SHAME AND THE EMOTIONAL IMPACT OF SCHIZOPHRENIA

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ABSTRACT

Background: Empirical research suggests that shame is a particularly painful emotion that is linked to psychopathology, in particular depression. Shame is considered the affect associated with attacks on the self. Given that schizophrenia represents an attack on the self, it was postulated that levels of shame are likely to be high in individuals diagnosed with schizophrenia. The study aimed to examine the relationship between shame and depression in schizophrenia.

Method: A total of sixty participants were involved in the study. The experimental group consisted of twenty individuals with a diagnosis of schizophrenia. Two control groups were used. Firstly, in an attempt to control for mental illness and to understand the relationship between depression and shame, twenty individuals who presented to psychiatric services with symptoms of depression acted as a psychiatric control group. Secondly, in an attempt to control for chronic illness, twenty out-patients with a diagnosis of rheumatoid arthritis participated. The participants completed a Stroop task to measure attentional biases to shame words, constructed by the experimenter. This was followed by a series of self-report questionnaires measuring levels of shame and guilt, depression, suicidal ideation, insight and recovery style from an illness.

Results: The main findings were: There were no group differences in attentional bias to shame words. The groups differed on measures of shame and guilt. The experimental group and the psychiatric control group had higher levels of global shame. Schizophrenia was also associated with lower levels of trait shame. The high levels of global shame in schizophrenia distinguished those who were depressed from those who were not depressed. Differences in shame between the groups was not due to differences in levels of depression between the groups. Regression analyses suggested that compared with the psychiatric control group, global shame has a greater association with depression in the experimental group. This supports the importance of shame in schizophrenia as speculated in the Introduction. The findings were discussed in relation to the existing literature, their clinical implications and directions for future.
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1.1. Opening Remarks and Overview

Mollon (1997) in the preface to his book ‘The Fragile Self’ states:

It is not widely recognised, for example that schizophrenic patients can experience intense shame and embarrassment and self consciousness. This is because they have an awareness of being somehow different from others and of being unable to give an adequate social performance...... (p. vii).

Mollon is correct in highlighting the shameful experience of schizophrenia, as such individuals struggle with a sense of difference and poor social skills. However, perhaps Mollon does not go far enough. Schizophrenia is very much an attack on one’s identity. The individual often loses valued social roles and subsequently one’s social standing in the eyes of others. Similarly, their sense of the world, a shared understanding with others is brought into question. They question what they hear and have thoughts that do not concur with others. This may in turn lead them to question their sense of self, something built up over one’s lifespan and which they formerly took for granted. Gilbert (1997) states that ‘shame is now regarded as one of the most powerful, painful and potentially destructive experience known to humans’. Shame is the affect most associated with attacks on the self and as such provides a framework for understanding the impact of schizophrenia on the individual.
1.1.1 Organisation of the Thesis

The study that follows attempts to understand the relationship between schizophrenia and in particular the phenomenon of post-psychotic depression and shame. Could post-psychotic depression be a response to a severe blow to an individual's sense of self and the consequent shame. Section 2 examines the concept of post-psychotic depression and possible explanations. Section 3 considers the importance of the self and the impact of schizophrenia on the self. Section 4 introduces the concept of shame, the distinction between shame and guilt and the relationship between shame and stigma. Section 5 examines the relationship between shame and psychopathology and in particular schizophrenia. It is argued that shame research offers a possible framework for understanding the impact of schizophrenia on the self. Section 5 considers the methodological issues relevant to shame research. Section 6 outlines the aims of the study and research questions. However, as a prelude it is perhaps useful as a way of setting the scene, to briefly consider the concept of schizophrenia and characteristic symptoms, the prevalence and course of the disorder and the costs associated with the illness.

1.1.2 The Concept of Schizophrenia and Characteristic Symptoms

Schizophrenia is not a new phenomenon. The history of schizophrenia can be traced back to the writings of Kraeplin (Kraeplin, 1907/1915) and Bleuler (Bleuler, 1911/1950). They were perhaps the first clinicians to delineate the full range of symptoms seen in the disorder. The term “schizophrenia”, which was first introduced by Bleuler (1911/1950),
literally meant ‘split mind or divided self’ and was used to describe an illness in which ‘the personality loses its unity’. Schizophrenia confronts the clinician with a remarkably diverse range of symptoms, which may, vary from patient to patient. Indeed, schizophrenia was the outcome of a merger of what were formerly four disorders, previously thought to be independent. The cardinal symptoms of schizophrenia are: abnormal ideas, the most common of which are delusions. These are false beliefs maintained in the face of contradictory evidence; abnormal perceptions, the most common of which are auditory hallucinations; formal thought disorder which refers to disturbances in the form of thinking, its structure, organisation and coherence; motor, volitional and behavioural changes which refer to bizarre movements, behaviour and changes in overall activity; finally, emotional changes include affective flattening, emotional withdrawal and inappropriate affect.

1.1.3 The Prevalence and Course of Schizophrenia

A recent survey of psychiatric morbidity suggests that the prevalence of schizophrenia is four per 1000 adults aged 16-64 (Meltzer, Gill & Petticrew, 1995; 1996). Although schizophrenia can occur in patients as young as fifteen years, the peak age of onset is in the mid 20's. Evidence suggests that the outcome of the illness is variable (Shephard, Watt & Fallon, 1989). Sixteen percent of individuals suffer only one episode, 32% suffer several episodes, although the effects are mild and have little or no long lasting effect, 9% experience repeated episodes and suffer lasting effects and 43% suffer enduring, increasingly severe symptoms with no periods of complete remission (Watt, Katz &
Shepherd, 1983). These individuals are often referred to as suffering from chronic schizophrenia. Patients presenting for the first time often show acute psychotic symptoms such as delusions, hallucinations and paranoia. However, with the advent of community care, relatively few people with schizophrenia are in hospital at any given time. A recent study suggests that the figure is in the region of 13% (Kavanagh, Opit & Knapp, 1995). Relapse is relatively common in patients with chronic schizophrenia, often followed by hospitalisation. In a 13 year follow up study 82% of first episode cases relapsed and 75% had at least one psychiatric admission (Mason, Harrison & Glazebrook, 1996).

Schizophrenia is perhaps the most serious of all mental illnesses. Its effects can be considered at a societal, familial or individual level. From a societal level, it is a hugely expensive disorder to treat. Just the inpatient care accounts for 5% of the total NHS expenditure in England (National Health Service Executive, 1996). The direct costs of schizophrenia amount to £714 million in England in 1992/1993. At a familial level, the devastating effects on a family following the diagnosis of a family member are well researched (see Jenkins & Schumacher, 1999 for a recent review). However, the present study is concerned with the direct effect on the individual, as they try to make sense of themselves and the world in which they live in, and as they attempt to come to terms with the losses associated with a disabling and often chronic disorder. Similarly, as they attempt to cope with the perceived and negative reactions of others. It is speculated that depression following an acute episode of schizophrenia may be a consequence of the shame associated with these factors.
1.2 Schizophrenia and Secondary Depression

1.2.1 Prevalence of Secondary Depression

Depression or secondary depression (as it is often referred to) is common in people diagnosed with schizophrenia. Previous research has found prevalence rates varying between 75% and 22% depending on the criteria used (Birchwood, Mason, MacMillan & Healy, 1993; Koreen, Siris, Chakos, Alvir, Mayerhoff & Liwberman, 1993; Siris, 1991). Bleuler (1911/1950) considered anhedonia and disorders of affect to be important aspects of schizophrenia. Affective like symptomatology may occur in the context of manifest psychotic symptomatology. However, interest has turned to “depression-like” symptomatology that often occurs when the patient is not actively psychotic. The frequency of the phenomenon and general interest has lead to a diagnosis of ‘Post-Psychotic Depression’ (f20.4) in the International Classification of Disorders, 10th Ed (ICD10: WHO, 1992).

1.2.2 Relationship between Depression and Negative Symptoms

Modern authors have described the pathological processes of schizophrenia using the construct of positive and negative symptoms. Wing in a series of papers culminating in Wing & Brown (1970) made a clear distinction. This was taken up and expanded by Berrios, (1985) and Carpenter, Heinrichs & Wagman, (1988). Positive symptoms refer to the presence of an abnormal phenomenon and includes delusions, hallucinations, formal
thought disorder, over activity and various odd behaviours. The negative symptoms are characterized by the absence or diminishment of a normal function and consist of social withdrawal, affective flattening, lack of volition, poverty of speech, slowness and underactivity. Clinical evidence revealed that positive symptoms appeared to come and go and were closely bound up with acute episodes. Negative symptoms on the other hand appeared more enduring and underlined much of the chronic disabilities of schizophrenia.

Evidence would suggest that although there is some overlap between depression and negative symptoms, depression can be differentiated from negative symptomatology. Jones, Stein, Stanley, Guido, Winchel & Stanley (1994) found that there was no relationship between positive and negative symptomatology and attempted suicide, but a statistically significant relationship between measures of depression and suicide. Studies have suggested that depression can have an impact on negative symptoms (Andreason, 1979; Carpenter et al., 1988) and conversely depression includes a significant contribution from negative symptoms (Prosser, Csernansky, Kaplan, Thiemann, Becker & Hollister, 1987; Whiteford, Riney & Csernansky, 1987). However, Pogue-Geile & Harrow (1984) showed that severe negative symptoms are infrequent in depressed patients.

1.2.3 Suicide & Schizophrenia

As early as 1911, Bleuler (1911/1950) identified 'suicidal drive' as the 'most serious of all schizophrenic symptoms'. Evidence suggests that suicide is common in schizophrenia. Estimates vary but studies suggest that 20% of people diagnosed with schizophrenia have
a history of attempted suicide (Birchwood & Preston, 1991) and 10% of all individuals diagnosed with schizophrenia kill themselves (Drake & Cotton, 1986; Roy, 1982). The World Health Organisation (WHO), five year follow-up study found that suicide was the leading cause of death among individuals suffering from schizophrenia (Sartorius, Jablensky, Ernberg, Leff, Korten & Gulbinat, 1987; Sartorius, Jablensky, Korten, Ernberg, Ankler, Cooper & Day, 1986). The exact magnitude of the problem is not clear. Suicide is typically under reported (Simpson, 1988; Tsuang & Simpson, 1985). Many actual suicides are recorded by coroners as accidental deaths or open verdicts suggesting that the exact figures might be higher.

Clinical studies indicate that attempted suicide in schizophrenia is rarely the result of command hallucinations and suicide rarely occurs when patients are at their most delusional or disorganised. Drake & Cotton (1986) note that suicide in people diagnosed with schizophrenia is not always an “insane” act, but may occur following ‘insight and comprehension of one’s life and future’. Most individuals suffering from schizophrenia who commit suicide have a history of depressive episodes or had shown depressive like symptomatology at their last contact compared with controls (Drake & Cotton, 1986; Roy, 1982). Jones et al. (1994) examined negative and depressive symptoms in patients with a diagnosis of schizophrenia. They found that current suicidal ideation was significantly higher in suicide attempters than non attempters even when depression was controlled for. The study highlights the clinical relevance of a history of suicide attempts. Previous suicide attempt is the best predictor of subsequent suicide. Current levels of depression differentiated patients with and without a history of depression. Neither
positive nor negative symptom scores differentiated attempters from non-attempters. Whilst there was a higher correlation between ratings of depression and negative symptoms in suicide attempters, negative symptoms scores did not add significantly to the relationship between depressive scores and suicidal behaviours.

In summary, the rates of suicide in this client group are very alarming and give weight to the need for further studies attempting to understand the process of post-psychotic depression.

1.2.4 Non-psychological Explanations for Depression

There have been various attempts to explain depression in schizophrenia. These can be divided into psychological and non-psychological explanations.

Depression as a response to neuroleptics

Harrow, McDonald, Sands, & Silverstein (1995) have hypothesised that depression may be a response to neuroleptic medication. However, evidence from drug trials (Hirsch, Jolley, Barnes, Liddle, Curson, Patel, York, Berru & Patel, 1989; Leff, Tress & Edwards, 1988) and comparisons of patients treated with and without neuroleptics (Hirsch et al., 1989; Hogarty & Munetx, 1984) and comparisons of patients with and without depression (e.g. Barnes, Curson, Liddle & Patel, 1989) suggest that they do not induce depression.
Depression as part of the schizophrenic process

Others have suggested that it may be part of the schizophrenic process itself (Johnson, 1981; Siris, 1991) or because of a phenomenological overlap with negative symptoms (Barnes et al., 1989). Empirical support comes from evidence that acute positive symptoms are preceded by (Hirsch & Jolley, 1989) coexist with (Knight & Hirsch, 1981; Leff et al., 1988) and are followed by (McGlashan & Carpenter, 1976) depressive symptoms. However, as has already been discussed, depression can be distinguished from negative symptomatology (e.g. Jones et al., 1994). Similarly, depression during an acute episode may be different from depression associated with chronic long term patients as it can and often does persist without ongoing positive symptoms (Johnson, 1981).

1.2.5 Psychological Explanations of Depression

There is a growing interest in psychological explanations of depression in schizophrenia. Comparisons of patients with and without depression suggest that psychosocial factors associated with depression per se including parental loss, social isolation, life events, distinguish depressed and non-depressed subjects (Roy, Thompson & Kennedy, 1988). Birchwood et al. (1993) have suggested that post-psychotic depression may be viewed as a ‘psychological response to an apparently uncontrollable life event, namely a psychotic breakdown, and its attendant disabilities’.
Post-traumatic stress reaction

There is no doubt that a psychotic episode is a traumatic experience. Jefferies (1977) argues that the negative symptoms associated with schizophrenia are in fact a neurotic reaction to the stress and trauma of being ill. McGorry, Chanen, McCarthy, Van Riel, McKennzie & Singh (1991) have suggested that symptoms of Post-Traumatic Stress Disorder (PTSD) are common following recovery from an acute episode. As such, depression may be secondary to the post-traumatic syndrome. They investigated the prevalence of PTSD in people recovering from a psychotic episode. Their study found a prevalence of PTSD of 46% at four months and 35% at eleven months. Interestingly, many symptoms related to mode of hospitalisation (seclusion, forced medication) rather than distress per se.

Grief

Appelo and colleagues (Appelo, Sloof, Woonings, Carson & Louwerens, 1993) see depression and negative symptomatology as a normal grief reaction to the many and significant losses associated with schizophrenia. According to Freud (1917/1957), grief is considered a normal reaction following any loss. Grief is generally described within stage models of bereavement. Ramsay (1977) divides the process of grief into five stages: shock, disorganisation, denial, acceptance and reintegration. Shock, disorganisation and denial are typically followed by emotions of depression. Clayton (1990) comments on the similarities between depressive symptoms and grief. Appelo et al. (1993) highlight the
losses associated with schizophrenia and argue that the clinical picture is similar to a normal grief reaction. Losses include loss of functioning, loss of valued roles and social positions, loss of family and friends as they distance themselves from the affected individual. This is likely to lead to loss of self-esteem and loss of hope.

**Stigma**

Depression may also be understood within the framework of stigma theory. Stigmatised individuals can be broadly defined as individuals who possess an attribute that others see as negative, unfavourable or in someway unacceptable (Westbrook, Bauman & Shinnar, 1992). According to stigma theory, if the world holds a negative view of a particular attribute, others will respond unfavourably to the person who possesses the attribute. This leads the individual to believe the attribute carries a negative characteristic that should be hidden where possible and leads to a general diminished sense of self worth and self esteem. Hayward & Bright (1997) offer an evaluation of the existing literature on stigma and its consequences.

Schizophrenia is a stigmatised illness and can be construed as an attack on one’s whole identity. One is typically labelled as “mad” by society as a whole. Defenders of the medical model have argued that it is more humane to regard psychologically disturbed persons as “sick” than “morally defective” or “bad”. However, it could be argued that the stigma attached to mental illness is actually greater than that attached to “bad” since our fear of mental illness is greater, perhaps because they are perceived as being more unpredictable.
Preconceived images of schizophrenia are likely to present a challenge to an individual's pre-morbid image, their sense of themselves before the illness. The media coverage and headlines such as "schizophrenic kills" only further adds to the stigma. Similarly, one's social standing whether it is with work, family or friends is likely to be threatened. Rather than being a person with a disorder the person becomes the disorder. Goffman (1968) has written extensively on social stigma and the impact on the individual and talks of the "spoiled identity". This is taken up further in Section 1.4.3 to follow, which examines the relationship between stigma and shame.

Lally (1989) discusses the effect of hospitalisation on an individual's concept of their self. To be in a psychiatric hospital infers that one is "crazy" which represents a challenge to the concept of the self. This can be understood within the context of social labelling theory (Scheff, 1966; Schur, 1971, 1972, 1980). The approach focuses on the belief that deviance which mental illness is seen as one specific type is created and maintained by deviant social roles being imposed on and internalised by the individual. Since the label mental illness has negative consequences when the individual begins to accept the label, a process called "role engulfment" occurs. Engulfment involves more than just using the label, it involves the person's self concept and behaviour becoming increasingly organised around the role of psychiatric patient. The patient is no longer suffering from just mental illness, the individual has the status or identity of a mental patient.

With the advent of community care, the general public's attitudes to schizophrenia are likely to be important in relation to the degree of stigma associated with the label,
schizophrenia. Studies (Furnham & Bower, 1992; Wolff, Pathare, Craig & Leff, 1996) suggest that negative attitudes are in part fuelled by lack of knowledge. However, the negative attitudes among people with children are not related to lack of knowledge about illness, but centres around concerns that they may harm their children in some way. The difficulty is not just the negative evaluation of mental illness, but the accompanying rejective attitudes manifested towards mentally ill people. The situation is complicated further by evidence to suggest that efforts to reduce stigmatisation can have the opposite effect. Matthias, Angermeyer, Bruce, Link & Majcher-Anermeyer (1987) compared attitudes of patients in two hospitals, one isolated State Hospital and one University Hospital. They predicted that the new University Hospital with its central location would lead to fewer feelings of stigmatisation by patients. However, the opposite was found.

In summary, post-psychotic depression is both a common and serious problem for individuals suffering schizophrenia. It is an important area of study in its own right, but, is perhaps more pressing, given both the association between depression and suicide and frequency of suicide attempts within this population. There have been various explanations put forward to understand the etiology of post-psychotic depression. Evidence would suggest that psychological explanations offer scope in both understanding the illness and the individual. Stigma theory provides a framework for understanding the impact of schizophrenia on the individual’s sense of self. Section 1.3 to follow, examines in more detail, the impact of schizophrenia on the self.
1.3 Schizophrenia and the Self

The hypothesis that schizophrenia in general may be a disorder involving the self has a long history. Bleuler’s (1911/1950) term “schizophrenia” has, as already been stated, literally meant divided self. Similarly, Schneider (1959) regarded a weakening of ego boundaries as the basis of his “first rank symptoms”, symptoms that he considered pathognomonic of schizophrenia. In the presence of one or more of these in the absence of brain disease a diagnosis of schizophrenia is often made. Concepts of the self and identity remain central to the conceptualisation of the illness. A disturbed sense of self and “extreme perplexity about one’s own identity” was highlighted as symptoms of schizophrenia in the Diagnostic & Statistical Manual of Mental Disorders (DSM-III: American Psychiatric Association: APA, 1980). However, the topic is rarely an area of investigation, in part perhaps, because of clinicians’ attempts to seek objective measures of symptoms. Strauss & Estroff (1989) reviewing the literature concluded:

There is something seriously missing in a field of mental illness that does not attend closely and broadly to patients’ subjective experiences and sense of self and yet much of the contemporary scene in disciplines that focus on mental illness reflects this neglect (Strauss & Estroff, 1989, p.177).

1.3.1 The Self, Person and Identity

Interest in the self, what it is and how it develops, is not a recent phenomenon. There has been an interest since the 17th century when the French mathematician and philosopher,
Rene Descartes, first discussed the "cognito," or self as a thinking substance. Following in his footsteps the self was subjected to vigorous philosophical examinations by such thinkers as Leibnitz, Locke, Hume and Berkeley. Similarly, as psychology developed as a separate discipline interest in the self developed.

Complex debates exist in an attempt to define and understand the self (Lee, 1982; Lapsley & Power, 1988). Estroff (1989) offers a summary that, whilst she recognises oversimplifies these issues, provides a structure to understand the impact of schizophrenia on the self. According to Estroff, ‘Others provide the contrast that permits the definition of the self. That is, the object (out there, not me) delineates the subject (in here, I, self)’. Nonetheless, we participate with others in what Crapanzano (1982) refers to as a ‘conspiracy of understanding’ about what categories we belong to, who we are and, about the labels received and given. This is a variable process associated with periods of self / other agreement and disagreement. The layers of a person can be typically divided into at least two aspects. Estroff (1989) states that ‘there is a private subject and a public person, a self known to the self and the person known to and identified by others’. This is labelled by different schools as the inner / outer; secret and shared; individual and social; subjective and objective. Typically, one thinks of these layers as overlapping to some extent. However, in relation to schizophrenia, there is often a severe incongruity between these two domains (Rosenberg, 1984).

Estroff (1989) also introduces the idea of reflexivity, ‘the ability we have to consider ourselves as an object. Our self consciousness, our ability to engage in a relationship with
ourself. The concept of the self entails a dimension of time. There is a sense of the self, as an enduring entity that pervades over time. However, schizophrenia would appear to represent a challenge to an individual’s enduring sense of self. However, it is unclear whether the person is so dissimilar, altered or absent altogether. One is left with the question who or what was there before the illness and who and what exists during and after. Of course with schizophrenia some do not accept that there is ‘an after’. Many families feel that they have, in some way, lost their relative to an illness and the person who sits before them is not person they knew. However, an individual may experience the self as enduring, but with some new characteristics or difficulties (symptoms). He may claim to be the same person. However, if others acknowledge an amended person there is a conspiracy of understanding, an underlying conflict between the self and others about the self.

A sense of self is also defined by our standing in society. By virtue of kin ties we belong to groups. These groups both convey and constitute a sense of self, providing us with an identity in relation to others and by virtue of others. Chronicity can be conceived of as a loss of self, positive social roles and identity. Estroff (1989) refers to chronicity as a ‘transformation of a prior, enduring, known and valued self into a less known and knowable relatively recent, devalued and dysfunctional self’. This occurs both among and in the eyes of others but also internally within the person. As stated earlier, schizophrenia is often associated with significant losses. An individual ceases to have a job, withdraws from school, loses contact with friends and family, they lose valued social roles. The patient role is often one of the few that remains. The category of “schizophrenic” engulfs
or pervades the person. The phenomenon of post-psychotic depression reviewed in Section 1.2 can be understood within the context of, and reaction to, the loss of self.

The self is also in part defined by a core of meaning or knowing in the person. The way we know what is real, how we attach importance to events, each of us has (and in some ways are) these beliefs and symbol systems. As with other aspects of the self these are arrived at over time, experience and culture. For the individual with schizophrenia, this part of the self can be, perhaps most vulnerable to change. They may question what they hear and have thoughts that do not concur with other’s reality. One’s sense of shared knowledge is brought into question and in turn one’s sense of self. The disorder of schizophrenia, perhaps, more than any other illness challenges this aspect of the self. Indeed, the idea of fighting the disease, having distance from the symptoms, a division from a sick or not sick self, requires an intellectually inappropriate separation of symptoms from subject.

1.3.2 Insight and Recovery Style

Is it unavoidable that a person who has schizophrenia becomes ‘schizophrenic’? Is the self necessarily enveloped by the disease? Is good prognosis associated with a split from self, a preserving of person who has but is not an illness? Or does a person fare better by embracing and uniting the illness as within and of the self? These are all important questions. Research into the concept of insight and recovery style may provide some answers.
Interest in the notion of insight has a long history. A. Lewis (1934) defines it as ‘a correct attitude to morbid change in oneself’, others, such as Birchwood, Smith, Drury, Healy, Macmillan & Slade (1994) refer to lack of insight as ‘an unawareness of illness’. Research has shown that insight is poor among people suffering from schizophrenia (Amador, Strauss, Yale, Flaum, Endicott & Gorman, 1994). The WHO’s (1973) international pilot study found 97% of the 811 participants were without insight. However, the study of insight in psychiatric disorders is compounded by the conceptual uncertainties intrinsic in the term. Traditionally, insight was measured as a single or unitary phenomenon (WHO: 1973; Wilson, Ban & Guy, 1986). An individual was considered to have good or poor insight depending on whether they accepted that they were disturbed. However, such a model failed to capture the complexities of insight demonstrated by the patient. There is a now a general consensus that it is multi-dimensional (see David, 1990 for a review). A patient may have insight into some but not all signs of illness. There is also a distinction between awareness or recognition of symptoms and attributions or explanations of symptoms. It includes general attributions about illness and specific symptoms, and an individual’s perceived need for treatment.

Insight or lack of it has been shown to have important implications. It has been linked to poor compliance with medication (McEvoy, Apperson, Appelbaum, Ortlip, Breckosky & Hammill, 1989). McEvoy et al. (1989) also found a weak but enduring relationship between insight and improved prognosis. According to Birchwood et al. (1994), lack of insight has been explained in terms of three models. Neuropsychological models suggest that there may be a brain dysfunction similar to that which underlies symptoms of
schizophrenia. The cognitive model suggests that insight summarizes a set of attributions or beliefs about mental symptoms. Finally, lack of insight may be a defence against the traumatic effects of the illness and the impact on the self. Amador, Strauss, Yale & Gorman (1991) argue, all types of defence mechanisms operate through self deception. The issue of whether insight or lack of it is a defence against the trauma of the illness has important implications in relation to post-psychotic depression. Does lack of insight into one’s condition protect one from experiencing depression? Carrol, Fattah, Clyde, Coffey, Owens & Johnstone (1999) found that increases in insight lead to increases in psychological distress. The association between lack of insight and elevated mood, or even elated mood, is supported by other workers (Bartko, Herczeg & Zador, 1988; Heinrichs, Cohen & Carpenter, 1985). However, David (1990) conclude the evidence is mixed and inconclusive.

Another way of examining this question is to consider individual differences in terms of recovery styles following a psychotic episode. McGlashan and colleagues (McGlashan, 1987; McGlashan & Carpenter, 1981; McGlashan, Doherty & Siris, 1976; McGlashan, Levy & Carpenter, 1975) proposed that there were two distinct recovery or coping styles, Integration and Sealing over. Integration was used to refer to patients who ‘recognised the continuity of mental activity and personality before and during the psychotic experience and after, during recovery’ (McGlashan, 1987). In other words, they take responsibility for their psychotic productions and integrate the information available into their self image. The term ‘Sealing over’ refers to individuals who fail to integrate the psychotic experience and try to separate it from their personal problems rather than
consider its meaning.

Studies suggest that individual’s who adopt an “integration” recovery style have a better outcome in terms of relapse and social functioning than those who adopt the sealing over coping strategy (Drayton, Birchwood & Trower, 1998; McGlashan, 1987). Using a questionnaire version to measure recovery style, Drayton et al. (1998) found that all participants assessed as being moderately and severely depressed were in the sealing over group. They also examined retrospective accounts of the individuals’ attachment experiences and found that patients in the sealing over group perceived both their mother and their father as less caring. In their discussion, Drayton et al. (1998) highlight the role of personality structure, defence mechanisms and the development of the self in an individual’s recovery from psychosis. In particular, they hypothesise that early experiences may lead to a fragile sense of self that, firstly, may lead people to be prone to developing schizophrenia. Secondly, some individuals are unable to cope with a diagnosis which poses a further challenge to their sense of self. Whilst the findings are interesting, retrospective accounts of attachment experiences have serious limitations. Similarly, it is also compounded by the fact that individuals in the sealing over group were moderately or severely depressed which may affect their perceptions of their parents. Therefore the finding should only be considered tentatively. However, the finding that recovery style distinguishes patients with and without post psychotic depression is informative in terms of individual differences in adaptation to psychosis. They argue that sealing over is considered an adaptive attempt but an ineffective strategy for coping with the trauma of psychosis.
The relationship between insight and recovery style is complicated and in part, dependent on one's definition of insight. At first glance, based on McGlashan's (1987) definitions of recovery style, it may seem logical to think that a recovery style characterised by integration suggests a level of insight into their illness. Similarly, a sealing over recovery style would be characterised by lack of insight. However, Drayton et al. (1998) found no relationship between insight and recovery style. This finding can be understood if one takes a closer examination of the measures. One can have insight into the fact that one is ill (integration) but one falls into the sealing over category because one does not incorporate the illness into one's identity. We will return to the concept of insight and recovery style after introducing the literature on shame.

In summary, Estroff (1989) notes that schizophrenia can be an 'I am illness', one that may overtake and redefine the identity of the person. It is more than an illness that one has; it is something a person is or may become. Schizophrenia results in a transformation of the self as known inwardly and of the person or identity as known outwardly. Ironically, the loss and disorder of person so characteristic of our conceptions of schizophrenia may be at least partly our creation, and one of many ways in which we forsake the individual. If we fail to take note of the subjective experience of schizophrenia, we do an injustice to the individual and the profession treating the person as the disorder rather than treating the person as a person who also has a disorder. Studies on insight and recovery style speculate that an attack on one's self identity may contribute to the development of depression. However, not every individual with a diagnosis of schizophrenia suffers from depression or goes on to commit suicide. Similarly there is no clear understanding why individuals
differ in terms of recovery style. Clearly, there must be some variables which mediate the association between schizophrenia and depression. One way of examining the impact of schizophrenia on the self and possibly offering some light on to the question of mediating variables is a consideration of shame. The concept of shame offers a framework within which to investigate the relationship between the self and schizophrenia. Shame can be understood as an affect which is experienced when the self is under threat and as such is open to investigation.

1.4 Shame

Shame is best understood as an intense negative emotion concerning the self in relation to standards, responsibility and such attributions as global self-failure (M. Lewis, 1992). Shame is elicited when one experience’s failure relative to a standard (one’s own or other people’s), feels responsible for the failure and believes the failure reflects a damaged self.

1.4.1 Theories of Shame

Shame can be examined in terms of emotions, cognitions and beliefs about the self, behaviours and actions, evolved mechanisms and in terms of interpersonal dynamic interrelationships. There exists a variety of shame theories rooted in different schools of thought. Gilbert & Andrews (1998) provides a summary of these theories. They include psychoanalytic theories such as Jungian (Jacoby, 1994), Kohutian self-psychology (Morrison, 1987) and various combinations (Lansky, 1992; Miller, 1986; Mollon, 1997),
affect theories (Kaufman, 1989; Nathanson, 1992; Tomkins, 1963, 1987) affect cognitive theories (M. Lewis, 1992, 1993, 1995) cognitive behavioural theories (Beck, Emery & Greenberg, 1985) and the evolutionary or ranking theory (Gilbert, 1997). It is beyond the scope of this thesis to try to do justice to the diversity of these theories. Similarly, it is not necessary for the reader to understand the complexities of these theories. A summary of the affect theory and in particular Gilbert’s (e.g. Gilbert, 1997) reworking based on an evolutionary framework is summarized together with Tangney’s work (e.g. Tangney & Fischer, 1995) on self conscious emotions based on an affect cognitive theory. This provides a frame to understand shame and its relationship to schizophrenia.

Affect theory

Affect theorists maintain that affects are innate and present at birth. Charles Darwin (1872) in The Expression of Emotion in Man and Animals, introduced the idea that we are born with a group of what would now be called “hardwired” mechanisms, that lead to a specific facial expression associated with each emotion. He maintained that each emotion readied the organism to act in ways that conferred on it, an increased ability to survive. This was taken up by Tomkins (Tomkins, 1963, 1987) who expanded them into what is known as the affect theory. He maintained that there were nine innate affect mechanisms, including shame. In the infant, each of the nine innate affects is believed to be triggered by changes in the central nervous system. Nathanson (1992) has developed Tomkin’s theory of shame. He argues that “shame-humiliation” is an affect program designed to be triggered in situations where positive affect is impaired. It is speculated
that the shame-humiliation affect program turns off positive affects.

Gilbert (1997) has written extensively on the evolutionary value of shame based on innate needs to be seen as attractive to others. Gilbert (1989, 1992) suggests that shame is related to rank and status judgements; of feeling inferior, powerless or bad in comparison to others. Gilbert suggests that 'shame serves to alert the self and others to detrimental changes in social status'. Gilbert’s theorising is as follows: In pursuing access to resources e.g. territories, food and sexual partners, there will be others who are pursuing the same resources. This is likely to bring them into conflict and as a result of conflict some will win and some will lose. Animals who lose need psychological mechanisms that will constrain their challenging mechanisms. To fight or struggle on will only escalate conflicts. In conflict situations an animal has two options, to continue fighting or to de-escalate and go for damage limitation. These strategies can loosely be referred to as submissive strategies and are primed by shame. Shame leads the individual to inhibit their behaviour but also send signals to its opponent to deactivate the challenge.

In humans, ranks and hierarchies are not only determined by power and aggression but also by expressing attractive qualities and abilities. Rank and status is often achieved by feeling respected and valued by others. Thus, in humans there are two major pathways to social ranking, one based on threat and cohesion and one based on social attractiveness (see Gilbert, 1997). Shame implies devaluation and has been linked indirectly with loss of social rank and status. Indeed, Kaufman (1989) called shame ‘the affect of inferiority’. Gilbert (1997) makes a distinction between shame and humiliation. In humiliation it is the
other who is bad whereas in shame there is something, bad or worthless about oneself (Gilbert, 1997). It follows that even if others are not attacking the self one can still feel shame from internal judgements. This may be important in relation to schizophrenia where the individual may suffer persecutory delusions.

Self-conscious emotions

Tangney & Fischer (1995) in a review of the existing literature examine shame in the context of self-conscious emotions such as pride, shame, guilt and embarrassment. They assert that the self-conscious emotions emerge later than the ‘basic’ emotions (e.g. anger, fear and joy) and are described as ‘secondary’ because they are dependent on certain cognitive abilities. They require a developed sense of the self as separate from others, together with a set of standards from which the self is evaluated. Not only are the self-conscious emotions connected to the self but they are also closely connected to our relationship with others and in a social context. Our early interpersonal relationships form the foundation for experiencing emotions such as shame, guilt, pride and embarrassment. The emotions typically arise when we meet, surpass or violate our standards and goals. A central feature of each involves some form of self-reflection and self evaluation. Many emotional experiences are involuntary and this is very much the case with shame. Shame is considered an unwanted and difficult to control experience. Shame does not appear to be produced by any specific situation, but rather by an individual’s interpretation of the event. Even more important, shame is not related necessarily to whether the event is public or private. Failure attributed to the self-system can be either public or private.
1.4.2 The Distinction between Shame and Guilt

The significance of shame and guilt to psychological disorders has long been noted and can be traced back to the writings of Freud (Freud 1909/1955, 1917/1957, 1924/1961). Freud viewed shame as related to sexuality. Much of the early work in this field was based around analytically orientated theories that failed to adequately distinguish between shame and guilt and it was considered under the umbrella of guilt.

H. Lewis (1971, 1987) went on to differentiate between shame and guilt. H. Lewis (1971) stated that shame involves the negative evaluation of the global self whereas guilt involves a negative evaluation of a specific behaviour. Lewis proposed that self-other comparisons were central to shame. In shame, one sees oneself in the inferior position. In contrast self-other comparisons are rarely involved in guilt which is seen as relating to moral and care providing actions. In guilt, although the self may have transgressed against others, the self remains active rather than helpless and inferior.

Recent research (Tangney, 1993; Tangney, Wagner, Gavlas, Barlow & Marshall, 1992) suggests that shame is an acutely painful emotion. It leads to a sense of worthlessness, powerlessness and a sense of being exposed. Guilt is typically less painful, as it focuses on a specific behaviour as opposed to the entire self. In other words, it does not affect one’s overall identity. It is associated with a sense of tension, remorse and regret. Guilt is considered a more adaptive emotion in that it is goal directed, and leads to reparative action. In contrast, shame orients people towards separation, distancing, hiding and
defence. This is supported by both qualitative analyses (H. Lewis, 1971; Lindsay-Hartz, de Rivera & Mascolo, 1995) and quantitative studies of shame and guilt experiences (Ferguson, Stegge & Damhuis, 1991; Tangney, Wagner & Gramzow, 1992).

Although shame is associated with avoidant behaviour, it may also lead to defensive retaliative anger. The humiliation associated with shame can lead to anger. Evidence suggests that shame proneness was positively correlated with anger whereas the inverse was true for guilt (Tangney et al., 1992; Tangney, Wagner, Burggraf, Gramzow & Fletcher, 1991). Individuals typically direct hostility inwards (I am such a bad person). This hostility can be easily directed outwards as a defence to protect the self.

**Shame and guilt as a personality trait**

Most people experience shame and guilt at various points in their lives. In other words, each of us has the capacity to experience both emotions. However, it appears that some people are more prone to one than the other. Some people are oversensitive to experiencing events as shaming and a tendency to greater psychological disruption. H. Lewis (1971) noted that there were individual differences in the degree to which people experience shame or guilt across different situations. H. Lewis (1971, 1987) hypothesised that there are individual differences in affective style, such that some individuals have a shame prone style whereas others have a guilt prone style. Early negative experiences may play an important role in establishing shame or guilt prone styles. Tangney, Burggraf & Wagner (1995) argue that shame prone individuals may be more vulnerable to depression
because of persistent situations in which self functioning is disrupted. Gilbert (1995) maintains that shame proneness is a major vulnerability factor for psychopathology. The link between shame and psychopathology is explored in more detail in Section 1.5 to follow.

1.4.3 The Relationship between Shame and Stigma

Goffinan (1968) defines stigma as a public mark, something which others can notice and which involves a "spoiled identity" or "spoiled self". The idea that somehow one is imperfect with regard to the standards of the society in which he or she lives. Stigma makes reference to the damaged self and therefore the association between shame and stigma appears obvious. Both appear to be related to standards that are incorporated and judged as being violated. Similarly, both are related to perceived responsibility. However, an individual can experience a sense of shame in relation to something that does not carry a stigmatised label. Goffman originally used the term stigmatisation to refer to visible marks, whereas people may experience intense shame about something that is not visible. It is perhaps easy to come up with a list of things that are stigmatised. However, it does not tell us anything about the experience of stigmatisation. When one considers the experience of stigmatization one is immediately drawn into the experience of shame. Shame amongst other emotions can be considered the emotional consequence of stigmatization.

In summary, there has been a general interest in the study of shame over the last twenty
years, in part, following H. Lewis' pioneering work delineating shame from guilt. There have been various attempts to understand the experience of shame with different theoretical frameworks. Evidence would suggest that shame is an acutely painful emotion linked specifically to challenges to the self. Gilbert's ranking theory (1997) highlights the importance of rank status and sees shame as mediating submissive strategies. Consequently, it is easy to see the link between shame and psychopathology.

1.5 Shame and Psychopathology

Shame has been increasingly seen to lie behind many forms of psychopathology and to represent major disturbances of the self. The continued experience of shame can lead to poor adjustment. It has been linked to a diverse range of disorders such as borderline and narcissistic disorders (Broucek, 1991; Morrison, 1989), depression (Allan, Gilbert & Goss, 1994; Brown, Harris & Hepworth, 1995), social anxiety (Gilbert & Trower, 1990); and alcoholism (Bradshaw, 1988). However, the lack of sound psychometric instruments to measure shame has been a primary impediment to research. In recent years the situation has changed with the publication of studies reporting on measures of shame (e.g. Cook, 1988, 1996; Tangeny, Wagner & Gramzow, 1989).

1.5.1 The Role of Shame in Depression

There is a rather rich theoretical literature pertaining to shame and depression. More recently there is empirical research confirming the association between shame and
depression. For example, Smith (1972, cited by Tangney & Fischer, 1995) found that subjects scoring high on the Beck Depression Inventory were significantly more shame prone than guilt prone. Similarly, Cook (1993) found a strong correlation between measures of shame and depression. Shreve (1987, cited by Gilbert, 1997) found a measure of shame proneness could distinguish between suicidal and non-suicidal individuals. These studies are all however, correlational and it is therefore possible that shame is merely a symptom of depression.

Shame can be understood in attributional theory, as an affective state stemming from internal, stable and global attributions. That is, it is a negative belief about the self, that persists and affects the individual’s sense of themselves. Similarly, an attributional style of this nature is associated with depression (Abramson, Seligman & Teasdale, 1978; Beck, 1983). Tangney et al. (1992) found that shame proneness accounted for a significant proportion of the variance in depression beyond the variance accounted for by attributional style. The study examined the similarities between depression and the states of shame and guilt. Shame and guilt are both often associated and cited as symptoms of depression. However, shame differed from depression on 8 of 22 dimensions. Shame was more likely than depression to involve a sense of exposure and a focus on what other people thought of the self. In shame, respondents reported a greater desire to hide from others, and they were less inclined to admit what they had done. There also appeared to be a stronger focus on an eliciting behaviour or event in connection with shame than for depression. When experiencing shame, participants were more likely to wish they had acted differently, to feel they had violated a moral standard and feeling responsible for
what had happened. There were however similarities, participants ratings of personal shame and depression episodes were roughly equivalent in terms of the degree of discomfort or dysphoria involved, sense of isolation from others and feelings of inferiority. The study confirms not only that shame is associated with depression but shame can be distinguished from depression. This is an important finding because it could be argued that shame is simply a part of depression and therefore has no explanatory value.

While shame cannot be measured in animal studies, as stated earlier, shame is speculated to underlie submissive strategies and subsequent loss of status. Many evolutionary theories note a 'failed struggle' in depression onset. Price & Soloman (1987) observed that depressed like states in birds often follow defeat. Further, data from animal studies suggest that being defeated and being able to escape can be less problematic than being defeated and having to stay in the arena (Mclean, 1990). Defeat has been linked to loss of status in humans. Similarly, in humans, blocked escape has been linked to suicide (Baumeister, 1990) It is proposed that feelings of defeat are linked to depression. Indeed the word 'depression' itself comes from the Latin word deprimere meaning to be brought down in status or fortune (Jackson, 1986). With regard to humans, there is considerable evidence that in depressed states people see themselves as inferior and of low rank compared to others (Allan & Gilbert, 1995; Swallow & Kuiper, 1988). As already stated loss in status, is associated with shame. The link between shame in schizophrenia is speculated, in part, through the loss of status and valued social roles.

Drawing on ranking theory, Brown et al. (1995) examined the role of life events in the
onset of depression. Specifically, they tested social rank predictions in humans by developing an interview measure of loss of status and social put downs and entrapment. They found humiliation (loss of rank or attractiveness) and entrapment (feeling trapped and unable to reaffirm their rank or position) were powerful predictors of depression. Gilbert & Allan (1998) maintain that these are important aspects of shame and are related to Gilbert’s (1997) term “social attractiveness and social attention holding power” (SAHP). Gilbert & Allan (1998) developed scales to measure entrapment and defeat, social comparisons and submissive behaviour. Evidence suggests that entrapment plays an important role in relation to depression. This may also be important in relation to schizophrenia where an individual suffering from this condition may feel trapped for example by auditory hallucinations or the social stigma that traps them as a mentally ill individual even after their acute symptoms have resolved. The author will return to this issue when discussing the role of shame in schizophrenia in Section 1.5.3.

In summary, evidence would suggest firstly that shame as a concept can be distinguished from depression. Further, there is an increasing body of evidence, drawing on an evolutionary understanding of shame suggesting that shame may play an important role in etiology of depression.

1.5.2 Shame & Suicide

Several writers have suggested that shame may play a role in the psychodynamics of suicidal behaviour. Breed (1972) saw shame as one of the five basic components of a
suicide syndrome, along with commitment to particular aspirations, failure, rigid thinking patterns and social isolation. The shame is speculated to result from failure in a major social role and the anticipation of negative reactions from others. Similarly, Shneidman (1980) used the term *infavoidance* that he defined as the process of trying to avoid humiliation, to quit embarrassing situations, to avoid feeling belittled, scorned or the indifference of others. M. Lewis (1992) noted that although suicide is usually thought to result from depression, it can be a direct result of shame or an indirect consequence of rage turned inwards. Mokros (1995) viewed suicide as a solution to self-ridicule and the impossibility of reclaiming one’s position in the social group. That is, it is a way of escaping unbearable psychic pain. Lester (1997) highlights the case of patients suffering from psychiatric disorders such as schizophrenia or depression who may experience shame after partial recovery in which they perceive themselves as substandard and humiliated and see suicide as a way of avoidance of these painful emotions.

The implication of these arguments is not only that shame may lead to depression and in turn suicidal ideation but there might be an independent effect of shame on suicidal ideation. That is to avoid depression following intense feelings of shame an individual may contemplate suicide as a viable option. This may have important implications for the study of post-psychotic depression. Individuals who experience shame may be prone to suicide, above and beyond that expected by their measure of depression. This issue is discussed further in Section 1.5.4 when the relationship between shame and insight is discussed.
1.5.3 The Role of Shame in Schizophrenia

Given the evidence thus far that schizophrenia represents an attack on one’s identity and given the stigmatising nature of schizophrenia, one may postulate that shame experiences are likely to be common. Despite this association there has been minimal research in the area. Anecdotal evidence comes from Morrison (1987) who has postulated about the role of shame in the symptoms and processes observed in schizophrenia based on her work in the University of New Mexico Mental Health Programme. Through case studies she argues that shame offers an organising framework for understanding how a patient with schizophrenia may experience the self and interpersonal relatedness.

Morrison maintains that the paranoid individual is acutely self-conscious and is characterised by a persistent struggle with internalised shame. In a desire to avoid shame individuals are motivated to use projective identification, in which impulses, introjects and personality traits intolerable to the self are projected into another. Similarly, the symptoms of omnipotence, isolation and detachment associated with schizophrenia can be understood in terms of shame. The presenting of the self to another, the exposure of the self, is to risk the experience of overwhelming shame. That is the imagined omnipotence of these patients is a complex interaction of fantasy, actual belief, defence and a case of recurrent shame. Winnicott’s concept of the ‘False self’ (Winnicott, 1960) developed to protect the ‘True self’ from direct contact with others is useful in understanding this process. Similarly the dreams of grandeur offer relief and repair of shame injuries to the self.
More empirical support comes from Birchwood et al. (1993) working within the framework of ranking theory, who speculated that an individual’s appraisal of the illness was an important factor predicting depression. They examined patients’ reactions to their psychotic illness and depression using the Personal Beliefs about Illness Questionnaire (PBIQ: Birchwood et al., 1993). They found that what concerns patients most and what is closely allied to depression is the feeling that the illness is beyond their control, a sense of feeling entrapped by their illness. That is they cannot reaffirm their rank or position. The study failed to find a significant relationship between depression and measures of stigma or self as illness, although this may be as much to do with their measures which over simplified and failed to capture the essence of these constructs. Rooke & Birchwood (1998) followed up the original cohort in Birchwood et al. (1993) study, two and a half years later. The study found that a core group of patients depressed at follow-up were depressed at the inclusion of the study. Depressed patients also experienced significantly more compulsory admissions. Comparing the cohort over the two and a half year period, depression at follow-up was predicted from the depression score at baseline together with information about the patients’ belief in entrapment by psychotic illness at inclusion and change in this belief during the follow-up period. Entrapment, a greater drop in employment status, high insight and loss of social role were found to be independently linked to depression when negative symptoms, delusions and other indices of illness or treatment were controlled. Depressed patients also appraised the locus of their illness more within their personality or psyche than in biomedical terms. This may have important implications in relation to recovery style as it is suggestive that to integrate the illness into the personality may be related to depression.
1.5.4 The Relationship between Shame, Insight and Recovery Style

The literature on insight and its relationship to schizophrenia was previously reviewed in section 1.3.2. Whilst there has not been any empirical studies examining the relationship between shame and insight, speculations can be made based on an understanding of the constructs. Firstly, it is speculated that if an individual lacks insight into their illness they cannot experience the shame that may be associated with that illness. Alternatively, as previously discussed, lack of insight may in fact be a defence against the intense shame and blow to their sense of self that an individual may experience following a psychotic episode. That is, individuals who lack insight may suffer intense shame. Indeed, Fingarette (1969) states that the main motive for self deception is the threat of losing ones identity. Similarly, Gilbert (1997) highlights the relationship between shame and concealment where shameful experiences can be too difficult to admit to the self or others.

However, if lack of insight is a defence mechanism, subjective measures of both shame and depression may also be prone to defensive strategies. In other words the use of any subjective measure of emotions and feelings may not be accurate due to the defensive strategies of the individual. Dixon, King & Steiger (1998) examined the relationship between unawareness of symptoms (an aspect of insight) and depression. They found that patients ratings of depression were negatively related to their unawareness of symptomatology. That is, the more unaware of their symptoms the less they reported feeling depressed. However, relatives’ ratings of depression in their family member significantly predicted unawareness of symptoms in patients. That is patients who show
a large degree of unawareness, although not subjectively depressed still manage to convey
to others either verbally or non-verbally many of the signs of depression. The paper is
perhaps evidence of the defence mechanism of denial. Individuals who report not being
depressed are psychologically motivated to repress the opposite belief (that they are
depressed), so as to avoid the tragic reality of their situation. It is speculated that attempts
to increase insight among such patients may result in increases in depression.

There are no empirical studies examining the relationship between shame and recovery style. However, again one can speculate based on our understanding of the constructs.
Evidence would suggest that a sealing over recovery style is associated with depressive symptomatology (Drayton et al., 1998). It is speculated that poor recovery style may be related to the intense shame associated with the realisation that one has a chronic disabling illness. The shame motivates the individual to adopt a sealing over recovery style.

In summary, there is an increasingly large body of evidence linking shame to psychopathology and in particular depression and schizophrenia. However in relation to schizophrenia, despite the compelling case studies and elaborate theories there are very few studies undertaken to confirm whether shame is an important variable in the experience of schizophrenia. Best support comes from recent research by Birchwood and colleagues (Birchwood et al., 1993; Rooke & Birchwood, 1998) who highlight the importance of entrapment. However, the present author is unaware of any studies using established measures of shame within a sample of patients with schizophrenia. Similarly, the relationship between shame and other variables such as depression, insight and
recovery style have not been examined.

1.6 Methodological and Definitional Issues in Shame Research

The measurement of shame cannot be fully understood without consideration of the ways in which it has been conceptualised. Andrews (1998) notes that shame scales have been designed to assess the degree to which people conform to the following:

1) Individuals who feel generalised or global shame frequently or continuously. The following measures are commonly used in published research to assess this construct: Internalised Shame Scale (ISS: Cook, 1988, 1996), the Personal Feelings Questionnaire-2 (PFQ2: Harder & Zalma, 1990) and The Other As Shamer Scale (OAS: Goss, Gilbert & Allan, 1994).

2) Individuals who are especially sensitive to feeling shame in potentially shame-eliciting situations, that is people we call shame prone. The following measures are commonly used in published research to assess this construct: Test of Self-conscious Affect (TOSCA: Tangney, Wagner & Gramzow, 1989) and the Dimensions of Consciousness Questionnaire (DCQ: Johnson, Danko, Huang, Park, Johnson & Nagoshi, 1987).

3) Individuals who are chronically ashamed of their behaviour or particular personal characteristics. Andrews has developed a semi-structured interview to assess shame of personal characteristics and behaviour (Andrews & Hunter, 1997).
Whilst these measures are considered valid and reliable measures of shame they all rely on an individual's account of their feelings of shame. They are all therefore potentially prone to bias through self-deception, defence mechanisms and deception on the part of the participants. Based on the evidence thus far that schizophrenic patients may be prone to self-deception in relation to depression, this may be particularly important in relation to issues associated with shame which by its very nature is difficult to admit. An alternative way of measuring shame that taps into unconscious or automatic processes and is less prone to manipulation is needed. Depressed patients have been shown to demonstrate increased attention to materials relevant to their emotional concerns. Such biases of attention have most often been investigated using the emotional Stroop test (Stroop, 1935). On this test subjects are required to name the colour of ink in which words are written. Attentional biases towards particular words or classes of words can be inferred from the degree of interference with performance as measured by speed of colour naming.

Williams and Broadbent (1986) showed performance of people who had attempted suicide was significantly slower to the words related to the theme of overdosing. Gotlib & McCann (1984) demonstrated interference for negatively toned words only in the case of subjects with high scores on a measure of depressed mood. In relation to individuals with a diagnosis of schizophrenia, Bentall & Kaney (1989) found an attentional bias for words of a threatening nature in patients suffering persecutory delusions. Similarly, Kinderman (1993) found that patients suffering from persecutory delusions showed a pattern of interference with colour naming of personally descriptive words of both positive and
negative content. Similar findings were found for the depressed subjects but not for the normal controls. For both clinical samples the interference was greatest for negative words. It would appear that information related to the self concept is highly salient for both depressed individuals and individuals suffering from schizophrenia. The Stroop test has been used as a measure of automatic processes and might be employed as a measure of attentional biases to shame words.

In summary, there are a number of different methods to measure shame, or aspects of shame. Choice of measure will influence the type of results obtained. The Stroop word colour naming task may offer an alternative way of measuring shame that taps into unconscious processes and is less prone to manipulation.

1.7 Aims of the Present Study and Research Questions

Clearly an understanding of individual differences in adaptation to psychosis is crucial. Those who suffer from schizophrenia are not passive individuals whose emotions and behaviours are exclusively determined by the illness. They are active agents, who continue to respond to and cope in differing ways to their circumstances. Although evidence would suggest that individuals differ in their adaptation to psychosis, there is only minimal research examining the role of shame in this process. The study is concerned with how shame relates to schizophrenia, post-psychotic depression, suicide, insight and recovery style.
Chapter One: Introduction

The study focuses on individuals with a diagnosis of schizophrenia who are recovering from a psychotic episode. They will be compared with: a “non-schizophrenia”, Psychiatric control group and a Medical control group, suffering from rheumatoid arthritis. The psychiatric control group were presenting to psychiatric or psychology services with depression or symptoms of depression. Evidence reviewed would suggest that individuals suffering from depression are likely to suffer shame (e.g. Brown et al., 1995). However, they differ from the experimental group in that they do not suffer from a primary diagnosis of schizophrenia. Thus, by controlling for psychiatric disorder the study aims to examine the relationship between shame and depression per se, independent of schizophrenia. The medical control group was used because they suffer from a chronic illness (like schizophrenia) and are as a group likely to suffer some degree of depression (see Katz & Yelin, 1995 for a review). It is speculated that rheumatoid arthritis is likely to be less-stigmatised (compared to schizophrenia) and it is predicted that the individuals are less likely to suffer shame.

By controlling for these variables, the study aims to examine the relationship between schizophrenia, shame, recovery style, insight, depression and suicide. Shame will be measured using a trait measure of shame (TOSCA: Tangeny et al., 1989), a global measure of shame (OAS: Goss et al., 1994) and a Stroop measure of shame.

The project aims to answer the following research questions.
The first two questions involve a partial replication of previous research.

1. What is the frequency of depression in schizophrenia?
2. What are the differences in recovery style among patients with a diagnosis of schizophrenia?

The third question examines the relationship between insight and the constructs of depression, shame and recovery style.

3. What is the relationship between level of insight and the constructs of depression, shame and recovery style among participants with a diagnosis of schizophrenia?

The fourth question examines the results of the Stroop task.

4. Do the groups differ in reactions times on the different conditions of the Stroop task?

The fifth question examines group differences on levels of shame and guilt.

5. Do the groups differ on measures of shame and guilt?

The sixth question examines the relationship between depression and the constructs of shame and guilt in schizophrenia.

6. Do participants suffering schizophrenia who are depressed have higher levels of shame and guilt compared with those who are not depressed?

The final question examines the association between variables and depression within the groups.

7. What variables predict depression?
2.1 Overview

Details of the design of the study are given together with information on the participants and the exclusion criteria for participation. Information concerning the measures used in the study are provided. Details are given concerning the construction of the Shame Stroop task. This is followed by a detailed account of the procedure used to conduct the study. Finally, information concerning the establishment of ethical approval for the study is given.

2.2 Design

A mixed design was used where the between subjects factor was the grouping variable (three groups: ‘Schizophrenia’ experimental group; Psychiatric control group; and Medical control group). The within subjects variable was the Stroop conditions (three levels: shame words; threat words and instrument (neutral words). In addition, all individuals were given a set of questionnaires detailed below. The dependent variables were first, the reaction time in seconds required to complete the three Stroop conditions and second, the responses to the questionnaires.
2.3 Research Participants

60 adults, aged between 18 and 81 took part in the study. There were twenty participants in each of the three groups. Demographic information for each group is shown in Table 1 below.

Group 1, the experimental group, were all patients at either the National Psychosis Unit at the Bethlem Hospital or wards at the Maudsley Hospital. All the participants in the experimental group had previously been given a diagnosis of schizophrenia according to the DSM-IV (APA, 1994) criteria by the psychiatrist in charge of their care.

Group 2, the psychiatric control group, were either inpatients on wards of the Maudsley Hospital, or patients (both inpatients and out-patients) at the Adult Mental Health Unit of the Chelsea & Westminster Hospital. All the participants were under the treatment of a psychiatrist or psychologist. All the participants had either been referred to the department for depression or had presented with depressive symptomatology. All participants had never received a diagnosis of schizophrenia.

Group 3, the medical control group consisted of out-patients at Kings College Hospital. All participants had a known history of rheumatoid arthritis, diagnosed by the consultant in charge. All participants had never received a diagnosis of schizophrenia.
Table 1: Demographic data and illness variables

<table>
<thead>
<tr>
<th></th>
<th>Schizophrenia Experimental Grp n=20</th>
<th>Psychiatric Control Grp n=20</th>
<th>Medical Control Grp n=20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Mean 30.35</td>
<td>42.95</td>
<td>59.80</td>
</tr>
<tr>
<td></td>
<td>SD 8.57</td>
<td>14.65</td>
<td>13.53</td>
</tr>
<tr>
<td></td>
<td>Min 18</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Max 55</td>
<td>72</td>
<td>81</td>
</tr>
<tr>
<td>Gender</td>
<td>M Freq 14</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>F Freq 6</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White Freq 15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Afro-Carib Freq 4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Other Freq 1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Age of Onset</td>
<td>Mean 20.35</td>
<td>32.15</td>
<td>48.95</td>
</tr>
<tr>
<td></td>
<td>SD 5.91</td>
<td>15.38</td>
<td>14.25</td>
</tr>
<tr>
<td></td>
<td>Min 14</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Max 41</td>
<td>70</td>
<td>66</td>
</tr>
<tr>
<td>Length of Illness in Months</td>
<td>Mean 127.80</td>
<td>125.00</td>
<td>135.25</td>
</tr>
<tr>
<td></td>
<td>SD 98.36</td>
<td>120.84</td>
<td>88.07</td>
</tr>
<tr>
<td></td>
<td>Min 12</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Max 432</td>
<td>444</td>
<td>324</td>
</tr>
</tbody>
</table>

Hospital Status

|                      | Inpatient Freq 19                   | 6                            | 0                        |
|                      | Out-patient Freq 1                 | 14                           | 20                       |

A comparison of the means shown in Table 1 indicated that there was a statistically significant difference between the three groups on Age of participants ($F(2, 59) = 27.81$, $P < .001$). Bonferroni post-hoc comparisons revealed that the medical control group had a statistically significant higher mean age than the other two groups and the experimental group had a statistically significant lower mean age than the psychiatric control group.

There was a statistically significant difference between the three groups on gender of participants ($x(2) = 13.45$, $p < .001$). Post hoc comparisons revealed that the experimental group were significantly different from the two control groups. The
participants in the experimental group were predominantly male, whereas the participants in the two control groups were predominantly female. There was no statistically significant difference between the three groups on ethnicity ($x^2 = .538, p = .764$). There was a statistically significant difference between the three groups on Age of onset of illness ($F(2, 59) = 26.12, p < .001$). Bonferroni Post hoc comparisons revealed that the medical control group had a statistically significant higher mean age of onset than the other two groups and the experimental group had a statistically significant lower mean age than the psychiatric control group. There was no statistically significant difference between the three groups on length of illness ($F(2, 59) = .053, p = .949$). There was a statistically significant difference between the groups on hospital status ($x^2 = 22.576, p < .001$). The schizophrenia group consisted of almost exclusively inpatients. The psychiatric group was predominantly out-patients and the medical control group was exclusively out-patients.

2.3.1 Exclusion Criteria

All participants had to meet the criteria for the completion of the Stroop tasks, (i.e. fluent in English, they were not dyslexic and not colour-blind). Individuals diagnosed with schizophrenia, deemed too ill (acutely psychotic) by the consultant in charge, to take part in the study were not approached by the experimenter. Any individuals with a history of schizophrenia were excluded from the two control groups.
2.4 Measures

2.4.1 Stroop Task

The Stroop task consisted of three lists of words (see Appendix 1). Two of the three lists of words were taken from Dalgleish (1995). The first set of words were emotional (threat-related) words and the second set were semantically related-neutral words (musical instruments). The list of words were matched as closely as possible for word length and frequency (Dalgleish, 1995). Previous research suggests that individuals diagnosed with schizophrenia have an attentional bias and are slower at naming the colour of the emotional words compared to the neutral words (Bentall & Kaney, 1989). The words were matched as closely as possible for length and frequency. The third list of words were "shame words". The words were generated by the author and two clinical psychologists experienced in the field. A preliminary list of 120 words were generated and then rated independently by the three psychologists as high, medium or low in their relationship to shame. Those words rated as low were removed from the list. This left a total of 54 words. These were then rated by ten trainee clinical psychologists and ten non-psychologists on a scale of 1-10 on their perceived relationship to shame. Words rated as low on the scale by either trainee clinical psychologists or non-psychologists were removed. This left a total of thirty words. Twenty words were then selected which were rated as high by both trainee clinical psychologists and non-psychologists which matched the two other lists of words as closely as possible in terms of words length and frequency.
2.4.2 Questionnaires

The Other As Shamer Scale: OAS (Goss, Gilbert & Allan, 1994). The OAS is an 18 item self report questionnaire aimed at measuring levels of shame (see Appendix 2). The OAS is a modified version of the Internalised Shame Scale (ISS: Cook, 1993). The items are reworded to focus on how an individual believes others might evaluate them as apposed to how they might evaluate themselves. Participants are asked to read each statement and indicate on a scale of 0 to 4 the frequency with which they find themselves experiencing or feeling what is described in the statement. 0 is never, 1 is seldom, 2 is sometimes, 3 is often and 4 is almost always. The OAS is based on a Guttman scale with a maximum score of 64.

The psychometric properties of the OAS have been reviewed by Goss et al. (1994). Evidence suggests that the OAS is correlated highly with the ISS (Spearman r = .81), a measure that has proven psychometric properties (Cook, 1993). The internal coefficient of the ISS was investigated by calculating Cronbach’s alpha coefficient which was multiplied by a 100 to express the percentage of test score variance attributed to the true variance of the characteristic being measured. This yielded a very high mean alpha coefficient of .95 using a clinical sample. The test-retest correlation was .84 over an interval of seven weeks. Cook (1993) reports on a study by McFarland (personal communication) in which the ISS correlated highly with other proven measures of shame such as the Personal Feeling Questionnaire (PFQ-2: Harder & Zalma, 1990).
**Test of Self Conscious Emotions** (TOSCA: Tangney, Wagner & Gramzow, 1989). The TOSCA is a 15 item self report questionnaire (see Appendix 3). It is a scenario based measure (10 negative and 5 positive) yielding indices of Shame, Guilt, Externalization, Detachment/Unconcern, Alpha pride and Beta Pride. Participants are asked to read scenarios in which they might find themselves in and to rate different responses to how they might behave, think or feel on a scale of 1-5, from likely to not likely.

The psychometric properties of the TOSCA were extensively reviewed by Tangney et al. (1989). A meta analysis of the TOSCA’s internal consistency yielded a high mean alpha analysis coefficient of .76 for the shame subscale and .66 for the guilt subscale. The 15 items were subject generated thereby enhancing the ecological validity of the measure. Cook (1993) reports on a study by McFarland (personal communication) in which the TOSCA correlated highly with other proven measures of shame such as the ISS and the PFQ.

**Insight Scale** (IS: Birchwood, Smith, Drury, Healy, Macmillian & Slade, 1994). The insight scale is a 8 item questionnaire aimed at measuring an individual’s awareness of illness (see Appendix 4). Subjects are asked to read each statement and tick the box which best applies to them in terms of whether they agree, disagree or are unsure about the statement.

The psychometric properties of the IS have been reviewed by Birchwood et al. (1994). Reliability was assessed using an alpha coefficient and the test retest method. The alpha
coefficient was high (0.75) as was the test retest score (Spearman $r = .90$), offering support for the reliability of the scale. Validity was measured using construct validity and concurrent validity. Construct validity was measured using factor analysis. Using a principal components method one factor was extracted which accounted for 60% of the variance. The power of the factor gives support for notion that the distribution of scores can be accounted for by a common construct. Criterion validity was measured by administrating the IS with individuals diagnosed with schizophrenia who were recovering from an acute episode. As predicted, IS scores increased from admission to recovery among patients who were found to recover but not among those who did not.

**Recovery Style Questionnaire** (RSQ: Drayton, Birchwood & Trower, 1998). The RSQ is a thirty nine item self-report questionnaire aimed at measuring recovery style in individuals diagnosed with schizophrenia (see Appendix 5). The questionnaire is based on McGlashan, Levy & Carpenter’s, (1975) interview measure of recovery style (Integration Sealing Over Scale: ISOS). Subjects have to read each statement and state whether they agree or disagree with the statement.

The psychometric properties of the RSQ have been reported by Drayton *et al.* (1998). Reliability was measured firstly using a test-retest procedure. Ten subjects completed the RSQ within one month following the first administration. The correlation was high (Spearman $r = .81$ $p < .002$). The internal reliability of the measure was investigated by calculating the Cronbach’s alpha coefficient. This was found to be good ($\alpha = .73$). The validity of the RSQ was assessed firstly using face validity. Items in the RSQ were chosen
by a focus group that included clinicians and patients and the items correlated with the 13 concepts in McGlashan's interview measure (ISOS). The criterion related validity was assessed against the ISOS which has established psychometric properties. The correlation between scores was found to be very high (Spearman $r = .92$, $p< .001$). The distribution of scores also offered support for the two groups proposed by McGlashan et al. (1975) of sealing over and integration.

**Beck Depression Inventory: BDI** (Beck, 1967; 1976; Beck & Steer, 1987) The BDI is a 21 item self-report questionnaire describing various affective, cognitive, behavioural and physiological symptoms associated with depression (see Appendix 6). Each item consists of four alternative statements graded in severity from 0 to 3. The individual is instructed to choose the most personally salient statement which reflects how he has been feeling over the past week including today.

The BDI is based on a Guttman Scale with a maximum score of 63. Normative data suggests the following categories of severity level: 'normal' (0-10), 'mild-moderate' (11-20), 'moderate-severe' (21-30) 'severe' (31+) Beck, Steer & Garbin (1988). The psychometric properties of the BDI were extensively reviewed by Beck et al. (1988). A meta analysis of the BDI's internal consistency yielded a high mean alpha analysis coefficient of .86 for psychiatric patients and 0.81 for non-psychiatric patients. High test-retest reliability values have been reported for normal and clinically depressed subjects across time intervals lasting from five days to three months (Gallagher, Nies & Thompson, 1982; Strober, Green & Carlson, 1981). Beck et al. (1988) considered the content validity
of the BDI by comparing the BDI's criteria against the DSM-III criteria (APA, 1980) for depression. They found that the BDI reflected six of the nine DSM-III criteria very well. The concurrent validity of the BDI with respect to other measures of depression (e.g. the Zung Self-reported Depression Scale: Zung (Zung, 1965) and clinical ratings was reported to be high. Construct validity was reported as strong with the BDI detecting a number of hypothesised relationships between behavioural and attitudinal variables indicative of depression.

**Beck Scale for Suicide Ideation** (BSI: Beck, Steer & Ranieri, 1988). The BSI is a 21 item self-report questionnaire aimed at measuring an individuals potential risk of suicide (see Appendix 7). Each item consists of three alternative statements graded in severity from 0 to 2. The individual is instructed to choose the most personally salient statement which reflects how the individual has been feeling over the past week including today. Individuals are instructed that if they have circled zero for items 4 and 5, then they are to skip down to item 20. The last two items, 20 and 21 examine previous suicide attempts.

The BSI is based on a Guttman Scale with a maximum score of 42. The psychometric properties of the BSI were extensively reviewed by Beck, Steer & Ranieri, (1988). The internal consistency was investigated by calculating a Cronbach’s alpha coefficient. The measure yielded a high alpha coefficient of .90. Concurrent validity was assessed by comparing psychiatrist ratings and patient scores. The Pearson product-moment correlation between the two parties was very high (Spearman r = .90 p < .001).
2.5 Procedure

Before any participant was approached to take part in the study, their suitability for inclusion was discussed with clinical professionals at the respective hospitals. This included keyworker, primary nurses, consultants and clinical psychologists. Individuals deemed suitable for the study were then approached by the researcher. Those who agreed to take part in the study were seen by the researcher individually.

Participants were given an information sheet explaining the basic aims of the study (see Appendix 8). The researcher read through the information sheet with some of the participants to ensure that they fully understood what would be required of them. Participants were given the opportunity to ask any questions. Those who agreed to take part in the study were given a consent form to complete. An example copy of the consent form is shown in Appendix 9. Demographic information was collected by verbal report and / or through case-notes.

Participants were seen individually for approximately one hour, to carry out the experimental task and complete the psychometric measures. Participants first completed the Stroop task. The Stroop task was presented first in order to avoid any priming from exposure to the questionnaires. The Stroop task involved colour naming the three list of words (Shame words; Threat words and Instrument words). The presentation of the lists was randomised across subjects in order to control for practice effects. For each list, there were two columns of ten words printed in either red, green, blue or yellow ink. The order
in which the colour of the words was presented was randomised for each list such that the same colour was not presented more than twice in succession. Participants were read standardised instructions (see Appendix 10). They were told that they were going to be shown lists of words. Their task was to name aloud the colour of the ink-red, green, blue or yellow in which the words were printed. They were told to go as quickly as possible down each column, ignoring the words and naming the ink. If they made a mistake they were to just correct themselves and keep on going. The participants were timed for each list of words using a stop watch and the number of mistakes were recorded.

Participants then completed a series of self-report questionnaires (see Measures Section 2.4, above). The order of presentation was standardised across subjects. This avoids the possibility that any observed differences between the groups could be attributed to the order of presentation. Subjects were first asked to complete a shame scale (Other as Shamer, OAS: Goss et al., 1994). The experimental group were then asked to complete the insight scale (Insight Scale, IS: Birchwood et al., 1994) followed by the recovery style questionnaire (Recovery Style Questionnaire, RSQ: Drayton et al., 1998). The two control groups did not complete the IS and the RSQ. This was followed by the depression scale (Beck Depression Inventory, BDI: Beck, 1967, 1976; Beck & Steer, 1987) followed by the suicide scale (Beck Scale for Suicide Ideation, BSI: Beck et al., 1988) and finally the Test of self conscious emotions (Test of Self Conscious Emotions, TOSCA: Tangney et al., 1989). The TOSCA was presented last because it was the longest questionnaire to complete. Presenting the questionnaire earlier may have discouraged participants from continuing with the study, feeling it would take too long to complete. Some of the
participants had difficulty concentrating on the questionnaires. In these instances the experimenter read the items to the participant who was asked to give the appropriate response.

2.6 Ethical Considerations

Ethical approval for the study was obtained from each of the following hospitals. The Maudsley Hospital, Kings Healthcare NHS Trust and the Riverside Mental Health Trust. (see Appendix 11).
The following results were analysed using the SPSS 7.0 for Windows.

3.1 Overview

The results chapter starts firstly by screening the measures for reliability and the data for missing data and the assumptions of multivariate statistics. This is followed by descriptive and exploratory data analyses. The results for each of the seven research questions are presented in turn. Included in the descriptive and data analysis are all the subscales of the TOSCA. These were included in order to consider their relationship to the variables under investigation. However, only the shame and guilt subscales were used to answer the research questions.

3.2 Screening

3.2.1 Tools

Internal reliability was calculated for all the measures. The Cronbach’s alpha coefficients for each measure are shown in Table 2. The Cronbach alpha coefficient’s for the BDI, BSI, OAS, RSQ, TOSCA and the subscales shame, guilt, detached and externalisation of the TOSCA were satisfactory (alpha scores > .70). The alpha and beta subscales of the
TOSCA were unsatisfactory (alpha coefficient scores < .70) indicating an index of error variance greater than 90%. When collapsed the Cronbach alpha coefficient was satisfactory. The combined score was used as a measure of pride throughout the data analysis. The Insight scale had an unsatisfactory Cronbach alpha equal to .42. The low Cronbach alpha score is likely to reflect the low number of items in the scale. The internal consistency of a scale increases with the number of items in the scale. Using Spearman-Brown Prophecy Formula (Nunnally, 1978 cited by Barker, Pistrang & Elliot, 1994) a 24 item questionnaire with similar items would give a Cronbach alpha of .68. The IS was included in the study although caution must be given to any findings obtained using this scale due to the low Cronbach alpha coefficient figure.

Table 2. Means, standard deviations and reliability coefficients for each measure.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>19.10</td>
<td>60</td>
<td>12.83</td>
<td>.92</td>
</tr>
<tr>
<td>BSI</td>
<td>4.74</td>
<td>60</td>
<td>9.63</td>
<td>.97</td>
</tr>
<tr>
<td>OAS</td>
<td>28.74</td>
<td>60</td>
<td>18.49</td>
<td>.96</td>
</tr>
<tr>
<td>IS</td>
<td>7.50</td>
<td>20</td>
<td>2.32</td>
<td>.42</td>
</tr>
<tr>
<td>RSQ</td>
<td>21.50</td>
<td>19</td>
<td>4.83</td>
<td>.70</td>
</tr>
<tr>
<td>TOSCA</td>
<td>215.52</td>
<td>59</td>
<td>26.92</td>
<td>.86</td>
</tr>
<tr>
<td>Shame</td>
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<td>10.90</td>
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</tr>
<tr>
<td>Guilt</td>
<td>58.22</td>
<td>59</td>
<td>8.98</td>
<td>.76</td>
</tr>
<tr>
<td>Detached</td>
<td>31.95</td>
<td>59</td>
<td>7.12</td>
<td>.70</td>
</tr>
<tr>
<td>Externalization</td>
<td>40.57</td>
<td>59</td>
<td>9.00</td>
<td>.71</td>
</tr>
<tr>
<td>Alpha Pride</td>
<td>18.54</td>
<td>59</td>
<td>3.80</td>
<td>.65</td>
</tr>
<tr>
<td>Beta Pride</td>
<td>18.89</td>
<td>59</td>
<td>3.83</td>
<td>.66</td>
</tr>
<tr>
<td>Alpha + Beta</td>
<td>37.43</td>
<td>59</td>
<td>51.96</td>
<td>.81</td>
</tr>
</tbody>
</table>

BDI (Beck Depression Inventory, Beck & Steer, 1987)
BSI (Beck Scale for Suicide Ideation, Beck et al., 1988)
OAS (Other as Shamer Scale, Goss et al., 1994)
RSQ (Recovery Style Questionnaire, Drayton et al., 1998)
TOSCA (Test of Self Conscious Emotions, Tangney et al., 1989)
IS (Insight Scale, Birchwood et al., 1994)
3.2.2 Data

The data was screened for missing data and the assumptions of multivariate statistics.

3.2.2.1 Missing Data

The data for each group were screened for missing data on each measure. Information on any missing data is detailed below.

**Experimental group diagnosed with schizophrenia**

BDI: 5 of the 20 participants had a single missing value for one item of the BDI. OAS: 1 of the 20 participants had a single missing value for one item of the OAS. TOSCA: 2 of the 20 participants had missing values, one had missing values on three questions and the other had missing values on one question. Following the guidance of Tabachnick & Fidell (1996) the missing values were replaced by the mean for all cases. RSQ: 5 of the 20 participants had missing data on one or more items (range 1-7). As the RSQ is based on a percentage the total score was unaffected by missing data. 1 participant failed to complete the measure and was subsequently removed from any subsequent data analysis involving that questionnaire.

**Psychiatric control group**

BDI: 2 of the 20 participants had missing values, one had missing values on four items and the other had a missing value on one item. This was replaced by the means for all cases.
Medical control group

BDI: 3 of the 20 participants had missing values, one participant had missing values on 2 items and the other two participants had missing values on one item. OAS: 1 of the 20 participants had a single missing value for one item of the OAS. TOSCA: 1 of the 20 participants had a missing value on one question. The missing values were replaced by the mean for all cases. Another participant failed to complete the TOSCA. They were removed from any subsequent data analysis involving that questionnaire.

3.2.2.2 Assumptions of Multivariate Statistics

The data for each group was examined separately through various SPSS programs for fit between their distributions and the assumptions of multivariate statistics. Following common standards (e.g. Tabachnick & Fidell, 1996), the assumption of normality was met if, after the skewness and kurtosis figures were divided by their respective standard errors, the obtained values were less than 1.96. According to common standards e.g. Bentler (1989), outliers were defined as cases whose scores were three standard deviations above or below the norm. Using common standards (e.g. Tabachnick & Fidell, 1996), two variables were considered multi collinear if they had a bivariate correlation greater than .70.

Experimental group diagnosed with schizophrenia

The means, standard deviations, range, skewness and kurtosis for each measure are shown in Table 3. Results for all measures were normally distributed with skewness and kurtosis
figures all within acceptable ranges. There were no outliers, extreme scores for all measures were within acceptable ranges. The data was screened for multicolinearity. Table 7 shows the correlation matrix for the experimental group. None of the measures were correlated above .70 indicating that none of the measures suffered from multicollinearity. The reaction times for the three stroop conditions were not correlated above .70 with any of the measures. The data for all measures therefore met the assumptions of multivariate analysis.

Psychiatric control group

The means, standard deviations, range, skewness and kurtosis for each measure are shown in Table 4. Results for all measures were normally distributed with skewness and kurtosis figures all within acceptable ranges. There were no outliers, extreme scores for all measures were within acceptable ranges. Table 8 shows the correlation matrix for the psychiatric control group. The detached subscale of the TOSCA was correlated above .70 with the BSI, OAS and the pride subscale of the TOSCA. However, as none of the measures were used in the subsequent data analysis no adjustment was made for multicollinearity. The reaction times for the three stroop conditions were not correlated above .70 with any of the measures. The data therefore met the assumptions of multivariate analysis.

Medical control group

The means, standard deviations, range, skewness and kurtosis for each measure are shown in Table 5. Results of the OAS showed unacceptable skewness and kurtosis. The stem and
leaf plot indicated positive skewness and kurtosis with one extreme outlier who scored 65. In an attempt to reduce the extreme skewness and kurtosis and reduce the impact of the outlier a square root transformation was carried out. However, the transformation made skewness and kurtosis figures unacceptable for the other two groups. When the outlier was removed, the results were normally distributed with kurtosis and skewness within acceptable ranges. Following common guidelines (e.g. Tabachnick & Fidell, 1996), the outlier was removed from all subsequent data analysis. In relation to the guilt subscale, the results were not normally distributed with unacceptable kurtosis and skewness. To reduce the extreme skewness and kurtosis a reflect square root transformation was carried out on the variable. The new variable was reflected back to simplify the direction of interpretation. The new variable labelled guilt was normally distributed with skewness and kurtosis within acceptable ranges for all three groups. The new variable, guilt was used in all subsequent data analysis. The results for all other measures were normally distributed with skewness and kurtosis figures all with acceptable ranges. There were no outliers, extreme scores for all measures were within acceptable ranges. Table 9 shows the correlation matrix for the medical group. None of the measures were correlated above .70 indicating that none of the measures suffered from multicollinearity. The data therefore met the assumptions of multivariate analysis.
Table 3. Means, standard deviations, range, skewness and kurtosis on each measure were calculated for the experimental group diagnosed with schizophrenia.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Freq</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
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66
Table 4. Means, standard deviations, range, skewness and kurtosis on each measure were calculated for psychiatric control group.

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67
Table 5. Means, standard deviations, range, skewness and kurtosis on each measure were calculated for the medical control group.

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<th>Max</th>
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<th>Kurtosis</th>
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68
3.3 Descriptive Statistics

In order to draw comparisons between the groups the means for the three groups (after screening the data) on all the measures together with the findings from the Stroop task are shown in Table 6.

Table 6: Comparison of the means between the three groups on all measures.

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<th>Medical Control Group</th>
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<td>Mean</td>
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With regard to Stroop task, from an observation of the means it can be seen that participants with a diagnosis of schizophrenia were slower on all words compared with the control groups. This is in accordance with the evidence that patients with
schizophrenia are slower on cognitive tasks (e.g. Asarnow & MacCrimmon, 1978; Walker, 1981, cited by Cutting, 1985).

As stated in Section 2.3 of the Methodology chapter, there were group differences on age of participants, gender, age at onset of illness and hospital status. A series of t-tests were carried out to see if, as a whole, there were differences on the measures based on gender of participants and hospital status. This was followed by series of Pearson product moment correlations in order to examine the association between the measures based on the age of participants and age at onset of illness. Due to the number of analyses, a significance level .01 was used to determine significant differences and associations. There were no significant differences on the measures based on gender and hospital status. There were no significant correlations between the measures and age at onset of illness. There was a significant correlation between age and the guilt subscale of the TOSCA (r = .343 p = .008). Age was positively correlated with levels of guilt. There were no other significant correlations between the other measures and age.

3.4 Associations Between Variables under Investigation

In order to determine the association between the scores on each of the measures under investigation (BDI, BSI, OAS, RSQ, IS TOSCA subscales and the mean totals for the shame, threat and instrument words of the Stroop Task), Pearson product moment correlations were carried out. The Pearson product moment correlations for the three groups are shown in Table 7 (experimental group), Table 8 (psychiatric control group)
and Table 9 (medical control group). The variables that correlated are indicated in the table with a *. Due to the number of correlations, only those that were significant at the level .01 are marked.

### 3.4.1 Experimental Group Diagnosed with Schizophrenia

The BDI was positively correlated with the BSI and OAS. The Shame subscale of the TOSCA was positively correlated with the guilt subscale of the TOSCA. The Detached subscale of the TOSCA was positively correlated with the pride subscale of the TOSCA. The reaction time for the Shame words was positively correlated with the reaction time for the Threat words. The reaction time for the Threat words was positively correlated with the reaction time for the Instrument words.

### 3.4.2 Psychiatric Control Group

The BDI was positively correlated with the BSI and the OAS and negatively correlated with the detached subscale of the TOSCA. The BSI was positively correlated with the OAS and the shame subscale of the TOSCA and negatively correlated with the detached and pride subscales of the TOSCA. The OAS was positively correlated with the shame subscale of the TOSCA and negatively correlated with the detached and pride subscales of the TOSCA. The shame subscale of the TOSCA was positively correlated with the guilt subscale of the TOSCA and negatively correlated with the detached and pride subscales of the TOSCA. The detached subscale of the TOSCA was positively correlated with the
pride subscale of the TOSCA. The reaction time for the Shame words was positively correlated with the reaction time for the Threat words and Instrument words.

3.4.3 Medical Control Group

The shame subscale of the TOSCA was positively correlated with the guilt subscale of the TOSCA. The detached subscale of the TOSCA was positively correlated with the guilt and pride subscales of the TOSCA. The reaction time for the Shame words was positively correlated with the reaction time for the Threat words and Instrument words. The reaction time for the Threat words was positively correlated with the reaction time for the Instrument words.
Table 7. Pearson product moment correlation coefficients for the experimental group diagnosed with schizophrenia.

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<th>IS</th>
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<th>TOSCA Pride</th>
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* Correlation is significant at the 0.01 level (2-tailed)
Table 8. Pearson product moment correlation coefficients for the psychiatric control group.

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<th>Guilt</th>
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</tr>
<tr>
<td>TOSCA</td>
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<td></td>
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<td></td>
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<tr>
<td>Shame</td>
<td></td>
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<td></td>
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<td>.597*</td>
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<tr>
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<td>-.146</td>
<td>.118</td>
<td>-.041</td>
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*Correlation is significant at the 0.01 level (2-tailed)
Chapter 3: Results

Table 9. Pearson product moment correlation coefficients for the medical control group.

<table>
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<tr>
<th>BDI</th>
<th>OAS</th>
<th>TOSCA</th>
<th>Shame</th>
<th>Guilt</th>
<th>Detached</th>
<th>External</th>
<th>Pride</th>
<th>Shame words</th>
<th>Threat words</th>
<th>Instrument words</th>
</tr>
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<td>OAS</td>
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<tr>
<td>Shame</td>
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<tr>
<td>Guilt</td>
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<td>-0.97</td>
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<td></td>
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<tr>
<td>Detached</td>
<td>.234</td>
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<td>.402</td>
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<td>.153</td>
<td>.580*</td>
<td>.314</td>
<td>1.0</td>
<td>.328</td>
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<tr>
<td>Stroop Task</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame words</td>
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<td>-.009</td>
<td>.061</td>
<td>-.186</td>
<td>-.097</td>
<td>.012</td>
<td>.328</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat words</td>
<td>.159</td>
<td>-.185</td>
<td>.252</td>
<td>-.020</td>
<td>-.067</td>
<td>.163</td>
<td>.333</td>
<td>.691*</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Instrument words</td>
<td>.014</td>
<td>.066</td>
<td>-.116</td>
<td>-.110</td>
<td>-.148</td>
<td>.066</td>
<td>.354</td>
<td>.589*</td>
<td>.685*</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.01 level (2-tailed)
4.1 Research Questions

**Research Question 1**

*What is the frequency of depression in a sample of patients with a diagnosis of Schizophrenia?*

The first research question involved a partial replication of previous research to see the percentage of patients with a diagnosis of schizophrenia who are depressed. Using a cut-off point of 15 on the BDI, 11 participants (55%) were classified as depressed and nine participants (45%) were not depressed. Birchwood *et al.* (1993), using an entirely out-patient sample, found 29% were classified as depressed and 71% were classified as non-depressed.

**Research Question 2**

*How do patients with a diagnosis of schizophrenia differ in terms of Recovery Style?*

The second research question was to do a partial replication to see the percentage of participants with a diagnosis of schizophrenia who are classified as adopting either an “integration” or “sealing over” recovery style. 15 participants (79%) were classified as having an “Integration” recovery style and 4 participants (21%) were classified in the sealing over category. Drayton *et al.* (1998) found in their out-patient sample, 53% of participants were classified as having an “Integration” recovery style and 47% of participants were classified as having a “sealing over” recovery style. The frequency
Drayton et al. (1998) measured depression using the Calgary Depression Scale for Schizophrenia (CDS: Addington, Addington & Mticka-Tyndall, 1993). The CDS places respondents into one of four categories equivalent to levels of depression measured by the Beck Depression Inventory (BDI: Beck et al., 1979). These are: not depressed (BDI equivalent score 0-10), mild depression (BDI equivalent score 11-20), moderate depression (BDI equivalent score 21-30) and severe depression (BDI equivalent score >31). Drayton et al. (1998) found all participants assessed as being moderately and severely depressed were in the sealing over group. This can be contrasted with the present study that found only one of the seven participants assessed as being moderately or severely depressed was in the sealing over group. No statistical comparisons were carried out because of the low numbers in each cell.

Table 10. Frequency figures for the two recovery styles contrasted with depression score.

<table>
<thead>
<tr>
<th>BDI</th>
<th>Present Study</th>
<th>Drayton et al. (1998)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RSQ</td>
<td></td>
</tr>
<tr>
<td>Integration</td>
<td>Sealing Over</td>
<td>Integration</td>
</tr>
<tr>
<td>Not depressed</td>
<td>5 (31%)</td>
<td>1 (33%)</td>
</tr>
<tr>
<td>Mild depression</td>
<td>5 (31%)</td>
<td>1 (33%)</td>
</tr>
<tr>
<td>Moderate depression</td>
<td>3 (19%)</td>
<td>0</td>
</tr>
<tr>
<td>Severe depression</td>
<td>3 (19%)</td>
<td>1 (33%)</td>
</tr>
</tbody>
</table>
Research Question 3

Is insight related to depression, shame or recovery style in the experimental group diagnosed with schizophrenia?

The third research question was to do a partial replication to see if there are firstly, differences in levels of insight between patients with a diagnosis of schizophrenia who are depressed and those who are not depressed and secondly, the relationship between insight and recovery style. Table 11 shows the mean insight score for the depressed and non-depressed experimental group. Depression was defined using a cut-off of 15 on the BDI.

Table 11. Mean Insight score for the depressed and non-depressed experimental group.

<table>
<thead>
<tr>
<th></th>
<th>Depressed</th>
<th>Non-depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N=11</td>
<td>N=9</td>
</tr>
<tr>
<td>Mean IS Total</td>
<td>7.44</td>
<td>7.36</td>
</tr>
</tbody>
</table>

There was no significant difference between level of insight in the two groups (t (18) = .078, p = .94). From, an observation of the Pearson product moment correlation matrix shown in Table 7, insight was not correlated with recovery style (r = .070, p = .775) or shame (OAS: r = -.134, p = .574; Shame subscale of the TOSCA: r = -.244, p = .343).
**Research Question 4**

*Do the groups differ in reaction times on the different conditions of the Stroop Task?*

A 3 x 3 Anova was carried to examine differences in reaction times on the different conditions of the Stroop Task. The between-subjects factor was the three groups (schizophrenia experimental group, psychiatric control group and medical control group). The within-subjects factor was the three word types (shame, threat and instrument words). There was a statistically significant main effect of group ($F (1, 57) = 7.284 \ p = .002$). The mean reaction times for the experimental group were significantly greater than the mean reactions for the two control groups. There was no statistically significant difference between word type ($F (1, 57) = .112, \ p = .739$) indicating that the groups did not differ on reaction times for the three word types. There was no statistically significant interaction between word type and group ($F (2, 57) = .471, \ p = .627$). There were no differences in reaction times on the different conditions of the Stroop Task for either group.

**Research Question 5**

*Do the groups differ on measures of shame and guilt?*

A one-way Anova was carried out looking at the differences between the three groups on levels of shame as measured by the OAS and the Shame subscale of the TOSCA and guilt as measured by guilt subscale of the TOSCA. Table 12 shows the results of the analysis.
Table 12. Separate Anova's showing the group differences on the measures of shame and guilt.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariate F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAS Total</td>
<td>F(2, 57) = 9.26</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>TOSCA</td>
<td>F(2, 56) = 3.64</td>
<td>.032</td>
</tr>
<tr>
<td>Shame subscale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOSCA</td>
<td>F(2, 56) = 5.42</td>
<td>.007</td>
</tr>
<tr>
<td>Guilt subscale</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There were significant differences between the groups on the OAS total and the TOSCA shame and guilt subscales. Bonferroni post-hoc comparisons were carried out for the OAS Total and the TOSCA shame and guilt subscales to determine which groups were significantly different (see Table 13). The mean OAS total for the experimental group diagnosed with schizophrenia and the depressed group were significantly larger than the mean for the medical control group. There was a strong trend indicating that the mean TOSCA shame subscale total for the medical and psychiatric control groups were higher than the mean for the experimental group. The mean TOSCA guilt subscale total for the medical and psychiatric control groups were significantly higher than the mean for the experimental group diagnosed with schizophrenia.
Table 13. Bonferoni post-hoc tests to look at group differences on the measures of shame and guilt.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Schizophrenia Mean</th>
<th>Psychiatric Mean</th>
<th>Medical Mean</th>
<th>Mean Diff</th>
<th>Std Error</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAS Total</td>
<td>31.70</td>
<td>15.79</td>
<td>15.91</td>
<td>-5.00</td>
<td>4.87</td>
<td>.926</td>
</tr>
<tr>
<td></td>
<td>31.70</td>
<td>36.70</td>
<td>15.91</td>
<td>4.87</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36.70</td>
<td>36.70</td>
<td>20.91</td>
<td>4.87</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>TOSCA</td>
<td>42.30</td>
<td>49.68</td>
<td>-7.38</td>
<td>3.27</td>
<td>.084</td>
<td></td>
</tr>
<tr>
<td>Shame subscale</td>
<td>42.30</td>
<td>50.20</td>
<td>7.90</td>
<td>3.27</td>
<td>.057</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50.20</td>
<td>49.68</td>
<td>.52</td>
<td>3.27</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>TOSCA</td>
<td>3.29</td>
<td>4.26</td>
<td>-.97</td>
<td>.32</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td>Guilt subscale</td>
<td>3.29</td>
<td>4.16</td>
<td>-.87</td>
<td>.32</td>
<td>.029</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.16</td>
<td>4.26</td>
<td>-.10</td>
<td>.32</td>
<td>.99</td>
<td></td>
</tr>
</tbody>
</table>

A one-way Anova was carried out in order to determine whether there was a significant difference between levels of depression between the three groups. There was no statistically significant difference (F (2, 57) = 2.430, p = .097). It follows that the observed differences between the groups on the measures of shame and guilt are not attributable to differences between the groups on levels of depression.

As stated in the Section 3.3 of the Results chapter, age was positively correlated with the guilt subscale of the TOSCA. Given that the groups differed significantly on age (see Section 2.3 of the Methodology chapter), an ANCOVA was performed on the guilt measure to determine whether there was a significant effect of group after covaring for age. The main effect of group was not significant (F (2, 55) = 2.026, p = .142) and the covariate age was not significant (F (1, 55) = 1.322, p = .255). The model was significant (F (3, 55) = 3.968 p = .012). This suggests that age and guilt overlap and the observed
differences are not attributable independently to either age or group.

Research Question 6

Do participants suffering schizophrenia who are depressed have higher levels of shame and guilt compared to those who are not depressed?

Participants in the experimental group diagnosed with schizophrenia were divided into depressed and non-depressed using a cut-off of >15 on the BDI (Birchwood et al., 1993). Table 14 shows the means and standard deviations for the shame and guilt measures for the two groups. From an observation of the means, the mean shame scores for the depressed participants was higher on both the measures of shame and guilt. T-tests were carried out to see whether differences were significant. Only the OAS showed a significant difference (t (18) = 3.393, p =.003, two-tailed).

Table 14. Mean differences on the measures of shame and guilt for the depressed and non-depressed experimental group.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Depressed n=11</th>
<th>Non-depressed n=9</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAS Total</td>
<td>Mean 42.82</td>
<td>18.11</td>
</tr>
<tr>
<td></td>
<td>SD 15.42</td>
<td>16.80</td>
</tr>
<tr>
<td>TOSCA Shame Subscale</td>
<td>Mean 45.64</td>
<td>38.22</td>
</tr>
<tr>
<td></td>
<td>SD 10.19</td>
<td>11.71</td>
</tr>
<tr>
<td>TOSCA Guilt Subscale</td>
<td>Mean 3.33</td>
<td>3.25</td>
</tr>
<tr>
<td></td>
<td>SD 1.10</td>
<td>.51</td>
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</tbody>
</table>
Research Question 7

What measures predict level of depression?

Three hierarchical multiple regressions were performed, the first, to look at what measures predict levels of post-psychotic depression and second, to compare the findings with the psychiatric and medical control group. As stated in Section 3.2.2.2 of the results chapter, the data met the assumptions of multivariate statistics. With a sample size of 20 participants with no missing data, Tabachnick and Fidell (1996) suggests that the ratio of variables to cases should not extend beyond the minimum of 1 to 5 (4 variables to 20 cases). However, in order to explore the relation between levels of depression and other variables with a low sample size, the number of independent variables exceeded this limit. Some caution is therefore needed when interpreting the results. The BDI was the dependent variable. The demographic and illness variables, shame and guilt subscales of the TOSCA, BSI and OAS were chosen as the predictor variables. These analyses examined the predictive effects of variables entered at four steps. At step one, the demographic and illness variables were entered (age, gender, age at diagnosis, length of illness and hospital status). At step two, the shame and guilt subscales of the TOSCA were entered. These variables were entered following the demographic and illness variables as they were trait measures. At step three, the BSI was entered. At step four, the OAS was entered. The OAS was entered last to examine the predictive value after controlling for variance accounted for by the other variables. Table 15 shows the findings for the experimental group diagnosed with schizophrenia following the analyses.
Chapter 3: Results

At step one, the demographic and illness variables accounted for 54% of the variance in the BDI. The F value at step one was significant $F(5, 14) = 3.25, p = .037$. Individually, none of the variables were significant predictors of BDI total. At step two, the entry of the shame and guilt subscale of the TOSCA accounted for an additional 6% of the variance in the BDI. The addition of shame and guilt yielded a non-significant F change. At step three, the entry of the BSI accounted for an additional 7% of the variance in the BDI. The addition of BSI yielded a non-significant F change. At step four, the entry of the OAS accounted for an additional 14% of the variance. The OAS was a positive predictor of BDI and yielded a significant F change, $F(1, 10) = 7.431, p = .021$. At step 4, with all the variables entered into the equation, the model yielded a significant F value, $F(9, 10) = 4.734, p = .012$.

Table 15. Regression analyses for the BDI in the schizophrenia group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step</th>
<th>R2</th>
<th>F</th>
<th>Sig</th>
<th>R2 change</th>
<th>F change</th>
<th>Sig</th>
<th>F change</th>
</tr>
</thead>
<tbody>
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<td>Age</td>
<td>1</td>
<td>.537</td>
<td>3.249</td>
<td>.037</td>
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<td></td>
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<tr>
<td>Age at diagnosis</td>
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<td></td>
</tr>
<tr>
<td>Length of illness</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient / out-patient</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame subscale of the TOSCA</td>
<td>2</td>
<td>.593</td>
<td>2.500</td>
<td>.078</td>
<td>.056</td>
<td>.828</td>
<td>.460</td>
<td></td>
</tr>
<tr>
<td>Guilt subscale of the TOSCA</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI</td>
<td>3</td>
<td>.669</td>
<td>2.774</td>
<td>.060</td>
<td>.075</td>
<td>2.503</td>
<td>.142</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAS</td>
<td>4</td>
<td>.810</td>
<td>4.734</td>
<td>.012</td>
<td>.141</td>
<td>7.431</td>
<td>.021</td>
<td></td>
</tr>
</tbody>
</table>

84
A second analysis was performed for the psychiatric control group. Table 16 shows the findings of the hierarchical multiple regression for the psychiatric control group. At step one, the demographic and illness variables accounted for 38% of the variance in the BDI. The F value at step one was not significant. At step two, the entry of the shame and guilt subscale of the TOSCA accounted for an additional 8% of the variance in the BDI. The addition of shame and guilt yielded a non-significant F change. At step three, the entry of the BSI accounted for an additional 11% of the variance in the BDI. The addition of BSI yielded a non-significant F change. At step four, the entry of the OAS accounted for an additional 3% of the variance. The addition of the OAS yielded a non-significant F change. At step four, with all the variables entered into the equation the model yielded a non-significant F value, F (9, 10) = 1.597, p = .238.

Table 16. Regression analyses for the BDI in the psychiatric control group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step</th>
<th>R2</th>
<th>F (df)</th>
<th>Sig</th>
<th>R2 change</th>
<th>F change (df)</th>
<th>Sig F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>.377</td>
<td>1.697</td>
<td>.200</td>
<td>----------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient / out-patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame subscale of the TOSCA</td>
<td>2</td>
<td>.459</td>
<td>1.454</td>
<td>.271</td>
<td>.081</td>
<td>.904</td>
<td>.431</td>
</tr>
<tr>
<td>Guilt subscale of the TOSCA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI</td>
<td>3</td>
<td>.564</td>
<td>1.780</td>
<td>.185</td>
<td>.105</td>
<td>2.656</td>
<td>.131</td>
</tr>
<tr>
<td>OAS</td>
<td>4</td>
<td>.590</td>
<td>1.597</td>
<td>.238</td>
<td>.026</td>
<td>.622</td>
<td>.449</td>
</tr>
</tbody>
</table>
A third analysis was performed for the medical control group. Inpatient / out-patient status and BSI were not entered into the equation because these variables were not relevant to the medical control group. Table 17 shows the findings of the hierarchical multiple regression for the medical control group.

Table 17. Regression analyses for the BDI in the medical control group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step</th>
<th>R2</th>
<th>F (df)</th>
<th>Sig</th>
<th>R2 change</th>
<th>F change (df)</th>
<th>Sig F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>.201</td>
<td>.819</td>
<td>.535</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender Age at diagnosis</td>
<td></td>
<td></td>
<td>(4, 13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame subscale of the TOSCA</td>
<td>2</td>
<td>.282</td>
<td>.721</td>
<td>.642</td>
<td>.081</td>
<td>.620</td>
<td>.555</td>
</tr>
<tr>
<td>Guilt subscale of the TOSCA</td>
<td></td>
<td></td>
<td>(6, 11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAS</td>
<td>3</td>
<td>.504</td>
<td>1.451</td>
<td>.286</td>
<td>.222</td>
<td>4.466</td>
<td>.061</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7, 10)</td>
<td></td>
<td></td>
<td>(1,10)</td>
<td></td>
</tr>
</tbody>
</table>

At step one, the demographic and illness variables accounted for 20% of the variance in the BDI. The F value at step one was not significant. At step two, the entry of the shame and guilt subscale of the TOSCA accounted for an additional 8% of the variance in the BDI. The addition of shame and guilt yielded a non-significant F change. At step three, the entry of the OAS accounted for an additional 22% of the variance. The addition of OAS yielded a non-significant F change. At step three, with all the variables entered into the equation the model yielded a non-significant F value, F (7, 10) = 1.451, p = .286.
CHAPTER 4: DISCUSSION

4.1 Overview

The chapter begins with a brief summary of the aims of the study and the main findings. These findings are then interpreted in the context of the research questions and the existing literature in the field. The limitations of the study are reviewed. Finally, the implications of the findings are discussed and suggestions for future research are made.

4.2 Summary of the Aims, Method and Research Questions

The main objective of the study was to understand individual differences in adaptation to schizophrenia, in particular, the relationship between shame and post-psychotic depression. Quantitative data was collected on 20 individuals with a diagnosis of schizophrenia. Data was also collected on two control groups. The psychiatric control group represented a control group for psychiatric diagnosis and consisted of twenty individuals presenting to psychology or psychiatric services with symptoms of depression who were not suffering from schizophrenia. The medical control group represented a control for chronic illness, who as a group, were likely to suffer symptoms of depression. The group consisted of twenty individuals with a diagnosis of rheumatoid arthritis who presented at a rheumatoid arthritis outpatient clinic. None of the participants in the two control groups had a known history of schizophrenia. The participants completed a Stroop
task (constructed by the experimenter) to measure reaction times on the different conditions of the Stroop task. This was followed by a series of self-report questionnaires measuring levels of shame, guilt, depression, suicidal ideation, insight and recovery style from an illness.

The study aimed to examine seven research questions. The first two questions consisted of a partial replication of previous research to examine firstly, the frequency of depression within the experimental group diagnosed with schizophrenia and secondly, to examine differences in recovery style within this group. The third question examined the relationship between insight and the constructs of depression, shame and recovery style. The fourth question examined group differences in reaction times on the different conditions of the Stroop task. The next two questions were concerned with differences on measures of shame and guilt. Firstly, are there differences in levels of shame and guilt among the three groups? Secondly, do patients with a diagnosis of schizophrenia who are depressed and non-depressed differ in terms of levels of shame and guilt? The final question examined, firstly, what variables can predict post-psychotic depression and secondly, to compare the findings with the psychiatric and medical control group.

4.3 Summary of the Main Findings

The study showed:

• Depression (at least mild depression) was a frequent phenomenon for patients with a diagnosis of schizophrenia. Using a cut-off score of 15 on the BDI, 55% of the
participants were depressed.

- Recovery style and insight failed to distinguish depressed and non-depressed participants with a diagnosis of schizophrenia.
- Level of insight was not associated with depression, shame or recovery style.
- Reaction times on the three conditions of the Stroop task failed to distinguish among the three groups.
- The groups differed on measures of shame and guilt. Specifically, the medical control group had a significantly lower mean total score on the OAS, the global measure of shame compared with the other two groups. There was a strong trend indicating that the experimental group had a lower mean total score on the shame subscale of the TOSCA, the trait measure of shame, compared with the other two groups. The experimental group had a significantly lower mean total score on the guilt subscale of the TOSCA, the trait measure of guilt compared to the other two groups.
- Within the experimental group, the depressed participants had a significantly higher mean score of the OAS compared with the non-depressed participants. There were no significant differences on the shame and guilt subscale of the TOSCA.
- Within the experimental group, the OAS was a significant predictor of depression even after accounting for variance attributable to the demographic and illness variables (age, age at onset of illness, gender, length of illness and hospital status), the shame and guilt trait measures and the measure of suicidal ideation. Within the psychiatric control group, the OAS was not a significant predictor of depression.
Chapter 4: Discussion

after accounting for the variance attributable to the demographic and illness
variables (age, age at onset of illness, gender, length of illness and hospital status),
the shame and guilt trait measures and the measure of suicidal ideation. Within the
medical control group, despite the fewer number of predictor variables, the OAS
was not a significant predictor of depression after accounting for the variance
attributable to the other variables.

4.4 Interpreting the Results

The present study found that depression was common (55%) in individuals with a
diagnosis of schizophrenia. As has already been stated, using the same criteria, Birchwood
et al. (1993) found that in their sample, 29% were classified as depressed and 71% were
classified as non-depressed. Estimates of depression within this client group vary between
75% and 22%, partly depending on the criteria used (Birchwood et al., 1993; Koreen et
al., 1993; Siris, 1991). Birchwood et al. (1993) used an entirely out-patient sample which
may explain the difference between Birchwood's study and the current findings. The
present study found that over half of the individuals suffering schizophrenia reported one
or more previous suicide attempts. Together these findings confirm the clinical
significance of depression in this client group.

In the present study, only 16% of the sample was classified as adopting a sealing over
recovery style. With such a small sample, making strong conclusions about recovery style
and depression is difficult. In contrast, Drayton et al. (1998) found that 47% of their
sample adopted a sealing over recovery style. In the study by Drayton and colleagues, depression was measured using the Calgary Depression Scale for Schizophrenia (CDS: Addington et al., 1993). Drayton and colleagues found that all participants assessed as being moderately and severely depressed were in the sealing over group. Using equivalent categories of the BDI, the present study found only one of the seven participants assessed as being moderately and severely depressed was in the sealing over group. Despite the limited numbers in the present study, depression was not linked exclusively to a sealing over recovery style. One possible explanation is the differences in sampling between the studies. Drayton et al. (1998) used an entirely out-patient sample whereas the present used almost exclusively inpatients. Sealing over suggests some sort of denial of illness. It is perhaps difficult for individuals to deny their illness when they are in hospital hence the low number of participants in the sealing over category in the present study. An alternative explanation is the differences are attributable to the differences in the two measures of depression.

In the present study, the Insight scale failed to distinguish between depressed and non-depressed individuals with a diagnosis of schizophrenia. The existing literature on insight is mixed. Longitudinal studies in this area suggest that insight increases with recovery from acute symptoms (Birchwood et al., 1993; McEvoy et al., 1989), however increases in insight are associated with increases in psychological distress, in particular depression (e.g. Carroll et al., 1999). The present study did not examine level of positive symptoms so no comparisons can be made concerning the relationship between insight and recovery from acute symptoms. One possible view is it is not the level of insight individuals have
but the change in levels of insight with recovery. However, the present study was cross sectional and cannot address these issues.

From an observation of the Pearson product moment correlation matrix shown in Table 7, insight was not significantly correlated with either the trait measure of shame or the global measure of shame. It might be argued that if an individual does not have insight they cannot experience shame. However, others have argued that lack of insight is a defence against the trauma of the illness (e.g. David, 1990). If some but not all individuals use lack of insight as a defence strategy it is perhaps not surprising that insight is not associated with shame or depression. The present study found no relation between insight and recovery style. This is in accordance with previous research (Drayton et al., 1998), discussed in Section 1.3.2 of the introduction.

The study failed to find any differences between the groups in reaction times on the different conditions of the Stroop Task. This can be contrasted with the observed differences on the shame measures (OAS, shame subscale of the TOSCA) which have established validity and reliability (Gilbert & Andrews, 1998). Interestingly, the study also failed to find any differences in the mean times between the types of words emotional and neutral words. This is contrary to well established previous research suggesting that emotionally salient words interfere with the ability to name the colour of the ink (Dalgleish, 1995; Kinderman, 1993; Stroop, 1935). The failure to find this basic difference leads one to question the validity of the shame Stroop task used in the present study. This is discussed further in the Section 4.5 of the Discussion under the limitations of the study.
The present study found group differences on measures of shame and guilt. Specifically, the medical control group reported significantly lower mean total scores on the OAS compared to the other two groups. The OAS is a global measure of shame. The OAS explores the expectations of how the individual perceives others see or judge them and as such was considered to capture stigmatisation. Individuals with a diagnosis of rheumatoid arthritis experience less global shame. One possible explanation is the diagnosis of rheumatoid arthritis is less stigmatising. Previous research highlights mental illness and contact with psychiatric services as stigmatising (Hayward & Bright, 1997). Although equally high levels of depression were reported by the medical control group none of the individuals in the study were receiving treatment or having any contact with psychiatric services. This suggests that it is perhaps the label of mental illness that carries the stigma rather than the symptoms experienced by the individuals. The study found no differences between the experimental group and the psychiatric control group. Although there is no previous research examining levels of global shame in individuals diagnosed with schizophrenia, it is postulated by many theorists, e.g. Goffman (1968) that schizophrenia, perhaps more than any other mental illness is associated with stigmatization. However, using the global measure of shame as an index of shame and stigmatization, the diagnosis of schizophrenia did not distinguish them from individuals without schizophrenia suffering psychiatric illness.

On the other measure of shame, the shame subscale of the TOSCA, the experimental group had a lower mean total score compared with the other two groups, although this was a trend, so some caution needs to be given to any interpretations of this finding.
Nevertheless, it is an interesting finding. The TOSCA is a trait measure of shame. Individuals scoring high on the TOSCA are considered shame prone individuals. H. Lewis (1971) noted that there are individual differences in the degree to which people experience shame or guilt across a range of situations. H. Lewis (1971) postulated that shame prone persons are vulnerable primarily to affective disorders (particularly depression) whereas guilt prone persons are more vulnerable to thought-related disorders (paranoia, obsessive compulsive syndromes). It is not possible to make any interpretations concerning causality from the findings of the present study. However, the present study offers support that individuals who suffer from schizophrenia are less shame prone than the two control groups.

There was no support for the suggestion that individuals suffering schizophrenia are more guilt prone. The inverse was true. Individuals suffering from schizophrenia were less prone to guilt compared with the other two groups. The TOSCA is a scenario-based measure of self-conscious emotions which is concerned with emotions in relation to others. The lower shame and guilt scores compared with the two control groups may reflect a preoccupation with the self and an inability to be sensitive to the feelings of others. However, the observed group differences on the measure of guilt were not apparent after covaring for group differences on age so some caution needs to be given to any interpretations.

Although there are distinctions between the groups on levels of shame, given the association between shame and depression (Brown et al., 1995; Tangney et al., 1992) one
possible explanation is that the differences in levels of shame between the groups is due to differences in levels of depression. In an attempt to rule out that possible explanation the groups were compared on levels of depression. The groups did not differ significantly on levels of depression. These findings are important because they suggest that differences in shame scores between the groups can therefore not be attributed to differences in level of depression. This is in line with research by Tangney et al. (1992) that while shame is associated with depression it can be distinguished from depression. Very few studies make this distinction, and without establishing causality the concept of shame has no explanatory value if it cannot be distinguished from depression.

The present study found that among individuals diagnosed with schizophrenia, depressed individuals had higher levels of shame on the OAS, the global measure of shame but not on the shame subscale of the TOSCA. This is contrary to previous studies that suggest depression is associated with levels of shame as measured by the TOSCA (e.g. Tangney et al., 1992). The difference between the present study and Tangney et al.’s (1992) study was the findings from the present study were obtained from individuals suffering from schizophrenia whereas the data from Tangney’s study was collected on a non-clinical sample (college students).

One possible explanation is the two shame measures capture different aspects of shame. The OAS explores the expectations of how the individual perceives how others see or judge them. The individual with schizophrenia is perhaps very sensitive to the negative perception of others, real or imagined. Indeed, schizophrenia is characterised by feelings
of persecution (Sims, 1996). The shame subscale of the TOSCA on the other hand is concerned with feelings of shame associated with wrongs towards others. Evidence suggests that schizophrenia is associated with lack of empathy and loss of affect (Sims, 1996). The preoccupation with the self may make them less sensitive to others’ feelings. It follows that the violation of others’ feelings may not generate the same amount of shame as would the perceived and/or real violation of their own feelings.

In considering what variables predict depression, within the experimental group the OAS was a significant predictor of depression even after accounting for the variance attributable to the demographic and illness variables (age, age at onset of illness, gender, length of illness and hospital status), the shame and guilt trait measures and the measure of suicidal ideation. This highlights the strong association between the global measure of shame and depression.

Within the psychiatric control group, the OAS was not a significant predictor of depression after accounting for the variance attributable to the demographic and illness variables (age, age at onset of illness, gender, length of illness and hospital status), the shame and guilt trait measures and the measure of suicidal ideation. Similarly, within the medical control group, the OAS was not a significant predictor of depression after accounting for the variance attributable to the other variables. This was despite the fewer number of predictor variables used in the regression analyses.

Taken together, these findings highlight the importance of the OAS in the experimental
group diagnosed with schizophrenia. The finding suggests that shame, at least global shame in schizophrenia is predictive of depression but not in the psychiatric control group or the medical control group after accounting for variance attributable to the other variables. This is an important finding. Prior to computing the regression analyses, it was not possible to distinguish the experimental group and the psychiatric control on the basis of levels of global shame (see Question 5 of the Results chapter). The findings of the regression analyses would suggest that compared with the psychiatric control group, global shame has a greater association with depression in the experimental group. This supports the importance of shame in schizophrenia as speculated in the Introduction. However, given that the study has a cross sectional design it is not possible to examine the causal relationship between shame and depression.

4.5 Limitations of the Study

4.5.1 Generalisability of the Findings

Perhaps the major limitation of this study is the low sample size. With only twenty participants in each group one has low statistical power and is likely to make a type II error and fail to reject the null hypothesis. In order to maintain statistical power, the study typically did not adjust the significance level on the basis of the number of statistical tests carried out. However, this leads one to possibly make a type I error and wrongly reject the null hypothesis. The author of the present study felt it was better to maximise statistical power than to wrongly reject the experimental hypothesis. However, due to this
limitation all findings need to be considered with caution and need to be replicated with a larger sample.

4.5.2 Sample

Another limit to the external validity of the findings relates to the restricted sample of the participants. In relation to the experimental group diagnosed with schizophrenia, individuals who were floridly psychotic were not approached to take part in the study. Even when individuals were considered suitable to take part, many individuals approached particularly in the group diagnosed with schizophrenia refused. It is uncertain whether those who chose to take part in the study were similar to, or different from those who did not take part in the study. This is particularly important in relation to the study of shame as shame is considered to be characterised by avoidance (Tangney & Fisher, 1995). It follows that those highest in shame may avoid taking part in the study.

With regard to the depressed control group, as stated in the Introduction, the group does not represent a group suffering from unipolar depression. They represent a psychiatric control group who presented to psychology or psychiatric services with symptoms of depression. They are not a homogenous group other than having never received a diagnosis of schizophrenia. Details of individual psychiatric histories were not examined. As discussed in the introduction, shame has been linked to a range of disorders including depression and further research is needed to delineate the impact of shame on a range of psychiatric disorders.
Due to the difficulties in data collection and the small sample sizes, individuals were not matched prior to inclusion in the study on the demographic variables such as age, gender and ethnicity or illness variables such as length of illness and hospital status. Research supports the importance of these variables. H. Lewis (1971) asserted that women are more prone to shame and men are more prone to guilt. Tangney (1989) found that women were more prone to shame and guilt as measured by the TOSCA. Similarly, Kitayama, Markus & Matsumoto (1995) and Greenwald & Harder (1998) maintain that because there are cultural variations in the construction of the self there are likely to be cultural differences on levels of self-conscious emotions. They maintain that some cultures can be considered cultures of honour and attacks on identity are likely to lead to greater feelings of shame. The study failed to control for chronicity and the likely impact this is going to have on the individual’s sense of self. This is perhaps important as previous research suggests that loss of status associated with chronicity is linked to levels of depression (Rooke & Birchwood, 1998). As already stated in the introduction, as a group, individuals with a diagnosis of schizophrenia, present with a remarkably diverse range of symptoms. With a small sample size it is not possible to consider differences within the experimental group, e.g. those who suffer persecutory delusions and those who do not.

As stated in Section 2.3 of the Methodology chapter, there were group differences on age of participants, gender, age at onset of illness and hospital status. As stated in Section 3.3 of the Results chapter, there were no significant differences on the measures under investigation based on gender and hospital status and there were no significant correlations between the measures under investigation and age at onset of illness. This
would suggest that group differences on measures of shame and guilt are not attributable to these variables. However, future research should attempt to collect a more homogeneous sample and or examine the interaction between these variables, the groups and the measures under investigation in order to avoid making a type I error.

4.5.3 Methodology and Research Design

The study used a cross sectional design to examine the relationship between shame and depression and other variables. The study enables one to examine the correlations between variables. However, with such a design, observations are made at the same point in time and this does not permit one to make casual inferences. The observed association between shame and depression does not allow one to make the inference that shame causes depression or vice versa. A longitudinal design would enable one to truly examine the casual relationship between shame and depression. The limitations of time and resources prevented the possibility of a longitudinal study.

An alternative approach would be to examine the mediating effects of variables (e.g. does shame mediate post-psychotic depression). This would require the use of a statistical procedure known as latent variable modelling. This requires a large sample, more than that used in the present study. Comrey & Lee (1992) give guide sample sizes of 50 as very poor, 100 as poor, 200 as fair, 500 as very good and 1000 as excellent. Tabchnick & Fidell (1996) states that as a general rule of thumb, it is comforting to have at least 300 cases for structural equation modelling.
The present study relied entirely on information obtained from questionnaires. The lack of any qualitative information is a limitation of the study. Shame is a complex emotion and the additional use of qualitative data to support the findings of quantitative data could only increase our understanding of shame and its relationship to post-psychotic depression. Andrews & Hunter (1997) has recently developed a semi-structured interview measure of shame. The use of semi-structured interviews for instance could examine what aspects of an individual’s experience lead to feelings of shame and poor adjustment to their illness. Is it the loss of a valued social role or is it being in hospital perhaps under section? Rooke & Birchwood (1998) found that feeling the illness is beyond their control, a sense of entrapment and a greater drop in employment status, high insight and loss of social role were independently linked to depression. As already discussed in the introduction, a diagnosis of schizophrenia often involves many losses and as speculated, a revised identity. This is in accordance with a ranking theory of shame (Gilbert, 1997). However, existing quantitative methods such as the questionnaires used in this study fall short in explaining shame and its relationship to the experience of suffering from schizophrenia. The present study suggests that shame is an important affect in the individuals’ experience of their illness. Further research including qualitative data will further explain the nature of this relationship.

4.5.4 Measures

Shame: The OAS is a global measure of shame. It is not truly a state measure of shame because it does not ask the participant to comment on how they are feeling in a set period
Chapter 4: Discussion

of time (e.g. in the last week). Similarly, it does not explicitly ask subjects to comment on their feelings of shame in relation to their illness. Question 1. reads: ‘I feel other people see me as not good enough’. This could be reworded to ‘Due to (or, Since) my illness I feel other people see me as not good enough’. This may help distinguish between levels of global shame between the experimental group and the psychiatric control group.

The TOSCA provides a trait measure of shame and guilt. It is considered relatively stable and distinguishes individuals who are shame prone and guilt prone. The TOSCA also measures pride (alpha & beta), detached and externalisation. Although the means and Pearson product moment correlations are reported, these variables were not used in any further analyses. This was because the study was specifically concerned with the concept of shame. In the present study, the experimental group had higher mean total scores compared with the other two groups on the detached, externalisation and pride scales. It would be interesting in a further paper to examine their relationship between depression and shame within the three groups. Tangney et al. (1996) state that levels of pride are not markedly adaptive or maladaptive in non-clinical samples but further research is required in a clinical population.

Reaction times to the three conditions of the Stroop task failed to distinguish between the groups and was not correlated with the shame measures. In reflection, there is a question concerning the validity and reliability of the constructed measure. The Stroop task was carried out using blocks of twenty words drawn from the same stimulus category presented on cards. With a list of only twenty words, the differences are likely to be small.
That coupled with a low sample size means that there is low statistical power to reject the null hypothesis. Dalgleish (1995) used twenty words but repeated the words in random order five times giving a block of 100 words. This is likely to increase the effect of any observed differences. This is an important limitation of this study, and future research is required before this paradigm is rejected. An alternative approach is to use a computer presentation format. The colour naming words are presented one by one on a computer screen and participants use a button press or voice key to name the colours. The stimuli are randomly mixed and the subjects’ individual reaction times for each word and each word category are used in the analysis. Both methods have been shown to be reliable and valid measures of the Stroop (Dalgleish, 1995). The advantage of the computer method is the words are randomised and you avoid the problem of order effects.

Depression: Depression was measured using the BDI which is a widely used measure both clinically and for research purposes (Beck, 1987). However, there are a number of limitations with the measure in relation to the present study. The BDI was chosen because it is a general measure of depression which would be suitable for all three groups. However, there are specific measures of depression for individuals with a diagnosis of schizophrenia (e.g. Calgary Depression Scale) which is considered a superior measure of depression in schizophrenia (Addington et al., 1993). However it was not used because it does not allow for comparisons between the three groups. Similarly, in its defence, the BDI has been widely used for research purposes with schizophrenia (e.g. Birchwood et al., 1993).
Chapter 4: Discussion

In relation to the medical control group, the participants were significantly older than the other two groups. The mean age for the group 59.80 compared with 30.35 for the experimental group and 42.95 for the psychiatric control group. Apart from the possible confounding effects of age, there is a question of whether the BDI is a valid measure of depression with an older sample size. Certain items such as physical complaints, disturbed sleep and loss of libido are likely to be compounded by age. Thus, the level of depression in the medical group as measured by the BDI, may have been an over estimation of their true level of depression. This may explain why none of individuals in the medical control group suffered any suicidal ideation despite equally high levels of depression (compared with the experimental group and psychiatric control group). In its defence, the BDI is perhaps the most well used questionnaire measure of depression and it is concerned with depressive symptomatology in the last week rather than changes over years that may be attributable to age.

The cut-off of 15 on the BDI was chosen to replicate previous research findings concerning the prevalence of depressive symptomatology. However, it is important to hold in mind that a score of greater than 15 does not confirm that an individual is suffering clinical depression. Beck & Steer, (1987) recommend that a score of 25 and above is used to define clinical depression. With this in mind, one has to be cautious when talking about depressed and non-depressed participants.

The Insight scale was not associated with level of depression, shame or recovery style. As stated in the results, the scale had a low Cronbach alpha coefficient of 0.4 and caution
needed to be given when interpreting the results. As discussed in the Introduction, the literature on the relationship between insight and psychopathology is mixed. The present study found no relationship between insight and the variables of shame and depression. The difficulty in interpreting these findings, is in part, because it is speculated that lack of insight might be a defence against painful emotions. However, the lack of predictive power raises questions concerning its future use.

4.6 General Implications

4.6.1 Academic and Research Implications

The study aimed to investigate the relationship between shame and post-psychotic depression. The study highlights the association between shame and depression. The use of two control groups enabled one to establish that differences in shame among the three groups is not attributable to level of depression. Evidence would suggest that psychiatric diagnosis per se (irrespective of whether they were suffering from schizophrenia) was the most important factor distinguishing the groups on global measures of shame. However, using multiple regression analysis, the findings of the present study suggest that the association between global shame and depression is greater in the experimental group diagnosed with schizophrenia compared with the psychiatric group.

The schizophrenia experimental group and the psychiatric control group also differed on the trait measure of shame, specifically the experimental group diagnosed with
schizophrenia had lower levels of trait shame. The finding highlights an important distinction in the concept of shame. Shame can result from the perceived negative evaluation of others (as measured by the OAS) and/or shame as a personality trait, which captures feelings of shame following specific actions on the part of the individual (as measured by the TOSCA). This distinction seems important among individuals with a diagnosis of schizophrenia and needs further research.

4.6.2 Clinical and Professional Implications

Given the clinical relevance of shame there is minimal research directed towards treatment-related issues. Retzinger (1998) has written about the effect of shame on the therapeutic relationship. Writing from a psychoanalytic perspective, Retzinger notes that if shame is evoked but not acknowledged, anger may be aroused by the belief that the other does not value the self. This has important implications for psychologists working therapeutically but also other professionals working clinically. H. Lewis (1971) following an analysis of hundreds of transcribed therapy sessions, concluded: ‘shame in the patient-therapist relationship was a major contributor to the negative therapeutic reaction’ (p. 11). This is highlighted by the famous case of Dora (Freud, 1915/1956) who left analysis in a state of humiliation and shame.

Beginning therapy is, by its very nature, shameful as it implies an inability to cope and a feeling of being exposed. An understanding of shame is likely to benefit all clinicians. It is important to hold in mind that all individuals are prone to feelings of shame and as such,
the sense of shame may occur on the part of the therapist as well as the patient. Greenwald & Harder (1998) remind the reader that shame has adaptive functions and rather than attempting to eradicate shame, therapist and client can work together to modify its maladaptive or excessive manifestations. Tangney et al. (1996) commenting on differences between shame and guilt prone styles have suggested that given the negative association between shame prone style and psychopathology, cognitive intervention should aim to transform maladaptive shame reactions into more functional guilt reactions which may reduce the impact of depression. The present study found no association between guilt and depression despite the fact that shame and guilt was highly correlated. Theorizing suggests that guilt prone styles are associated with adaptive behaviour, reparative action and the maintenance of relationships (Tangney et al., 1992). The speculated preoccupation with the self associated with schizophrenia is likely to inhibit the formation and maintenance of personal relationships. This is important as lack of social support is a vulnerability factor for depression (Brown & Harris, 1989).

4.7 Directions for Future Research

Many of these suggestions broadly parallel the limitations detailed above.
Chapter 4: Discussion

It is important to replicate the study with a larger sample size, and attempt to collect a more homogeneous sample. It is important to consider the interaction between the measures of shame, guilt and depression and the demographic and illness variables. Greater specificity is required in relation to any psychiatric control group to consider the relationship between levels of shame and different diagnoses. A larger sample size would also allow the possibility to examine the mediating effects of shame on post-psychotic depression.

A longitudinal design would enable the causal relationship between shame, and post-psychotic depression to be examined. It has not been possible to determine the causal nature concerning the link between shame and depression. Does the tendency to experience shame place people at risk of depression? Or, is shame simply a symptom or by-product of depression? The current author is in agreement with Tangney (1989) that the relationship is likely to be bidirectional.

In addition to collecting quantitative data there is a need for qualitative data to consider what aspects affect an individual's adjustment to their illness. Recovery from, and adjusting to, a diagnosis of schizophrenia is complex. A greater understanding may enable clinicians to reduce the devastating impact the illness has on the lives of many who suffer from schizophrenia. Possible methodologies include discourse analysis (Potter & Wetherell, 1987) and grounded theory approach (Glaser & Strauss, 1967; Strauss & Corbin, 1990). However, future research should not abandon quantitative methods. Similarly new measures need to be developed which capture the variables under
investigation. In particular, the distinction highlighted in the study between shame associated with the perceived negative views of others and the shame associated with wrongs towards others.

Tangney et al. (1996) has highlighted the association between anger and shame proneness. It is speculated that shame may lead to defensive retaliative anger. Given that the findings of present study highlight the role of shame in schizophrenia, future research could examine the relationship between shame and anger in individuals with a diagnosis of schizophrenia. Increasing our understanding of aggression by patients has important clinical relevance and any research that sheds light onto this area would be welcomed. There is extensive literature on the sick role in individuals suffering chronic schizophrenia (e.g. Blackwell, 1989). Blackwell (1989) maintains that one of most striking features about the literature on the “sick role” is the absence of treatment interventions. Research on shame may provide insights and treatment strategies aimed at dealing with shame and may lead individuals to take a more active and adaptive approach to their illness.

The findings of the present study taken together, confirm support for a model of shame and depression. Shame offers a framework for understanding the impact of an illness on the self. Such a model can be used for research with other clinical samples where stigmatisation and shame is suspected to be important (e.g. individuals suffering from AIDS.)
4.8 Closing Remarks

Traditionally, psychiatry, and the medical model has dominated the field of schizophrenia. Psychological theories and the value of psychological interventions were de-emphasised in favour of the scientist *Zeitgeist* which has emphasised the importance of biological determinants of psychotic behaviour. This is in part because of the relative success of biological therapies and the past failure of psychological therapies. This position is slowly changing following criticisms of the medical model (see Boyle, 1991 for a review), the emphasis of the scientist-practioner model within clinical psychology and the growing acceptance of a biopsychosocial framework for understanding all illness. This is highlighted by the relative success of cognitive behavioural interventions with psychotic disorders (see Kuipers, Garety, Fowler, Dunn, Bebbington, Freeman & Hadley, 1997). Our current understanding of differences in recovery from an acute episode of schizophrenia is limited. Recent advances in our knowledge of shame offer a fruitful basis for increasing our understanding of this process.
REFERENCES


Appendix 1: Stroop Words
<table>
<thead>
<tr>
<th>Shame words</th>
</tr>
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<tbody>
<tr>
<td>shame</td>
</tr>
<tr>
<td>exposed</td>
</tr>
<tr>
<td>embarrassed</td>
</tr>
<tr>
<td>humiliate</td>
</tr>
<tr>
<td>mocked</td>
</tr>
<tr>
<td>dishonour</td>
</tr>
<tr>
<td>disgrace</td>
</tr>
<tr>
<td>disgust</td>
</tr>
<tr>
<td>crushed</td>
</tr>
<tr>
<td>degrade</td>
</tr>
</tbody>
</table>
(Threat words)

- trembling
- panic
- hysterical
- perturbed
- terrify
- fright
- horrid
- dread
- tense
- punish

- jumpy
- distress
- menacing
- scared
- petrify
- sweat
- worry
- alarmed
- threat
- wrath
<table>
<thead>
<tr>
<th>Instrument words</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>banjo</td>
<td>clarinet</td>
</tr>
<tr>
<td>tambourine</td>
<td>saxophone</td>
</tr>
<tr>
<td>bagpipe</td>
<td>guitar</td>
</tr>
<tr>
<td>violin</td>
<td>trumpet</td>
</tr>
<tr>
<td>piccolo</td>
<td>piano</td>
</tr>
<tr>
<td>cornet</td>
<td>cymbal</td>
</tr>
<tr>
<td>bugle</td>
<td>bassoon</td>
</tr>
<tr>
<td>rattle</td>
<td>viola</td>
</tr>
<tr>
<td>sitar</td>
<td>flute</td>
</tr>
<tr>
<td>cello</td>
<td>harp</td>
</tr>
</tbody>
</table>
Appendix 2: The Other As Shamer Scale
OAS

Directions: Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. Most of these statements describe feelings and experiences that are generally painful or negative in some way. Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find that these statements describe the way you feel a good deal of the time, it can be painful just reading them. Try and be as honest as you can in responding.

Read each statement carefully and circle the number to the left of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. DO NOT OMIT ANY ITEM.

<table>
<thead>
<tr>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>NEVER</td>
</tr>
</tbody>
</table>

1. I feel other people see me as not good enough.
2. I think that other people look down on me.
3. Other people put me down a lot.
4. I feel insecure about others opinion of me.
5. Other people see me as not measuring up to them.
6. Other people see me as small and insignificant.
7. Other people see me as defective as a person.
8. People see me as unimportant compared to others.
9. Other people look for my faults.
10. People see me as striving for perfection but being unable to reach my own standards.
<table>
<thead>
<tr>
<th>SCALE</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVER</td>
<td>SELLDOM</td>
<td>SOMETIMES</td>
<td>OFTEN</td>
<td>ALMOST</td>
<td>ALWAYS</td>
</tr>
</tbody>
</table>

11. I think others are able to see my defects.

12. Others are critical or punishing when I make a mistake.

13. People distance themselves from me when I make mistakes.

14. Other people always remember my mistakes.

15. Others see me as fragile.

16. Others see me as empty and unfulfilled.

17. Others think there is something missing in me.

18. Other people think I have lost control over my body and feelings.
Appendix 3: Test of Self Conscious Emotions
Below are situations that people are likely to encounter in day-to-day life, followed by several common reactions to those situations.

As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in each of the ways described. We ask you to rate all responses because people may feel or react more than one way to the same situation, or they may react different ways at different times.

For example:

A. You wake up early one Saturday morning. It is cold and rainy outside.

a) You would telephone a friend to catch up on news.  
   1---2---3---4---5  
   not likely  very likely
   a circle around 4

b) You would take the extra time to read the paper.  
   1---2---3---4---5  
   not likely  very likely
   a circle around 3

c) You would feel disappointed that it's raining.  
   1---2---3---4---5  
   not likely  very likely
   a circle around 2

d) You would wonder why you woke up so early.  
   1---2---3---4---5  
   not likely  very likely
   a circle around 1

In the above example, I've rated ALL of the answers by circling a number. I circled a "1" for answer (a) because I wouldn't want to wake up a friend very early on a Saturday morning -- so it's not at all likely that I would do that. I circled a "5" for answer (b) because I almost always read the paper if I have time in the morning (very likely). I circled a "3" for answer (c) because for me it's about half and half. Sometimes I would be disappointed about the rain and sometimes I wouldn't -- it would depend on what I had planned. And I circled a "4" for answer (d) because I would probably wonder why I had awakened so early.

Please do not skip any items -- rate all responses.
1. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up.

a) You would think: "I'm inconsiderate."  
   
   1---2---3---4---5  
   not likely very likely

b) You would think: "Well, they'll understand."  
   
   1---2---3---4---5  
   not likely very likely

c) You would try to make it up to him as soon as possible.  
   
   1---2---3---4---5  
   not likely very likely

d) You would think: "My boss distracted me just before lunch."  
   
   1---2---3---4---5  
   not likely very likely

2. You break something at work and then hide it.

a) You would think: "This is making me anxious. I need to either fix it or get someone else to."  
   
   1---2---3---4---5  
   not likely very likely

b) You would think about quitting.  
   
   1---2---3---4---5  
   not likely very likely

c) You would think: "A lot of things aren't made very well these days."  
   
   1---2---3---4---5  
   not likely very likely

d) You would think: "It was only an accident."  
   
   1---2---3---4---5  
   not likely very likely

3. You are out with friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company.

a) You would think: "I should have been aware of what my best friend is feeling."  
   
   1---2---3---4---5  
   not likely very likely

b) You would feel happy with your appearance and personality.  
   
   1---2---3---4---5  
   not likely very likely

c) You would feel pleased to have made such a good impression.  
   
   1---2---3---4---5  
   not likely very likely

d) You would think your best friend should pay attention to his/her spouse.  
   
   1---2---3---4---5  
   not likely very likely

e) You would probably avoid eye-contact for a long time.  
   
   1---2---3---4---5  
   not likely very likely
4. At work, you wait until the last minute to plan a project, and it turns out badly.

   a) You would feel incompetent.

   b) You would think: "There are never enough hours in the day."

   c) You would feel: "I deserve to be reprimanded."

   d) You would think: "What's done is done."

5. You make a mistake at work and find out a co-worker is blamed for the error.

   a) You would think the company did not like the co-worker.

   b) You would think: "Life is not fair."

   c) You would keep quiet and avoid the co-worker.

   d) You would feel unhappy and eager to correct the situation.

6. For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well.

   a) You would think: "I guess I'm more persuasive than I thought."

   b) You would regret that you put it off.

   c) You would feel like a coward.

   d) You would think: "I did a good job."

   e) You would think you shouldn't have to make calls you feel pressured into.
10. You are driving down the road, and you hit a small animal.
   a) You would think the animal shouldn't have been on the road.
   b) You would think: "I'm terrible."
   c) You would feel: "Well, it was an accident."
   d) You would probably think it over several times wondering if you could have avoided it.

11. You walk out of an exam thinking you did extremely well. Then you find out you did poorly.
   a) You would think: "Well, it's just a test."
   b) You would think: "The instructor doesn't like me."
   c) You would think: "I should have studied harder."
   d) You would feel stupid.

12. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success.
   a) You would feel the boss is rather short-sighted.
   b) You would feel alone and apart from your colleagues.
   c) You would feel your hard work had paid off.
   d) You would feel competent and proud of yourself.
   e) You would feel you should not accept it.
Appendix 4: Insight Scale
Please read the following statements carefully and then tick the column which best applies to you:

Agree  Disagree  Unsure

1. Some of my symptoms are made by my mind.

2. I am mentally well.

3. I do not need medication.

4. My stay in hospital is necessary.

5. The doctor is right in prescribing medication for me.

6. I do not need to be seen by a doctor or psychiatrist.

7. If someone said I have a nervous or a mental illness then they would be right.

8. None of the unusual things I experience are due to an illness.
Appendix 5: Recovery Style Questionnaire
RSQ

Instructions: Written below is a list of statements about your illness. Please read them carefully and tick the column to show if you agree or disagree.

<table>
<thead>
<tr>
<th></th>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>There was a gradual build up to me becoming ill.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>My illness is not part of my personality.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I am responsible for what I think when I am ill.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I am not interested in my illness.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>My illness taught me new things about myself.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I need help to solve the problems caused by my illness.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>My illness was caused by my difficulties in coping with life.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I have had a nervous breakdown as a result of my illness.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I can see positive aspects to my illness.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>My illness has had a strong impact on my life.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I am not frightened of mental illness.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I liked some of the experiences I had when I was ill.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>My illness has helped me to find a more satisfying life.</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>My illness came on suddenly and went suddenly.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>My illness is part of me.</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I am not responsible for my actions when I am ill.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I am curious about my illness.</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I understand myself better because of my illness.</td>
<td></td>
</tr>
</tbody>
</table>
19. I can manage the problems caused by my illness, alone.

20. Others are to blame for my illness.

21. I have had a medical illness.

22. Nothing good came from my illness.

23. My illness has had little effect on my life.

24. I am frightened of mental illness.

25. I didn’t like any of the unusual experiences I had when I was ill.

26. It is hard to find satisfaction with life following my illness.

27. My illness came on very suddenly.

28. My illness is alien to me.

29. I am responsible for my thoughts and feeling when I am ill.

30. I don’t care about my illness when I am well.

31. I want to be the person I was before my illness.

32. Others can help me to solve my problems.

33. My illness was caused by stress in my life.

34. I have suffered an emotional breakdown as a result of my illness.

35. Being ill had good parts too.

36. I am not really interested in my illness.

37. I liked some of the unusual ideas I had when I was ill.

38. My life is more satisfying since my illness.

39. My attitude to mental illness is better now, than before I was ill.
Appendix 6: Beck Depression Inventory
BDI

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which best describes the way you have been feeling the past week including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad
    1 I feel sad.
    2 I am sad all the time and I can’t snap out of it.
    3 I am so sad or unhappy that I can’t stand it.

2. 0 I am not particularly discouraged about the future.
    1 I feel discouraged about the future
    2 I feel I have nothing to look forward to.
    3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
    1 I feel I have failed more than the average person.
    2 As I look back on my life, all I can see is a lot of failures.
    3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
    1 I don’t enjoy things the way I used to.
    2 I don’t get real satisfaction out of anything anymore.
    3 I am dissatisfied or bored with everything.

5. 0 I don’t feel particularly guilty.
    1 I feel guilty a good part of the time.
    2 I feel quite guilty most of the time.
    3 I feel guilty all of the time.

6. 0 I don’t feel I am being punished.
    1 I feel I may be punished.
    2 I expect to be punished.
    3 I feel I am being punished.

7. 0 I don’t feel disappointed in myself.
    1 I am disappointed in myself.
    2 I am disgusted with myself.
    3 I hate myself.
8.   0 I don't feel I any worse than anybody else.
     1 I am critical of myself for my weaknesses or mistakes.
     2 I blame myself all the time for my faults.
     3 I blame myself for everything bad that happens.

9.   0 I don't have any thoughts of killing myself.
     1 I have thoughts of killing myself, but I would not carry them out.
     2 I would like to kill myself.
     3 I would kill myself if I had the chance.

10.  0 I don't cry any more than usual.
     1 I cry more than I used to.
     2 I cry all the time now.
     3 I used to be able to cry, but now I can't cry even though I want to.

11.  0 I am no more irritated now than I ever am.
     1 I get annoyed or irritated more easily than I used to.
     2 I feel irritated all the time now.
     3 I do not get irritated at all by the things that used to irritate me.

12.  0 I have not lost interest in other people.
     1 I am less interested in other people than I used to be.
     2 I have lost most of my interest in other people.
     3 I have lost all of my interest in other people.

13.  0 I make decisions about as well as I ever could.
     1 I put off making decisions more than I used to.
     2 I have greater difficulty in making decisions than before.
     3 I can not make decisions at all anymore.

14.  0 I don't feel I look worse than I used to.
     1 I am worried that I am looking old or unattractive.
     2 I feel that there are permanent changes in my appearance that makes me
        look unattractive.
     3 I believe that I look ugly.

15.  0 I can work about as well as before.
     1 It takes an extra effort to get started at doing something.
     2 I have to push myself very hard to do anything.
     3 I can't do any work at all.
<p>| | | |</p>
<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td>16.</td>
<td>0</td>
<td>I can sleep as well as usual.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I don’t sleep as well as I used to.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I wake up several hours earlier than I used to and cannot get back to sleep.</td>
</tr>
<tr>
<td>17.</td>
<td>0</td>
<td>I don’t get more tired than usual.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I get tired more easily than I used to.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I get tired from doing almost anything.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I am too tired to do anything.</td>
</tr>
<tr>
<td>18.</td>
<td>0</td>
<td>My appetite is no worse than usual than usual.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>My appetite is not as good as it used to be.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>My appetite is much worse now.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I have no appetite at all anymore.</td>
</tr>
<tr>
<td>19.</td>
<td>0</td>
<td>I haven’t lost much weight, if any lately.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I have lost more than 5 pounds.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I have lost more than 10 pounds.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I have lost more than 15 pounds.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I am purposely trying to lose weight by eating less.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes ______ No ______</td>
</tr>
<tr>
<td>20.</td>
<td>0</td>
<td>I am no more worried about my health than usual.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I am worried about physical problems such as aches and pains; or upset stomach; or constipation.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I am very worried about physical problems and its hard to think of much else.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I am so worried about my physical problems that I cannot think about anything else.</td>
</tr>
<tr>
<td>21.</td>
<td>0</td>
<td>I have not noticed any recent change in my interest in sex.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I am less interested in sex than I used to be.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I am much less interested in sex now.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I have lost interest in sex completely.</td>
</tr>
</tbody>
</table>
Directions: Please carefully read each group of statements below. Circle the one statement in each group that best describes how you have been feeling for the past week, including today. Be sure to read all of the statements in each group before making a choice.

**Part 1**

1. 0 I have a moderate to strong wish to live.
   1. I have a weak wish to live.
   2. I have no wish to live.

2. 0 I have no wish to die.
   1. I have a weak wish to die.
   2. I have a moderate to strong wish to die.

3. 0 My reasons for living outweigh my reasons for dying.
   1. My reasons for living or dying are about equal.
   2. My reasons for dying outweigh my reasons for living.

4. 0 I have no desire to kill myself.
   1. I have a weak desire to kill myself.
   2. I have a moderate to strong desire to kill myself.

5. 0 I would try to save my life if I found myself in a life-threatening situation.
   1. I would take a chance on life or death if I found myself in a life-threatening situation.
   2. I would not take the steps necessary to avoid death if I found myself in a life-threatening situation.

If you have circled the zero statements in both Groups 4 and 5 above, then skip down to Group 9C.
<table>
<thead>
<tr>
<th>Part 2</th>
<th>Total Score</th>
</tr>
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<tr>
<td>20.</td>
<td>Subtotal Part 2</td>
</tr>
<tr>
<td>21.</td>
<td>Total Score</td>
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### Subtotal Part 2

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>I have brief periods of thinking about killing myself which pass quickly.</td>
</tr>
<tr>
<td>7</td>
<td>I rarely or only occasionally think about killing myself.</td>
</tr>
<tr>
<td>8</td>
<td>I do not accept the idea of killing myself.</td>
</tr>
<tr>
<td>9</td>
<td>I can keep myself from committing suicide.</td>
</tr>
<tr>
<td>10</td>
<td>I would not kill myself because of my family, friends, religion, possible injury from an unsuccessful attempt, etc.</td>
</tr>
<tr>
<td>11</td>
<td>My reasons for wanting to commit suicide are primarily aimed at influencing other people, such as getting even with people, making people happier, making people pay attention to me, etc.</td>
</tr>
<tr>
<td>12</td>
<td>I have no specific plan about how to kill myself.</td>
</tr>
<tr>
<td>13</td>
<td>I do not have access to a method or an opportunity to kill myself.</td>
</tr>
<tr>
<td>14</td>
<td>I do not have the courage or the ability to commit suicide.</td>
</tr>
<tr>
<td>15</td>
<td>I do not expect to make a suicide attempt.</td>
</tr>
<tr>
<td>16</td>
<td>I have made no preparations for committing suicide.</td>
</tr>
<tr>
<td>17</td>
<td>I have not written a suicide note.</td>
</tr>
<tr>
<td>18</td>
<td>I have made no arrangements for what will happen after I have committed suicide.</td>
</tr>
<tr>
<td>19</td>
<td>I have not hidden my desire to kill myself from people.</td>
</tr>
<tr>
<td>20</td>
<td>I have never attempted suicide.</td>
</tr>
<tr>
<td>21</td>
<td>My wish to die during the last suicide attempt was low.</td>
</tr>
</tbody>
</table>

Go to Group 20.
Appendix 8: Participant Information Sheet
Information sheet

Title of the study: Self-conscious Emotions

Researcher: Darren George, Trainee Clinical Psychologist
Address: Sub-division of Clinical Health Psychology
University College London
1-19 Torrington Place
London
Tel: 0171-380 7897

Aims

You are invited to take part in the present study which aims to examine the role of emotions.

The information obtained from this study will be useful in gaining a better understanding of people's emotions and indicate further ways in which people with psychological problems can be helped. The study is divided into two parts and should last no longer than one hour.

In the first part of the study you will be presented with lists of words. For each list you will be asked to ignore the words and simply to name the colour of the ink in which they are written. In the second part of the study you will be asked to complete six questionnaires. The first one the OAS is used to measure emotions. The second questionnaire is used to assess views on one's illness. The next one, the RSQ is used to measure style of recovery from an illness. The next two, the BDI and BSI are used to measure mood. The final questionnaire, the TOSCA is used to measure emotions.

You do not have to take part in this study if you do not wish to. If you decide to take part you may withdraw at anytime without having to give a reason. Your decision whether to take part or not will not affect your medical care and management in any way. The information obtained from this study will be kept strictly confidential. With the exception that if at any time during the study information is obtained which would suggest that yourself or another is in danger I would have a moral responsibility to inform a member of the medical staff. I would not do that without informing you first.

All proposals for research using human subjects are reviewed by an ethics committee before they can proceed. This proposal was reviewed by the Institute of Psychiatry.
Information sheet

Title of the study: Self-conscious Emotions

Researcher: Darren George, Trainee Clinical Psychologist
Address: Sub-division of Clinical Health Psychology
University College London
1-19 Torrington Place
London
Tel: 0171-380 7897

Aims

You are invited to take part in the present study which aims to examine the role of emotions.

The information obtained from this study will be useful in gaining a better understanding of people's emotions and indicate further ways in which people with psychological problems can be helped. The study is divided into two parts and should last no longer than one hour.

In the first part of the study you will be presented with lists of words. For each list you will be asked to ignore the words and simply to name the colour of the ink in which they are written. In the second part of the study you will be asked to complete four questionnaires. The first one the OAS is used to measure emotions. The next two, the BDI and BSI are used to measure mood. The final questionnaire, the TOSCA is used to measure emotions.

You do not have to take part in this study if you do not wish to. If you decide to take part you may withdraw at anytime without having to give a reason. Your decision whether to take part or not will not affect your medical care and management in any way. The information obtained from this study will be kept strictly confidential. With the exception that if at any time during the study information is obtained which would suggest that yourself or another is in danger I would have a moral responsibility to inform a member of the medical staff. I would not do that without informing you first.

All proposals for research using human subjects are reviewed by an ethics committee before they can proceed. This proposal was reviewed by Kings Healthcare NHS Trust and the Riverside Research Ethics Committee.
Consent Form

Title of Study: Self-conscious Emotions

Researcher: Darren George, Clinical Psychologist in Training
Address: Sub-division of Clinical Health Psychology
         University College London
         1-19 Torrington Place
         London
Tel: 0171-380 7897

To be completed by the patient:

1) I have read the information sheet and I understand the aims of this study.
   Yes / No

2) I have had the opportunity to ask any questions and received satisfactory answers.
   Yes / No

3) I understand that participation in the study is voluntary and I am free to withdraw from this study at any time without giving a reason for withdrawing and without affecting my future care.
   Yes / No

4) I understand that the information obtained from this study will be kept strictly confidential. With the exception that if at any time during the study information is obtained which would suggest that your self another is in danger I would have a moral responsibility to inform a member of the medical staff. I would not do that without informing you first.
   Yes / No

5) I agree to take part in the study.
   Yes / No

Signed............................................................................ Date..............................
Name in Block Letters..................................................................

THANK YOU FOR YOUR CO-OPERATION
Appendix 10: Standardised Instructions for the Stroop Task
Instructions

I am going to show you a list of words. I would like you to name aloud the colour of the ink-red, green, blue or yellow-in which the words are printed. Go as quickly as you can, going down the column. For the first one you would say "Red". Understand. If you make a mistake, just correct yourself and keep on going. Name the colour of the ink as quickly and as accurately as you can. Ready? Begin.
Appendix 11: Ethical Approval
21 May, 1998

Prof D Hemsley
Department of Psychology
Institute of Psychiatry

Dear Prof Hemsley

Re: Shame and Emotional Impact in Schizophrenia (051/98)

At its meeting on 15 May 1998, the Ethical Committee (Research) considered and confirmed Chair’s action to approve Study No. 051/98 from an ethical point of view.

Yours sincerely

[Signature]

Margaret M Chambers
Research Ethics Coordinator
29 June 1998

Professor D Hemsley
Department of Psychology
Institute of Psychiatry
De Crespigny Park
London
SE5

Dear Professor Hemsley

Re: Protocol Number: 1998-0157
Shame and Emotional Impact in Schizophrenia (051/98)

At the recent meeting of the Research Ethics Committee on Wednesday 24 June 1998 your submission was reviewed. The Committee is pleased to confirm that Chairman's Action which was previously given on the protocol has been ratified and full ethical approval has now been granted.

Notes: N/A

Yours sincerely

[Signature]

PROFESSOR E HOWARD
Chair, Research Ethics Committee
Kings Healthcare NHS Trust

cc Margaret Chambers
Dear Mr George,

RREC 2009 - Shame and the emotional impact of Schizophrenia.

I am writing to inform you that the above submission has been considered and now approved by Chairman's Action.

Please note the following conditions which form part of this approval:

1. **This approval is for one year only.** For projects with an expected duration of more than one year, a letter from the principal investigator will be required in order to further extend consent. This will enable the Committee to maintain a full record of research.

2. Any changes to the protocol must be notified to the Committee. Such changes may not be implemented without the Committee's approval.

3. The Committee should be notified immediately of any serious adverse events that are believed to be study related or if the entire study is terminated prematurely.

4. You are responsible for consulting with colleagues and/or other groups who may be involved or affected by the research, e.g., extra work for laboratories. Approval by the Committee for your project does not remove your responsibility to negotiate such factors with your colleagues.

Cont/2..
You must ensure that nursing and other staff are made aware that research in progress on patients with whom they are concerned has been approved by the Committee.

Pharmacy must be told about any drugs and all drug trials, and **must** be given the responsibility of receiving and dispensing any trial drug.

The Committee must be advised when a project is concluded and should be sent one copy of any publication arising from your study, or a summary if there is to be no publication.

May I take this opportunity to wish you well in your research. If any doubts or problems of an unexpected nature arise, please feel free to contact me at any time.

Yours sincerely

C G Mackworth-Young MA MD FRCP
Chairman - RREC

### Seen and Approved

<table>
<thead>
<tr>
<th>Submission</th>
<th>16 February 1999 &amp; CA form dated 14 May '99</th>
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<td>Maudsley LREC &amp; Kings LREC letters of Approval</td>
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<td>Protocol</td>
<td>Research Proposal</td>
</tr>
<tr>
<td>Information Sheet</td>
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<tr>
<td>Consent Form</td>
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</tr>
<tr>
<td>Questionnaires</td>
<td>BDI, Tosca &amp; RSQ + Demographics form</td>
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<tr>
<td>Letter of Indemnity</td>
<td>-</td>
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<td>DDX/CTX</td>
<td>-</td>
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