 2006). A limited amount of research has suggested that implicit mental illness attitudes may be present, amongst individuals with and without mental health difficulties (e.g., Monteith & Pettit, 2011; Rusch, Corrigan et al., 2010; Teachman et al., 2006). As yet, no research has explored implicit associations regarding mental illness amongst people experiencing depression. Drawing each of these research areas together, the primary aim of the current study was to measure implicit associations regarding mental illness, , self-reported internalised stigma, and help seeking symptom thresholds amongst people with depression.

This introduction will outline the concept of stigma and how this is linked to mental illness. Literature which has explored the relevance of mental illness stigma to clinical populations will be discussed. This will refer to a key theoretical perspective, Modified Labelling Theory. A description of the process of internalised mental illness stigma amongst clinical samples will then been provided. An outline of the nature of depression, its prevalence, impact, and stigmatising attitudes associated with this will then be discussed. This will be followed by an overview of research regarding help seeking for mental health problems and a systematic literature review regarding depression, stigma and help seeking. The nature of implicit processes and Dual Process Theory will then be discussed, followed by a literature review of research exploring implicit mental illness attitudes. Finally, the overall study rationale and research questions will be outlined.

1.2 Stigma

1.2.1 The concept of stigma.

The term stigma originated with the ancient Greeks, who used it to refer to bodily signs that were cut or burnt into an individual. These branded them as being morally abhorrent due to a particular social position or behaviour, for instance as a result of being a traitor, slave or criminal. The term has since been used to describe a particular trait which is linked to undesirable characteristics, as opposed to bodily signs or branding (Goffman, 1963; Jones, 1984). Goffman's (1963) definition of stigma, which has been widely cited within the stigma research literature, refers to this as an "attribute that is deeply discrediting", reducing the stigmatised person from "a whole and usual person to a tainted, discounted one" (Goffman, 1963, p. 3). Stigma is a widely researched area and has been explored in relation to HIV and AIDS (Parker & Aggleton, 2003), obesity (Puhl & Brownell, 2003), physical

disability (Cahill & Eggleston, 1995), sexual orientation (Herek, 2004), and mental illness (Corrigan, 1998).

Stigma refers to social rejection and is therefore a social construct (Crocker, 1998). Certain negative attributes have greater social salience (Link, 2001). The connection between labels and undesirable attributes can be relatively strong or weak (Link, 2006). Consequently, there may be more social stereotypes relating to certain conditions, such as mental illness, compared to medical conditions such as hypertension (Link, Yang, Phelan, & Collins, 2004). Stigma may be more or less prominent depending on the social context.

Various terms have emerged within the literature to describe stigma. Perceived stigma refers to the extent to which individuals experiencing a stigmatised condition, such as a mental illness, perceive that others in society will devalue or discriminate against them as a result of that condition (Sirey, Bruce, Alexopoulos, Perlick, Friedman et al., 2001). Internalised stigma refers to the application of negative stereotypes to oneself, which can result in devaluation, shame, secrecy and withdrawal (Corrigan, 1998). Some researchers have explored implicit associations which may be held regarding mental illness. These may conflict with self-reported views (Rusch, Corrigan et al., 2010; Teachman et al., 2006). Further research is required to determine the presence of such implicit associations and the implications of these for mental illness stigma. Of particular relevance to the current study are the concepts of internalised stigma and implicit mental illness associations. The meaning and consequences of stigma for individuals with a mental illness, in addition to any potential automatic basis for stigmatising views regarding mental illness, may have important implications for treatment (Rusch, Angermeyer, & Corrigan, 2005; Rusch, Corrigan, et al., 2010).

1.2.2 Mental illness stigma.

Mental illness stigma is widespread. Evidence supports a strong and persistent impact across various countries including the United Kingdom (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000), United States (Link, 1987), Germany (Angermeyer & Matschinger, 1997), Greece (Madianos, 1987), South Africa (Hugo, Boshoff, Traut, Zungu-Dirwayi, & Stein, 2003), Japan and Australia (Griffiths et al., 2006). Strong evidence from a meta-analysis of studies exploring public attitudes towards mental illness revealed that the overall social rejection of mentally ill individuals remained stable over 20 years (Schomerus et al., 2012). Stigmatising attitudes towards mental illness may take various forms. In Western cultures, negative stereotypes regarding individuals with mental illness have suggested that they are dangerous, incompetent, unable to care for themselves, or childlike (Brockington, Hall, Levings, & Murphy, 1993; Corrigan, 1998; Phelen, 2000; Taylor & Dear, 1981; Wahl, 1992).

Negative media portrayals regarding the danger posed by people with mental health difficulties may be a key factor maintaining stigma (Matas, el-Guebaly, Harper, Green, & Peterkin, 1986; Philo, 1996; Wahl, Wood, & Richards, 2002). Furthermore, biological and genetic causal models of mental illness have propagated the message that mental illness should be treated as a medical disease like any other (Rabkin, 1972). Research has indicated that such views may have resulted in increased perceptions of dangerousness (Mehta & Farina, 1997; Read, Haslam, Sayce, & Davies, 2006; Walker & Read, 2002). This may explain public endorsement of these beliefs. However, there is also evidence that endorsement of a biological model of depression is associated with decreased stigma (Goldstein & Rosselli, 2003), therefore conclusions are unclear.

Research has demonstrated that increased contact with people who have a mental illness, combined with education, may be effective in reducing stigmatising attitudes (Pinfold et al., 2003; Rusch et al., 2005; Schulze, Richter-Werling, Matschinger, & Angermeyer, 2003). However, Evans-Lacko, London, Little, Henderson, and Thornicroft (2010) found that the "Time to Change" anti stigma campaign improved public knowledge about mental health difficulties, but did not change negative attitudes. Furthermore, Angermeyer and Matschinger (2004) did not find that increased contact with individuals with mental illness reduced negative attitudes. This suggests that the stigma surrounding mental illness is an enduring phenomenon and that further efforts are needed to reduce this. The following section will summarise aspects of the research literature relating to mental illness stigma.

1.2.3 Mental illness stigma research literature.

As outlined above, Goffman (1963) defined stigma as a social construction which describes a stigmatised individual's identity in a discredited, negative manner. Goffman's research highlighted the damaging impact of mental illness stigma and influenced numerous subsequent studies. Phillips (1966) found that participants reported a strong desire for social distance if it was known that an individual had received mental health treatment. Another study found evidence of decrements in task performance on an experimental task for individuals who believed their experimental partner knew of their mental illness (Farina, Allen, & Saul, 1968), providing an early indication of the effects of internalised stigma. Research has since reiterated the finding that negative stigmatising attitudes regarding mental illness are in existence (Crisp et al., 2000; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Phelen, 2000; Thompson et al., 2002).

As the stigma research literature has progressed, explorations have turned towards the experience of individuals diagnosed with a mental illness. Several studies have suggested that internalised stigma is linked to decrements in self-esteem for individuals experiencing a mental illness (e.g., Berge & Ranney, 2005; Fung, Tsang, Corrigan, Lam, & Cheung, 2007; Kahng, 2005; Keser, Saygin, Turkan, Kulaksizoglu, & Buldukoglu, 2011; Kleim, 2008; Landeen, Seeman, Goering, & Streiner, 2007; Lundberg, Hansson, Wentz, & Bjorkman, 2009; Moses, 2009; Vauth, Kleim, Wirtz, & Corrigan, 2007; Verhaeghe, Bracke, & Bruynooghe, 2008; Werner, Aviv, & Barak, 2008). Furthermore, Link et al. (2001) found that both perceiving stigma and withdrawing from others as a result were associated with significantly lowered self-esteem at six and 24 month follow-up periods, amongst a sample of individuals accessing an outpatient rehabilitation programme (N = 70). These studies have suggested the damaging effects of mental illness stigma. However, many studies utilised samples of individuals with schizophrenia, which is a severe and enduring mental health difficulty (Berge & Renney, 2005; Kleim, 2008; Landeen et al., 2007; Vauth et al., 2007; Werner et al., 2008) or other serious mental health problems (Fung et al., 2007; Kahng, 2005; Keser et al., 2011; Lundberg et al., 2009). It may be expected that stigma experiences would be high amongst such individuals and that self-esteem would be lowered as a result. There is some evidence that self-esteem is not necessarily associated with lowered self-esteem (Rusch, Corrigan, Wassel et al., 2009), therefore this area would benefit from continued exploration.

Findings from cross-sectional and longitudinal research have indicated that mental illness stigma may be associated with worsened psychiatric symptoms amongst individuals with psychosis (Karidi et al., 2010; Lysaker et al., 2007; Lysaker, Vohs & Tsai, 2009; Yanos, Roe, Markus, & Lysaker, 2008). Furthermore,

Link et al. (1997) found an enduring effect of stigma on depressive symptoms amongst men with a dual diagnosis of substance misuse and mental disorder after one year, despite an improvement in other psychiatric symptoms and substance misuse. This suggests a negative impact of stigma on depressive symptoms specifically. However, not all studies have found a link between stigma and psychiatric symptoms (Dickerson, Sommerville, Origoni, Ringel, & Parente, 2002; Lysaker et al., 2011). This research area would be aided by further exploration.

To summarise, many studies have been carried out within this area. Caution must be employed when making conclusions from cross-sectional research. Moreover, it is unclear to what extent stigma research amongst people experiencing psychosis can be applied to individuals experiencing other mental health difficulties, such as depression. Nevertheless, findings have indicated that stigma can have a damaging effect upon individuals experiencing a mental illness. This suggests that stigmatising attitudes within society may become internalised. The next section will offer a theoretical perspective relating to the internalisation of mental illness stigma.

1.2.4 Modified Labelling Theory.

Modified Labelling Theory posited that early socialisation experiences raise awareness of negative stigmatising views associated with mental illness diagnoses. For instance, individuals with a mental illness diagnosis may be viewed as being less trustworthy, dangerous, or incompetent. Such beliefs may be applied to the self once a mental illness label, in the form of a diagnosis, has been received. Once an individual has been in treatment for a mental health difficulty, the likelihood of them receiving a mental illness label is increased. According to Modified Labelling Theory, an individual may subsequently develop perceptions around the likelihood of rejection and devaluation (Link, 1982; Link, Cullen, Frank, & Wozniak, 1987;

Link, Struening, Cullen, Shrout, & Dohrenwend, 1989; Link, 2001). Thus, they may withdraw socially, feel demoralised and attempt to conceal their mental illness, all factors which may worsen their difficulties and functional outcomes (Link et al., 1989; Markowitz, 1998).

There has been some empirical support for this theory. Individuals who have been in treatment for a mental illness have been found to have lower incomes and to be more likely to be unemployed, compared to those with similar symptoms who are not receiving treatment (Link, 1982). Furthermore, Link et al. (1989) established that individuals who had experienced repeated contact with treatment services, who were therefore hypothesized to be particularly affected by labelling, had significantly reduced social networks compared to an untreated community group. Additionally, the treated sample reported more perceived social rejection and used secrecy and withdrawal as coping strategies.

However, other theorists have stated that it is the socially unacceptable behaviours displayed by people with a mental illness, rather than mental illness labels, which result in social rejection (Gove, 1980). It is difficult to ascertain whether labelling has a greater impact than psychiatric symptoms on social and lifestyle factors. Mental illness labels may also have a positive impact in that they may result in the receipt of beneficial treatment (Rosenfeld, 1997)**.** Nevertheless, there is evidence that negative stereotypes are associated with mental illness diagnoses. An exploration by Nunnally (1961) suggested that there were few labels denoting mental illness which did not have negative connotations. Furthermore, there is evidence that perceived mental illness stigma is associated with negative outcomes such as reduced self-esteem (Link et al., 2001). This provides evidence that stigmatising attitudes regarding mental illness may be linked to negative self-worth.

1.2.5 Internalised stigma.

Modified Labelling Theory is relevant for understanding the concept of internalised stigma. This theory has outlined the subjective perception amongst individuals experiencing a mental illness that they may become devalued or marginalised as a result of their mental health difficulty (Ritsher, Otilingam, & Grajales, 2003). Therefore, following an initial awareness of mental illness stereotypes, these may become internalised if a mental illness is experienced (Link, 2001). Aspects of internalised stigma may relate to a sense of feeling alienated from society and the endorsement of stereotypes regarding mental illness (Ritsher et al., 2003). Internalised stigma has been theorised to result in self devaluation and shame (Corrigan, 1998). It has been proposed that it is due to these processes that internalised mental illness stigma may be associated with reduced self-esteem (Corrigan & Watson, 2002).

However, the internalisation of negative social stereotypes amongst stigmatised groups is not straightforward. Corrigan and Watson (2002) proposed that individuals with a mental illness may not necessarily experience shame and devaluation as a result of stigma. Depending on their perceptions of the legitimacy of negative attitudes, individuals may display responses which are on a continuum between righteous anger and indifference at one end, or lowered self-esteem and self-efficacy at the other. There may be many factors which mediate internalised stigma. For example, coping style may determine the impact that stigma has upon individuals. Coping responses may be characterised by problem solving or avoidance. An avoidant coping style may maintain the internalisation of stigmatising ideas (Miller & Kaiser, 2001). The internalisation of mental illness stigma is complex and requires further exploration amongst specific clinical groups, such as

individuals experiencing depression. The following sections will outline the nature of depression and its impact.

1.3 Depression

The Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV; American Psychiatric Association, APA; 1994) has outlined the criteria for a Major Depressive Episode. These consist of two key features, namely depressed mood and anhedonia, or a reduced capacity to experience pleasure. The definition offered within the International Statistical Classification of Diseases and Related Health Problems, tenth edition (ICD-10; World Health Organisation, 1993) has also specified loss of energy as a key diagnostic criterion. At least one (according to the DSM-IV) or two (according to the ICD-10) of these features must be present at the time of diagnosis to determine the presence of a current episode. Within both classification systems, the presence of a depressive episode is further determined by the number and severity of various symptoms. According to DSM-IV criteria, symptoms include five or more of the following: Persistent low mood, markedly diminished interest in all, or almost all daily activities, significant weight loss or gain, increased or reduced sleep, psychomotor agitation or retardation, excessive fatigue or loss of energy, feelings of worthlessness or excessive guilt, diminished ability to concentrate or indecisiveness, and recurrent thoughts of death, suicidal ideation, or planned suicidal intent. Symptoms must have been present for at least two weeks, should have been observed for a large proportion of each day over that period, and should represent a change from an individual's prior level of functioning (APA, 1994).

The DSM-IV has further specified other conditions which are associated with depressed mood, including dysthymia. This is characterised by chronic mild mood

disturbance over at least two years, and adjustment disorder with depressed mood, characterised by a psychological disturbance following an identifiable life event (APA, 1994). It has been recognised that sub-threshold depressive symptoms, which fall below the criteria for a Major Depressive Episode, may be disabling and persistent (NICE, 2009). Furthermore, evidence has indicated that subclinical depression is a risk factor for the occurrence of Major Depression (Kessler, Zhao, Blazer, & Swartz, 1997).

1.3.1 The prevalence and impact of depression.

The World Health Organisation has predicted that, after heart disease, depression will become the second leading cause of disability worldwide by the year 2020 (Moussavi et al., 2007). Furthermore, depression was cited within this survey as being one of the most common mental health problems within the Western world. Research has established that the prevalence of depression is increasing (Murray & Lopez, 1996) and that the sizable burden of this disorder worldwide is underestimated (Murray & Lopez, 1997). Within the UK, depression has been estimated to affect one in every four to five women and one in every seven to 10 men at some point across the lifespan (Bebbington et al., 1998). Moreover, a large scale national survey of adolescents and young adults demonstrated a lifetime prevalence rate of 15.3% for Major Depression and 9.9% for sub clinical depression (Kessler & Walters, 1998).

Extensive research has established a link between depression and various negative life outcomes. An international health survey across 60 countries indicated that depression has co-morbidity with a number of physical health problems, including angina, arthritis, asthma, and diabetes (Moussavi et al., 2007). Although this study does not determine any causal links, findings are indicative of a possible

link to adverse health consequences. Many other poor outcomes have been found to be associated with depression. An eight to 10 year longitudinal study found a long term impact of depressive symptoms on social maladjustment (Kennedy & Paykel, 2004). Furthermore, depression has a high level of co-morbidity with other mental health difficulties, including substance abuse disorders (Rohde, Lewinsohn, & Seeley, 1991), personality disorders (Hirschfeld, 1999), and anxiety disorders (Kaufman & Charney, 2000).

Moreover, mood disorders such as depression place a substantial economic burden upon individuals and wider society. During the year 2000, the total cost to the UK economy of depression was estimated to be over £9 billion, with direct treatment costs estimated as being £370 million (Thomas & Morris, 2003). Hospitalisation fees make up a sizable proportion of treatment costs for depression (Berto, D'Ilario, Ruffo, Di Virgilio, & Rizzo, 2000). This indicates that alternative treatments for depression, for instance those that are community based, may be more cost-effective. Studies exploring the economic impact of depression are complicated by the fact that many individuals do not present for treatment, with one study finding that 43% of depression sufferers across Europe had not sought help (Lepine et al., 1997). Poor identification and under diagnosis are key difficulties which may result in a lack of appropriate treatment for this disorder (Davidson & Meltzer-Brody, 1999).

Research has indicated the pervasiveness and severity of depression. For instance, the risk for repeated episodes of Major Depressive Disorder was found to exceed 80% following an initial episode (Judd, 1997). Moreover, 90% of individuals in one study who had experienced three depressive episodes went on to experience depressive symptoms later in life (Solomon et al., 2000). Therefore, it is important to

identify potential factors which maintain this condition. Furthermore, depression has been established to be a key risk factor for suicide (Brown, Beck, Steer, & Grisham, 2000). It has been suggested that better recognition of depression and the subsequent delivery of appropriate treatments, such as antidepressants, should substantially reduce the risk of suicide associated with the disorder (Rhimer, 2001). This highlights the role of identifying and addressing factors which may delay treatment.

Additionally, NICE has alluded to the poor recognition and treatment of depression. It has been recommended that this should be screened amongst individuals with a previous history of the disorder or chronic health conditions. A stepped care model for the management of depression has been advised, with low intensity interventions such as guided self help within a Cognitive Behavioural framework being offered for milder presentations and more intensive interventions offered for higher levels of complexity (NICE, 2009). This indicates that the need for better identification and treatment for depression has been recognised from a policy perspective.

1.3.2 Stigma and depression.

Evidence has suggested that stigmatising attitudes towards depression are prevalent. In a large UK survey (N = 1737), 23% of individuals viewed people suffering from severe depression as being a danger to others, 62% felt that these individuals would be hard to talk to, and 56% thought that this group would be unpredictable (Crisp et al., 2000). Furthermore, Cook and Wang (2010) found that views about the danger posed by depressed individuals were strongly prevalent in Canada. Moreover, stigmatising views towards depression were found to be present amongst an African American population (Rusch, Kanter, Manos, & Weeks, 2008), indicating the pervasiveness of such views across cultures. Negative emotional

responses, such as pity or fear, may result from stigmatising views towards depression (Angermeyer & Matschinger, 2004).

Evidence has explored the impact of these attitudes upon individuals with depression. Sirey, Bruce, Alexopoulos, Perlick, Friedman et al. (2001) established that low perceived stigma was associated with a greater adherence to antidepressant medication amongst individuals with a confirmed diagnosis of Major Depressive Disorder. Therefore, treatment engagement may be a factor that is linked to depression related stigma. Individuals who seek help for depression may be viewed as being emotionally unstable in comparison to individuals who seek help for back pain (Ben-Porath, 2002), suggesting the presence of stigmatising attitudes towards treatment seeking. Furthermore, research amongst individuals with chronic pain, war veterans, and older adults has established a link between stigmatising views and depressive symptoms (Freidl, Piralic Spitzl, & Aigner, 2008; Pyne et al., 2004; Werner, Stein-Shvachman, & Heinik, 2009). This suggests that an increased severity of depressive symptoms may be associated with a heightened risk that stigma will be internalised, or that internalised stigma may worsen the symptoms experienced by individuals with depression.

However, not all studies have found a negative impact of depression related stigma. Sirey, Bruce, Alexopoulos, Perlick, Raue et al. (2001) explored the impact of perceived stigma on treatment discontinuation, using the stigma coping scale (Link et al., 1989) amongst psychiatric outpatients with depression. Perceived stigma was not significantly associated with an increased likelihood of treatment discontinuation following a three month follow-up. Therefore, stigma reduction efforts would be aided by exploring processes which may protect against the negative impact of depression related stigma.

To summarise, evidence has suggested that particular stigmatising views may be held towards depression (Crisp et al., 2000; Cook & Wang, 2010). Some evidence has indicated that stigmatising attitudes correlate with depressive symptoms (Friedl et al., 2008; Pyne et al., 2004; Werner et al., 2009). This links with Modified Labelling Theory, as having a greater severity of symptoms is more likely to be associated with a diagnosis of depression. This may in turn be associated with the internalisation of negative attitudes (Link, 1982; Link et al., 1987). Some evidence has also suggested that treatment engagement may be affected by stigma (Sirey, Bruce, Alexopoulos, Perlick, Friedman et al., 2001). This suggests that it may be relevant to explore whether stigma links to help seeking for this difficulty.

1.4 Help Seeking

Goldberg and Huxley's (1980) Pathways to Care model has offered a framework to understand mental health treatment. The model proposed five levels of care: Community services, primary care, primary care mental health services, outpatient mental health care, and inpatient services. Within this model, a higher level of symptom severity determines access to treatment (Goldberg & Huxley, 1980). There may be delays in accessing these services. For instance, poor GP recognition may be a key factor limiting access to appropriate care (Davenport, Goldberg, & Millar, 1987). Evidence has suggested that many individuals experiencing psychiatric difficulties do not seek help or support from either primary or specialist services (Commander, Dharan, Odell, & Surtees, 1997; Kessler et al., 1999; Regier et al., 1993). Relating to depression, the interval between the onset of symptoms and the receipt of appropriate treatment has been found to significantly predict their persistence over time (Scott, 1992). Therefore, it is important to understand factors contributing to the help seeking process.

Research has distinguished between formal and informal help seeking. Formal help seeking refers to support from a range of professionals, including GPs, psychiatrists, counsellors, or psychologists. Informal help seeking is characterised by seeking support from friends, family or community members (e.g., Brown, 1978; Husaini, Moore & Cain, 1994; Neighbors & Jackson, 1984). Informal help seeking may also encapsulate self help tasks such as engaging in physical exercise or pleasurable activities (Jorm et al., 1997; Rippere, 1979). Distinct factors may influence each process, for instance the intensity of distress predicted formal help seeking from a counsellor amongst a sample of undergraduate students in the United States (Oliver, Reed, Katz, & Haugh, 1999). Furthermore, amongst Australian adolescents, professional help seeking was predicted by the level of psychological distress (Rickwood & Braithwaite, 1994). Moreover, research has indicated that individuals may only ever make use of informal help (Neighbors & Jackson, 1984). Factors influencing more formal help seeking include trust in the particular form of treatment and recommendations from others (Chadda, Agarwal, Singh, & Raheja, 2001). This highlights the importance of exploring both formal and informal help seeking within research.

Of relevance to the current study is the concept of help seeking symptom thresholds, as defined within a study by Sherwood et al. (2007). Specifically, this is the self-reported level of depression severity needed before various forms of informal and formal help are sought. The concept of help seeking symptom thresholds does not denote help seeking behaviour in itself. The following section will explore wider factors which may influence help seeking for a mental health difficulty such as depression.

1.4.1 Factors affecting help seeking.

Ajzen's (1991) Theory of Planned Behaviour aids understanding around help seeking for mental health difficulties such as depression. This theorises that behaviours are determined by an individual's intention to engage in them. Behavioural intentions are thought to be influenced by attitudes towards that behaviour and perceived social norms. A further concept, perceived behavioural control, refers to an individual's sense of self-efficacy regarding their ability to successfully carry out behaviour. Perceived behavioural control is hypothesised to influence behavioural intention and to have a direct influence on behaviour (Ajzen, 1991; Armitage & Conner, 2001; Bandura, 1997). Stigma towards mental illness may be one factor impacting on self-efficacy (Corrigan, Watson, & Barr, 2006; Kleim, 2008). Furthermore, stereotypes about mental illness may influence both attitudes towards behaviours and perceived social norms. There is evidence for the existence of stigmatising attitudes towards psychiatric help (Vogel, Wade, & Haake, 2006). Therefore, stigma may be a key factor which influences help seeking and this would appear to be supported by elements of the Theory of Planned Behaviour.

The severity of a mental health condition may influence the likelihood of an individual seeking help. A large scale population based survey was carried out by Mojtabai, Olfson, and Mechanic (2002) and explored help seeking amongst individuals with common mental disorders such as anxiety, depression, and substance abuse difficulties. Co-morbidity was associated with a greater perceived need for professional help, as was the presence of suicidal ideation and functional impairment. For individuals with severe mental health difficulties, such as psychosis, entry into the mental health system may arise following assessment and treatment within accident and emergency services (Addington, Van Mastrigt, Hutchinson, &

Addington, 2002). These studies provide support for the assertion that access to support for psychiatric difficulties is dependent on the severity of difficulties, as outlined in the model by Goldberg and Huxley (1980) described above.

However, in a UK based survey, only 28% of individuals with elevated scores on the General Health Questionnaire had sought help from their GPs (Oliver, Pearson, Coe & Gunnell, 2005). Furthermore, in a primary care based study, individuals with greater levels of psychiatric disability were the least likely to disclose their difficulties to a GP (Bushnell, 2005). Moreover, amongst a large Norwegian sample (N = 65,648), Roness, Mykletun, and Dahl (2005) found that only 13% of depression sufferers had sought help. These findings may not directly apply to a UK sample. Nevertheless, these studies have suggested that many individuals do not seek help, despite increased symptom severity. In addition, many individuals with severe mental health difficulties do not receive adequate psychiatric treatment. Poor recognition and a perceived lack of effectiveness regarding psychiatric treatment have been established as possible reasons for these unmet needs (Kessler et al., 2001). Furthermore, many members of the general public have negative beliefs about medication, despite evidence from scientific trials illustrating the potential effectiveness of this particular treatment approach (Regier et al., 1988).

The importance of mental health literacy has been emphasised in the help seeking process. Judd (1997) found poor recognition of diagnoses amongst a population sample in Australia, regarding mental health difficulties described within a series of vignettes. This finding has been replicated by other research (Angermeyer & Matschinger, 1995; Angermeyer, Matschinger, & Riedel-Heller, 1999). Poor recognition of depression amongst young people has also been found (Burns & Rapee, 2006). It has been suggested that these factors influence the willingness and

readiness to seek psychological or psychiatric help for a mental health difficulty (Jorm, 2000).

Various tools for measuring help seeking have been used within the literature, including asking respondents for retrospective accounts of their behaviour (e.g., Oliver et al., 2005; Bushnell, 2005) and vignette based measures (e.g., Jorm, 1997). However, there may be methodological difficulties with making statistical associations between past and future behaviours (Verplanken & Aarts, 2011). Furthermore, some research has indicated a lack of correlation between responses to case vignettes and actual behaviour (Morrell & Roland, 1990), questioning their use within research. Therefore, there may be methodological disadvantages with the use of such help seeking measures.

To summarise, a greater severity of mental health difficulties has been found within some studies (e.g., Addington et al., 2002) to predict mental health service use, but other studies have found that even with increased severity, many individuals do not seek help (e.g., Bushell, 2005; Oliver et al., 2005). This implies that there are often delays to the help seeking process. An exploration of the impact of stigma on help seeking behaviour for psychiatric problems will now be provided.

1.4.2 Stigma and help seeking.

A narrative review conducted by Schomerus and Angermeyer (2008) established that there is stigma attached specifically to seeking formal help for a mental health problem. The review concluded that internalised stigma was associated with readiness to seek professional help within numerous studies. A systematic review of 22 qualitative and quantitative studies exploring barriers to help seeking amongst young people and adolescents was carried out by Gulliver, Griffiths and

Christensen (2010). This revealed that perceived stigma was one of the barriers to help seeking for mental health problems.

Several research studies have explored the impact of stigma on help seeking. Within a general population survey in Australia (N = 142), Wrigley, Jackson, Judd, and Komiti (2005) found that help seeking attitudes were associated with perceived mental illness stigma, measured using the Perceived Stigma Scale, which was developed by the authors. However, in a regression model perceived stigma was not predictive of seeking help from a GP. This study may not be applicable to sources of help seeking other than GP support. Using structural equation modelling, Vogel, Wade, and Hackler (2007) explored the role of self stigma in help seeking attitudes and intentions towards counselling. Self stigma was measured using the Self Stigma of Seeking Help Scale (Vogel, Wade & Haake, 2006). The authors found that 57% of the variance in attitudes towards counselling and 34% of the variance in willingness to seek counselling were accounted for by self stigma. The study used a large sample of undergraduate students (N = 676) but did not include any measures of psychiatric symptoms, therefore the applicability of the findings to individuals experiencing active symptoms is unclear. Despite limitations, these findings suggest that stigma towards mental illness had an influence on help seeking.

Some studies have indicated that internalised mental illness stigma has a particularly pertinent impact on help seeking. Amongst a sample of individuals with severe mental illness (N = 85), internalised (β = .08, p = .00) rather than perceived (β = -.71, p = .16) stigma was predictive of hospitalisation (Rusch, Corrigan, Wassel et al., 2009). The Self Stigma of Mental Illness Scale (Corrigan, Watson & Barr, 2006) and the Perceived Devaluation and Discrimination Questionnaire (Link, 1987) were used. Furthermore, an impact of internalised as opposed to perceived stigma on both

formal and informal help seeking was also established amongst a sample of undergraduate students. Once again, the Perceived Devaluation and Discrimination Questionnaire was used (Link, 1987), with the wording of some items adapted to measure internalised stigma (Eisenberg, Downs, Golberstein, & Zivin, 2009). These studies have used different measurement tools to explore internalised stigma, therefore it is difficult to reach firm conclusions. However, internalised stigma has been highlighted as potentially being associated with help seeking.

Findings regarding the impact of stigma on mental health help seeking may not be straightforward. Alonso et al. (2009) carried out a large scale study across adults living in six European countries (N = 8796). They measured common mental health problems using the Composite International Diagnostic Interview (Kessler & Ustun, 2004). Perceived stigma was measured by asking two questions relating to the degree of experienced embarrasment and discrimination as a result of having a mental illness. No differences were found between participants who did or did not perceive stigma in terms of help seeking delays. Results were not reported meaning that no firm conclusions about any relationship between these variables can be made. Additionally, considering that this was such a large scale study, it is regrettable that only two questions relating to perceived stigma were used.

To summarise, although the evidence is not conclusive, stigma may have a key impact on the process of seeking help for a psychiatric difficulty. Many studies in this area have been carried out with non-clinical populations (Eisenberg et al., 2009; Wrigley et al., 2005; Vogel et al., 2007). Whilst this provides important information regarding help seeking attitudes and behaviour, according to Modified Labelling Theory, the experiences of individuals with clinically significant mental illness symptoms may be different (Link, 1982; Link et al., 1987). Research findings

have indicated that there is stigma associated with seeking help for depression, compared to other conditions (Ben-Porath, 2002). Stigma may therefore be a key factor which aids understanding around the process of help seeking for depression. The following section will explore this more thoroughly.

1.4.3 Stigma, depression and help seeking.

A literature search was carried out using the NHS national library for health. The databases searched were: Embase (1980 to present), Medline (1950 to present), Psycinfo (1806 to present), and Cinahl (1981 to present). Keywords used were: "Stigma", "Attitudes", "Prejudice", "Stereotypes", "Help Seeking", "Treatment Seeking", "Help Seeking Behaviour", "Treatment Seeking Behaviour", "Psychiatric Help", and "Depression". For all search terms, the wildcard option was used to access variations of the same search term. The following inclusion and exclusion criteria were applied. Only quantitative studies were included. Studies were included if they were published within a peer reviewed journal and were in the English language. Studies were excluded from the review if they did not explore stigma, depressed mood or symptoms, and help seeking as key variables. In order to access relevant articles that may have been missed, reference lists were also scanned. The search resulted in 48 articles. Duplicates were removed resulting in 42 articles. Following the application of the above outlined criteria, 13 relevant studies remained.

Several studies explored the role of ethnicity in the association between stigma and help seeking for depression. Conner et al. (2010) established that internalised stigma mediated the relationship between race and attitudes towards treatment amongst African American and White older adults. Utilising a comparable sample, similar findings were also established by Menke and Flynn (2009), although

in their study depression severity fully mediated the relationship between stigma and service use. Within another study, Latin American participants with greater perceived stigma were less likely to be taking antidepressant medication (Interian et al., 2010). Moreover, Brown et al. (2010) found that internalised stigma mediated the relationship between perceived stigma and negative attitudes towards mental health treatment for White, rather than African American individuals. Givens, Katz, Bellamy and Holmes (2007) established that amongst individuals from both White and African American backgrounds, greater internalised stigma was associated with lower perceived acceptability of mental health counselling. Overall, despite the measurement of attitudes towards different forms of treatment, these findings have suggested that stigma may have an impact on help seeking for a diverse range of ethnic groups. Various tools to measure stigma were used in the above studies. These included Link's (1987) Perceived Devaluation and Discrimination Questionnaire (Brown et al., 2010; Conner et al., 2010; Interian et al., 2010), the Internalised Stigma of Mental Illness Scale (ISMII; Ritsher et al., 2003) and author developed scales (Givens et al., 2007; Interian et al., 2010; Menke & Flynn, 2009). This highlights the importance of understanding the differing stigma concepts measured by these scales when making conclusions from studies.

Several studies explored help seeking and stigma amongst community samples. Amongst a large scale population sample (N = 1312), Barney, Griffiths, Jorm and Christensen (2006) found that internalised and perceived stigma predicted help seeking from a range of sources. In order to measure perceived stigma, a vignette was used followed by questions about stigmatising responses. A key limitation of this study was the use of unstandardized measures with no reporting of psychometric properties. Another large scale survey carried out by Griffiths, Crisp,

Jorm, and Christensen (2011) in Australia explored public reactions to case vignettes of depressed and depressed suicidal individuals (N = 2000). The authors established that a belief that depression should be dealt with alone was predicted by perceived stigma (β = -.05, p <.01). Other key predictors were personal stigma (β = .11, p .00) and nationality (β = -.44, p <.05). Both perceived and personal stigma were measured using the Depression Stigma Scale (Griffiths, Christensen, Jorm, Evans, & Groves, 2004). Therefore, perceived and personal stigma may link to a belief in the helpfulness of dealing with depression alone, rather than in seeking formal treatment.

Furthermore, Schomerus, Matschinger, and Angermeyer (2009) explored whether participants would follow advice from their GP to see a psychiatrist. The authors used their own scale to measure anticipated discrimination upon visiting a psychiatrist. Greater desire for social distance from depressed individuals depicted in a vignette was predictive of reduced intentions to see a psychiatrist (β = -.03, p = .04). Anticipated shame (β = -.01, p = .00) and age (β = -.00, p = .00) were also predictive of this factor. This study's design would have been strengthened by a more detailed measure of help seeking, which included various sources of professional help other than psychiatrist support. Moreover, the use of vignettes in both this and the Griffiths et al. (2011) study may mean that the findings are not directly applicable to real life scenarios. However, these results indicate the existence of stigmatising attitudes towards depression which may impact negatively on help seeking.

Utilising a longitudinal design, Jorm et al. (2000) carried out a six month follow-up of a community sample (N = 580, 422 at follow-up), exploring whether perceived stigma predicted help seeking actions over time. A vignette was used followed by questions regarding perceived stigma. For actions involving someone

else knowing about the presence of psychiatric symptoms (e.g., going to see a GP or having counselling), perceived stigma accounted for only 1% of the variance in help seeking intentions and was insignificant. Psychiatric status and socio-demographic variables accounted for 20.3 % of the variance. Longitudinal evidence is therefore suggestive of a limited role of stigmatising attitudes in terms of help seeking. However, this study used an unstandardized measure of stigma, weakening the credibility of the findings. Furthermore, the sample consisted of the general public contacted through a postal survey. The use of a clinical sample may have produced different findings.

Other studies have explored the impact of stigma on treatment seeking amongst specifically depressed samples. Amongst a large scale public survey, Schomerus et al. (2012) screened 25 individuals as being currently depressed. This was a low sample size, therefore caution is required when interpreting the results. Using regression analyses, high internalised stigma predicted a low perceived need for treatment (β = -.59, p = .00). Internalised stigma was measured using the Self Stigma of Mental Illness Scale (Corrigan et al., 2006). Another notable predictor was the appraisal of current depression as a problem (β = .47, p = .03), measured using a problem appraisal scale developed by the authors. Findings from this study indicated a potential impact of stigma on unmet treatment needs for depressed individuals within the general population.

The link between stigma and help seeking has also been explored amongst individuals experiencing depression within primary care settings. Van Hook (1999) explored stigma and help seeking amongst a sample of women accessing primary care services in the US (N = 321), of whom 10% had experienced Major Depression. Perceived stigma was measured through two questionnaire items. Perceived stigma

was one of the barriers to seeking help for depression, however the authors did not carry out any statistical tests to back this up. In addition, an unstandardized stigma measure was used. In another primary care study, Roeloffs et al. (2003) measured treatment utilisation for depression at baseline and at a 6 month follow-up, amongst a large sample (N = 1,187). Within a regression model, scores on an adapted version of the Perceived Discrimination and Devaluation Questionnaire (Link, 1987) did not predict mental health visits or antidepressant medication usage. However, individuals who perceived that their friends held stigmatising views towards them due to their depression reported more unmet needs regarding their depressed symptoms at follow-up (OR = 1.51, p = .03). One limitation is that the authors did not state how participants were asked about their perceptions around unmet needs. Furthermore, the authors did not report psychometric information. However, findings indicated a discrepancy between treatment use and self-reported unmet needs, which were related to perceived stigma.

Sherwood et al. (2007) explored the role of beliefs and attitudes about depression and help seeking symptom thresholds amongst currently depressed individuals (N = 42), individuals with a psychological disorder other than depression (N = 12), and a community control sample (N = 48). The authors developed a measure of help seeking symptom thresholds which required participants to rate how severe their depression would need to be in order to seek various sources of help. Participants who were currently depressed rated that a higher severity of depression would be needed in order to seek help. This indicated that depressed symptoms were related to higher symptom thresholds. Therefore, there was a correlation between the perceived level of symptom severity needed before help would be sought and current depression severity. Moreover, internalised stigma regarding depression was

associated with increased symptom thresholds for help seeking. Therefore, stigma was also associated with increased self-reported symptom thresholds, even for participants who had previously sought help. This study adapted the Personal Beliefs about Illness Questionnaire (Birchwood, Mason, MacMillan, & Healy, 1993) which contains some items relating to internalised stigma. However, this was not a formalised measure of stigma experiences and therefore it may be difficult to compare to other studies in this area.

In summary, findings across studies were mixed. Evidence from general population (Barney et al., 2006; Griffiths et al., 2011; Schomerus et al., 2009) and clinically depressed (Schomerus et al., 2012; Sherwood et al., 2007; van Hook, 1999;) samples indicated that stigma may relate to negative views towards treatment or increased symptom thresholds for help seeking. Evidence from longitudinal research was less conclusive, with studies indicating a limited impact of perceived stigma on treatment use over time amongst a non clinical sample (Jorm et al., 2000) and an impact of perceived stigma on unmet treatment needs, rather than delayed treatment use, amongst a primary care sample (Roeloffs et al., 2003).

Research is needed regarding the impact of stigma on help seeking for currently depressed samples, as Sherwood et al. (2007) established that depression severity was associated with increased symptom thresholds for help seeking. Research findings are likely to be dependent on the ways in which stigma and help seeking are measured (Bornstein, 1998; Brohan, Slade, Clement, & Thornicroft, 2010). Numerous measurement tools have been used within the mental illness stigma research literature (Brohan et al., 2010), therefore there may be methodological difficulties when drawing conclusions from studies. Furthermore, unstandardized or vignette based measures were used within some of the research studies reviewed

(Barney et al., 2006; Jorm et al., 2000; Roeloffs et al., 2003; Schomerus et al., 2012), questioning their validity. The use of alternative measures of stigma within research may be useful, as there may be limitations with self-report measures (Hinshaw, 2007). The following section will explore the relevance of implicit processes to research on mental illness stigma.

1.5 Implicit Processes

An implicit process refers to an absence of awareness (Faulkner & Foster, 2002). The term implicit originates from cognitive psychology (Fazio & Olson, 2003). Implicit attitudes, stereotypes, or self-esteem are defined as evaluations that have an unknown origin and are activated automatically (Greenwald & Banaji, 1995; Wilson, Lindsey & Schooler, 1991). However, these should be distinguished from other implicit processes, such as implicit memory, of which individuals are theorised to have no awareness (Schacter, 1987). In contrast, the evidence has not suggested that individuals lack awareness of implicit attitudes, as measured through implicit attitude tasks (Fazio & Olson, 2003). Conversely, self-reported views, attitudes or experiences have been labelled explicit processes. These have been theorised to be readily available for introspection and involve a greater level of control and effort (Greenwald & Banaji, 1995). The current study has focused on implicit attitudes, through the exploration of implicit associations regarding mental illness.

The measurement of implicit attitudes may be a useful addition to research for a number of reasons. Certain attitudes may be discriminatory, such as those projected towards mental illness. This increases the likelihood that social desirability concerns will impact on self-reported views (Teachman et al. 2006). Therefore, limitations in the use of self-report measures may relate to an individual's lack of willingness to report certain biases (Greenwald et al., 2002). Furthermore, self-report

measures which access self-report (explicit) attitudes may be weakened by an individual's lack of capacity to report less accessible, automatically activated knowledge accurately (Greenwald, et al., 2002; Wilson & Schooler, 1991). This has led to a surge in research utilising implicit measures (Fazio & Olson, 2003; Greenwald & Banaji, 1995). The Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) was developed as a measure of implicit attitudes. This measure uses written stimuli and is based on the notion that information is assumed to be stored within the brain amongst a network of neural links, organised hierarchically according to semantic relationships (Fareham, 1999; Shiffrin, 1977). Research has shown that the evaluative and semantic content of words are processed automatically (Fareham, 1999; Greenwald, Klinger, & Liu, 1989). The strength of an implicit association relates to the ability of one concept to activate another. According to neural network theory, this instigates a spread of activation between two connected links. This association makes it easier to process subsequent similar material (Greenwald et al., 2002).

Both the IAT and the later developed Brief Implicit Association Test (BIAT; Sriram & Greenwald, 2009), measure the strength of associations. If a paired category, for instance "Flowers" and "Good", matches an individual's automatic associations in memory, the sorting task should be easier and reaction times should be quicker in comparison to a task which does not match automatic associations (e.g., "Insects" and "Good"). In the latter case, the concepts may be unrelated or dissimilar (De Houwer, 2001). The dependent variable within this measure is the speed of classification of written stimuli across a series of trials.

The IAT has been employed within research as a measure of implicit self concept or implicit attitudes (Greenwald et al., 2002; Greenwald et al., 1998).

Relating to self-concept, associations between "Me" and a positive or negative valence attribute, such as "Good" or "Bad", have been theorised to measure implicit self-esteem (Bosson, Brown, Zeigler-Hill, & Swann, 2003; Koole, Dijksterhuis, & van Knippenberg, 2001; Spalding & Hardin, 1999). Extensive research has explored implicit self-esteem amongst depressed individuals. This has found evidence of positive implicit, but not explicit, self-esteem within this group (De Raedt, Schacht, Franck, & De Houwer, 2006; Franck, De Raedt, & De Houwer, 2008; Franck, De Raedt, Dereu, & Van den Abbeele, 2007; Huajian, 2003; Risch et al., 2006). The above studies have further found that implicit measures do not correlate with self-reported self-esteem amongst depressed samples. Relating to implicit attitudes, the IAT is a measure of an association between a concept, such as "Mental Illness" and a negative valence attribute such as "Dangerous".

Research has suggested that stigma may have a negative impact on self-reported self-esteem for mentally ill individuals (Corrigan, 1998; Link et al., 2001). This suggests the value of exploring links between implicit attitudes, such as those pertaining to mental illness, and implicit self-esteem. Moreover, research exploring attitudes should make use of both implicit and self-report measures in order to gain a more thorough understanding of the impact of these. One key theoretical perspective has attempted to increase understanding around implicit and explicit processes. This will now be outlined.

1.5.1 Dual Process Theory.

Dual Process Theory was developed to explain the mechanisms underlying implicit and explicit processes, such as attitudes. Theories exploring dual processes assume that they each contribute towards attitudes and behaviour (Fazio & Olson, 2003; Friese, 2008; Smith & DeCoster, 2000). Dual Process Theories have assumed

that implicit processes are spontaneous, may be influenced by a construal of an object in an immediate situation, and may be based on inner affective reactions. Explicit processes, theorised within these models as being deliberative and controlled, involve more of a cost-benefit analysis of a behaviour or attitude. In order to engage in explicit processing, motivation and opportunity must both be high. Opportunity may be dependent on time and resources, whilst motivation may depend on the cognitive effort required to engage in controlled processes. If both opportunity and motivation are low, it is assumed that automatic processes will be more readily relied upon in influencing behaviour or construing an attitude (Fazio & Olson, 2003).

Within Dual Process Theory, implicit attitudes have been thought to be stable evaluative representations associated with long term socialisation experiences (Gawronski & Bodenhausen, 2006). These are synonymous with schemas, which are cognitive representations associated with people, the self, roles or events (Fiske, 1991; Smith & DeCoster, 2000). Conversely, explicit attitudes have been viewed as being more recently acquired (Petty, Tormala, Brinol, & Jarvis, 2006). There has been disagreement amongst Dual Process Theorists as to whether implicit and explicit processes occur simultaneously or in a sequence (Beevers, 2005; Smith & DeCoster, 2000). Therefore, the mechanisms through which these processes operate are unclear.

Some Dual Process Theorists have explored the associations between these mechanisms and underlying memory systems. For example, Smith and DeCoster (2000) theorised implicit processes to be more stable, as they rely on associations in memory that have been formed on the basis of repeated experiences. As such, these are based on slow learning memory systems. Smith and DeCoster also contended

that implicit processing operates through pattern completion of current and previously encoded stimuli. Specifically, when a new stimulus is experienced, acquired knowledge regarding key characteristics or affective reactions is used to automatically complete information, on the basis of similarities between current and previous events. Explicit processing on the other hand is theorised by them to be reflective, rule based and intentional. This operates more deliberately in comparison and can result from a single experience, rather than several. Explicit processes are based on a fast learning memory system, for instance allowing the rapid construction of episodic memories (Smith & DeCoster, 2000). Regarding explicit attitudes, these emerge over time as a result of context or experience. These change relatively easily, whereas implicit attitudes adapt more slowly (Wilson et al., 2000).

A meta-analysis of 126 studies established that implicit and explicit measures showed a weak average correlation (r = .19). Correlations increased when there was greater conceptual correspondence between the measures (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005). There may be many reasons for the lack of convergence between implicit and explicit measures. Dual Process Theories may help to explain why implicit and explicitly held attitudes may differ. Implicit attitudes may be held regardless of whether an individual believes these to be true or false (Gawronski & Bodenhausen, 2006). It has been proposed that explicit processes are characterised by evaluative reasoning which assesses the validity of implicit attitudes, determining whether these are true or false. Therefore, divergent scores on implicit and explicit attitude measures may result from an individual's assessment of the validity of automatic attitudes and the rejection of these if they are deemed to be inappropriate or wrong (Sritharan, 2010). Individuals can therefore be viewed as having some degree of conscious access to implicit attitudes, in that these

are used to make explicit evaluative judgements (Greenwald & Banaji, 1995; Wilsonet al., 2000). Therefore, Dual Process Theory has described how implicit and explicit processes are different but related to one another.

Implicit measures have been found to predict spontaneous behaviour, whereas explicit measures predict more controlled behaviours (Friese, 2008). Spontaneous behaviours, which may be elicited automatically as a result of implicit processes, include body tension and eye contact (Asendorpf, 2002; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997). Using the IAT, implicit and explicit fear associations were each found by Teachman (2003) to uniquely predict avoidance behaviours amongst individuals with spider phobias. However, the impact of implicit processes on behaviour is not straightforward. Most Dual Process Theories have alluded to the importance of both mechanisms, rather than behaviours being determined solely by implicit or explicit processes (Fazio & Olson, 2003; Gawronski & Bodenhausen, 2006; Smith & DeCoster, 2000; Wilson et al., 2000).

Although evidence from cognitive science has appeared to support Dual Process Theories (Smith & DeCoster, 2000), there is still extensive research needed to explore the ways in which implicit and explicit processes operate. For instance, there has been a lack of clarity regarding the degree of awareness individuals have around implicit processes, or the ways in which implicit attitudes adapt over time (Fazio & Olson, 2003). In order to substantiate some of the claims made in the theoretical literature, further research using implicit measures and their applications to behaviour is warranted. It is possible that implicit attitudes towards mental illness are held amongst stigmatised groups, such as individuals with a mental illness, and that these may be associated with unique negative outcomes in comparison to explicit, self-reported attitudes. An exploration of implicit attitudes will add to the

current research base regarding stigma, as most studies have used self-report measures (e.g., Griffiths et al., 2011; Jorm et al., 2000; Link et al., 1997; Lysaker et al., 2007; Roeloffs et al., 2003; Schomerus et al., 2012; Sherwood et al., 2007). A summary of research which has begun to explore this area will now be provided.

1.5.2 Research exploring implicit attitudes towards mental illness.

A literature search using the databases Embase, Medline, PsycInfo, and Cinahl was carried out using the keywords "Implicit Association Test", "Automatic", "Implicit", "Attitudes", "Mental Illness", "Psychiatric Illness", "Depression", "Stigma, "Prejudice", "Stereotype", and "Discrimination". Due to the scant literature within this area, studies which have employed implicit measures in their explorations of mental illness stigma amongst clinical and non clinical populations were included. One study explored implicit attitudes towards psychiatric medication, rather than mental illness (Rüsch, Todd, Bodenhausen, Weiden, & Corrigan, 2009), but was deemed relevant to the area. Only quantitative studies were included. Studies were excluded if they were not published in a peer reviewed journal. The search produced 94 articles. Duplicates were removed resulting in 74 articles. Following the application of the above outlined criteria, 10 articles remained. Studies were mainly excluded due to their exploration of implicit processes not relating to mental illness stigma. Table 1 summarises the studies reviewed.

Table 1

Summary of Studies Exploring Implicit Attitudes Regarding Mental Illness

Author / Date	Sample	Design	Implicit Measures	Conclusions
Teachman, Wilson, & Komarovskaya (2006)	Undergraduates (*N* = 119), healthy controls (*N* = 19), and a clinical sample (*N* = 35).	Cross-sectional	An Implicit Association Test measuring implicit attitudes towards mental illness compared to physical illness	Findings indicated an implicit bias towards mental illness compared to physical disability amongst all samples
Lincoln (2008)	Undergraduates (*N* = 61) and medical students (*N* = 60).	Within-groups	Implicit Association Tests exploring implicit attitudes towards schizophrenia and depression	There were no changes on IAT scores following a stigma reduction education programme, despite changes in self-report scores
Peris, Teachman & Nosek (2008)	Mental health professionals (*N* = 682), undergraduate students (*N* = 204), a general population sample (*N* = 112), and Health and Social service staff (*N* = 541).	Between-groups	An Implicit Association Test measuring implicit attitudes towards mentally ill people compared to welfare recipients	Individuals with mental health training reported more positive implicit and explicit evaluations of mental illness

Author / Date	Sample	Design	Implicit Measures	Conclusions
Rusch, Todd, Bodenhausen, Weiden, & Corrigan (2009)	Individuals with a severe mental illness (*N* = 85)	Cross-sectional	A Brief Implicit Association Test measuring positive and negative implicit attitudes towards psychiatric medication	More positive implicit attitudes towards psychiatric medication predicted higher levels of insight
Rusch, Todd, Bodenhausen & Corrigan (2010a)	Individuals with a diagnosed mental illness (*N* = 85) and a control sample (*N* = 50)	Between-groups	A Brief Implicit Association Test exploring implicit blame related stereotypes regarding mental illness	Amongst the mentally ill sample only, stronger "just world" beliefs ("I get what I deserve") were related to implicit self blame
Rusch, Todd, Bodenhausen & Corrigan (2010b)	Individuals with a diagnosed mental illness (*N* = 85) and a control sample (*N* = 50)	Between-groups	A Brief Implicit Association Test exploring implicit guilt related stereotypes regarding mental illness	Endorsement of a biogenetic explanation for mental illness was associated greater implicit guilt amongst the diagnosed sample
Rusch, Todd, Bodenhausen & Corrigan (2010c)	Individuals with a diagnosed mental illness (*N* = 75).	Longitudinal (6 month follow-up)	A Brief Implicit Association Test exploring implicit shame between mental illness and physical disability	Stronger implicit shame predicted perceived legitimacy of discrimination at follow-up

Author / Date	Sample	Design	Implicit Measures	Conclusions
Rusch, Corrigan, Todd, Bodenhausen (2010)	Individuals with a diagnosed mental illness (*N* = 78)	Cross-sectional	Two Brief Implicit Association Tests measuring implicit attitudes between mental illness and physical disability and implicit self-esteem	Combined implicit mental illness stigma and implicit self-esteem scores predicted quality-of-life in a regression model
Monteith & Pettit (2011)	Undergraduate students (*N* = 135)	Cross-sectional	An Implicit Association Test measuring implicit attitudes towards depression, compared to physical illness	Implicit attitudes were more negative towards depression compared to physical illness
Rusch, Corrigan, Todd & Bodenhausen (2011)	Individuals with a diagnosed mental illness (*N* = 85) and a matched control sample (N = 50)	Between-groups	A Lexical Decision Task using “crazy” and “sane” word primes	The diagnosed sample showed evidence of reduced automatic stereotypes towards mental illness compared to the control sample

Research has explored a wide range of implicit attitudes regarding mental illness. Several studies have explored implicit attitudes amongst non clinical populations. Peris, Teachman, and Nosek (2008) used samples of mental health professionals, staff working in health and social care, undergraduate students, and the general public (N = 1539). The authors used the IAT to compare implicit attitudes towards welfare recipients and mentally ill individuals. IAT stimuli included "welfare recipients", "mentally ill people", "good", and "bad". A more appropriate comparison category on the IAT may have been physical illness or physical disability, as used within other studies (Rusch, Corrigan et al. 2010; Teachman et al. 2006). As might be expected, participants who had received mental health training reported more positive implicit and explicit evaluations regarding mental illness. Interestingly, negative implicit biases (stronger associations between "mentally ill people" and "bad") predicted over diagnosis of clinical vignettes amongst mental health staff. This highlights the benefit of using implicit measures amongst professionals who come into contact with mentally ill individuals.

Using a similar sample, Lincoln, Arens, Berger, and Reif (2008) explored implicit attitudes amongst undergraduate psychology (N = 61) and medical students (N = 60). The purpose of this study was to explore self-report and implicit attitudes towards depression and schizophrenia, both prior to and following stigma reduction interventions. IAT stimuli relating to "schizophrenia", "depression", and a range of categories representing blame, helplessness and perceived threat were used. Stronger associations were found between the categories "schizophrenia" and "threatening". Although changes were observed on explicit measures following the stigma reduction programmes, there was no effect on IAT scores. This suggests a pervasive impact of implicit views over time.

Monteith and Pettit (2011) explored implicit attitudes towards depression amongst undergraduate students (N = 135). Their IAT categories included "controllable", "uncontrollable", "temporary", "permanent", "psychological", "biological", "good" and "bad". Depression was compared to physical illness. Implicit associations regarding the temporary nature of depression and underlying psychological causes were found, in comparison to physical illness. Implicit associations surrounding controllability were similar for both mental and physical illness. Implicit associations regarding mental illness were more negative. The authors did not state whether they measured the presence of physical illness amongst their sample, which may be a confounding factor. Moreover, it is unclear to what extent the views of their sample may apply to the wider population, or to individuals with depression themselves, which limits external validity. However, this study was useful in that the IAT tasks incorporated specific attitudes and beliefs that may be associated with depression.

Amongst both clinical and non clinical samples, Teachman et al. (2006) measured implicit attitudes towards either mental or physical illness. IATs explored "physical illness" or "mental illness" with the attribute categories "good" or "bad". Participants were undergraduate (N = 119) and healthy control samples (N = 19), as well as a sample of individuals with mental illness (N = 35). Scores indicated an implicit negative bias towards mental illness relative to physical illness amongst both the clinical and non clinical populations. However, once again, the authors did not state whether any of their sample was suffering from a physical illness which may confound the results. Amongst both samples, implicit and explicit measures were unrelated, supporting the assertion that these measure different constructs (Nosek, Banaji & Greenwald, 2002; Wilson et al., 2000). The applications of this study are

limited in that it did not describe the impact of such negative associations upon clinical outcome variables.

Addressing this factor, Rüsch, Todd, Bodenhausen and Weiden (2009) used the BIAT (Sriram & Greenwald, 2009) to measure implicit attitudes towards psychiatric medication amongst a sample of individuals with severe mental health diagnoses (N = 85). More positive implicit associations regarding medication were found to be predictive of higher self-reported levels of insight and perceived need for treatment, but not to medication adherence. These results remained significant after diagnoses were controlled for. This suggests that, measured implicitly, more positive views towards some forms of treatment may be associated with adaptive clinical variables, such as insight. This is a factor that could impact positively on treatment.

Two studies explored implicit blame and guilt associations regarding mental illness. Firstly, Rüsch, Todd, Bodenhausen, and Corrigan (2010a) explored these associations amongst individuals diagnosed with a mental illness (N = 85) and a control sample (N = 50). The authors used a BIAT. Self reported beliefs that actions have predictable and appropriate consequences were related to greater implicit blame regarding mental illness amongst the diagnosed sample only. In a separate study, exploring implicit associations between “me” or “not me” and “guilty”, again using the BIAT, Rusch, Todd, Bodenhausen, and Corrigan (2010b) found that the self-reported endorsement of Biogenetic explanations for mental illness was associated with stronger implicit guilt amongst a sample who had a range of mental health diagnoses (N = 85). Guilt is a key variable which could have adverse consequences on mental well-being. These studies have suggested that blame and guilt associations may be present amongst clinical populations, which may have implications for mental illness stigma.

Exploring a concept relating to guilt, Rusch, Todd, Bodenhausen, Olschewski, and Corrigan (2010c) measured automatic shame related mental illness stereotypes longitudinally amongst individuals with mental illness (N = 75). Participants were recruited from outpatient mental health services in the US, at baseline and following a six month follow-up. At the follow-up period, 12% of participants could not be contacted. The authors did not compare demographic or psychiatric variables with those who remained in the study, which is a key limitation. The BIAT was used with the categories "mental illness", "physical disability", "shameful" and "proud". Stronger automatic shame reactions predicted perceived legitimacy of discrimination at follow-up, measured using the Perceived Devaluation and Discrimination questionnaire (Link, 1987). These findings remained significant after diagnoses were controlled for. A clinical outcome measure, in addition to the perceived discrimination measure, may have produced richer findings.

Exploring a more pertinent clinical outcome amongst a clinical population with severe mental health problems (N = 78), Rusch, Corrigan et al. (2010) explored implicit associations regarding mental illness in relation to quality-of-life. The authors used two BIATs to measure implicit self-esteem (using the categories "me" "not me", "good" and "bad") and implicit mental illness associations, relative to physical disability (using the same mental illness categories as Teachman et al., 2006, described above). The authors combined the scores from each BIAT to form a concept of "implicit self stigma", as it is proposed that both awareness of stereotypes and lowering of self-esteem must occur for stigma to be internalised (Corrigan et al. 2006). Due to the lack of research within this area, exploring the scores from each individual task may have provided richer findings. The authors found that greater levels of their concept of implicit self stigma (more negative implicit associations

regarding the self combined with more negative associations regarding mental illness) significantly predicted poor quality-of-life amongst their sample. Moreover, in keeping with the findings of Teachman et al. (2006), this study found that implicit and explicit measures were unrelated.

All of the studies reviewed thus far have indicated negative implicit views regarding mental illness. However, research utilising alternative measurement paradigms has revealed mixed results. Rusch, Corrigan, Todd, and Bodenhausen, (2011) used the Lexical Decision Task (Wittenbrink, Judd, & Park, 2001) amongst individuals with mental illness (N = 85) and a matched control sample from the general public (N = 50). The Lexical Decision Task involves the use of category primes, which in this study were "crazy" and "sane", followed by the presentation of word and non-word items. Respondents are requested to quickly classify items as words or non-words. It is proposed that the stronger the association between prime and target words, the quicker individuals will respond. Findings indicated that the diagnosed mentally ill sample displayed markedly reduced negative automatic stereotypes compared to the control sample. The authors also measured emotional responses and found greater self-reported anger related prejudice amongst individuals with mental illness, in comparison to the control sample. Therefore, reduced automatic stereotypes were found amongst the clinical sample despite negative self-reported affective reactions. A limitation is that many of these emotional response measures were not standardised. Furthermore, the study would have benefited from the inclusion of a self-report stigma measure, to explore whether explicit stereotypes differed from those measured automatically. Nevertheless, these findings differ from those described above. This may have been partially attributable

to the choice of task, a priming measure, as other studies in this area have made use of the IAT or BIAT.

Findings regarding implicit or automatic associations regarding mental illness are likely to be dependent on the choice of measurement tool used, as this has been established amongst research exploring implicit associations amongst other concepts (Fazio & Olsen, 2003). Research surrounding implicit attitudes has largely made use of the IAT (Lincoln et al., 2008; Teachman et al., 2006), the BIAT (Rusch, Corrigan et al., 2010; Rusch, Todd et al., 2010a; Rusch, Todd et al., 2010b) or priming measures, such as the Lexical Decision Task (Rusch et al., 2011). Priming measures have made a useful addition to existing attitude research, for example research regarding automatic racial stereotypes (Dovidio et al., 1997; Jackson, 1997). However, one limitation of priming tasks concerns the extent to which respondents may be aware of the connection between the prime used in the task and their subsequently activated judgements (Lepore & Brown, 2002). This may be one factor impacting on the validity such measures.

Limitations of the IAT as an implicit measure have also been proposed. It has been suggested that respondents may use response strategies to facilitate responding (Rothermund, Wentura & De Houwer, 2005). Rothermund et al. (2005) proposed that this may involve responding to a set category of words using one computer response key. If such strategies are used, this may question whether the IAT is measuring implicit associations, thereby challenging the task's validity. In contrast, one potential advantage of the BIAT is that this task is shorter and only displays two category pairings at any one time (Sriram & Greenwald, 2009). Sriram and Greenwald (2009) theorised that this limits the potential confounding effects of variations in spontaneous response strategies. However, a potential limitation of both

the IAT and BIAT is that a comparison category is needed (Greenwald et al., 1998; Sriram & Greenwald, 2009), therefore implicit associations can only be explored in relation to this. Nevertheless, research suggests that both the IAT and BIAT are psychometrically robust measures of implicit attitudes (Greenwald et al., 1998; Sriram & Greenwald, 2009). The validity of the IAT has been further ascertained through a study which showed a strong correlation between IAT scores and an fMRI measure exploring neurological responses to black and white faces (Phelps et al., 2000). Furthermore, IAT paradigms (including the BIAT) have been frequently used within implicit attitude research (Fazio & Olson, 2003).

In summary, there are potential benefits and limitations to each measurement paradigm and these should be considered in any future research (Fazio & Olson, 2003). Amongst non clinical populations, there were indications of negative implicit associations regarding mental illness using the IAT (Lincoln et al., 2008; Monteith & Pettit, 2011; Peris et al., 2008). Amongst clinical populations, findings were indicative of negative implicit associations regarding mental illness (Rusch, Todd et al., 2010a). There were also implicit associations regarding guilt and shame (Rusch, Todd et al., 2010b). Implicit associations regarding mental illness have been found to predict poorer quality-of-life (Rusch, Corrigan et al., 2010) or self-reported views towards psychiatric treatment (Rusch, Todd et al., 2009). However, these studies were cross-sectional and not causal in nature. One study (Rusch et al., 2011) failed to find negative implicit views amongst a sample who were experiencing mental health problems. This highlights the value of continuing to explore implicit associations regarding mental illness amongst clinical populations. Moreover, focusing on a specific clinical sample, such as individuals experiencing depression, may prove

useful clinically as implicit associations regarding mental illness may differ between clinical groups.

1.6 Rationale for the Current Study

Research has suggested that stigmatising attitudes may be internalised by individuals experiencing mental health difficulties (e.g., Berge & Ranney, 2005; Link et al., 2001; Ritsher et al., 2003) and specifically by individuals experiencing depression (e.g., Friedl et al., 2008; Pyne et al., 2004 & Werner et al., 2009). The evidence has also suggested the existence of implicit associations regarding mental illness, both for non-clinical (Lincoln et al., 2008; Monteith & Pettit, 2011; Peris et al., 2008) and clinical (Rusch et al., 2011; Rusch, Todd et al., 2010a; Rusch, et al., 2010c; Teachman et al., 2006) samples. These associations have appeared to be distinct from self-reported (explicit) stigma (Rusch, Corrigan et al., 2010; Teachman et al., 2006). Implicit attitudes have been theorised to be more stable and less susceptible to change in comparison to explicit attitudes (Gawronski & Bodenhausen, 2006). This highlights the importance of incorporating implicit measures into research exploring attitudes regarding mental illness. Amongst clinical samples, such as individuals with depression, it is possible that implicit associations regarding mental illness may be linked to key behavioural outcomes, including help seeking. This area warrants further research.

Evidence from UK (Lepine et al., 1997) and non UK samples (Roness et al., 2005) has indicated that help seeking for depression is poor. Furthermore, persistent depressive symptoms may be linked to a delay between their onset and the receipt of adequate treatment (Scott, 1992). Some evidence has suggested that stigma may adversely impact on help seeking (e.g., Conner et al., 2010; Barney et al., 2006; Sherwood et al., 2007), yet the limited implicit stigma research carried out thus far

has neglected to explore this link. The relevance of exploring stigma and help seeking amongst clinical samples has been outlined, with specific reference to Modified Labelling Theory. Depression is a recurrent disorder (Judd, 1997) and there is a clear need to understand factors which contribute to help seeking for this difficulty. The primary aim of the current research was to explore the link between stigma and help seeking symptom thresholds amongst a depressed sample, offering a novel perspective by exploring the role of both self-reported (explicit) stigma and implicit associations regarding mental illness.

There were several further aims of the current study. Self-esteem has been highlighted as a negative outcome variable which may result from the internalisation of mental illness stigma (Corrigan et al., 2011; Keser et al., 2011; Link et al., 2001). The study further aimed to explore the links between stigma and self-esteem. It was intended that an exploration of both implicit and explicit self-esteem would offer a more detailed perspective on the overall impact of mental illness stigma, adding to the existing literature within this area. Other aims were that the study would further explore the association between explicit and implicit measures and that the role of depression severity in relation to both help seeking symptom thresholds and stigma would be examined.

1.7 Research Questions

1.7.1 Primary research questions.

1. What is the relationship between stigma and help seeking symptom thresholds amongst depressed individuals?

Some research has established a negative association between stigma and help seeking for mental health difficulties and specifically depression (Barney et al.,

2006; Sherwood et al., 2007; Van Hook, 1999; Vogel et al., 2007; Schomerus et al., 2012). Preliminary evidence has also suggested that negative implicit associations surrounding mental illness exist amongst clinical populations and that these may be associated with negative consequences (e.g., Rusch, Corrigan et al., 2010). The current study has used a measure of help seeking symptom thresholds to explore delays in help seeking (Sherwood et al., 2007). It was expected that a significant positive correlation would be found between the BIAT measuring implicit associations regarding mental illness and help seeking symptom thresholds, relating to overall, formal and informal help seeking (research question 1a). In addition, it was hypothesized that a significant positive correlation would be found between self-reported (explicit) internalised stigma and overall help seeking symptom thresholds, formal and informal help seeking (research question 1b).

2. What is the relationship between stigma and depression severity?

The hypothesis around the link between implicit associations regarding mental illness amongst depressed individuals and depression severity (research question 2a) was exploratory, as no research has explored a link between these variables. Conversely, a significant, positive correlation was expected between self-reported (explicit) internalised stigma and depression severity (research question 2b), following on from current research findings (Griffiths et al., 2008; Pyne, et al., 2004; Werner, et al., 2009). In order to explore the impact of anxious symptoms within both hypotheses, partial correlations were carried out to control for anxiety.

3. What is the relationship between depression severity and help seeking symptom thresholds, relating to both formal and informal help?

Studies have found that increased depression severity is negatively associated with help seeking behaviour (e.g., Jorm et al., 2000). Research has also suggested that depressed mood may be associated with increased self-reported symptom thresholds for depression, prior to help being sought (Sherwood et al., 2007). As the research is unclear, the direction of this hypothesis was not specified. Partial correlations were carried out to explore the impact of depressive symptoms on help seeking symptom thresholds, excluding the impact of anxiety.

1.7.2 Secondary research questions.

4. What is the relationship between stigma and self-esteem?

Prior research has specified that for stigma to be internalised, self-esteem should be lowered as a result (Corrigan, 1998). Furthermore, extensive research has established a link between mental illness stigma and self-esteem (e.g., Link et al., 2001) although this has not been found to be conclusive (Rüsch, Corrigan, Wassell et al., 2009). A negative correlation was hypothesised between self-reported internalised stigma and self-reported self-esteem. Additionally, the link between associations regarding mental illness (implicit mental illness attitudes) and the self (implicit self-esteem) as measured through the BIAT was explored (research question 4b). Due to there being no research exploring implicit mental illness attitudes and implicit self-esteem, this hypothesis was exploratory.

5. What is the relationship between implicit and explicit stigma measures?

Various studies have found that implicit and explicit measures are unrelated (Rusch, Corrigan, et al., 2010; Teachman et al., 2006). Furthermore, implicit and explicit processes have been theorised to operate through distinct mechanisms (Gawronski & Bodenhausen, 2006; Smith & DeCoster, 2000). Prior research has established that implicit and explicit measures of stigma are unrelated (Rusch, Corrigan et al., 2010; Teachman et al., 2006). A negative correlation between the mental illness BIAT and self-reported internalised stigma amongst individuals experiencing depressive symptoms was expected (research question 5a). Research has also established that implicit and explicit measures of self-esteem within depression do not correlate (de Raedt et al., 2006; Franck et al., 2008; Franck et al., 2007; Huajian, 2003; Risch et al., 2006). Therefore a negative correlation between implicit and explicit self-esteem was expected in the current study.

Chapter 2

Method

2.1 Design

The study used a cross-sectional within-subjects design. Participants completed measures at one time point. Participants were individuals experiencing current depressive symptoms, accessing primary and secondary care mental health services, or voluntary mental health service user groups. The research explored the relationship between seven within-subject factors. These were:

1. Implicit Associations Regarding Mental Illness (Implicit Mental Illness Attitudes)
2. Explicit Self-reported Internalised Stigma
3. Implicit Associations Regarding the Self (Implicit Self-esteem)
4. Explicit Self-reported Self-esteem
5. Help Seeking Symptom Thresholds
6. Depressive Symptoms
7. Anxious Symptoms

A limitation to this design is that it does not allow for the establishment of causal relationships between the variables under study (Coolican, 2004). However, a cross-sectional design was deemed appropriate to contribute to this novel area of research.

2.2 Participants

2.2.1 Inclusion criteria.

Participants were included in the study if they scored 16 or above on the Centre for Epidemiological Studies Depression Scale (CES-D), which is the

established cut off score to indicate current levels of depression (Radloff, 1977). To be included, participants must have been experiencing current depressive symptoms, with or without co-morbid symptoms of anxiety. As this is not a diagnostic measure, it was not known whether a formal depression diagnosis, such as Major Depressive Disorder, was present for participants.

2.2.2 Exclusion criteria.

Participants were excluded if they had significant literacy difficulties, difficulties in reading or understanding English, or a substantial visual impairment. This was because of the impact that these factors would have had on their completion of the questionnaire measures and engagement in the computer tasks. Additionally, participants with physical disabilities, but not physical health difficulties, were excluded from the study. This was because 'Physical Disability' was used as a comparison category on the Brief Implicit Association Test (BIAT; Sriram & Greenwald, 2009). It would therefore have been a confounding factor if participants had a physical disability as well as a mental health difficulty. Furthermore, participants were excluded if they had a current substance abuse difficulty, as this may have impaired their concentration and could have had an impact on their ability to accurately follow instructions and complete the various measures.

2.2.3 Sample size.

Effect sizes have not been calculated within the literature reviewed. However, it was anticipated that individuals accessing a mental health service would have a greater experience of stigma, as this fits with Modified Labelling Theory (Link, 1987). Evidence suggests that individuals with depressive symptoms have

negative experiences related to stigma (Griffiths et al., 2008; Pyne et al., 2004) and that stigma experiences can impact negatively on help seeking behaviour (Barney et al., 2006; Sherwood et al., 2007; Vogel et al., 2007). Therefore, it would be expected that a large effect size would be present amongst this population. Correlations were planned to explore findings relating to the research questions. A large effect size of *d* = .80 translates roughly into *r* = .50 for a Pearson's correlation. With the power level at .80 and the level of significance at *p* = .05, a sample of 36 participants is required to detect this effect size (Cohen, 1988).

2.2.4 Response rate.

A total of 270 information packs were dispersed to the various mental health teams and service user groups. Seven participants were excluded due to them not meeting the main inclusion criterion of scoring above the clinical cut off on the CES-D (Radloff, 1977) or being identified as having a physical disability via the initial telephone conversation. Furthermore, of an initial 38 respondents, three returned reply slips or contacted the researcher, of which two later declined to participate and one could not be contacted. This resulted in a total of 35 participants. The overall response rate was 13%. The low response rate is likely to have been partly due to service changes and restructuring going on within some of the clinical teams at the time of the research. Therefore, it was difficult for staff to keep the study in mind. Furthermore, numerous research projects were being carried out within the Cambridge secondary care mental health teams at the time of the current study. This was likely to be one reason for staff difficulties in assisting with the research within those teams. It was notable that high response rates were obtained from the secondary care mental health service in Peterborough, in comparison to the other mental health teams, possibly due to the researcher having worked within this team

and therefore having closer relationships with the staff. A high response rate was also obtained from the voluntary mental health service in Fenland (Mind). This may have been due to greater cooperation amongst staff. Some staff reported that reasons for potential participants not wishing to take part related to poor engagement within services, translating to poor engagement with the research, severity of depressive symptoms, or a lack of interest in the research.

2.3 Measures

Participants were asked for information regarding their age and gender. Information was also obtained regarding the geographical area that participants were recruited from and the particular service, namely whether this was an NHS or voluntary organisation.

2.3.1 Internalised Stigma of Mental Illness Inventory (ISMII; Ritsher et al., 2003).

The ISMII was designed to measure the subjective experience of stigma from the perspective of individuals with a mental illness. This measure has been provided in Appendix A1. The measure consists of 29 items scored on a four point Likert scale with response options of "strongly agree", "agree", "disagree" and "strongly disagree". Individuals may score up to 116, with higher scores indicating greater levels of internalised stigma.

The ISMII has five subscales: Alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance. Lower levels of internal consistency were found for the stigma resistance subscale, which includes positively framed items such as; "I can have a good, fulfilling life despite my mental illness". Ritsher et al. (2003) retained this subscale within the measure, to maintain a

balance between positive and negative items on the scale. The ISMII was validated on a sample of 127 psychiatric outpatients with various mental health diagnoses. The proportion of the sample with a diagnosis of depression was 82%.

The overall ISMII measure was measured as having high internal consistency (α =.90 to .91) as well as good test-retest reliability (r = .92) over a 6 week period (Ritsher et al., 2003; Ritsher & Phelan, 2004). Amongst individuals with depression in the Ritsher et al. (2003) study, internal consistency was α = .89. The overall score, rather than scores on individual subscales, were used within the current analysis. Construct validity was demonstrated by Ritsher et al. (2003), who found that the scale was significantly correlated with the Perceived Devaluation and Discrimination Scale (Link, 1987) which measures culturally induced stigma about mental illness (r = .35, p <.01). Furthermore, the scale correlated moderately (r = .53, p < .01) with the CES-D (Radloff, 1977) and was inversely related to the Rosenberg Self-esteem Scale (Rosenberg, 1979). The total score on the ISMII predicted depressive symptoms using the CES-D (β, 82 = .24, p <.05), indicating predictive validity. Ritsher et al. (2003) used Varimax rotation factor analysis to determine the extent to which internalised stigma was a distinct construct. It was established that items from the ISMII loaded onto the expected factors, except for two items with the CES-D (Radloff, 1977), three items with the Rosenberg self-esteem scale (Rosenberg, 1979) and one item with the Perceived Devaluation and Discrimination Scale (Link, 1987). This provides an indication of the divergent validity of the ISMII. Studies exploring stigma experiences amongst different mental health populations have used this scale, including those measuring the experiences of individuals with schizophrenia (Lysaker, Roe, & Yanos, 2007) and affective disorders (Ghanean, 2011).

2.3.2 Rosenberg Self-esteem Scale (RSES; Rosenberg, 1979).

The RSES is a widely used measure of self-esteem and consists of ten items, answered on a four point Likert scale. This measure has been provided in Appendix A2. Individuals may score up to 30 on the measure, with higher scores indicating positive self-esteem. The scale contains a mixture of items reflecting high or low self-esteem, therefore items reflecting low self-esteem are reverse scored. Response options were the same as for the ISMII. The original validation sample consisted of school pupils in the United States (N = 5024). Psychometric properties of the scale have been demonstrated. Test-retest correlations are within the range of r = .82 to .88, whilst internal consistency ranges from α = .77 to .88 (Blascovich, 1993; Rosenberg, 1986). Aluja, Rolland, Garcia and Rossier (2007) demonstrated that the Rosenberg scale is one dimensional. Depression accounted for 47% of the variance of the scale. Silverstone and Salsali (2003) found that the measure correlated strongly (r = -.72) with the Social Adequacy Scale (Janis, 1959), another measure of self-esteem. The same study also established that individuals with a diagnosis of Major Depressive Disorder had significantly lower self-esteem than a control group, using the Rosenberg Self-esteem Scale (p <.00).

2.3.3 The Centre for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977).

The CES-D is a 20 item measure which was designed to screen for depressive symptoms in the general population. This measure has been provided in Appendix A3. The scale was developed in accordance with previously validated measures, including the Beck Depression Inventory (Beck & Steer, 1987). Key aspects of the clinical literature around diagnostic criteria for depression were incorporated (Radloff, 1977). The scale includes items related to affective and

somatic aspects of depression. Individuals are required to respond to items according to how they have felt over the past week. Response options are: Rarely or none of the time (less than 1 day), some or a little of the time (1-2 days), occasionally or a moderate amount of time (3-4 days), and most or all of the time (5-7 days). The scale contains some items which require reverse scoring. Higher scores indicate a greater presence of depressive symptoms and an individual may score up to 60. Radloff (1977) determined a cut off score of 16 or more on the measure to identify individuals suffering with depression.

The CES-D was initially developed using a general population sample in the United States and was further validated on psychiatric inpatient and outpatient populations. Internal consistency ranged from α = .84 to .90 amongst the various samples, split half reliability ranged from *r* = .76 to .85, and Spearman Brown reliability ranged from *r* = .86 to .92. Test-retest correlations at 2 to 8 week intervals ranged from *r* = .51 to *r* = .67. However, Radloff (1977) intended the measure to assess current depressive symptoms, which may be expected to vary over time.

Radloff (1977) found weak correlations (*r* = -.07 to .23) with the Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960), indicating divergent validity. Radloff used principal components factor analysis to further ascertain the validity of the measure. Four factors were identified: Depressed affect, positive affect, somatic and retarded activity, and interpersonal symptoms. These all had factor loadings above .40. Within a meta-analysis incorporating a range of studies exploring psychometric properties of four depression measures, including the CES-D, Shafer (2006) used Varimax Rotation factor analysis and found that the results largely reflected the original factor analysis carried out by Radloff. . Although separate factors have been identified for the measure, Radloff recommended using

the overall score on the measure due to the high overall internal consistency. Therefore, overall scores were used within the current research. Sensitivity and specificity of the measure was identified as .45 and .95 respectively (Thomas, Jones, Scarinci, Mehan, & Brantley, 2001), amongst a female sample experiencing depression and accessing primary care.

2.3.4 Beck Anxiety Inventory (BAI; Beck, Epstein, Brown & Steer, 1988).

A copy of this measure has not been provided within the Appendices due to copyright restrictions. This measure was included due to the high co-morbidity between depressive and anxiety symptoms (Barlow, 1986; Hirschfield, 2001). A measure of anxiety was therefore used to control for this within the various analyses. The BAI is a well established self-report measure of anxiety and consists of 21 items, which are scored on a Likert scale ranging from "Not at all", "Mildly (it did not bother me much)", "Moderately (it was unpleasant but I could stand it)", to "Severely (I could barely stand it)". Higher scores indicate a greater presence of anxiety and an individual can score up to 63. Kabacoff, Segal, Hersen and Van Hasselt (1997) found no single cut off score on the BAI to be optimal in terms of sensitivity and specificity. For example, a cut of score of 10 resulted in 94% of anxiety cases being identified, but at this cut off the probability of actually having an anxiety disorder was .3, whilst the probability of not having one was .97. For a cut of score of 19, 56% of the anxiety group were correctly identified. The probability of actually having an anxiety disorder was .34, whilst the probability of not having one was .86.

The initial normative sample used by Beck et al. (1988) consisted of psychiatric outpatients in the United States (N = 1086). The authors established that

the measure has high levels of internal consistency (α = .92 and .94). Moreover Steer et al. (1993) further established internal consistency for the measure at α = .92, using a sample of 470 psychiatric outpatients in the United States. Studies have also found one week test-retest reliabilities of r = .75 and .73 (Beck et al., 1988; Fydrich, 1992).

Beck and Steer (1990) conducted a cluster analysis on the 21 items of the BAI and found that they reflected four symptom clusters; Physiological symptoms (e.g., wobbliness), subjective experiences (e.g., fear of losing control), panic experiences (e.g., fear of dying), and autonomic features of anxiety (e.g., feeling hot). Steer, Ranieri, Beck and Clark (1993) further established the stability of these factors through Principal Components Factor Analysis. They established a mean cosine of .97 between the overall principal components structures of two randomly allocated samples of psychiatric outpatients. The BAI has also been shown to have moderate levels of concurrent validity, with correlations ranging from r = .51 with the Hamilton Rating Scale for Anxiety (Riskind, Beck, Brown, & Steer, 1987), to r = .47 and .58 with the State and Trait scales of the State-Trait Anxiety Inventory (Spielberger, 1993), respectively. Beck et al. (1988) found a correlation of r = .48 between the BAI and the Beck Depression Inventory (Beck & Steer, 1987), indicating discriminant validity of the measure.

2.3.5 Severity of Symptoms Help Seeking Thresholds Measure (Sherwood et al., 2007).

This measure was developed by Sherwood et al. (2007). A copy has been provided in Appendix A4. Permission was sought from the authors for use of this measure within the current research. The measure contains eight items, which ask how severe symptoms of depression would need to be in order to recognise these as depression and seek help within a range of areas. This is therefore not a direct

measure of help seeking behaviour. The Sherwood et al. (2007) study sample consisted of 42 individuals with depression accessing primary care services in the United Kingdom, 21 individuals who had previously received treatment for a psychological disorder other than depression, and 48 individuals from a community sample. All participants were asked to complete the measure as if they were currently depressed.

The authors used principal component factor analysis and found evidence of two factors. The first factor related to seeking professional help (e.g., from a GP, psychiatrist, psychotherapist, or agreeing to take medication). The second factor related to self recognition of symptoms and seeking help from close others (e.g., family members or friends). The authors did not provide statistical information regarding their factor analysis. Internal consistencies for the measure were α = .83 for the whole scale, α = .87 for the professional help seeking subscale, and α = .68 for the subscale measuring self recognition of symptoms and help seeking from close others. Test-retest reliability over two weeks was found to be r = .95. The original scale used a 9 point interval rating. Within the current study, a rating scale of between 1 ("Not at all severe") and 5 ("Extremely severe") was used, in order to maintain greater consistency with the rating scales used within the other self-report measures.

2.3.6 The Brief Implicit Association Test (Sriram & Greenwald, 2009).

Of the various implicit and priming measures available, the BIAT was chosen for use in the current study. The BIAT is considerably shorter than the IAT (80 trials in comparison with 180; Greenwald et al., 2003; Sriram & Greenwald, 2009). In keeping with recent research utilising clinical samples (Rusch, Todd et al., 2009; Rusch, Todd et al., 2010a; Rusch, Todd et al., 2010b; Rusch, Todd et al., 2010c;

Rusch, Corrigan et al., 2010) and due to measurement of both implicit self-esteem and implicit associations regarding mental illness in the current study, the BIAT was used. In addition to being shorter in length, this task utilises simplified instructions in comparison to the IAT (Sriram & Greenwald, 2009). It was further intended that the use of the BIAT would allow the current study's findings to be linked to other research in this emerging area.

Within the IAT, there are two target categories (e.g., "Flowers" or "Insects") and two attribute categories (e.g., "Good" or "Bad"). Within this task, trials refer to written stimuli, whilst a block refers to a group of trials to be classified according to a particular category-attribute pairing. Throughout the IAT, category and attribute categories are mapped onto either a left or right hand response key (e.g., "Flowers" or "Good" mapped onto the right hand key, "Insects" or "Bad" mapped onto the left). The pairings then change throughout the task, meaning that different categories will be assigned to a different response key according to the particular block of the task. The categories can be changed according to the aims of the research (Greenwald et al., 2003).

In contrast, in the BIAT only one category and attribute pairing appears on the screen at any one time. Like the IAT, the BIAT measures association strength between category and attribute pairings by analysing latency in categorisation responses. A category-attribute pairing remains centrally on the screen and participants are instructed to press the right hand response key (e.g., "I") if written stimuli can be classified into either the category or attribute which appear on the screen, or the left hand key (e.g., "E") for anything else. If participants classify written stimuli more quickly according to one category-attribute pairing over another (e.g., "Flowers" or "Good" as opposed to "Insects" or "Good"), it is proposed that

this represents an automatic preference towards one category ("Flowers") over the other ("Insects"). Within the BIAT, three categories are *focal*, meaning that they are shown on the screen, and one is *non-focal* meaning that it is never shown on the screen during the experiment. For instance, the category-attribute pairings might be "Flowers" or "Good" versus "Insects" or "Good", meaning that "Bad" is never shown on the screen and is therefore a non-focal category.

Sriram and Greenwald (2009) measured psychometric properties of the BIAT. This study established that the standard IAT correlated $r = .65$ with the BIAT. The BIAT using "Good" rather than "Bad" as a focal category had good internal consistency ($\alpha = .83$) and correlated well with a self-report measure of a similar construct ($r = .75$).

The current experiment used two BIATs, adapted from the original Sriram and Greenwald (2009) BIAT script. The two BIATs measured implicit self-esteem and implicit stigma towards mental illness as opposed to physical disability. A full description of the task is provided in the procedure section below.

2.3.6.1 BIAT measuring implicit associations regarding mental illness.

Categories within this task were: "Mental Illness", "Physical Disability", "Good" and "Bad". The BIAT is a relative task and therefore requires a comparison category in order to measure automatic associations. It was deemed that physical disability would represent an appropriate comparison due to this being distinct from mental illness. Moreover, this allowed a more reliable comparison of associations between BIAT categories. If physical illness had instead been used, as in the Teachman et al. (2006) study, confounding effects may have emerged. The use of physical disability as a comparison category also converges with another study in this area (Rusch, Corrigan et al., 2010). Written stimuli matched those used within

the Rusch, Corrigan et al. (2010) study and were similar to those used by Teachman et al . Quicker response times within the "Physical Disability" or "Good" block pairing were presumed to represent more negative associations regarding mental illness compared to physical disability, whilst the opposite was presumed to be true for faster responses during the "Mental Illness" or "Good" block. Table 2 displays the written stimuli for this task.

Table 2

Written Stimuli for the BIAT Measuring Implicit Attitudes Towards Mental Illness

Category	Mental Illness	Physical Disability	Good	Bad
	Mentally Disturbed	Physically Impaired	Wonderful	Terrible
	Mental Illness	Physical Disability	Good	Nasty
	Mentally Unbalanced	Physically Handicapped	Nice	Horrible
	Mentally Ill	Physically Disabled	Excellent	Bad

2.3.6.2 BIAT measuring implicit associations regarding the self (Implicit self-esteem). Categories within this task were: "Me", "Not Me", "Good" and "Bad". These categories were chosen on the basis of other studies measuring implicit self-esteem in depression (De Raedt, Schacht, Franck, & De Houwer, 2006; Franck, De Raedt, & De Houwer, 2007; Franck et al., 2008). Furthermore, written stimuli also matched those utilised in a similar study (Rusch, Corrigan et al., 2010). If low self-esteem were present, it was expected that participants would classify stimuli more quickly during the block pairing "Not Me" or "Good", as opposed to the block pairing "Me" or "Good". Table 3 displays the written stimuli for this task.

Table 3

Written Stimuli for the BIAT Measuring Implicit Self-esteem

Category	Me	Not Me	Good	Bad
	Myself	They	Wonderful	Terrible
	My	Them	Good	Nasty
	Mine	Not Me	Nice	Horrible
	Me	Their	Excellent	Bad

2.4 Ethical considerations

2.4.1 Ethical approval.

Guidance for conducting ethical research within NHS settings, as well as The British Psychological Society Code of Ethics and Conduct (BPS; 2009) was carefully followed. Study documentation including a research proposal, consent form and participant information sheet, was submitted to Cambridgeshire East NHS Ethics Committee. Following initial ethical approval, an amendment to the original proposal was made to recruit from primary as well as secondary care services, in order to maximise recruitment opportunities. Appendix B contains copies of letters detailing NHS ethical approval. Following NHS ethical approval, Research and Development approval was sought and granted from Cambridgeshire and Peterborough NHS Foundation trust. Appendix C contains Research and Development approval documentation.

2.4.2 Valid consent.

A copy of the research information sheet has been provided in Appendix D. This detailed the voluntary nature of the research, confidentiality within the research

process and the need to break this if risk issues emerged, and the potential for distress at discussing stigma experiences within the study. Furthermore, the research information sheet also made clear that the study was independent of any healthcare that participants were receiving. At the initial contact stage, the researcher clarified that participants had read all aspects of the information sheet and were aware of what their participation would involve. Participants also had an opportunity to ask any questions. Once a research meeting had been arranged, participants completed a consent form, which has been provided in Appendix E. All participants were deemed capable of giving valid consent to participate in the study. Please see Appendix F for a copy of the invitation letter, containing the reply slip which participants returned to the researcher to initially show their interest in the study.

2.4.3 Confidentiality.

Data were collected and analysed in accordance with the Data Protection Act (1998). Participants did not provide their names on any of the measures and were instead provided with information numbers. Participants provided their names on consent forms, but these were stored separately to study raw data. A password protected laptop, which only the researcher had access to, was used by participants to complete the computer task. Data were automatically saved and analysed using this laptop. All study raw data, namely consent forms and completed questionnaires, were stored securely in a locked filing cabinet throughout the course of the research. Participants were informed of their confidentiality and the limits to this, namely that their GP, care coordinator, or an on call clinician from their mental health team would need to be informed if any indication of harm to themselves or others arose during the course of the research meeting. No such precautions were necessary during the research. No participant case notes were viewed when initially contacting

potential participants. Participants were only contacted if they had preliminarily consented to this by completing the reply slip on the invitation letter. Personal contact details provided on reply slips were shredded after initial contact had been made. Following the study's completion, raw data will be stored in a locked archive at the University of East Anglia for 5 years, in line with the current university policy.

2.4.4 Management of distress.

Participants may have had difficult experiences resulting from stigma about their mental illness. Therefore, answering a questionnaire about their experiences of stigma and whether they had internalised this in any way may have evoked distress. Furthermore, participants were required to answer questions relating to depressive or anxious symptoms and self-esteem, which may have been emotive or stressful. However, questionnaires of this kind are routinely administered within mental health settings and were therefore unlikely to have been novel for participants. The computerised tasks were designed to measure less consciously accessible processes, which participants are likely to have been less aware of. Therefore, becoming aware of these may have evoked distress or discomfort. Attempts were made to address this issue through a period of debrief following completion of the measures (see below). Minimal distress occurred for two participants, relating to questionnaire items which they had not previously thought about in detail. This was managed by talking through distressing feelings at the time. These participants were offered the choice to end the research meeting, but they were each happy to continue with the research.

2.4.5 Debriefing.

All participants were asked how they had found the completion of the various measures at the end of the research meeting. This provided them with the

opportunity to discuss their completed measures if they wished to. Furthermore, this allowed them the option to discuss the results from the BIATs. If participants chose to discuss their score and the interpretation of this, they were briefly told what their score indicated. They were also briefly informed about the nature of implicit attitudes and the difference between these and consciously endorsed attitudes. Participants were then given time to discuss this further if they wished to do so. This short debrief was taken up by 26 of the 35 participants.

2.5 Procedure

2.5.1 Initial recruitment.

Recruiting depressed participants to research can be difficult (Muñoz et al., 1995; Willemse, Smit, Cuijpers, & Tiemens, 2004). Following research and development and local NHS approval for the study, clinical services were contacted. A convenience sampling approach was used to recruit participants. In order to maximise the chances of recruiting the intended sample size, recruitment was spread across nine primary and secondary care mental health services within Cambridgeshire and Peterborough NHS Foundation Trust. Presentations regarding the study were made to eight of these teams. Presentations gave a brief background to the study, detailed the particular assistance required from professionals, and what would be expected of potential participants. For one team, a presentation of the research was made by the team psychologist. Information packs were dispersed to teams containing an invitation letter with reply slip, information sheet, and stamped addressed envelope. All of the clinical services contacted agreed to assist with the research. Close links were maintained with professionals within each service, for instance psychologists or administrative staff, to encourage packs to be handed out. Posters were also displayed in some staff office areas, detailing the study criteria. In

addition, voluntary Mind service user groups in Cambridge, Peterborough, Huntingdon and Fenland were contacted, as well as another voluntary group, Lifecraft in Cambridge. The researcher attended service user meetings held by four of these groups and briefly described the research directly to service users. Information packs were also handed out by staff working within these services. Invitation posters, displaying the researchers contact details and brief information regarding the study, were displayed in the waiting areas of all services. These followed the same format of the invitation letter, provided in Appendix F.

Participants contacted the researcher by either returning an information pack through the post or contacting the researcher directly following viewing the study details on an invitation poster. If initial contact was made through the latter means, the participant was either sent an information sheet through the post or via email. A follow-up phone call then determined whether they still wished to participate. Participants who obtained the researcher's details from posters were asked quick screening questions regarding whether or not they suffered from a physical disability or whether they had a current substance abuse difficulty. Staff members within the clinical services only handed out information packs to participants who met the study criteria.

Research meetings were arranged either at the homes of participants or within a room within one of the clinical services. Local trust NHS lone working policies were followed. Care coordinators or other professionals within the mental health service were made aware when participants were being visited within their own homes and any potential risk issues were discussed beforehand. If recruited from service user groups, the researcher maintained safety by keeping a mobile phone nearby and assessing the potential for risk issues during a research meeting. If

taking place within a participant's own home, it was ensured that the research meeting took place within a quiet room with a table and minimal distractions.

2.5.2 Development of computer measures.

A software license for the programme "Inquisit" was purchased from a website for the organisation "Millisecond". Following this, the BIAT computer tasks were downloaded and adapted using Inquisit version 3 software. The original BIAT script (Sriram & Greenwald, 2009) was downloaded. The categories were then changed on the script to suit the research purpose. The script contains "Target A", "Target B", "Attribute A" and "Attribute B" labels. These can be defined to suit the particular aims of the study. Within the BIAT measuring implicit mental illness attitudes, "Target A" was assigned to the "Mental Illness" category, "Target B" to the "Physical Disability" category, "Attribute A" to the "Good" category, and "Attribute B" to the "Bad" category. Within the BIAT measuring implicit self-esteem, "Target A" was assigned to the "Me" category, "Target B" to the "Not Me" category, "Attribute A" to the "Good" category, and "Attribute B" to the "Bad" category. Within the Sriram and Greenwald (2009) script, Attribute B is non focal, meaning it is not displayed on the screen throughout the task. Therefore, within the current study, "Bad" was non focal in both BIATs. This resulted in the two blocks of the BIAT measuring implicit associations regarding mental illness being "Mental Illness or Good" and "Physical Disability or Good" and the two blocks of the self-esteem BIAT measuring "Me or Good" and "Not Me or Good".

The manner of assignment of labels to these categories determines the meaning of the final "*D*" measure. *D* is an effect size measure and is the difference between the mean latencies of the two blocks of the BIAT divided by the inclusive standard deviation of latencies on both blocks, for an individual respondent

(Greenwald et al., 2003). This is computed automatically immediately following the completion of the BIAT. Faster responses during the "Target A or Attribute A" blocks will result in a positive *D* score, whilst faster responses during "Target B or Attribute A" blocks will result in a negative *D* score. Therefore, for the BIAT measuring implicit associations regarding mental illness, faster response times during the "Mental Illness or Good" blocks resulted in a positive score, whilst faster response times during the "Physical Disability or Good" blocks resulted in a negative score. Within the BIAT task measuring implicit self-esteem, faster response times during the "Me or Good" block resulted in a positive score, whereas faster response times during the "Not Me or Good" block resulted in a negative score.

When designing this script, particular attention was paid to Sriram and Greenwald's (2009) paper which validated the BIAT. They conducted different BIAT experiments measuring the validity of several variations of this measure and established that BIATs using "Good" rather than "Bad" as focal categories resulted in greater validity. Therefore, the scripts for each BIAT were designed to take this into account.

2.5.3 Data collection.

All data were collected within one research meeting, which lasted between 50 minutes and 1 hour and 15 minutes. The length of meetings was dependent on the level of explanation required around the completion of the tasks and whether participants requested a period of debrief. Participants completed a consent form followed by the completion of the measures. The questionnaires were completed prior to the computer tasks, as the format of these was thought to be more familiar for most participants. It was intended that this would lessen any initial anxiety at engaging in the research meeting. This follows the procedure used in the BIAT

validation study by Sriram and Greenwald (2009). Furthermore, Nosek, Greenwald, and Banaji (2005) did not find any notable effects relating to the order of presentation of implicit and self-report measures. The order of the completion of self-report measures during the research meetings was as follows:

1. Internalised Stigma of Mental Illness Inventory
2. The Rosenberg Self-esteem Scale
3. The Centre for Epidemiological Studies Scale
4. The Beck Anxiety Inventory
5. The Severity of Symptoms Help Seeking Thresholds Measure

Self-report measures took between 30 and 40 minutes in total for participants to complete. Following this, participants completed the BIATs, which took between 20 and 30 minutes to complete. Participants completed the BIAT measuring implicit self-esteem first, followed by the BIAT measuring attitudes towards mental illness.

BIATs were completed on a Dell Inspiron laptop. The BIAT was displayed on the full computer screen, without any tool bars. Once the task had commenced, the participant was provided with an instruction page. This informed participants that during the task, they would be instructed to press the "I" key on the keyboard for words relating to "Good" and items from one specific category, either "Me" or "Not Me" (or "Mental Illness" or "Physical Disability" in the second BIAT), and the "E" key for "Bad" words and items from the other of those categories. It was explained to participants that these category pairings would change throughout the task. The participant was then informed that the first block was for practice and was designed to help them get used to the task format. They were instructed to respond quickly,

making as few mistakes as possible. Participants were given additional instructions by the researcher if they requested this. If additional verbal instructions were provided, these rephrased the on screen instructions that had preceded the task.

Participants were informed that if a mistake was made, a red "X" would appear centrally on the screen, following which they were required to rapidly correct the error. A built in error penalty was incorporated into the BIAT, following a psychometric validation study by Greenwald, Nosek, and Banaji (2003). Therefore, if errors were made during either of the BIATs, the Sriram and Greenwald (2009) script ensured that the latency was recorded according to the correct response.

Following the instruction page, a second screen appeared following which participants were provided with the category which was assigned to the "I" key ("Good") and examples of the words which came under this category ("Wonderful", "Good", "Nice", "Excellent"). A brief instruction was provided at the bottom of the page, instructing participants to press the "I" key for "Good" and the "E" key for anything else. Participants were again instructed to go as fast as they could and to use the space bar to begin the task. A practice block consisting of 20 written stimuli ("Trials") then commenced. Trials were presented in random order for each participant.

Once the practice block had finished, the participant completed the blocks of the task. The two blocks, "A" and "B", were each presented twice during the task. For the BIAT measuring Implicit Self-esteem, within Block A words associated with the category pairing "Me or Good" were to be responded to with the "I" keyboard key, and the "E" key was for "Anything else" (i.e. words associated with "Bad" or "Not Me"). Within Block B of the implicit self-esteem BIAT, words associated with the category pairing "Not Me or Good" were to be responded to with the "I" key,

and the “E” key was used for “Bad” or “Me” words. For the BIAT measuring mental illness attitudes, within Block A, words associated with “Mental Illness or Good” were to be categorised with the “I” key, and the “E” key was for either “Physical Disability” or “Bad” words. Within Block B of this task, the “I” key was for words associated with “Physical Disability or Good”, whilst the “E” key was for words associated with “Mental Illness or Bad”.

The order of presentation of blocks “A” and “B” was counterbalanced across participants and followed one of six orders:

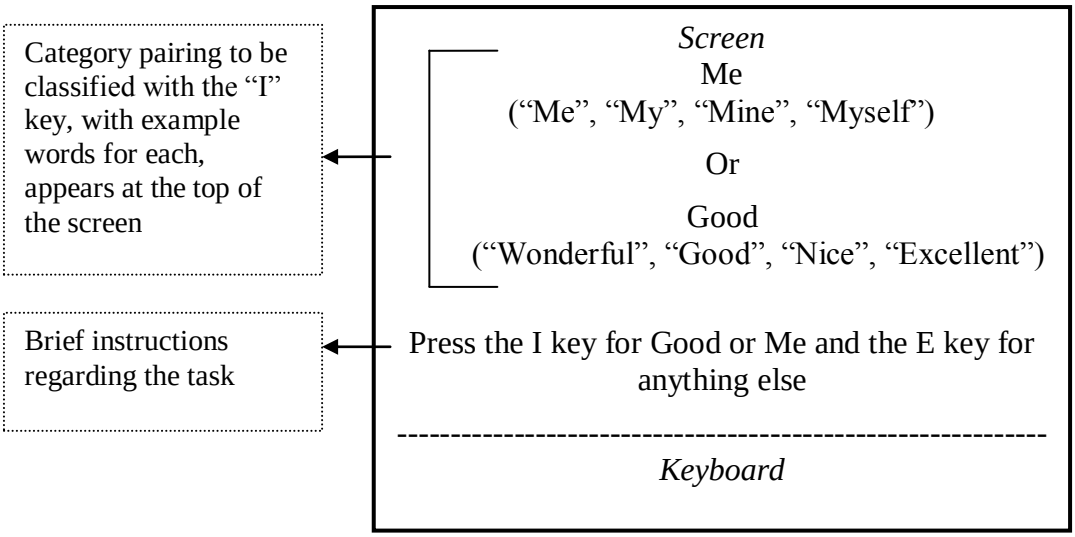
1. ABBA
2. BAAB
3. AABB
4. BBAA
5. ABAB
6. BABA

Counterbalancing was incorporated into the BIAT script so that the first of every six participants got the first order presentation, the second of every six participants got the second presentation, and so on.

Prior to each block commencing, a brief instruction page again appeared on the screen, to press the “I” key for words belonging to either of the block categories and the “E” key for anything else. Examples of words associated with both categories used within the block were provided. Figure 1 displays an example of this screen presentation.

Figure 1

Example Screen Presentation of the Brief Instruction Page Appearing at the Start of Each Block (BIAT Measuring Implicit Self-Esteem)



Following this page, participants completed the block. During the block, the category pairing to be classified with the "I" key was displayed centrally at the top of the screen, with examples of words within each category. Within each block, 20 written stimuli were presented in random order consecutively and appeared centrally on the screen. A total of 80 written stimuli ("trials") were therefore contained within each BIAT task, excluding the practice blocks. During each block, the category pairing remained at the top of the screen, reminding participants of what was to be classified with the "I" key. Instructions did not remain at the bottom of the screen during the block. Participants therefore held the instructions in mind throughout the block. Figures 2 and 3 display example screen presentations during both the implicit self-esteem and mental illness attitude BIATs.

Figure 2

Example Screen Presentation during Block A of the BIAT Measuring Implicit Self-Esteem

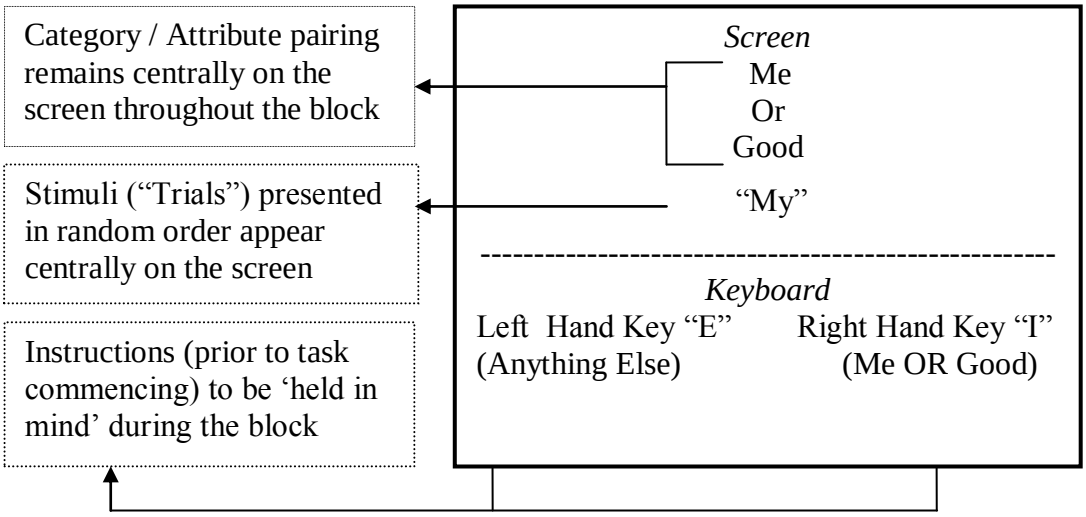
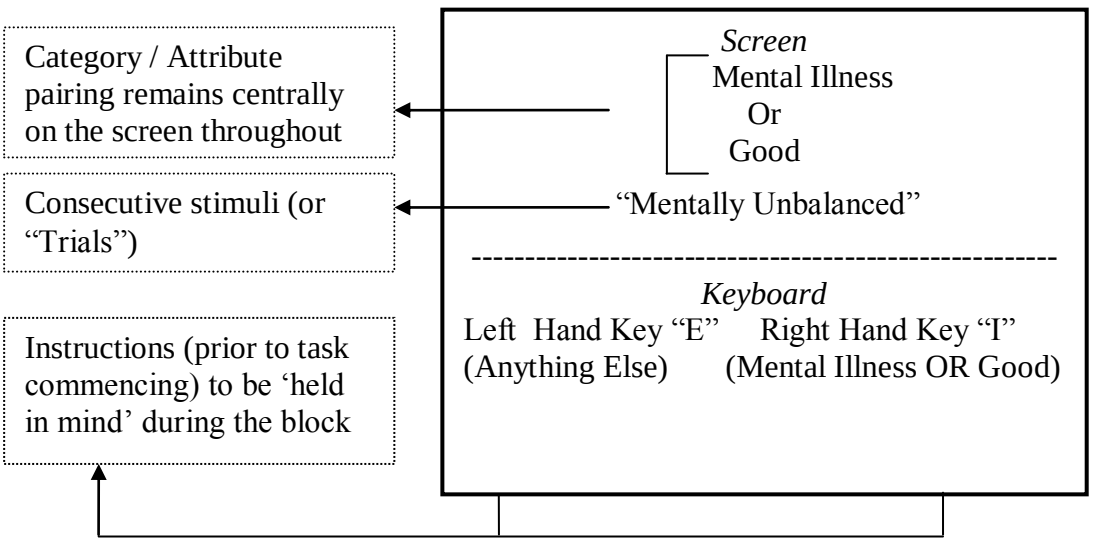


Figure 3

Example Screen Presentation During Block A of the BIAT Measuring Implicit Mental Illness Attitudes



Participants were notified of a change of block by another instruction screen, which informed them of the new category pairing to be categorised according to the

"I" key, and again that "E" was to be used for "anything else". Once the first BIAT task had ended, the screen closed and the next task was started. The task then ended and no further information was provided on the screen. A *D* score for each participant was automatically calculated and saved within a separate file on the laptop. Participants did not automatically view this score. However, as described above, they had the option of talking through their resulting score through a period of debrief if they wished to.

2.6 Plan of Analysis

For Research Questions 1 to 5, correlations were planned. For Research Question 1, one tailed correlations were planned, whilst two tailed correlations were planned for the remaining Research Questions. For Research Questions 2a and 2b, it was intended that partial correlations would be carried out to control for the effects of anxiety in the relationships between implicit mental illness stigma and depression severity, and between self-reported (explicit) internalised stigma and depression severity. It was further intended that partial correlations would control for the effects of anxiety in the relationship between depression severity and help seeking thresholds, for Research Question 3.

Chapter 3

Results

3.1 Overview

The first section of the results will explore demographic data on the research participants. This will be followed by an outline of data relating to each of the study variables, with respect to means, standard deviations, range, skew and kurtosis. Each variable w ill then be explored in turn, with regards to data distribution and outliers. A brief overview of the data analyses will be provided. Finally, results relating to each hypothesis in turn will then be presented.

3.2 Descriptive Data Analysis

3.2.1 Demographic data.

Table 4 has provided brief demographic details regarding the participants. Relating to gender, 37% (*N* = 13) of the sample were male and 63% (*N* = 22) were female. The age range was 24 to 85 and the mean age was 45 (*SD* = 12.1). The majority of research participants were recruited from Fenland Mind (*N* = 10) and Peterborough Secondary Care services (*N* = 8). Overall, 29% (*N* = 10) of the sample were accessing a secondary care mental health service, 11% (*N* = 4) were accessing a primary care mental health service, and 60% (*N* = 21) were accessing support from a service user group.

Table 4

Demographic Data for Study Participants

	Male (n = 13)	Female (n = 22)	Total (N = 35)
Age (Years)			
Mean (SD)	44 (9.62)	45 (13.55)	45 (12.1)
Area			
Peterborough Secondary Care	3	5	8
Peterborough Primary Care	0	2	2
Peterborough Mind	2	3	5
Fenland Secondary Care	0	1	1
Fenland Primary Care	0	0	0
Fenland Mind	6	4	10
Huntingdon Secondary Care	0	0	0
Huntingdon Primary Care	0	0	0
Huntingdon Mind	0	1	1
Cambridge Secondary Care	0	1	1
Cambridge Primary Care	1	1	2
Cambridge Mind	0	3	3
Cambridge Lifecraft	1	1	2

3.2.2 Summary of study variables.

Table 5 has summarised data for all study variables. These data were closely explored to ascertain the distribution. Using the values for skewness and kurtosis, *Z*

scores were calculated to determine significance. Box plots were also explored for each study variable to determine the presence of extreme outliers.

Table 5

Summary Data for Study Variables

Variables	Mean	SD	Range	Skewness	Kurtosis
BIAT Self Esteem	.46	.39	1.88	-.19	.75
BIAT Mental Illness	.07	.29	1.19	-.14	-.28
ISMII	73.68	14.02	52.00	-.32	-.77
RSES	11.20	5.09	18.00	-.28	-.84
CES-D	37.40	11.45	45.00	.01	.70
BAI	25.43	14.58	55.00	.30	-.86
SOS-HST Total	27.94	7.63	32.00	-.60	-.09
SOS-HST Formal	18.08	4.82	20.00	-.83*	.29
SOS-HST Informal & Recognition	9.86	3.34	12.00	-.34	-.99

Note. * Indicates significant negative skewness as determined by *Z* Scores. The following formulas were applied: *Z* skewness = S – 0 /SE skewness, *Z* kurtosis = K – 0/SE kurtosis. Absolute values greater than 1.96 were used to determine significance at $p < .05$ (Field, 2009). The standard error for skewness was .398, whilst the standard error for kurtosis was .778. BIAT = Brief Implicit Association

Test, ISMII = Internalised Stigma of Mental Illness Inventory, RSES = Rosenberg Self-esteem Scale, CES-D = Centre for Epidemiological Studies Scale, BAI = Beck Anxiety Inventory, SOS-HST = Severity of Symptoms Help Seeking Thresholds.

3.2.2.1. Internalised Stigma of Mental Illness Inventory. Items 4, 10, 15, 22 and 29 were reverse scored. The distribution for the ISMII indicates no significant skew or kurtosis. There were no extreme outliers. As displayed in Table 5, the mean ISMII score was 73.68 (*SD* = 14.02). The mean ISMII score for females was 73.23 (*SD* = 12.78), whilst the mean ISMII score for males was 74.46 (*SD* = 16.45). A high level of internalised stigma on the ISMII has been defined as an average score of 2.5 or above on the Likert Scale, where response options range between 1 and 4 (Ritsher et al., 2003; Ritsher & Phelan, 2004). Within the current study, 57% (*N* = 20) of the sample obtained average scores either at 2.5 or above and would therefore be classed as having high levels of internalised stigma. An alpha reliability level of α = .93 was found in the present study for the ISMII.

3.2.2.2. The Rosenberg Self-esteem Scale. Items 3, 5, 8, 9, and 10 were reverse scored. The self-report self-esteem scores were slightly negatively skewed, but not significantly so. The distribution did not have significant kurtosis. There were no extreme outliers. The mean score of the sample was 11.2 (*SD* = 5.09). Prior research has indicated a negative relationship between self-esteem and depressive symptoms (Roberts, Kassel, & Gotlib, 1995). Consistent with this, within the current study, depressive symptoms were significantly negatively correlated with self-reported self-esteem (*r* = -.44, *p* = .01). Internal consistency for the Rosenberg scale within the current study was α = .84.

3.2.3.3. The Centre for Epidemiological Studies Scale. Items 4, 8, 12 and 16 were reverse scored. CES-D scores were not significantly skewed and did not have significant kurtosis. There were no extreme outliers. The internal consistency of the CES-D within the current study was α = .87.

3.2.3.4. The Beck Anxiety Inventory. BAI scores were not significantly skewed and did not have significant kurtosis. Moreover, there were no extreme outliers. The mean score obtained by the sample was 25.45 (*SD* = 14.58). Following the BAI manual (Beck & Steer, 1990), total scores of between 0 and 7 indicate minimal levels of anxiety, accounting for 14% of the sample (*N* = 5). Scores between 8 and 15 indicate mild levels of anxiety, accounting for 20% of participants (*N* = 7). Scores between 16 and 25 reflect moderate levels of anxiety, which again accounted for 20% of participants (*N* = 7). Finally, scores between 26 and 63 indicate severe anxiety, accounting for 46% participants (*N* = 16). Therefore, just under half of the overall sample reported experiencing severe anxiety. A strong correlation was found between CES-D and BAI scores (*r* = .52, *p* = .001), indicating that depression and anxiety were significantly positively correlated amongst study participants.

3.2.3.5. Severity of Symptoms Help Seeking Thresholds Measure. The total scores on the Severity of Symptoms Help Seeking Thresholds measure did not have significant skewness or kurtosis. There were 3 extreme outliers. The literature suggests that help seeking experiences amongst depressed individuals are variable (e.g. Barney et al., 2006; Jorm et al., 2000; Lepine et al., 1997). The decision was therefore made to include these outliers in the analysis. For the 3 items which made up the Informal Help Seeking and Recognition of Symptoms subscale, there was no significant skewness and no extreme outliers. Some kurtosis was evident (.99, see

Table 5), but the *Z* score was not significant. For the 5 items making up the Formal Help Seeking subscale, there was significant negative skewness but no extreme outliers. To verify the skewness of this data distribution, the Kolmogorov-Smirnov test was used. This further indicated that the Formal Help Seeking scores were skewed ($p = .001$). A natural log transformation was carried out to reduce the skewness of this variable. As the data distribution was negatively skewed and log transformations can only be carried out on positively skewed data, scores for the Formal Help Seeking subscale were reversed, with a constant of 1 added (Field, 2009). The direction of scores was then changed following the transformation. This transformation reduced the level of skewness from -.825 (*Z* score -2.07) to -.802 ($Z = -2.02$). As this did not significantly reduce the skewness, a non-parametric test was employed within the analysis related to Formal Help Seeking, using the untransformed variable.

Overall, 57% of the sample rated that depressive symptoms would have to be either "Very" or "Extremely" severe for them to seek the various sources of formal help, whilst 46% of the sample rated that this level of severity would be required for them to either recognise the symptoms as those of depression or to seek the two sources of informal help. As participants appeared to rate a higher severity of symptom thresholds in order to seek formal, as opposed to informal help seeking, a paired samples t-test was used to explore any differences between these variables. This showed that formal help seeking thresholds were significantly higher than those relating to informal help seeking ($t = -14.96$, $p = .00$). In addition, the mean overall help seeking symptom thresholds score was slightly higher for males ($M = 29.92$, $SD = 6.06$) than for females ($M = 26.77$, $SD = 8.33$).

An alpha reliability coefficient of α = .89 was found for the Help Seeking Symptom Thresholds total score. For the Formal Help Seeking subscale, internal consistency was α = .85. For the subscale measuring Informal Help Seeking and Self-Recognition of Symptoms, internal consistency was α = .76.

3.2.2.6. Brief Implicit Association tests. Measures of association strength were computed using the *D* score, which has a possible range from -2 to +2. As discussed within the Method section, the *D* score is an effect size measure. *D* scores were computed automatically upon completion of each BIAT, using Greenwald, Nosek, and Banaji's (2003) improved scoring algorithm. This algorithm states that to obtain the *D* score, the difference between the mean latencies for each individual block is divided by the standard deviation of all latencies across the task. The practice trial was not included in the computation of the final *D* score (Sriram & Greenwald, 2009). As with the IAT, the BIAT has a built in error penalty. This means that error latencies were replaced with block mean latencies, with 600 ms added. In addition, trials exceeding 10,000 ms or less than 300 ms were excluded in the computation of the *D* measure (Greenwald et al., 2003).

A *D* score of .15 constitutes a slight effect, a *D* score of .35 is a moderate effect, whilst a *D* score of .65 or above is a strong effect (Greenwald et al., 2003; Nosek et al., 2002). Positive *D* scores within the current study either indicated associations between "me" and "good in the self-esteem BIAT, or between "mental illness" and "good" in the mental illness BIAT. Negative *D* scores indicated associations between "not me" and "good" in the self-esteem BIAT, or between "physical disability" and "good" in the mental illness BIAT.

For the mental illness BIAT, relating to positive *D* scores, no participants obtained a *D* score of .65 or above, 17% of the sample (*N* = 6) obtained scores of

between .35 and .64 (moderate effect), and 40% of the sample (*N* = 14) obtained scores of .34 or below (slight effect). For negative *D* scores, no participants obtained scores of .65 or above, 9% of the sample (*N* =3) obtained scores of between .35 and .64 (moderate effect), and 29% of the sample (*N* = 10) obtained scores of .34 or below (slight effect). Overall, for this BIAT, 57% of the sample (*N* = 20) obtained positive *D* scores, 6% of the sample (*N* = 2) obtained *D* scores of zero, and 37% of the sample (*N* = 13) obtained negative *D* scores.

For the self-esteem BIAT, 31% of participants (*N* = 11) obtained positive *D* scores of .65 or above (strong effect), 26% of participants (*N* = 9) obtained positive *D* scores of between .35 and .64 (moderate effect), and 34% of participants (*N* = 12) obtained positive *D* scores of .34 or below (slight effect). Overall, 91% of participants (*N* = 32) obtained positive *D* scores and 9% of participants (*N* = 3) obtained negative *D* scores, all of which were below .34.

Neither distribution for the BIAT measures was significantly skewed and neither had significant kurtosis. The BIAT measures had one extreme outlier each. As neither distribution had significant skewness or kurtosis, these were dealt with by the procedure described by Field (2009). The lowest *D* score for the self-esteem BIAT (*D* = -.57) was changed to the next *D* score plus 1 (-.31). The lowest *D* score for the mental illness BIAT (*D* = -.55) was changed in the same way, resulting in a *D* score of -.45. As these alterations did not influence a significant change in any of the correlations, the decision was made to include the original scores in the analyses.

3.3 Analysis of Research Questions

The data were analysed using the Statistical Package for Social Sciences (SPSS) for Windows, version 18. Assumptions for parametric analyses were met, excepting the Formal Help Seeking Symptom Thresholds variable. Therefore

research questions using this variable used non parametric analyses. Scatter plots were used to explore the relationships between variables as specified in the research questions, prior to correlations being carried out. This enabled a visual exploration of the associations between variables and further identified any extreme outliers.

3.3.1 Research question 1: What is the relationship between stigma and help seeking symptom thresholds amongst depressed individuals?

The results relating to this research question have been displayed in Table 6. For research question 1a, one tailed Pearson Correlations indicated that the relationships between BIAT mental illness *D* scores, the total help seeking symptom thresholds score, and informal help seeking symptom thresholds were not significant. Furthermore, a one tailed Spearman's Rho correlation revealed that the relationship between BIAT mental illness *D* scores, and formal help seeking symptom thresholds was not significant. For research question 1b, one tailed Pearson Correlations indicated significant positive correlations between explicit internalised stigma, the help seeking symptom thresholds total score, and informal help seeking symptom thresholds. Additionally, a one tailed Spearman's Rho analysis revealed a significant positive correlation between explicit internalised stigma and formal help seeking symptom thresholds. Therefore, BIAT mental illness *D* scores were not related to any of the help seeking variables. Explicit (self-reported) internalised stigma was significantly related to all help seeking variables.

Table 6

Correlations between Implicit and Explicit Stigma with Help Seeking Symptom Thresholds

	Help Seeking Symptom Thresholds Total Score	Informal Help Seeking Symptom Thresholds	Formal Help Seeking Symptom Thresholds**
BIAT Mental Illness	-.00	.07	-.08
Explicit Internalised Stigma (ISMII)	.31*	.34*	.33*

*P <.05

**Spearman's Rho analysis used for correlations with this variable

3.3.2 Research question 2: What is the relationship between stigma and depression severity?

Relating to research question 2a, two tailed Pearson Correlations indicated that BIAT mental illness *D* scores were not significantly related to depression severity (r = .13, p = .443). However, for research question 2b, explicit internalised stigma was significantly positively related to depression severity (r = .50, p <.01). For the second part of the analysis for this research question, partial correlations revealed that the correlation between explicit internalised stigma and depression severity reduced from r = .50 to r = .27 when anxiety was controlled for. This correlation no longer remained significant (p = .12). The correlation between BIAT

mental illness *D* scores and depression severity remained insignificant when anxiety was controlled for. Therefore, there was no relationship between depression severity and the *D* scores found in the BIAT mental illness task. There was a significant relationship between explicit internalised stigma and depression severity, but these variables were not associated when anxiety was controlled for.

3.3.3 Research question 3: What is the relationship between depression severity and help seeking symptom thresholds?

Correlations relating to research question 3 have been summarised in Table 7. Regarding the relationship between depression severity and help seeking symptom thresholds, two tailed Pearson Correlations revealed that there was a significant positive relationship between depression severity as measured by the CES-D and the total help seeking symptom thresholds score ($r = .42$, $p < .05$), in addition to informal help seeking symptom thresholds ($r = .52$, $p = <.01$). A two tailed Spearman's Rho analysis established a further significant positive relationship between depression severity and formal help seeking symptom thresholds ($r = .38$, $p < .05$). This indicates that as severity of depression increases, the symptom thresholds required to seek various sources of help also increase.

Table 7

Correlations between Depression Severity and Help Seeking Symptom Thresholds

	Depression Severity (CES-D)
Help Seeking Symptom Thresholds Total Score	.42*
Informal Help Seeking Symptom Thresholds	.51**
Formal Help Seeking Symptom Thresholds***	.38*

* $P < .05$

** $P < .01$

*** Spearman's Rho analysis used for correlations with this variable

Partial correlations were further carried out to control for the impact of anxiety in the relationship between depression severity and help seeking symptom thresholds. This seemed particularly pertinent given the high overall levels of anxiety reported by the sample. The correlation between depression severity and the total help seeking symptom thresholds score reduced to $r = .40$, $p = <.01$ when anxiety was controlled for. Regarding the relationship between depression severity and informal help seeking symptom thresholds, the correlation reduced to $r = .46$, $p < .01$ when anxiety was controlled for. Therefore, although each of these correlations reduced, they remained significant. This indicates that depression severity was significantly related to total and informal help seeking symptom thresholds, even when anxiety was taken into account. A non-parametric Kendall's Tau partial correlation was carried out to ascertain the association between depression severity and formal help seeking symptom thresholds with anxiety controlled for. As SPSS

does not support Kendall's Tau partial correlation, a formula outlined by (Siegel, 1988) was used. Significance levels were obtained from a paper by (Maghsoodloo, 1981). With anxiety controlled for, the correlation between depression severity and formal help seeking symptom thresholds was $r = .24$ ($p = .03$). Therefore, depression severity was significantly related to formal help seeking symptom thresholds when anxiety was taken into account.

3.3.4 Research question 4: What is the relationship between stigma and self-esteem?

Table 8 has summarised the correlations between the variables relating to stigma and self-esteem. A two tailed Pearson Correlation revealed that explicit (self-reported) self-esteem was significantly negatively related to explicit internalised stigma, therefore greater internalised stigma is associated with lower self-reported self-esteem (Research Question 4a). The same analysis indicated that the relationship between BIAT mental illness *D* scores and BIAT self-esteem *D* scores was not significant (Research Question 4b).

Table 8

Correlations between Stigma and Self-esteem

	BIAT Mental Illness	Explicit Internalised Stigma (ISMII)
BIAT Self-esteem	-.10	
Explicit Self-esteem (RSES)		-.48**

P <.01

3.3.5 Research question 5: What is the relationship between implicit and explicit stigma measures?

Table 9 has summarised the correlations relating to research questions 5a and 5b. Two-tailed Pearson Correlations indicated that the association between BIAT mental illness *D* scores and explicit internalised stigma was not significant (Hypothesis 5a). Furthermore, there was no significant relationship between implicit and explicit (self-reported) self-esteem (Hypothesis 5b). Therefore, implicit and explicit measures were unrelated.

Table 9

Correlations between Explicit and Implicit Measures

	BIAT Mental Illness	BIAT Self-esteem
Explicit Internalised Stigma	.04	
Explicit Self-esteem		-.21

3.4 Summary of Findings

3.4.1 Primary Research Questions.

Research question 1a was not confirmed. *D* scores for the mental illness BIAT did not correlate in the expected direction with any of the help seeking variables. Additionally, 57% of the sample obtained positive *D* scores on this BIAT, indicating faster response times during the "mental illness or good" block and slower responses during the "physical disability or good" block. However, only 17% of these *D* scores were above the moderate range. Research question 1b was supported, with a positive correlation being found between explicit internalised stigma and all

of the help seeking variables. Research question 2 sought to explore the association between the experience of stigma and depression severity. There was no significant relationship between BIAT mental illness *D* scores and depression severity (Research question 2a). Self-reported (explicit) internalised stigma was positively related to depression severity, but this relationship did not maintain significance when anxiety was controlled for (research question 2b). Relating to research question 3, depression severity was significantly associated with greater symptom thresholds for all help seeking variables. Correlations between depression severity and total, formal and informal help seeking symptom thresholds remained significant with anxiety controlled for. This suggests that as depression symptoms increase in severity, perceived symptoms thresholds required to seek help also increase.

3.4.2 Secondary research questions.

Research question 4 sought to explore the relationship between stigma and self-esteem. There was a significant negative relationship between explicit self-esteem and self-reported (explicit) internalised stigma (research question 4a). However, *D* scores for the mental illness BIAT were unrelated to *D* scores for the self-esteem BIAT (research question 4b). Furthermore, the majority of the sample had positive *D* scores on the self-esteem BIAT, indicating faster responses during the "me or good" block for most participants, compared to the "not me or good" block. . Research question 5 sought to explore the relationship between implicit and explicit measures. Implicit and explicit measures of stigma and self-esteem amongst the sample were unrelated (research questions 5a and 5b).

Chapter 4

Discussion

4.1 Overview

The overall aim of the current study was to explore the relevance of both implicit associations regarding mental illness and self-reported stigma to help seeking symptom thresholds by people with depression. Within this section, a summary of the key research aims will be provided. This will be followed by a consideration of results relating to each of the study variables. Findings relating to each of the primary and secondary research questions will be considered in turn, with links made to key aspects of the research literature. A critical evaluation of the study's methodology and analysis will also be conducted, with an exploration of key strengths and weaknesses. This will be followed by a consideration of the theoretical implications of the study and areas for further research. Finally, the clinical implications of the findings relating to implicit stigma, internalised stigma and help seeking symptom thresholds by people with depression will be discussed.

4.2 Summary of Study Aims and Research Questions

Modified Labelling Theory has suggested that individuals who are labelled as mentally ill may both have awareness of stigmatising attitudes towards mental illness and internalise these (Link, 1982, Link et al., 1987). Preliminary research has revealed the presence of negative implicit attitudes towards mental illness. Evidence has suggested that such attitudes may be present amongst individuals with a diagnosed mental illness (e.g., Rusch et al., 2010a, Rusch et al., 2010c, Rusch, Corrigan et al., 2010; Teachman et al., 2006) and non clinical samples (Lincoln, 2008; Peris et al., 2008; Monteith & Pettit, 2011). The primary role of the current study was to explore both implicit associations regarding mental illness and self-

reported (explicit) stigma amongst individuals experiencing depressive symptoms, in relation to help seeking symptom thresholds for depression. Depression was explored as this is a recurrent mental health difficulty (Judd, 1997) which may be associated with treatment delays (Lepine et al., 1997). The study further sought to explore whether stigma was associated with the severity of depression. A negative correlation was expected. In addition, depression severity was explored in relation to help seeking symptom thresholds. Secondary research questions explored the association between mental illness stigma and self-esteem, as well as the links between implicit and explicit measures.

4.3. Overview of the Main Study Variables

4.3.1 Demographic variables.

The majority (N = 22, 63%) of the sample were female. Roeloffs et al. (2003) carried out a study in primary care. Of their total sample, 73% were female. Similarly, an over representation of females was found in other studies exploring stigma within depression, in outpatient and community settings (Jorm et al., 2000; Sirey, Bruse, Alexopoulos, Perlick, Raue et al., 2001). This may reflect an over representation of females in mental health services in general, or amongst people seeking some form of help for depressive symptoms. The mean age of the current sample was 45 (SD = 12.1). In the Roeloffs et al. (2003) study, 55.7% of participants were older than 41. In the Jorm et al. (2000) study, the majority of participants were aged between 50 and 59. The average age of participants in the current study was similar to the age of participants in the above two studies, which were carried out in psychiatric outpatient and primary care settings. Furthermore, in a study exploring stigmatising attitudes towards mental illness amongst individuals accessing primary care for depression, no differences were found between older and younger

participants (Sirey et al. 2001). This suggests that stigmatising views are common across age groups.

4.3.2 Internalised stigma.

Over half of the current sample obtained overall scores above the "high" internalised stigma range, as defined by Ritsher et al. (2003). This is proportionally higher than the Ritsher and Phelan (2004) sample, who were individuals with a severe mental illness, 85% of whom had depression. Within their study, around a third of the sample had average scores above the midpoint of the scale, defined by Ritsher et al. as denoting high internalised stigma. Furthermore, within the Lysaker et al. (2007) study, amongst a sample of adults with schizophrenia (N = 75), the number of participants scoring within the moderate to high range was also just over one third. Considering studies that have used alternative measures of stigma within depression amongst a Taiwanese sample, it was found by Yen et al. (2005) that 25% of depressed individuals had scores within the high range on a Taiwanese version of the Self Stigma Assessment Scale (Corrigan et al., 2001). However, average CES-D scores for this sample were lower than for the current sample. Moreover, Roeloffs et al. (2003) found that around two thirds of their sample expected to experience stigma if they disclosed their depression to employers.

The high self-reported internalised stigma amongst the sample could have been due to their sensitivity to experiences and perceptions of stigma, a factor which may have motivated them to participate in the study. Furthermore, 60% of participants (N = 21) were recruited from service user groups. Such groups frequently display information about ongoing campaigns to reduce mental illness stigma. This may have increased the awareness of stigma amongst participants accessing those services. Furthermore, as much of the sample was recruited from

service user groups and secondary rather than primary care mental health settings, the high levels of internalised stigma may have been due to the overall clinical severity of symptoms.

4.3.3 Self-reported self-esteem.

The mean RSES score amongst a currently depressed sample in a separate study (N = 24) was 9.9 (SD = 5.4) (Franck & De Raedt, 2007), which is comparable to the mean of the current sample. Furthermore, RSES scores of the current sample were lower than scores which were obtained by individuals across 53 countries in a large scale cross cultural study (Schmitt & Allik, 2005). This indicates a deviation from the self-esteem of the normal population. This fits with research which has indicated that low self-esteem is consistently found amongst depressed individuals (Kernis, 2006; Strauman & Kolden, 1997). However, this is in contrast to findings relating to scores found on the self-esteem BIAT, discussed below. It has also been established that depressive symptoms correlate negatively with self-esteem (Roberts et al., 1995), a finding replicated within the current study.

4.3.4 Symptom measures.

The mean CES-D score for the current sample is M = 37.40, SD = 11.45. The mean CES-D score of a group of individuals from psychiatric inpatient and outpatient settings was 24.42 (SD = 13.51) (Radloff, 1977), therefore the current sample mean was higher. Amongst acutely depressed individuals within another study (N = 148), the average CES-D score was 38.10 (SD = 9.01) (Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977), which was comparable to the mean of the current sample.

Just under half of the overall sample obtained scores which would be classified as indicating severe anxiety (Beck & Steer, 1990). The mean BAI score of the current sample (25.45, *SD* = 14.58) was higher than that found amongst adults recruited from a university anxiety and treatment center (*N* = 193, *M* = 12.3, *SD* = 13.9) (Leyfer, Ruberg, & Woodruff-Borden, 2006). This may be indicative of the clinical severity of participants in the current study. However, extensive research has indicated that anxiety is frequently co-morbid with depression (Gorman, 1996; Pini et al., 1997). Therefore, given that the sample all had current depressive symptoms, the high prevalence of anxiety was not unexpected. Consistent with research (Beck et al. 1988; Mendels, Weinstein, & Cochrane, 1972), symptoms of depression and anxiety were found to be positively associated within the current study.

4.3.5 Help seeking symptom thresholds measure.

Self-reported formal help seeking symptom thresholds were significantly negatively skewed and mean symptom threshold scores were significantly higher than those for informal help seeking. Therefore, depressed participants in this study rated that a greater severity of depressive symptoms would need to be experienced in order to seek formal, as opposed to informal sources of help. Whilst this is not a measure of help seeking behaviour, this finding does fit with research that has found that formal help seeking is predicted by high levels of psychological distress (Oliver et al., 1999; Rickwood & Braithwaite, 1994).

The majority of the sample (*N* = 21, 61%) were accessing help from service user groups. This may be a help seeking source that is associated with higher group identification, due to the peer support and group treatment components of such services. Group identification has been found to predict use of peer support self help groups (Rusch, Corrigan, Wassel et al., 2009). Therefore, some individuals may

show a preference for service user group support over other treatment sources, due to the peer contact. This was a help seeking source not measured by the symptom thresholds measure.

4.3.6 Implicit measures.

Regarding the mental illness BIAT, over half of the sample responded more quickly when "mental illness" was paired with a positive descriptor, compared to the block where physical disability was paired with a positive descriptor. This is in contrast to findings which have indicated negative implicit attitudes towards mental illness amongst diagnosed samples (Rusch, Corrigan et al., 2010; Rusch, Todd et al., 2010; Teachman et al., 2006). Furthermore, explicit internalised stigma was high amongst the current sample and a vast amount of literature suggests that mental illness stigma may be internalised by individuals with a mental illness (Berge & Ranney, 2005; Kleim, 2008; Link, et al., 2001) and by individuals with depression specifically (Pyne et al., 2004; Sirey et al., 2001; Werner et al., 2008). It is therefore unexpected that over half of participants had positive *D* scores on the mental illness BIAT. However, specific details regarding positive or negative IAT or BIAT scores have not been provided within existing studies, making direct comparisons difficult.

One possible interpretation is that this could indicate more favourable attitudes towards mental illness amongst the current depressed sample, compared to other samples. Rusch et al. (2011) found an absence of negative automatic stigmatising views amongst a clinical sample, using the Lexical Decision Task. Therefore, for some clinical populations, negative automatic or implicit attitudes regarding mental illness may not be present.

However, the current study found that participants did not have either positive or negative *D* scores within the "strong effect" range. It should also be noted

that the BIAT results could equally indicate negative implicit attitudes towards physical disability, as this was the comparison category on the task.

Regarding the self-esteem BIAT, the *D* scores of over two thirds of participants indicated an association between "me" and "good". Of these, just under one third of participants had *D* scores within the "strong effect" range. One potential interpretation is that this could indicate positive implicit self-esteem amongst participants. This would match much of the research that has been conducted around implicit self-esteem in depression, suggesting that this tends to be positive (De Raedt et al., 2006; Franck & De Raedt, 2007; Franck et al., 2008; Huajian, 2003). This finding is also apparent amongst non clinical samples (Koole et al., 2001).

4.4 Summary of Primary Research Questions

4.4.1 The relationship between stigma and help seeking thresholds.

Regarding research question 1a, BIAT mental illness *D* scores were unrelated to help seeking symptom thresholds. Therefore, the hypothesised correlation between implicit associations regarding mental illness and help seeking symptom thresholds amongst depressed individuals was not supported. This was in contrast to the findings relating to research question 1b. As hypothesised, explicit internalised stigma was positively associated with overall, formal and informal help seeking symptom thresholds.

The lack of association between help seeking symptom thresholds and *D* scores on the BIAT mental illness measure is contrary to the literature which suggests that stigma is associated with help seeking delays (Barney et al., 2006; Sherwood et al, 2007) and negative views towards treatment (Brown et al., 2010; Conner et al., 2010; Givens et al., 2007; Schomerus et al., 2009; Vogel et al., 2007). The small sample size within this study is unlikely to have explained the lack of

association between these variables, as the correlations were low. Furthermore, not all literature suggests that help seeking is associated with stigma (Jorm, 2000; Roeloffs et al., 2003). Therefore, together with the results of the current study, evidence within this area is mixed.

Conversely, the finding regarding the link between help seeking symptom thresholds and explicit internalised stigma is consistent with the literature which suggests a link between stigma and help seeking delays or intentions. Some studies have supported the finding that internalised stigma in particular is associated with negative views or intentions towards psychiatric treatment. This has been found in relation to help seeking for overall psychiatric difficulties (Eisenberg et al., 2009) and depression (Barney et al., 2006; Brown et al., 2010; Conner et al., 2010; Givens et al., 2007; Schomerus et al., 2012). This could be hypothesised as being due to internalised stigma having a stronger association to help seeking than perceived stigma, as some studies have shown (e.g., Rusch, Corrigan et al., 2009; Eisenberg et al., 2009). However, this finding is not unequivocal (Griffiths et al., 2011). Drawing on Modified Labelling Theory, Corrigan (2004) states that engaging with psychiatric care involves receiving a mental health label, which results in the internalisation of stigmatising attitudes. This leads to an individual feeling discredited or ashamed. Corrigan proposes that this can result in the avoidance of mental health care. This suggests that internalised stigma may occur after help has been initially sought and could delay further treatment seeking. This may explain the correlation found between self-reported internalised stigma and increased help seeking symptom thresholds in the current study.

The current findings are in contrast to existing research that has explored implicit views towards mental illness amongst individuals with diagnosed mental

health problems. Whilst only a small number of studies have been conducted, the literature reviewed amongst clinical populations has highlighted negative implications. Specifically, negative stereotypes regarding mental illness have been associated with implicit blame towards people with mental health problems (Rüsch, Todd et al., 2010a), endorsement of biogenetic explanations for mental illness has been associated with implicit guilt (Rusch, Todd et al., 2010b), implicit shame related stereotypes have been linked to perceived legitimacy of discrimination over time (Rusch, Todd, et al., 2010c), and both implicit associations regarding mental illness and implicit self-esteem have been found to predict poor quality-of-life (Rusch, Corrigan, et al., 2010). From this perspective, the finding that the *D* scores on the mental illness BIAT were unrelated to help seeking symptom thresholds is unexpected. The current study utilised a group of individuals experiencing depressive symptoms. One hypothesis is that there may be differences in the expression of automatic attitudes towards mental illness, relative to physical disability, amongst individuals with depression.

Given that over half of the sample had positive *D* scores on the mental illness BIAT, it is perhaps unsurprising that there was no link to help seeking symptom thresholds. Furthermore, not all of the literature is suggestive of negative implicit associations regarding mental illness. Amongst a non clinical sample, Monteith and Pettit (2011) found implicit associations regarding depression which indicated that this is a temporary condition with underlying psychological causes. These attitudes are less linked to stigmatising responses. Moreover, as discussed, Rusch et al. (2011), failed to identify negative automatic attitudes towards mental illness amongst individuals with a range of mental health diagnoses, compared to a control sample. This study used the Lexical Decision Task. These findings suggest that implicit or

automatically activated attitudes towards mental illness may not be predominantly negative.

The conclusions drawn by Rusch et al. (2011) are of interest in relation to the current study. They hypothesised that individuals who have lived experience of mental illness hold qualitatively different automatic associations regarding mental illness compared to non clinical populations. It was proposed that these might relate to pain and suffering, rather than specific categories of "good" or "bad". This suggests the benefit of future research using stimuli on implicit measures which match these proposed implicit associations. Furthermore, implicit associations regarding mental illness appear to access a different construct compared to self-reported stigma. This was high amongst the current depressed sample and associated with increased help seeking symptom thresholds. The current study has made an important contribution to the limited research within this area. Given the mixed findings in the existing literature, further research would be beneficial, both with individuals with depression and individuals with other symptoms or diagnoses. In particular, it would be important to explore any factors which mediate potential positive or negative implicit associations regarding mental illness.

4.4.2 The relationship between stigma and depression severity.

Relating to research question 2a, BIAT mental illness *D* scores were unrelated to depression severity, contrary to the hypothesis. Conversely, relating to research question 2b, explicit internalised stigma was strongly related to depression severity. This suggests a clear relationship between depressive symptoms and internalised stigma. However, this correlation was no longer significant after controlling for anxiety. Furthermore, there was also a strong correlation between symptoms of depression and anxiety amongst the sample.

The lack of association between BIAT mental illness *D* scores and depression severity was unexpected, given the link between depressive symptoms and self-reported stigma found within other studies (Freidl et al., 2008; Pyne et al., 2004; Rusch et al., 2008; Werner et al., 2009). However, these results were consistent with research question 1a, that scores for this BIAT were unrelated to help seeking symptom thresholds. Additionally, the finding that over half of the sample displayed positive *D* scores on the mental illness BIAT could explain this. If implicit attitudes towards mental illness are more positive, it might be expected that such scores would not correlate with depressive symptoms. These results may further suggest that in comparison to explicit internalised stigma, implicit mental illness associations represent a separate construct. Moreover, it is possible that this is associated with different outcomes. However, as discussed, scores on the mental illness BIAT were only positive relative to physical disability. These are tentative hypotheses that require verification using different response categories and measurement paradigms. Furthermore, further research is needed to verify the assertion that implicit associations regarding mental illness are indicative of implicit attitudes.

Findings relating to research question 2b are consistent with much of the existing literature. Although samples used in other studies within this area differ, studies have indicated a correlation between depression severity and internalised or perceived stigma. This link has been established amongst individuals with chronic pain (Freidl et al., 2008), war veterans (Pyne et al., 2004), African American individuals (Rusch et al., 2008) and older adults (Werner et al., 2008). Studies have also indicated that depressive symptoms amongst other diagnostic groups, such as individuals with substance misuse problems or severe and enduring mental health difficulties, are related to stigma (Link et al., 1997; Ritsher & Phelan, 2004).

The association between depressive symptoms and internalised stigma was reduced when anxiety was controlled for. This indicates that explicit internalised stigma was not specifically associated with depressive symptoms. Rather, both symptoms of depression and anxiety were linked to internalised stigma in the current study. Co-morbidity between depression and anxiety has been consistently found within the research literature (Barlow, 1986; Beck et al., 1988; Gorman, 1996; Pini et al., 1997). Due to the prevalence of anxiety amongst individuals experiencing depression, it is more likely that the general severity of overall clinical symptoms is linked to internalised or perceived stigma. This hypothesis is supported by the findings of other studies, that overall psychological distress or symptoms are associated with stigma (Griffiths et al., 2008; Karidi et al., 2010; Lysaker, Davis et al., 2007; Lysaker et al., 2009).

Along with numerous other studies within this area (Freidl et al., 2008; Pyne et al., 2004; Rusch et al., 2008), the current research was cross-sectional. Consequently, it is unclear whether symptoms of depression and anxiety cause individuals to be aware of stigma and internalise this, whether the internalisation of stigma causes a worsening of symptoms, or whether there is a third variable that underlies both. A negative cognitive style has been established amongst individuals experiencing depression, characterised by negative interpretations of events, hopelessness, and dysfunctional attitudes (Blackburn, Jones, & Lewin, 1986). Furthermore, anxiety has been associated with a cognitive style which is focused on impending threat and danger (Riskind & Williams, 2005). This could have impacted on participant s' responses on some of the internalised stigma questionnaire items, for instance those relating to perceived inadequacy or reduced socialisation due to mental illness. Equally, experiences of stigma have been theorised to be associated

with withdrawal from others (Corrigan, 1998), a factor which could cause depressed or anxious mood.

4.4.3 The association between depression severity and help seeking symptom thresholds.

Regarding research question 3, there were significant positive correlations found between CES-D measured depressive symptoms and all of the help seeking variables. Interestingly, a particularly strong correlation ($r = .51$, $p < .01$) was found between current depressive symptoms and informal help seeking symptom thresholds. Moderate correlations were found between CES-D measured depressive symptoms, overall and formal help seeking symptom thresholds. Moreover, partial correlations showed that all correlations remained strong and significant when anxiety was controlled for. Therefore, current depression was strongly linked to high help seeking symptom thresholds (perceptions about how severe symptoms would need to be before seeking help), even taking current levels of anxiety into account.

These findings correspond with those of Sherwood et al. (2007), who established greater overall symptom thresholds amongst their currently depressed sample ($N = 24$) in comparison to a control sample without depression ($N = 66$). This suggests that the presence of current depressive symptoms does not necessarily mean that help seeking symptom thresholds will be lowered. This indicates that symptoms would need to be perceived as severe before help is sought. This is in contrast to Goldberg and Huxley's (1980) suggestion that a greater severity of symptoms is needed in order to access care. However, this links to other studies which have found that many individuals with elevated psychiatric symptoms do not seek help (Bushnell, 2005; Oliver et al., 2005). This finding is also consistent amongst depression sufferers (Roness et al., 2005).

There are many possible reasons for this. Stigma may be a key factor which influences negative views towards treatment. Schomerus et al. (2012) used a sample of participants from the community who were currently depressed, but not in receipt of treatment. They found that high internalised stigma was associated with a low perceived need for treatment, which possibly explained the unmet treatment needs amongst their sample.

A particularly strong association was found between self-reported symptom thresholds for informal help seeking and the presence of current depression. This was a finding also apparent within the study by Sherwood et al. (2007). This was an interesting result, given that delays have often been associated with formal, rather than informal help seeking (Oliver et al., 2005; Rickwood & Braithwaite, 1994). Studies have suggested that informal support systems may play a key role amongst individuals who have attempted suicide (Cedereke & Öjehagen, 2007). There may be factors which mitigate the likelihood of individuals drawing on informal help seeking sources. Informal support may be a useful treatment source, therefore understanding barriers in informal help seeking would be an important step for future research. In general, there is limited research to explain why the presence of current depressive symptoms could limit the willingness to discuss these with family or friends. One hypothesis is that this is due to a lack of importance being placed on exploring these sources of support within the literature. Further research within this area is warranted.

High symptom thresholds for the initial recognition of symptoms of depression were reported. Therefore, symptoms were rated as needing to be severe before participants recognised them as indicating depression. Symptom thresholds related to self recognition of symptoms were also significantly associated with

current depression severity. Again, this finding was apparent in the Sherwood et al. (2007) study. Current depression was therefore associated with possible delays in the recognition of depression symptoms. One explanation for this could be the stigmatising attitudes associated with depression, such as this condition being associated with dangerousness, reduced social skills, and unpredictability (Crisp et al., 2000). Individuals may wish to delay recognising their symptoms in order to avoid the potential application of such ideas to themselves. This fits with Modified Labelling Theory, which has stated that individuals are aware of stigmatising attitudes and that receiving a diagnosis results in the internalisation of these (Link, 1987). However, it should be noted that self-reported delays on the current help seeking measure do not necessarily correlate with actual symptom recognition delays amongst participants.

All of the current participants were receiving treatment for their depressive symptoms. Therefore, the current receipt of treatment is not necessarily associated with lowered thresholds for recognising symptoms of depression. This is comparable to another finding of Sherwood et al.(2007), that increased symptom thresholds for informal help seeking and symptom recognition were present amongst their currently depressed sample. This finding was present even for those who had previously received treatment for depression.

4.5 Summary of Secondary Research Questions

4.5.1 The relationship between stigma and self-esteem.

Relating to research question 4a, explicit self-reported internalised stigma was negatively associated with self-reported self-esteem. The correlation was moderate (r = -.48) but significant at the p <.01 level. Therefore, greater internalised stigma was associated with lowered self-esteem. On the other hand, relating to

research question 4b, there was no association between BIAT mental illness and BIAT self-esteem *D* scores.

Findings relating to research question 4a are consistent with the extensive literature suggesting that stigma is negatively associated with self-esteem amongst clinical populations (Berge & Ranney, 2005; Kleim, 2008; Landeen et al., 2007; Link et al., 2001; Vauth et al., 2007; Verhaeghe et al., 2008; Werner et al., 2008). Many of these studies were conducted amongst individuals with severe mental illness, such as psychosis. However, the current study has suggested that reduced self-reported self-esteem may also be associated with stigma for individuals experiencing depressive symptoms. Furthermore, internalised stigma has been defined as a process which is associated with devaluation and shame (Corrigan, 1998; Link et al., 2001). Therefore, it is unsurprising that self-reported self-esteem was found to be linked to this. However, it has not been a consistent finding that stigma is related to low self-esteem (Rusch, Corrigan, Wassel, Michaels, Olschewski et al., 2009) and Corrigan and Watson (2002) suggested that self-esteem may be lowered for some individuals, but not others, depending on the perceived legitimacy of stigmatising attitudes. Continued efforts should be made to explore factors which may protect against lowered self-esteem as a result of stigma.

It may have been expected that these findings would also be apparent at an implicit level, given the evidence found using self-report measures. However, the finding that *D* scores for the BIAT measuring implicit mental illness attitudes were unrelated to those for the self-esteem BIAT was consistent with findings relating to research questions 1a and 2a. Namely, there was a lack of association found between *D* scores on the mental illness BIAT and both help seeking and depression severity. This could also be explained by the lack of a strong association between "mental

illness" and "good" in the mental illness BIAT amongst the sample in general, together with the fact that over half had positive *D* scores on this task. None of the studies exploring implicit mental illness stigma have explored a link to implicit self-esteem. However, studies have found that negative implicit views towards mental illness amongst clinical samples are associated with implicit blame and guilt (Rüsch, Todd et al., 2010a; Rusch, Todd et al., 2010b), therefore it might have been expected that these would have been associated with negative *D* scores on the self-esteem BIAT. The current results have potentially challenged the proposed association between implicit mental illness stigma and implicit self-esteem. It is possible that implicit associations regarding mental illness are associated with different outcomes for clinical populations in comparison to self-reported (explicit) internalised stigma. However, there are various ways of measuring both implicit stigma and implicit self-esteem. Therefore, further explorations are required within studies using a variety of implicit measures.

The lack of correlation between the BIATs may further be explained by the stronger associations found between "me" and "good" as opposed to "me" and "bad" amongst the 91% of the sample on the self-esteem BIAT. It would therefore be expected that there would be a lack of association between this task and the mental illness BIAT. The finding that the majority of the sample had positive *D* scores on the self-esteem BIAT is consistent with studies that have indicated positive implicit self-esteem amongst depressed individuals (De Raedt et al., 2006; Franck & De Raedt, 2007; Franck et al., 2007; Franck et al., 2008; Huajian, 2003).

These results are of interest, as poor self-esteem has generally been regarded as being a key feature of depressed mood (Clark, 1999). The constructs accessed by implicit and self-report self-esteem measures may differ, suggesting that implicit

self-esteem represents a different process. Positive implicit self-esteem was found to predict future depressive symptoms following a six month follow-up (Franck et al., 2007).Therefore, this may not be an adaptive trait amongst individuals experiencing depression. Moreover, it has been proposed that implicit positive self-esteem may represent "ideal self schemas", reflecting "hoped for" views of the self Explicit measures on the other hand represent "actual self schemas" (Clark, 1999). It may be that the discrepancy between these two constructs results in increased susceptibility for depression. A more detailed exploration of implicit self-esteem was beyond the scope of the present study and this area would benefit from continued exploration.

4.5.2 The relationship between implicit and explicit measures.

Results relating to both research questions 5a and 5b indicated that there was no relationship between the mental illness BIAT and explicit self-reported stigma, or between the self-esteem BIAT and self-reported (explicit) self-esteem. Therefore, self-report and implicit measures were unrelated in the current study. These findings link with other research within this area (Rusch, Corrigan et al., 2010; Teachman et al., 2006). Furthermore, implicit and explicit attitudes towards depression were found in one study to differ amongst a non-clinical population (Monteith & Pettit, 2011). Moreover, the study carried out by Rusch et al. (2011), using the Lexical Decision Task, also failed to find a link with self-report measures amongst their clinical sample. This suggests that the attitudes measured through implicit tasks are unrelated to thoughts or attitudes measured by self-report. However, Rusch et al. found that automatic attitudes were associated with self-reported anger towards individuals with a mental illness amongst their non-clinical sample. Therefore, conclusions about the relationship between implicit and explicit measures are unclear.

A meta-analysis found that implicit and explicit measures showed a weak to average correlation within several studies (Hofmann et al., 2005). The same study suggested that correlations improved if there was greater conceptual correspondence between implicit and explicit measures. The categories used in the mental illness BIAT within the current study may have been conceptually different to the self-report (explicit) internalised stigma scale. Specifically, the internalised stigma scale measured concepts relating to alienation as a result of having a mental illness, whereas the BIAT categories were limited to set response categories ("mental illness", "mentally disturbed" or "good").This may have explained the lack of correlation between these measures. However, in the Teachman et al. (2006) study, participants rated views towards both physical and mental illness using Likert scales, with "good" and "bad" as response options. These would have been expected to converge with their IAT measure, yet they failed to find that these were linked. Therefore, a lack of conceptual similarity between measures does not appear to fully explain the lack of correlation between these.

The finding that implicit and explicit measures were unrelated has further implications. Specifically, despite associations between "mental illness" and "good" on the mental illness BIAT, participants self-reported negative experiences relating to internalised stigma on the questionnaire measure. Furthermore, Rusch et al. (2011) failed to establish negative automatic attitudes towards mental illness on the Lexical Decision Task, but self-reported shame and anger were found on their self-report measures. This suggests that although positive associations may be found on implicit or automatic measures amongst individuals experiencing a current mental illness, these do not necessarily converge with positive self-reported views. More specifically, the attitudes that the majority of individuals within the current study

were aware of were negative, even if the implicit measures suggested more positive associations relating to mental illness. Individuals have been theorised to have some degree of conscious access to implicit processes (Greenwald & Banaji, 1995). Therefore, individuals may have had some awareness of these positive associations at the conscious level, but reported predominantly negative views towards mental illness on the questionnaire. This suggests a possible rejection of the automatic views at the explicit level. Consequently, positive associations may not have a self protective effect in the way that mental illness stigma is felt or perceived, for individuals with depression or amongst clinical populations in general. However, positive implicit views towards mental illness have not been consistently found within the literature (e.g., Rusch, Corrrigan et al., 2010; Rusch, Todd et al., 2010a; Rusch Todd et al., 2010b; Rusch, Todd et al., 2010c, Teachman et al., 2006). Given the limited research within this field, further exploration is required.

4.6 Methodological Limitations and Strengths

4.6.1 Design.

The current study sought to further explore implicit associations regarding mental illness, internalised mental illness stigma, and any association to help seeking symptom thresholds amongst a sample of individuals experiencing depressive symptoms. Along with many studies that have explored experiences of stigma amongst general population and clinical samples (e.g., Alonso et al., 2009; Berge & Ranney, 2005) and studies that have been conducted around implicit mental illness stigma (Rüsch, Todd et al., 2010a; Rusch, Todd et al., 2010b; Rusch, Corrigan et al., 2010), the research employed a cross-sectional design. Implicit associations regarding mental illness had not previously been explored amongst individuals with depression. This design was deemed appropriate due to the limited research within

this area. It was intended that this exploratory study would provide a novel perspective on the impact of implicit associations regarding mental illness and explicit mental illness stigma amongst individuals experiencing depression. Moreover, participants completed measures at one time point, therefore the design was not limited by attrition.

A key limitation to this design is that causal links between variables cannot be established (Coolican, 2004). Thus, the results can only infer a relationship between the variables under study. It is not possible to ascertain the direction of the relationships found within the study's significant results. Further research is required to ascertain the causal nature of these associations. Furthermore, a between-groups design, similar to those employed by Teachman et al (2006) and Rusch et al. (2011), may have allowed for an exploration of the differences in implicit associations regarding mental illness between individuals who are depressed and other clinical populations.

Another limitation of the current design was the lack of exploration of other variables which may have been related to stigma or help seeking within depression. For instance, treatment history may have been pertinent in either reducing or increasing help seeking symptom thresholds. However, the study's design was strengthened by the use of partial correlations to control for the impact of anxiety in exploring the association between depressive symptoms and key variables. This allowed for a more thorough investigation of the unique impact of current depression. Another strength was the exclusion of participants with a physical disability, a factor which could have confounded responses on the BIAT and one which was not considered amongst studies using physical illness as a comparison category (Monteith & Pettit, 2011; Teachman et al., 2006).

The study utilised some self-report measures, which may be to subject to social desirability biases (Greenwald et al., 2002; Hinshaw, 2007). Participants completed all measures during a research meeting, therefore the presence of the researcher could have had an impact. However, the design was substantially enhanced by the use of implicit measures, which are far less limited by such social desirability biases (Greenwald & Banaji, 1995). Additionally, the incorporation of implicit measures within the design ensured that the study maintained relevance to the research area, which is increasingly using such tools (Peris et al., 2008; Rusch, Corrigan et al., 2010; Rusch et al., 2011; Teachman et al., 2006). Furthermore, the BIAT, rather than the full IAT, is likely to have lessened the impact of fatigue, a factor which could have increased response latencies and therefore biased scores.

4.6.2 Sample.

A key strength was the use of a clinical sample of individuals experiencing depressive symptoms. Individuals with depression may experience negative thoughts which bias their interpretations of events and can link to a sense of hopelessness (Blackburn et al., 1986). Implicit or explicit stigmatising views may therefore be unique amongst this sample. Furthermore, there is evidence that help seeking for depression is poor (Lepine et al., 1997; Roness et al., 2005). This highlights the relevance of exploring symptom thresholds related to help seeking for depression specifically. Many of the studies conducted within this area have explored treatment seeking attitudes and experiences amongst samples within the community. There is a lack of clarity regarding help seeking processes for those whose clinical symptoms may be at a severity requiring active treatment. Furthermore, according to Modified Labelling Theory, individuals who are receiving treatment for a mental illness are

more likely to apply stigmatising views to themselves (Link, 1987). Therefore, the use of a clinical sample who were receiving treatment was advantageous.

As a screening measure was used rather than a diagnostic tool, the proportion of the sample who would meet diagnostic criteria for a Major Depressive Episode is unclear. However, the mean CES-D score was comparable to other studies which have utilised samples of individuals with depression. Additionally, all participants scored above the screening cut off on the CES-D, indicating current depression. This increases the external validity of the findings.

Despite efforts to recruit participants from a range of clinical settings, the majority of the sample (N = 21, 60%) were recruited from service user groups. These participants may have been particularly motivated to take part following negative experiences of stigma. The application of these results to individuals who may have had less negative experiences of mental illness stigma could be limited. Furthermore, it is worth considering the impact of current depression on the completion of the questionnaire measures used in the study. Depressed mood has been associated with a negative thinking style (Blackburn et al., 1986), therefore it may be that current depression results in views of treatment being ineffective, or an individual's general hopelessness about their current situation. This may have influenced some scores on the help seeking measure. Moreover, responses to items on the ISMII regarding discrimination as a result of having a mental illness or shame may have been skewed by the negative cognitive style characteristic of depression. In addition, 60% of the sample were accessing service user self help groups. As discussed, such groups may be associated with strong group identification, a factor which has been found to reduce the perceived legitimacy of mental illness stigma amongst service users

(Rusch, Corrigan, Wassel et al., 2009). This could have further skewed responses on ISMII.

The overall response rate for the current study was 13%. Difficulties in the recruitment of depressed participants have been noted in other studies (Muñoz et al., 1995; Willemse et al., 2004), therefore this response rate was not unexpected. Despite the low sample size, there were a number of significant results. This reduced the impact of power issues.

4.6.3 Measures.

Limited demographic information was obtained. Indications from a systematic review were that socio-demographic variables had no strong correlation with internalised stigma across several studies (N = 45) (Livingston & Boyd, 2010). Furthermore, attempts were made to keep the length of research meetings to a minimum. However, additional demographic details could have highlighted factors influencing the self-reported symptom thresholds for help seeking in the study.

Another limiting factor relates to the use of the CES-D (Radloff, 1977), rather than a formal diagnostic tool such as the Structured Clinical Interview for DSM-IV Axis 1 disorders (First et al., 2001) to measure depression. Completion of this tool can be lengthy and its inclusion would have substantially increased the length of research meetings. Furthermore, the CES-D was developed using diagnostic criteria from the American Psychiatric Association relating to Major Depressive Disorder (Radloff, 1977), indicating some convergence between this measure and formal diagnostic tools.

As with many other studies in this area (Brown et al., 2010; Conner et al., 2010; Givens et al., 2007; Jorm et al., 2000), the current research used a self-report measure of help seeking. The help seeking symptom thresholds measure does not

translate to actual help seeking delays, for which retrospective behavioural accounts would have been necessary. Consequently, a more concrete behavioural measure, such as a review of clinical notes, may have provided a more objective account of help seeking.

The use of the BIAT, a variant of the IAT, ensured consistency with existing research (e.g., Rusch, Corrigan et al., 2010; Teachman et al., 2006). However, as has been noted, both the BIAT and the IAT are relative tasks. Therefore, the positive associations established regarding mental illness displayed by some participants could have equally been indicative of negative associations regarding the comparison category, physical disability. An alternative measure of automatic attitudes, such as the Lexical Decision Task (Wittenbrink et al., 2001), as used by Rusch et al. (2011) would have avoided these relative effects. However, there are advantages and disadvantages to both implicit and priming measures (Fazio & Olson, 2003).

Potential limitations to the validity of the BIAT should be considered when interpreting the results. The study used a positively valenced attribute as the focal category on the BIAT ("good"), which may not correspond well to mental illness stigma, a largely negative concept. As suggested by Rusch, Corrigan et al., (2010), as this is a new area of research, future studies should vary the choice of focal category on the BIAT. Another pertinent factor is the written stimuli used on the BIATs. As the mental illness BIAT did not correlate with ISMII scores, these stimuli may not have been valid representations of implicit associations regarding mental illness. Future research could vary the stimuli used on the task, or consider utilising alternative measurement paradigms.

Another potential limitation relates to the comparison category used within the mental illness BIAT. Comparison categories related to physical disability or

physical illness have been used within many of the studies within this area (Rusch, Corrigan et al., 2010; Teachman et al., 2006). Physical disability was deemed more appropriate due to this being a more distinct alternative category. However, stigma towards physical disability may have been common amongst the sample. A self-report measure of stigmatising attitudes towards physical disability may have reduced the impact of this confounding factor.

4.6.4 Analysis.

The low sample size meant there was no scope for analyses other than correlations. A larger sample size would have enabled regression analyses to be carried out. These would have allowed for an analysis of whether implicit associations regarding mental illness or self-reported (explicit) stigma predicted help seeking symptom thresholds amongst individuals with depression. Furthermore, a multiple regression analysis may have explored more rigorously the impact of both depressive and anxious symptoms on both stigma and help seeking. Moreover, numerous analyses were utilised to explore the associations between the various factors under study. This could have increased the risk of a Type 1 error, namely rejecting the null hypothesis inappropriately (Field, 2009). Again, a regression would have limited the number of analyses carried out, thus increasing the validity of the results.

4.7 Theoretical Interpretation of Research Findings

4.7.1 Modified Labelling Theory.

Modified Labelling Theory has argued that individuals are aware of negative stereotypes surrounding mental illness labels. It has been proposed that these stereotypes can become internalised once a mental illness diagnosis has been received (Link, 1982; Link et al., 1987; Link et al., 1989). The current study has

provided some support for Modified Labelling Theory. Over half of the sample obtained scores on the internalised stigma scale within the high range (Ritsher et al., 2003). The theory further proposed that negative outcomes may result from the application of negative stereotypes to the self, such as social withdrawal (Link et al., 1989). The current study found that internalised stigma was positively associated with increased help seeking symptom thresholds and negatively associated with self-reported self-esteem. Internalised stigma was also found to be associated with depressive symptoms, although the partial correlation showed that there was an influence of anxiety on the relationship between these variables. The findings have provided support for the assertion that negative outcomes may be associated with the internalisation of negative mental illness attitudes. The current study has also supported the application of this theory to individuals experiencing depressive symptoms.

Particularly high symptom thresholds were reported in relation to formal help seeking amongst individuals with depressive symptoms in the current study. One implication of Modified Labelling Theory is that contact with mental health services will result in increased negative outcomes related to labelling (Link et al., 1989). Therefore, individuals may delay seeking formal treatment to avoid the experience of being labelled. Furthermore, depression severity was linked to increased self-reported symptom thresholds in all aspects of help seeking. It could be hypothesised that individuals with a higher severity of depressive symptoms will be more likely to receive a mental illness label. Furthermore, all participants within the current study were seeking some form of help, further indicating the likelihood of their receiving a label. One proposed suggestion from Modified Labelling Theory is that labelling and the subsequent internalisation of negative stereotypes will result in individuals

attempting to conceal their mental health difficulty (Link et al., 1989; Markowitz, 1998). This could have influenced the increased help seeking symptom thresholds reported by participants within the current study.

However, implicit associations regarding mental illness were unrelated to any of the variables measured. This challenges one of the facets of Modified Labelling Theory, the assertion that negative stereotypes are internalised by individuals and are associated with negative outcomes. Furthermore, the theory postulated that early socialisation experiences will result in individuals becoming aware of negative social stereotypes surrounding mental illness (Link, 1982; Link et al., 1987; Link et al., 1989). However, implicit associations, which are theorised to correlate with long term socialisation experiences (Fiske, 1991; Greenwald et al., 2002), were not found to be predominantly negative in the current study. Therefore, although negative mental illness attitudes may be common at an explicit level, the current findings have suggested that implicit associations about mental illness are not necessarily negative, relative to physical disability. Modified Labelling Theory has not considered the differences between explicit stigmatising attitudes and implicit associations regarding mental illness. As a consequence, this theory has not considered the different mechanisms which may underlie social attitudes.

4.7.2 Dual Process Theory.

Dual Process Theory has explored the mechanisms underlying implicit and explicit processes. Implicit processes have been theorised to be spontaneous in nature. In contrast, explicit processes have been viewed as being more deliberative, involving an effortful cost-benefit analysis of a situation. Both motivation and opportunity must be present in order to engage in effortful processing. If these factors are absent, implicit processes, such as inner affective reactions or implicit

attitudes, are more likely to be relied upon (Fazio & Olson, 2003; Friese, 2008; Smith & DeCoster, 2000).

Within the current study, the association between self-reported help seeking symptom thresholds and implicit associations regarding mental illness were explored. The consideration of depressive symptom thresholds required for various sources of help seeking within this study has reflected a controlled analysis of the positive and negative aspects of different forms of treatment. Therefore, a degree of cognitive effort was required when participants were completing this measure, indicating that some level of motivation would have been necessary. Furthermore, participants were given time to complete the measure, indicating the presence of opportunity. From the perspective of Dual Process Theory, implicit processes were therefore less likely to be relied upon (Fazio & Olson, 2003). This may explain the lack of convergence between the help seeking and implicit measures.

Help seeking behaviour is reflective of a controlled process which is likely to follow a series of steps. This involves the identification of a problem, the consideration of various sources of help, and engagement in the behaviour. Consequently, it would theoretically be expected that controlled, rather than automatic processing would be relied upon in order to seek help (Friese, 2008). However, this would only be the case if motivation and opportunity were high. For example, individuals experiencing a mental health crisis may have less cognitive resources available to them. This could mean that they may be more likely to rely on automatic, less controlled processes when seeking help. The current study measured symptom thresholds rather than help seeking intentions or behaviour, therefore further research is necessary in order to more fully understand help seeking from the perspective of Dual Process Theory. One avenue for future research could be to

measure implicit views regarding mental health treatment, with a comparison to self-reported attitudes or intentions. For instance, Rusch, Todd et al. (2009) found that implicit views regarding psychiatric medication were present amongst a group of individuals with severe mental illness and that this influenced their perceived need for treatment.

The study found that implicit and explicit measures were unrelated. This is consistent with Dual Process Theory, which has suggested that these processes operate through distinct mechanisms (Gawronsk and Bodenhausen, 2006). It has been proposed by some theorists that an automatic response within a given context, such as a negative affective reaction, may be actively considered in terms of its relevance to evaluative judgements. For example, a negative reaction towards a member of a stigmatised group may trigger an evaluative response that it is wrong to stigmatise. The resulting cognitive dissonance and the need to resolve this, by rejecting the automatic response for example, could explain the disparity between implicit and explicit measures (Gawronski & Bodenhausen, 2006; Sritharan, 2010). However, as discussed, both motivation and opportunity would need to be present in order for this process to occur and for implicit reactions not to be relied upon (Fazio & Olson, 2003). Furthermore, implicit and explicit processes interact and are not viewed within Dual Process Theories as operating in isolation from one another (Gawronski & Bodenhausen, 2006; Smith & DeCoster, 2000).

The finding that more positive implicit associations were evident relating to mental illness amongst the current sample of individuals experiencing depression is pertinent. This could reflect a tendency towards positive implicit attitudes regarding mental illness amongst depressed individuals, as this is a concept associated with the self. However, as noted, the associations regarding mental illness found within this

study could also be indicative of negative implicit associations regarding physical disability. Nevertheless, this hypothesis would fit with the existing literature which indicates positive implicit self-esteem amongst depressed individuals (e.g., De Raedt et al., 2006; Franck et al., 2007; Franck et al., 2008; Huajian, 2003). This may be indicative of a general propensity amongst depressed individuals to view the self, or concepts associated with the self, in a positive manner. As discussed above, it has been proposed that implicit positive self-esteem may represent "ideal self schemas", reflecting "hoped for" views of the self (Clark, 1999). Furthermore, implicit self-esteem, attitudes and stereotypes have been theorised to be related within overarching social knowledge structures (Greenwald, et al., 2002). Therefore, implicit associations regarding mental illness and implicit self-esteem may be related. However, this is a speculative hypothesis, due to the small sample size and exploratory nature of the current study. Furthermore, BIAT *D* scores were not in the strong range.

4.8 Implications for Future Research

The current study was cross-sectional and exploratory. Furthermore, the small sample size means that conclusions are tentative. The findings require further verification. The research has contributed towards the limited evidence in this area and has indicated that findings regarding implicit associations surrounding mental illness are mixed. It is unclear whether this was due to the use of a specific sample of individuals experiencing depression. Therefore, future studies could explore differences in stigmatising views between clinical populations. Furthermore, larger scale designs may allow for the use of regression analyses which would indicate whether implicit mental illness associations have more of a predictive role regarding help seeking for mental health difficulties. A larger sample size may also allow for

the application of structural equation modelling, which would enable the testing out of hypothesised relationships between concepts. Additionally, as this is an emerging research area, future studies would benefit from incorporating alternative implicit or automatic measures, such as the Lexical Decision Task, the Implicit Association Test, or the Single Target IAT (Bluemke & Friese, 2008). This would more thoroughly ascertain how implicit or automatic processes operate in relation to mental illness stigma and would allow firmer conclusions to be made.

As much research has measured help seeking through self-report, behavioural measures may provide more valid insights regarding the impact of mental illness stigma. For instance, information could be gained from referrals into services or clinical notes, rather than relying on participants' retrospective or anticipatory accounts. Additionally, drawing on the current literature on implicit views towards mental illness, it may be helpful to include implicit as well as self-report measures of help seeking within future research. This would follow on from Rusch, Todd et al. (2009) who explored implicit views towards psychiatric medication. This could provide a more thorough picture on barriers to help seeking. Moreover, longitudinal designs measuring treatment engagement over time could ascertain the long term impact of positive or negative implicit associations regarding mental illness,

The current findings have suggested that implicit associations regarding mental illness amongst a sample of individuals experiencing depressive symptoms may not be predominantly negative. These results are consistent with the findings of one other study (Rusch et al., 2011), which utilised a different measurement paradigm. Given the contrast with other findings (Rüsch, Todd et al., 2010a; Rusch, Todd et al., 2010b; Rusch, Corrigan et al., 2010; Teachman et al., 2006), further research is needed to explore implicit associations regarding mental illness amongst

clinical samples and any negative outcomes these may have. These findings could be explored in relation to implicit self-esteem, to evaluate further whether automatic associations regarding the self or mental illness may be positive amongst certain clinical populations or individuals. In addition, further studies should explore the use of written stimuli on the IAT or BIAT which relate more strongly to the unique experiences of individuals with lived experience of mental health problems. As suggested by Rusch et al. (2011), these could relate to concepts of pain and suffering (e.g., "anguish", "hurt"), as opposed to more stereotypic written stimuli (e.g., "good", "bad"). This would link to studies which have explored implicit shame or guilt in relation to having a mental illness amongst clinical populations (e.g., Rusch, Todd et al., 2010a).

Dual Process Theories have alluded to the importance of motivation and opportunity in determining the influence of implicit processes on behaviour. If both factors are low, this is theorised to increase the influence of implicit processes and decrease the influence of explicit, controlled processes on behaviour (Fazio & Olson, 2003). Friese et al. (2008) further suggested moderators that may influence either the opportunity or motivation to control behaviour, such as working memory capacity and a dispositional tendency to value detailed cognitive processing. It would be beneficial for future studies to explore key moderators which determine the potential influence of implicit associations regarding mental illness on behaviour. This could relate to an exploration of their influence on symptom thresholds for help seeking or actual help seeking behaviour. Such factors may indicate the predictive validity of implicit measures (Friese et al., 2008). Furthermore, Dual Process Theories have drawn upon cognitive neuroscience to explain the different memory systems underlying implicit and explicit processes. Further research could aim to test the

assertion that automatic processes are laid down early in life within a slow learning system that is more resistant to change (Smith & DeCoster, 2000). In general, it would be beneficial for research around implicit processes, including implicit attitude research, to link cognitive and social psychological literature, as this may provide insights regarding the mechanisms required for attitude change.

4.9 Clinical Implications

Self-reported internalised stigma was found to relate to increased symptom thresholds. Formal help seeking symptom thresholds were significantly higher than those found for informal help seeking. Therefore, staff working in primary or secondary mental health care settings should consider methods of reducing stigma towards mental health difficulties and seeking help. Moreover, as GPs are a key help seeking source, key efforts to reduce stigmatising views should be made within primary care. These could range from normalising the occurrence of mental health difficulties in interactions with clients and the provision of informative material about the long term benefits of seeking help for depression. It is concerning that the current and previous findings (Sherwood et al., 2007) indicated that depressive symptoms were linked to increased self-reported symptom thresholds for help seeking. This suggests that current depressed thinking may influence negative views towards treatment, a factor which could fuel stigmatising attitudes. Furthermore, depressive symptoms were strongly related to symptom thresholds for informal help seeking and symptom recognition. NICE guidance has recommended the effective identification of depressive symptoms amongst all health professionals, not just those within mental health (NICE, 2009). Therefore, staff working across all levels of the healthcare system should be alert to depressive symptoms amongst patients and actively promote treatment sources and their effectiveness. Further information

is required regarding the factors which influence symptom recognition and the use of informal support systems, as it could be hypothesised that these initial steps influence more formal sources of treatment seeking.

Internalised stigma was highly prevalent amongst the current sample. Evidence regarding the effectiveness of anti stigma campaigns has failed to conclusively find that these are effective in reducing negative public attitudes. Despite its broad scope, the five year anti stigma campaign launched by the Royal College of Psychiatrists in 1998 showed generally small reductions in negative public opinions (Crisp, Cowan, & Hart, 2004). This could have negative consequences on the level of internalised stigma experienced by individuals with depression. A depression specific campaign in Australia resulted in increased recognition of the impact of this condition (Highet, Luscombe, Davenport, Burns, & Hickie, 2006). Public education efforts could turn towards promoting more positive views regarding treatment for specific mental health difficulties such as depression, rather than seeking to reduce stigmatising attitudes towards mental illness in general.

The current study found that self-reported internalised stigma was associated with psychiatric symptoms and low self-reported self-esteem, amongst individuals experiencing depressive symptoms. This fits with the existing literature amongst other populations experiencing a mental illness (Link et al., 2001; Ritsher & Phelan, 2004). Such negative outcomes could worsen or maintain mental health difficulties such as depression. This suggests the importance of therapeutic interventions targeting stigmatising beliefs. A group based cognitive-behavioural intervention aimed at reducing stigmatising attitudes and improving self-esteem amongst a sample of individuals with schizophrenia resulted in improved symptoms (Knight, Wykes, & Hayward, 2006). This suggests the value of targeting stigma related

beliefs or negative automatic thoughts within cognitive-behavioural or other treatment programmes. Furthermore, professionals working with individuals with depression should aim to address the relevance that internalised stigma may have for their clients' overall recovery.

Clinical interventions may benefit from exploring methods to reduce some of the negative implicit associations regarding mental illness that have been established in other studies (Rusch, Corrigan, et al., 2010; Rusch, Todd et al., 2010a; Rusch, Todd et al., 2010b; Teachman, et al. 2006). As an example, Grumm, Nestler and Collani (2009) found that that repeatedly pairing the word "I" with positive trait adjectives, in an evaluative conditioning paradigm amongst undergraduate students, increased implicit self-esteem. A similar procedure could be employed amongst individuals with depression or other mental health problems. This bears some relation to cognitive bias modification procedures, which aim to modify the selective attention or interpretation processes maintaining anxiety (MacLeod & Mathews, 2012). However, it should be considered that such implicit associations may vary amongst individuals with mental health problems, as the current and Rusch et al. (2011) studies produced contrasting findings.

The current study established that self-reported internalised mental illness stigma was common and was linked to depressive symptoms and self-reported low self-esteem. Therefore, apparent positive automatic associations regarding mental illness, relative to physical disability, did not appear to have a strong protective effect amongst the sample. One hypothesis is that the discrepancy between implicit associations and explicit attitudes is problematic. For instance, this could result in the lack of a coherent or stable sense of self. Moreover, a Meta-Analysis of various studies exploring implicit cognitive biases, self-esteem, or self beliefs within

depression established that such processes were generally predictive of depressed mood (Phillips, Hine, & Thorsteinsson, 2010). In general, clinical interventions would benefit from considering the impact of any discrepancy between implicit and explicit processes. This requires consideration within clinical practice.

4.10 Conclusions

Much research has indicated that stigma may have a negative impact upon individuals suffering from a mental illness (e.g., Link et al., 2001; Lysaker et al., 2007), including those with depression (Friedl et al., 2008; Pyne et al., 2004; Werner et al., 2008). Research has indicated that help seeking for depression may be delayed, a factor which could worsen the overall course of this disorder (Lepine et al., 1997). Research has turned towards alternative measures of stigma. This has indicated that stigma may be internalised, but that this may also operate in a less controlled, implicit manner (e.g. Rusch, Todd et al., 2010a; Rusch, Todd et al., 2010c; Teachman et al., 2006). The primary aim of the current study was to explore correlations between self-reported internalised stigma, implicit associations regarding mental illness, and help seeking symptom thresholds within depression. The study also explored correlations between stigma and depression severity, the impact of depression severity on help seeking symptom thresholds, the link between stigma and self-esteem, and the link between implicit and explicit measures. It was intended that this study would contribute to a limited but emerging evidence base relating implicit associations regarding mental illness.

Findings provided some support for Modified Labelling Theory. Self-reported internalised stigma was associated with self-reported symptom thresholds for help seeking and reduced self-reported self-esteem within depression. Internalised stigma was also associated with depressive symptoms, but anxiety had

an influence in this relationship. This suggests that it is overall, rather than specific symptoms which are associated with the internalisation of mental illness stigma. The study also indicated that current depressive symptoms were positively associated with self-reported help seeking symptom thresholds. Therefore, there are clearly negative outcomes associated with the internalisation of negative mental illness stereotypes for individuals with depression. Modified Labelling Theory has failed to account for implicit associations regarding mental illness, either amongst clinical or non-clinical populations. Within the current study, implicit associations surrounding mental illness were not related to help seeking symptom thresholds, depression severity, or self-esteem. One hypothesis is that this represents a different construct to explicit internalised stigma, however verification through future research is required.

The current findings support Dual Process Theories; implicit and explicit processes were unrelated. Furthermore, more positive implicit associations regarding mental illness were found amongst over half of the sample. In addition, positive self associations were found on the implicit self-esteem task, in accordance with prior research. This may indicate a tendency to view the self, or concepts associated with the self, in a positive light. Automatic associations regarding mental illness did not result in more adaptive self-reported views, suggesting that the former do not have a self protective effect. Given the cross-sectional nature of the current research and the relative nature of the implicit task used, this is a tentative hypothesis. Moreover, the lack of association between implicit associations regarding mental illness and self-reported help seeking symptom thresholds may have been a result of the latter being more strongly related to controlled processes, from the perspective of Dual Process Theory (Fazio & Olson, 2003). Further research within this area is warranted.

The results have several important clinical implications. Stigmatising stereotypes may become internalised at an explicit level for individuals experiencing depression and there is a potential association to the perceived severity of depressive symptoms required before informal or formal help is sought. Efforts should be made to reduce the negative impact that stigma may have for depressed individuals, in terms of worsened symptoms or delays in treatment access. Efforts to reduce negative implicit associations and self-reported stigmatising attitudes towards mental illness should be explored. Such efforts may improve overall outcomes for individuals experiencing depressive symptoms. Further research within this limited research field is required, exploring any relevance to Dual Process Theory and considering a broader stance in the measurement of mental illness stigma and its impact.

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Appendix A1

The Internalised Stigma of Mental Illness Inventory

ID Number_____ Date _____

Age _____ Gender (Circle): Male / Female

The term 'Mental Illness' is used in this questionnaire, but please think of it as whatever you feel is the best term for it.

Please tick your response

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I feel out of place in the world because I have a mental illness				
2. Mentally ill people tend to be violent				
3. People discriminate against me because I have a mental illness				
4. In general, I am able to live life the way I want to				
5. People ignore me or take me less seriously just because I have a mental illness				
6. I feel inferior to others who don't have a mental illness				
7. I avoid getting close to people who don't have a mental illness to avoid rejection				
8. People can tell that I have a mental illness by the way I look				
9. Having a mental illness has spoiled my life				
10. Living with mental illness has made me a tough survivor				
11. Nobody would be interested in getting close to me because I have a mental illness				
12. Mentally ill people shouldn't get married				
13. People with mental illness cannot lead a good, rewarding life				
14. People often patronize me, or treat me like a child, just because I have a mental illness				

	Strongly Disagree	Disagree	Agree	Strongly Agree
15. I feel comfortable being seen in public with an obviously mentally ill person				
16. I stay away from social situations in order to protect my family or friends from embarrassment				
17. People without mental illness could not possibly understand me				
18. I am disappointed in myself for having a mental illness				
19. I don't talk about myself much because I don't want to burden others with my mental illness				
20. I don't socialise as much as I used to because my mental illness might make me look or behave 'weird'				
21. Negative stereotypes about mental illness keep me isolated from the 'normal' world				
22. I can have a good, fulfilling life, despite my mental illness				
23. Because I have a mental illness, I need others to make most decisions for me				
24. I am embarrassed or ashamed that I have a mental illness				
25. Others think that I can't achieve much in life because I have a mental illness				
26. Stereotypes about the mentally ill apply to me				
27. I can't contribute anything to society because I have a mental illness				
28. Being around people who don't have a mental illness makes me feel out of place or inadequate				
29. People with mental illness make important contributions to society				

Appendix A2

The Rosenberg Self-esteem Scale

The next set of questions are about your feelings towards yourself. Please tick your response.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I feel that I'm a person of worth, at least on an equal plane with others				
2. I feel that I have a number of good qualities				
3. All in all, I'm inclined to feel that I am a failure				
4. I am able to do things as well as most other people				
5. I feel I do not have much to be proud of				
6. I take a positive attitude towards myself				
7. On the whole, I am satisfied with myself				
8. I wish I could have more respect for myself				
9. I certainly feel useless at times				
10. At times, I think I am no good at all				

Appendix A3

The Centre for Epidemiological Studies Depression Scale

The next 20 questions relate to how you have felt and behaved during the PAST WEEK. **Please tick your response.**

	Rarely or none of the time (< 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of the time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that don't usually bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with the help of my family or friends.				
4. I felt that I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				

	Rarely or none of the time (< 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of the time (3-4 days)	Most or all of the time (5-7 days)
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not get “going”.				

Appendix A4

Severity of Symptom Thresholds Help Seeking Measure

The next set of questions are about seeking help from a friend, family member, or professional. **Please rate how severe depressive symptoms would need to be in order for you to seek each form of help.**

	Not at all Severe	Slightly Severe	Moderately Severe	Very Severe	Extremely Severe
1. Agree to take medication					
2. Discuss these with a family member					
3. Recognise the symptoms as those of depression					
4. Accept a referral to a psychiatrist					
5. Discuss these with a close friend					
6. Seek help from a GP					
7. Agree to a hospital admission					
8. Accept a referral for psychotherapy					

Appendix B

NHS Ethical Approval

NHS
National Research Ethics Service
NRES Committee East of England - Cambridge East
Victoria House
Capital Park
Fulbourn
Cambridge
CB21 5XB

Telephone: 01223 597656
Facsimile: 01223 597646

12 September 2011

Miss Veronica Hamilton
Trainee Clinical Psychologist
Cambridgeshire and Peterborough NHS Foundation Trust
School of Medicine, Health Policy and Practice
University of East Anglia
Norwich
NR4 7TJ

Dear Miss Hamilton

Study title:	**An Exploration of the Explicit and Implicit Self Stigma and Help Seeking within Depression**
REC reference:	**11/EE/0241**
Protocol number:	**V.1**

Thank you for your letter of 08 August 2011, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

NHS Sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Investigator CV	miss Veronica Hamilton	02 June 2011
Investigator CV	Malcom Adams	06 May 2011
Investigator CV	Dr Sarah Clark	03 June 2011
Letter from Sponsor	from Tracy Moulton UEA	02 June 2011
Letter from Sponsor	Zurich Municipal	25 May 2011
Letter of invitation to participant	version 2	08 August 2011
Other: Thesis proposal assessment forms Sian Cker and Kiki Maetroyannopaulou		01 March 2011
Participant Consent Form	version 2	08 August 2011
Participant Information Sheet	version 2	08 August 2011
Protocol	version 1	02 June 2011
Questionnaire: Appendix A	version 2	08 August 2011
Questionnaire: Appendix B - Internal Stigma of Mental Illness Scale	version 2	08 August 2011
Questionnaire: Appendix C Rosenberg Self Esteem Scale	version 2	08 August 2011
Questionnaire: Appendix D - The Centre for Epidemiological Studies Depression Scale	version 2	08 August 2011
Questionnaire: Appendix E The Severity of Symptoms Help Seeking Threshold	version 2	08 August 2011
Questionnaire: Appendix D - The Beck Anxiety Inventory	version 2	08 August 2011
REC application	81429/21958 4/1/691	
Response to Request for Further Information	from Miss Veronica Hamilton	08 August 2011

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *'After ethical review – guidance for researchers'* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

11/EE/0241	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely

pp Jeanne Moden

Dr Daryl Rees
Chair

Email: leanne.moden@eoe.nhs.uk

Enclosures: After ethical review – guidance for researchers

Copy to: Ms Tracy Moulton
University of East Anglia
Norwich
NR4 7TJ

Mr Stephen Kelleher
Box 277
Addenbrookes Hospital

Appendix C

Research and Development Approval

Cambridgeshire and Peterborough NHS
NHS Foundation Trust

Understanding mental health, understanding people
Research and Development Department

Box 277
Addenbrooke's Hospital
Hills Road
Cambridge
CB2 0QQ

Direct Dial: 01223 586371 ext 6371
E-mail: rachel.kyd@cpft.nhs.uk
www.cpft.nhs.uk

13 October 2011

R&D Ref: MD0450

Veronica Hamilton
Cambridge & Peterborough NHS FT
Trainee Clinical Psychologist
Elizabeth House
Fulbourn Hospital
Cambridge
CB21 5EF

Dear Veronica

11/EE/0241 An Exploration of the Explicit and Implicit Self Stigma and Help Seeking within Depression

In accordance with the Department of Health's Research Governance Framework for Health and Social Care, all research projects having place within the Trust must receive a favourable opinion from an ethics committee and approval from the Department of Research and Development (R&D) prior to commencement.

R&D have reviewed the documentation submitted for this project, and has undertaken a **site specific assessment** based on the information provided in the SSI form, and I am pleased to inform you that we have no objection to the research proceeding within Cambridge and Peterborough NHS Foundation Trust.

Sponsor: University of East Anglia

Funder: No external funding

End date: 01/12/12

Protocol: v2 dated 08/08/11

The project must follow the agreed protocol and be conducted in accordance with all Trust Policies and Procedures especially those relating to research and data management.

Honorary Research Contracts (HRC)

Members of the research team must have appropriate substantive or honorary contracts with the Trust prior to the study commencing. Any additional researchers who join the study at a later stage must also hold a suitable contract. For more information on whether you or any of your research team will require a research contract please liaise with the R&D office. **It is your responsibility to inform us if any members of your team do not hold contracts with the Trust.**

Risk and Incident Reporting

Much effort goes into designing and planning high quality research, which reduces risk; however untoward incidents or unexpected events (i.e. not noted in the protocol) may occur in any research project. Where these events take place on Trust premises, or involve trust service users, carers or staff, you must report the incident within 48 hours via the Trust incident reporting system on www.cpft.nhs.uk. Alternatively, you may contact the R&D department for further guidance

Research Governance, Confidentiality and Information Governance

Whilst conducting this study, you must fully comply with the Research Governance Framework. This can be accessed at http://www.dh.gov.uk website then use the DH search facility. All personnel working on this project are bound by a duty of confidentiality. All material accessed in the Trust must be treated in accordance with the Data Protection Act (1998).

All parties involved in this research should familiarise themselves and comply with the Trust's policies and procedures available on the Trust website:
http://www.cpft.nhs.uk/Publications/Documents.asp?id=[illegible]

Protocol / Substantial Amendments

You must ensure that the approved protocol is followed at all times. Should you need to amend the protocol, please follow the Research Ethics Committee procedures and inform all NHS organisations participating in your research.

Monitoring / Participant Recruitment Details

Your proposed local end date is 01/12/2012. At this time your study will be closed at CPFT if no reports or extensions are sought from the R&D office, and CPFT R&D approval will be revoked.

Updating Records

It is your responsibility to keep the R&D department informed of any changes to your contact details, or any changes to the research team and their contact details.

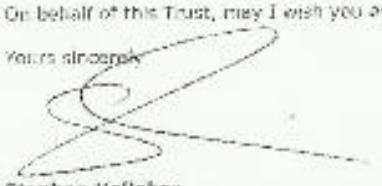
Final Reports

At the end of your research study, we will request a final summary report so that your findings are made available to local NHS staff. The details from this report may be published on the Trust Intranet site to ensure findings are disseminated as widely as possible to stakeholders.

Failure to comply with any of the above may result in withdrawal of Trust approval.

On behalf of this Trust, may I wish you every success with your research.

Yours sincerely



Stephen Kelleher
Senior Research and Development Manager

Appendix D

Research Information Sheet

Version 2: 8.9.11

Participant Information Sheet

Study Title: **An Exploration of Stigma Experiences and the impact on Help Seeking within Depression**

My name is Veronica Hamilton and I am a trainee clinical psychologist. I am inviting you to take part in a research study. Please take the time to read through this information sheet and contact me if you have any further questions (details below).

Part 1

What is the purpose of this study?

Stigma involves judging or labelling someone in a negative way. This can relate to mental illness. Research has found that many individuals are aware of stigma around mental illness within society, which can be upsetting and difficult.

The purpose of this study is to explore whether stigma has an effect on seeking help for depression.

Experiences of stigma can be measured by questionnaire, but also in other ways. This study will use questionnaires as well as a brief computer task, to measure experiences of stigma in a more detailed way.

Who is carrying out the research?

I (Veronica Hamilton, Trainee Clinical Psychologist) am carrying out the study, as part of a clinical psychology doctorate course at the University of East Anglia (UEA). The study will be supervised by Professor Malcolm Adams and Dr. Sarah Clark, at UEA. The study has been reviewed and given a favourable ethical opinion by the Cambridge East Research Ethics committee.

If I decide to take part, what would I have to do?

If you agree to participate, I will arrange a research meeting with you that will last no longer than 1 hour and 15 minutes. During this time, I will ask you to complete questionnaires about self stigma, depression, anxiety, self-esteem, and help seeking for depression.

I will also ask you to take part in a short computer task, on a laptop which I will bring to you. The computer task is not a test, but instead aims to understand any experiences of stigma in a more detailed way.

I will arrange the research meetings either in a private, closed room within the mental health service, or in your own home, depending on what is easiest for you.
Any travelling expenses will be fully reimbursed.

Do I have to take part?

Your decision whether or not to take part is voluntary. This decision will not impact in any way on the healthcare that you receive, either now or in the future. You can withdraw yourself from the study at any stage.

What are the advantages to taking part?

It is hoped that this research will improve the understanding of factors which influence seeking help for depression. It will also increase understanding about stigma and any negative effects of this.

Are there any risks?

There are no serious risks to you taking part in this study. However, it is possible that exploring stigma experiences may be distressing for you.

What if there is a problem?

If you become distressed or upset when meeting with me, you will be given the option of talking this through at the time or stopping the meeting. It is your decision whether or not to re-arrange another research meeting at a later date. If you do experience distress, you will also be given details of who to contact within the team to talk things through. This will be someone you have already worked with, e.g. a nurse or a social worker.

If there is any indication during an interview that either you, or another individual, is at risk from harm in some way, your confidentiality would need to be broken and someone from the team would need to be informed.

If you are interested in this study, please read part 2.

Part 2.
Is the research confidential?

Scores from the questionnaires will be typed onto a computer and saved onto an NHS encrypted memory stick. **This means that no one apart from the researcher will have access to this data.** Data from the computerised task will be saved as soon as you have completed this, onto a password protected laptop which only the researcher has access to.

The paper copies of the questionnaires will be stored securely in a locked filing cabinet throughout the duration of the research, and in a locked archive at the University of East Anglia after this, for a maximum of 5 years. If you decide to take part, you will be given a number which will enable your data to be identified confidentially. **This means you do not need to provide your name and your research data will be anonymous.**

Academic members of staff, at the University of East Anglia, as well as a clinical psychologist from the local area, will review the research. This research may also be published in an academic research journal. **However, no one will be able to identify you personally.** I will also write a summary of the research to everyone who has taken part, which someone from the team can pass on to you.

What if I have concerns about the study?
If you have a concern about any aspect of this study, you can contact me **(07873 290 511)** or my supervisor, Malcolm Adams (01603 593 600) and we will try our best to answer your questions. If you wish to make a formal complaint, you may contact your local Patient Advice and Liaison Service (PALS), on free-phone 0800 376 0775.

What should I do now?
If you would like to take part, you will need to fill out the reply slip on the letter provided. I will then contact you to discuss the study further and arrange a meeting with you, if you are happy with this. Before taking part, you will need to complete a consent form. You can withdraw your consent at any time, even after completing the consent form. **Consent forms will be stored separately to study questionnaires to ensure your confidentiality.**

If you have any questions, please contact me **(Veronica Hamilton)** on **(07873 290 511)** or at **V.Hamilton@uea.ac.uk**

Other contact details:

Professor Malcolm Adams
01603 593 600
M.Adams@uea.ac.uk
Norwich Medical School
Elizabeth Fry Building
University of East Anglia
Norwich
NR4 7TJ

Thank you for reading through this information, I look forward to hearing from you.

Appendix E

Consent Form

University of East Anglia

Cambridgeshire and Peterborough NHS
NHS Foundation Trust

Version 2: 8.9.11

Understanding mental health, understanding people

Participant Consent form

Study Title: **An Exploration of Stigma Experiences and the impact on Help Seeking within Depression**

Researcher: **Veronica Hamilton, Trainee Clinical Psychologist**

Supervisor: **Professor Malcolm Adams, University of East Anglia**

Please initial in the boxes

I confirm that I have read the information sheet explaining the Research and I have had the chance to ask questions	☐
I understand that my decision to take part is voluntary and I can withdraw from the study at any time (even after I have taken part)	☐
I understand that my decision whether or not to take part in this research will not influence any of the care that I receive	☐
I agree to take part in a research meeting with the researcher (Veronica Hamilton) which will last up to 1 hour and 15 minutes	☐
If I have any concerns about any aspect of this study I have been Given appropriate information on where to seek further support	☐
I understand that any information provided during this study will Remain confidential. I understand that the only exception to this is if I provide information which indicates that I may be at risk of harm or of harming others. In this case, an appropriate professional will be informed.	☐
I agree to participate in this study	☐

Please sign and date here

Name (print)
.....

Signature.....
Date.....

Researcher

Name (print)
.....

Signature.....
Date.....

Please retain a copy of this form. A copy will also be kept by the researcher.

Appendix F

Invitation to Participate in Research

My name is Veronica Hamilton and I am a Trainee Clinical Psychologist at the University of East Anglia.
I am recruiting for a research study around stigma.

Stigma involves judging or labelling someone in a negative way. This can relate to mental illness.
I am interested in stigma about depression, and whether this impacts on seeking help from a friend, family member or professional.

I am hoping that this study will help to increase understanding about stigma and the impact which this has.
If you are interested in this study and would like to find out more, please complete the reply slip below and I will contact you. Once I have contacted you, I will not keep these details.
Please also read through the study information sheet which I can go through with you at a later date.

You can either return this to me at my address **(in the stamped addressed envelope provided)** or give it to a member of staff from the mental health team who can pass this on to me.
Alternatively, if you would like to find out more about the study by phone, please give me a call **(07873 290 511)** or email **(**V.Hamilton@uea.ac.uk**)**

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Your name

A contact telephone number

Preferred contact time (please circle): Day (09:00-17:00) /

Evening (17:00-21:00)
An email address

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Address to return to: Veronica Hamilton, School of Medicine, Health Policy and Practice, University of East Anglia, Norwich, NR4 7TJ