Late-Onset Psychosis

and

Adjustment to Ageing

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Abstract

Little is known about the psychological factors involved in the onset and experience of psychosis that begins after age 60 (late-onset psychosis, LOP). At present, treatment methods are primarily biological. As a first step in developing a psychological intervention for LOP, this study aimed to explore the role and nature of psychological factors and the way in which they interact with the ageing process. It was hypothesised from the literature that people with LOP are made vulnerable to mental health difficulties through various psychological (personality difficulties) and environmental (life events) factors and that when age-related stressors occur, this vulnerability leads to difficulties in adjusting to ageing (as reflected in attitude to ageing, self-esteem, and use of assimilative versus accommodative coping style) and hence, psychotic breakdown. Fourteen people with LOP were interviewed about their life experiences (childhood, family, relationships, children, work and health) and asked to complete questionnaires concerning self-esteem, depression, attitude to ageing, cognitive schemas, and coping strategies. Responses were compared with a late-onset depression group (N=13) and a healthy volunteer group (N=18). As predicted, the clinical groups reported a greater number of adverse life events, and there were differences between these groups in the types of events reported. The LOP group reported higher levels of depression and maladaptive schemas, and lower levels of attitude to ageing and morale than the healthy volunteer group. The LOP group was different to the depressed participants on two schema domains. All three groups had equivalent coping styles. Therefore, there was evidence to suggest that people with LOP are made vulnerable to developing mental health difficulties through adverse life
events and entrenched personality difficulties. There was some evidence that this group found adjusting to ageing difficult, but the results did not suggest that assimilative or accommodative coping strategies were adversely affected in people with LOP. These results are discussed in relation to theories of LOP, psychosis of earlier-onset and adjustment to ageing. The implications for clinical practice are also considered.
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Chapter One: Introduction

Late-Onset-Psychosis (LOP) affects 2-4% of people over 60 years old (Almeida, Howard, Förstl, & Levy 1992b). Treatment methods are primarily biological. As yet, recent advances in the development of psychological approaches to treating psychosis (where onset is during adolescence or adulthood) have had little impact on the treatment of older people who develop psychotic symptoms for the first time in late life. Despite growing awareness of the relevance of psychotherapeutic methods with older people, the potential usefulness of cognitive-behavioural and other therapeutic approaches currently used with younger people with psychosis has not yet been explored in relation to LOP. In order to develop any intervention for LOP based on this model it will first be necessary to explore the role and nature of psychological factors and the way in which these interact with the ageing process. This study aims to extend the psychological understanding of psychosis that presents in older adulthood and provide insights that can be used in developing a treatment programme.

1.1 The Concept of Late-onset Psychosis

Types of psychosis that occur in late life include schizophrenia (both the late-onset type and people with earlier-onset schizophrenia who live to old age); delusional disorder; psychosis in patients with dementia; psychosis in patients with depression; and miscellaneous psychosis (Lacro, Harris & Jeste 1993). Consequently, the literature comprises a wide and sometimes confusing array of terms and definitions, and a number of different disorders can be encountered under the umbrella of a "late paraphrenia" diagnosis.
Roth & Morrissey (1952, cited in Almeida et al 1992b) first proposed the term “late paraphrenia” to refer to:

“..... a specific group of elderly patients with a well-organised system of paranoid delusions and hallucinations, existing in the setting of a well preserved personality and affective response”.

This term was rapidly adopted in the British literature largely to distinguish the illness from chronic schizophrenia (Howard, Rabins, Seeman, Jeste, et al, 2000), which usually involves a deterioration of personality and affective response in addition to positive symptoms. Late paraphrenia has been used to describe a variety of psychotic phenomena that first emerges after the age of 55 or 60. German psychiatry, however, has tended to focus on the form of illness that emerges between the ages of 40 and 60 and to term this “late-onset schizophrenia”. Unfortunately, the British and American literatures have used the phrase “late-onset schizophrenia” interchangeably with “late paraphrenia” as a generic term for both these disorders, despite there being widespread debate over whether they are distinct disorders (Riecher-Rossler, Rossler, Förstl & Meise 1995). This confusion of terms and concepts has impeded comparative international research and reviews of this area often mix findings on late-onset schizophrenia with those on late paraphrenia (Riecher-Rossler et al, 1995).

During the last decade, there have been calls for clarity concerning these issues. Almeida and colleagues (Almeida, Howard, Levy & David, 1995a; Almeida et al 1992b) have
argued for a specific diagnostic category called "Late-Onset-Psychosis" (LOP). According to these researchers, LOP occurs for the first time after the age of 60 and is characterised by a well-organised delusional system, with or without hallucinations and where there is no obvious deterioration of intellect or personality. LOP, then, is considered to be a different entity from psychosis that develops within the context of dementia or depression, and also different from psychosis of earlier-onset. As will be discussed below, these points have been the subject of extensive debate.

Currently neither the ICD-10 (WHO, 1992) nor the DSM-IV (American Psychiatric Association, 1994) contain separate diagnostic codes for late-onset schizophrenia or late paraphrenia. It seems to be assumed that all cases that satisfy the diagnostic criteria for schizophrenia fall into that category regardless of age of onset (Howard et al, 2000). However, the DSM-IV does acknowledge that people with onset after age 45 have some different clinical features to younger cases, as well as showing some similarities. It is important to consider these similarities and differences in more detail.

**Is LOP the same disorder as Schizophrenia?**

As can be seen, the concept of LOP has been further complicated by the debate concerning whether it is simply schizophrenia manifesting in later life or whether it is an aetiologically distinct disorder.

Almeida et al (1995a) have summarised the main areas of controversy as follows:
1) Late paraphrenia has been considered by many to be the manifestation of schizophrenia in late life, and proponents of this view feel that a separate diagnostic category is misleading (Roth & Kay 1998; Riecher-Rossler, Loffler & Munk-Jorgensen 1997; Pearlson et al 1989; Harris & Jeste 1988).

2) Late paraphrenia has often been associated with a number of risk factors such as female gender, hearing impairment and social isolation. This has been interpreted as an indication that early- and very-late-onset cases of schizophrenia may result from distinct pathogenic mechanisms (Castle, Wesselly, Howard, & Murray 1997; Almeida, Howard, Förstl & Levy 1992a).

3) Some neuroimaging studies have found lesions in the brains of patients with LOP that are quantitatively and qualitatively different from schizophrenia with an earlier-onset. Therefore, some authors have suggested that LOP is associated with organic brain damage (Almeida et al 1992a; Miller, Lesser & Boone 1991; Krull, Press & Dupont 1991; Harris, Cullum & Jeste 1988).

4) Late paraphrenia has been described as a heterogeneous condition in which organic factors may play an important role in the initiation and maintenance of psychotic symptoms in some patients, whereas in others there is no obvious presence of such a link (Almeida, Howard, Levy, David, Morris & Sahakian, 1995c; Howard, Förstl & Almeida 1992a; Flint, Rifat & Eastwood 1991; Post 1966).
Although the aetiologies and distinctive pathophysiologies of earlier-onset schizophrenias are at present unknown (Howard et al, 2000), studies have compared the brain imaging and neuropsychological patterns of patients with different ages of onset. Improvements in the methodology of studies have resulted in new evidence in relation to the argument that LOP is different from schizophrenia. Whilst studies have found brain lesions in people with LOP, their causal role is unclear and needs to be viewed in the context that lesions are common in elderly populations (Longstreth et al, 1996). For instance, although significant structural changes have been found (Burns & Förstl, 1997), the significance of most of these changes disappear when people with LOP have been compared to age-matched healthy controls (Roth & Kay, 1998). The remaining structural changes are also similar to those found in people with earlier-onset schizophrenia – higher ventricle-to-brain ratios and third ventricle volume (see Howard et al, 2000 and Roth & Kay, 1998 for details of studies). It seems that the non-specific structural changes found in people with earlier-onset schizophrenia are also found in people with LOP and brain-imaging findings are essentially similar regardless of age of onset (Howard et al, 2000).

Similarly, in reviewing the literature, Howard et al (2000) concluded that people with LOP show similar patterns of impairment to people with earlier-onset schizophrenia on neuropsychological measures. For instance, when compared to age, sex and education-matched controls, people with LOP scored significantly lower on measures of general cognitive ability and executive functioning (Almeida et al 1995d). However, compared with earlier-onset schizophrenia, people with LOP tend to have milder deficits, especially in the areas of learning and abstraction / cognitive flexibility (Howard et al, 2000).
Whilst brain imaging and neuropsychological studies have shown few significant differences with age of onset, it seems that the clinical presentation of early-onset schizophrenia and LOP show some distinctions. A study that compared people with very early-onset (before age 25) and people with very-late-onset (beginning after age 60) psychosis, found that the older group was more likely to be female, have good premorbid functioning and developmental history, and to exhibit persecutory delusions and hallucinations (Castle et al, 1997). They were less likely to have negative schizophrenic symptoms, a positive family history of schizophrenia, or to have suffered pregnancy or birth complications. Other researchers (Jeste, Symonds, Harris, Paulsen, Palmer & Heaton 1997, Howard et al, 1997) have also found a weaker genetic link in LOP than in earlier-onset schizophrenia. Castle et al (1997) concluded that their results underlined the differences in phenomenology of very-early and very-late-onset functional psychosis and that it was premature to consider the two groups to be merely different manifestations of the same illness.

Similarly, Almeida et al (1995a & b; 1992b) have argued for a separate diagnostic category of late paraphrenia. They investigated a group of late paraphrenia patients (first symptoms after 55) and the reliability of their diagnosis according to the most widely used systems of classification of mental disorders (Almeida et al, 1995a). They found that most patients did not fit the operational criteria for ‘persistent delusional disorder’ (WHO, 1992). The category of ‘schizophrenia’ was also unsuitable because it failed to take into account the associated factors of late paraphrenia (such as preponderance of
women, hearing loss and ageing). Further, most patients lacked the more fundamental and stable symptoms of schizophrenia such as flattened affect and lack of motivation.

Recently, clinicians and academics from around the world have reviewed the extensive literature concerning this issue and produced an international consensus (Howard et al, 2000). The group acknowledged that there are both similarities and differences between earlier- and late-onset psychosis, but concluded that there was sufficient evidence to justify the recognition of two illness classifications: late-onset (onset after the age of 40 years) schizophrenia and a very-late-onset (onset after 60) schizophrenia-like psychosis (VLOSLP). This study aims to focus on the specific group of elderly people described by Almeida et al (1995a, 1992b) and the VLOSLP group distinguished by Howard et al (2000). For brevity’s sake, the term LOP will be used throughout to refer to people who first develop psychotic symptoms after the age of 60 and who do not exhibit significant cognitive deterioration or a primary affective disorder. The rates of this disorder in the general population and in clinical settings will now be briefly reviewed.

**Prevalence and Incidence of LOP**

The use of different terms and criteria has made it difficult to ascertain the rate of LOP in the population. Epidemiological information has come from two sources: studies of persons who have reached psychiatric services and surveys of elderly persons sampled from the general population (Henderson & Kay, 1997). Patient studies show that between 5.6% and 10% of psychiatric admissions over the age of 60 are for late paraphrenia (Kay & Roth 1961; Christie 1982). First admission data suggests that the annual incidence of
LOP increases by 11% with each 5-year increase in age (Van Os, Howard, Takei & Murray, 1995). Therefore, age may be a risk factor, although it is not known how many of these people would have had a dementing illness.

Community studies indicate a lower rate of between 2% and 6% of older people showing persecutory ideation, paranoia or psychotic symptoms (Henderson et al 1998, Forsell & Henderson 1998, Christenson & Blazer 1984), although again, many of these people will have dementia (Howard et al 2000). Community prevalence estimates for schizophrenia in people over 65 years old range from 0.1% to 0.5% (Howard et al 2000). It has been suggested that a large number of paranoid elderly people remain undiagnosed in the community either because of their social isolation or because the symptoms are not disruptive enough to be noticed (Almeida et al 1992b, Post 1966). It is often noted clinically that people with LOP have experienced paranoid feelings for many years before they reach mental health services.

1.2 What is understood about LOP?: Aetiology and risk factors

The debate concerning the aetiology and pathology of LOP in relation to schizophrenia of earlier-onset has dominated the literature. As discussed previously, several risk factors and conditions have repeatedly shown up in the literature: hereditary disposition (though weaker than in schizophrenia of earlier-onset); female sex; hearing and other sensory deficits; and subtle cognitive dysfunction and brain abnormalities (Fuchs 1999a; Almeida et al 1995b; Almeida et al 1992b; Hassett, Keks, Jackson & Copolov, 1992). Some of these factors will now be examined in more detail.
The Organicity hypothesis

As discussed earlier, LOP shares many of the same organic attributes as earlier-onset schizophrenia, suggesting that the organic factors associated with schizophrenia may also play a part in the initiation and maintenance of LOP – although what this role is in earlier-onset schizophrenia is still not clear. Alternatively, some authors have proposed that LOP is related to dementia rather than to schizophrenia. For example, in a long term follow up study Holden (1987) reported that 40% of people with LOP had developed dementia over a 10-year period. However, when organic cerebral disorders are carefully screened out of studies, evidence of focal cerebrovascular abnormalities are not found to differ significantly compared to control groups (Symonds, Olichney, Jernigan, Corey-Bloom, Healy, & Jeste, 1997). Further, patterns of neuropsychological impairments are qualitatively and quantitatively different from those found in patients with dementia, in that learning capacity is less affected (Howard et al 2000; Almeida et al 1995d). So there seems to be a group of people who develop psychosis in later life that does not seem to be related to a progressive dementing process, but could be related to earlier-onset schizophrenia.

Preponderance of women

Many studies have found a preponderance of women over men in LOP, the ratio of females to male ranging from 3:1 to 45:2 (Almeida et al 1995b). This difference remains even after statistical adjustments are made for the higher proportion of women in older populations (Jeste, Naimark, Halpain & Lindamer 1995). In contrast, being male is a risk factor for onset during adolescence and up to age 35. A possible biological explanation
for this contrast may involve the role of oestrogen production. Generally, but not consistently, low oestrogen levels have been associated with an increased risk of psychosis (Jeste et al, 1995). Oestrogen modulates the sensitivity of dopamine receptors and the production of oestrogen is reduced in older women (Angermeyer & Kühn, 1988). Therefore, the degree of vulnerability to psychosis could vary by gender at different stages of life (Angermeyer & Kühn 1988), and the production of oestrogen could be a protective factor against developing psychosis. The relationship between psychotic symptoms and oestrogen level needs to be examined further (Howard et al 2000).

Alternatively, Castle & Murray (1993) have suggested that LOP has aetiological links with late-onset affective disorders, and that this could explain the gender discrepancy. In a controlled family study of probands with LOP, the lifetime risk of depression in first-degree relatives was significantly increased (Howard et al 1997). However, brain abnormalities specifically associated with late-onset affective disorders (Rabins, Pearlson, Ayward, Kumar & Dowell, 1991) have not been found in studies of LOP populations (Symonds et al, 1997), and LOP generally responds well to neuroleptic medication but not to anti-depressant drugs (Roth & Kay, 1998). Roth & Kay (1998) have noted that female preponderance is evident from the age of 35, and feel that the heightened female to male ratio in old age can be explained as a continuation this correlation, whatever the cause. So at present it is not clear if LOP has aetiological links with affective disorders, and there are no convincing theories as to why being female acts as a risk factor for psychosis in later life.
Sensory impairments

Studies have often found a greater rate of sensory impairments, in particular hearing difficulties, in populations of LOP when compared with healthy controls (Castle et al 1997; Almeida et al 1995b). Further, a reduction in psychotic symptoms has been observed when hearing aids are fitted (Almeida et al 1995b). However, the mechanisms and contribution of sensory impairments in LOP are unclear (Almeida et al 1995b). Very few older people with hearing impairments actually develop psychotic symptoms (Corbin & Eastwood 1986). Further, in most studies hearing loss predated the onset of psychosis by many years (Hassett 1997). It might be that long standing hearing impairments lead predisposed persons to social isolation, suspiciousness and a greater liability to misinterpret environmental events (Almeida et al 1995b, Cooper & Porter 1976). The prevalence of sensory impairments in LOP populations may simply reflect a reluctance of people with paranoia to seek corrective measures for their deficits, or because of problems with health care systems for mentally unwell older people (Howard et al 2000).

Psychological Factors

So far, the role of biographical and personality factors have only played a minor role in the search for an understanding of LOP (Fuchs 1999a; Hassett 1997). However, these factors may well be part of a premorbid vulnerability that manifests for the first time under the influence of additional adversities arising in old age (Fuchs 1999a). The available literature provides some indications of factors that might be relevant.
Personality

People with LOP have frequently been described as quarrelsome, cold-hearted, dictatorial, and determined (Almeida et al 1992b; Kay & Roth 1961). Importantly, a number of studies have shown that a significant proportion of people with LOP had *premorbid* personality styles characterised by schizoid (a tendency to withdraw from social contact or remain aloof) and paranoid (excessively self-referent and sensitive) traits (Fuchs 1999b; Howard & Levy 1993). In an early study, Kay & Roth (1961) found 45% of late paraphrenies could be described as having premorbid paranoid and schizoid traits, characterised by jealousy, suspiciousness, arrogance, emotional coldness and extreme solitariness. A further 30% were described as explosive and sensitive. Similarly, Post (1966) found 40% of his patients had premorbid personality traits that he termed 'paranoid', in that they were quarrelsome, sensitive, suspicious or hostile. He described other patients as odd, eccentric, histrionic, or pretentious. However, for 30% of cases he concluded that premorbid personality functioning had been free of significant abnormality.

More recently, diagnostic classification systems for personality disorders have been applied to investigate these findings more stringently. Howard & Levy (1993) studied 25 people with late-onset paranoid psychosis using the ICD-10 diagnostic criteria for personality disorder. They found that 10 people (40%) fulfilled the criteria for ‘paranoid’ personality disorder, and a further 6 (24%) had ‘personality difficulties’ in this area. They did not find any diagnosable cases of schizoid personality disorder, although 32% had ‘difficulties’ in this area. Similarly, Fuchs (1999b) applied DSMIII-R criteria to 38 late
paraphrenics and found that 39% could be diagnosed with either ‘paranoid’ or ‘schizoid’ personality disorders. This contrasted with a group of late-onset depressed patients, who were significantly more likely to be diagnosed with avoidant and dependent personality disorders. Fuchs (1999b) suggested that there could be a polarity of premorbid personality styles between paranoid and depressed people. If this were true, then it might be that personality factors play a role in which illnesses people experience when they run into difficulties in later life.

A criticism of these studies could be that the diagnostic systems simply reflect the illness rather than measuring the premorbid personality trait (Howard & Levy 1993) and therefore these figures might be an overestimate. It has certainly been demonstrated that abnormal premorbid personality is not a universal phenomenon for all people with LOP. On balance, however, there seems to be some evidence to suggest that people who go on to develop psychosis in later life may have personality difficulties (if not diagnosable personality disorders) that begin before the appearance of their psychotic symptoms. The case for an abnormal premorbid personality is strengthened when evidence concerning past life events and relationship patterns is considered.

Relationship patterns and isolation

Social isolation has been cited as a risk factor for LOP in most studies (Fuchs 1999b; Almeida et al 1995b; Kay & Roth 1961). People with LOP are inclined to be unmarried or divorced (and to have had their own parents divorce before they were 14 years old), live alone, have few or no social contacts, and have fewer children than other clinical
groups and healthy older adults (Fuchs 1999b; Howard & Levy 1993; Almeida et al 1992b). Having fewer children remains true even when 'unmarrieds' are partialled out of the analysis (Fuchs 1999b). These findings contrast with their good premorbid education and occupational adjustment (Fuchs 1999b; Castle et al 1997). This has led to speculation over whether the lack of social contact is due to difficult premorbid personality traits or the effect of developing psychosis, or is itself a specific trigger for psychotic symptoms.

In interviews with people with late paraphrenia, Fuchs (1999b) reported that they described their marriages more as "expedient alliances" than ones of intimate relationships. Three quarters of those who were divorced had initiated the divorce; therefore Fuchs commented that 17 of the 20 people who lived alone were alone by choice. As a group he found that they also had significantly fewer social contacts than a comparison group of people with late-onset depression, and did not have anyone to confide in. Following bereavements or divorce, the LOP group also had only "minor grief reactions", with only two of the 24 who had suffered losses grieving for more than one year. In the depressed group two-thirds had "hardly got over the loss" and had grieved for longer than one year. Instead, the group of late paraphrenics tended to have qualities of "tenacity, self-assertion and autonomy" (page 76), and two-thirds of the women had worked for more than 20 years compared with only one-third of the depressed group who had largely kept house since they married. In interviews, the LOP group had often stated their need for autonomy and independence. It is possible that non-conforming to social role expectations by working to support themselves may factor in the development of feeling isolated and different from the world, in that people looked at these women
with suspicion. The picture gained was that people with LOP were more likely to remain single and childless and to support themselves than people who had late-onset depression (Fuchs, 1999b).

This picture of social isolation fits with previous findings by Kay, Cooper, Garside & Roth (1976) who compared people over the age of 50 who had paranoid psychosis to those with affective psychosis. The paranoid patients (rated by themselves and close informants) were found to have had greater difficulty in establishing and maintaining satisfactory relationships premorbidly. They had also been significantly less able to display sympathy or emotion. Difficult premorbid personality traits are not specific to people with LOP (Kay & Roth 1961) and it may be the lack of positive personality traits such as warmth and ease with human relations, rather than the presence of negative personality traits that are important (Howard & Levy 1993).

This data would suggest that the pattern of isolation is a long-term phenomenon for this group rather than a trigger for the onset of symptoms. Fuchs (1999b) concluded that it was likely that patients’ prevailing isolation mainly reflected a lifelong pattern of missing intimacy, a dislike of sociability and an emphasis on personal autonomy. Avoiding emotionally taxing personal relationships could postpone psychotic breakdown to old age (Roth 1987). Therefore, the pattern of isolation could be the preferred coping mechanism of people who are constitutionally already vulnerable to psychotic breakdown.
Past life events

Early life traumas have been associated with LOP (Fuchs 1999a; Fuchs 1994; Gurian, Wexler & Baker, 1992), and in particular, discriminating-stigmatising environments (such as illegitimate birth or having an illegitimate child, amputation and handicap) and threatening-persecutory experiences (such as expulsion from home and rape). Fuchs (1994) detected that 47% of his late paraphrenia sample were war refugees expelled from their territories following World War II. This compared with rates of only 20% in a group of late-onset-depressed patients, a group of people with dementia, and the baseline community rate. In a later study he also found increased frequencies of illegitimate births, illegitimate children and handicaps in late paraphrenics compared with late-onset depressives, and again a higher rate of expulsions (Fuchs 1999a).

Fuchs (1994) argued that the over-representation of expellees among the paranoid patients could not be explained by the idea that these people had a pre-existing vulnerability to delusional experience as this would also mean that they had a vulnerability to emigration via expulsion. Specifically, he hypothesised that the trauma of forced flight may have resulted in feelings of distrust, resentment and injustice (Fuchs 1994), and similarly that stigmatising-discriminating conditions might have fostered a reserved and suspicious attitude towards their environment, leading to a lifetime of feeling like an outsider (Fuchs 1999a). He postulated that the delay between trauma in early life and the onset of psychotic symptoms may be a function of the person’s coping strategies – in particular their tendency to strive for autonomy and be engaged with their occupations, and their refraining from intimacy. The changes and stresses of later life such as the
ending of occupational engagement, bereavement, illness, sensory loss and dependency needs might lead to a decompensation and thus to a late effect of traumatic events that occurred early in life (Fuchs 1999a; Fuchs 1994).

Specifically referring to his sample of expellees, Fuchs (1994) further postulated that the lasting impression of the vulnerability of one’s own territory might relate to the ‘partition delusions’ often associated with late paraphrenia. Partition delusions are the belief that people, objects, or radiation can pass through what would normally constitute a barrier to such passage, such as walls, floors, doors and ceilings (Howard, Castle, O’Brien, Almeida & Levy, 1992b). Often they involve the belief that someone is operating just outside the person’s home, and is able to enter their home or force gas into their home with the express purpose of annoying or harming them.

**Summary**

Studies investigating the aetiology of LOP have suggested, then, that people who develop psychosis for the first time in later life may have a biological, psychological and / or environmental vulnerability to developing the disorder. Brain imaging and neuropsychological measures have revealed similarities with organic processes found in schizophrenia of earlier-onset, and differences with those found in dementing and affective illnesses. Other biological risk factors include being female, ageing, and sensory impairments. From psychological and biographical perspectives, people who tend to withdraw from intimate relationships and have paranoid personality traits may be at risk
of developing the disorder. It appears that this group of people may have life-long difficulties with intimacy and human relationships, and some authors have suggested that social isolation maybe a coping strategy and is a preferred state for these individuals. It has further been suggested that these vulnerability factors may interact with the ageing process to produce a decompensation into psychosis. Personality and biographical factors have so far not played a significant part in the search for an understanding of LOP. The evidence from the limited number of studies suggests that these factors could be important variables in the development of the disorder, but do not really tell us about the inner world and experiences of the person with LOP. An understanding of this would be needed to develop a psychological intervention with this group.

**Management and outcome of LOP**

Given the emphasis in the literature on organic and biological factors, it is not surprising that the treatment of choice so far has primarily been pharmacological. In a recent review of diagnostic and treatment issues with elderly psychotic patients, Lacro, Pharm & Jeste (1997) dedicate the paper to drug treatments and their administration. They include one line stressing the importance of supportive psychotherapies. Reviewing outcome studies, Howard et al (2000) report that between 48-61% of patients show full remission of psychotic symptoms with typical anti-psychotic medications. They also note that psychosocial and behavioural approaches are important adjuncts to pharmacological therapies and raise the issue that the role of these in patient management needs to be investigated.
Psychological interventions could be extremely important in helping those patients who do not fully respond to anti-psychotic medications and remain symptomatic; perhaps some 50% of all cases (Howard & levy 1992). Psychological approaches, such as cognitive-behavioural-therapy (CBT), have been successfully implemented with some younger people with psychosis for whom medication has proved unsuccessful or unpalatable. Such approaches have been used to alleviate the distress associated with symptoms that are drug-resistant, as well as reducing symptoms themselves (Garety, Fowler & Kuipers 2000). Given some of the similarities between schizophrenia of earlier-onset and LOP, it is reasonable to assume that psychological theories and approaches could also be beneficial to older individuals with psychosis. In trying to find a psychological understanding of LOP it would also be reasonable to look at the literature concerning psychological understandings of earlier-onset schizophrenia and examine which factors may apply in later life.

1.3 What is known about psychosis of earlier-onset?

Biographical and personality studies provide some psychological understanding of LOP, but tell us little about the internal world of people who develop psychosis in later life, for instance the way in which they view themselves and others and interpret the world around them. Over the past decade and a half, people have investigated these issues with younger individuals with psychosis. For the sake of clarity, in the following discussion the term ‘schizophrenia’ or ‘psychosis’ will be used to refer to the type of illness that first emerges
during adolescence and adulthood. LOP will continue to be used to refer to the type of illness where onset of psychotic symptoms is after age 60.

**Stress-Vulnerability models of Psychosis**

A useful framework that has been adopted by many psychologists is the Stress-Vulnerability model of schizophrenia. There have been a number of these models (e.g. Zubrin & Spring 1977, Nuechterlein 1987, Ciompi 1988, Perris 1989) which emphasise different factors but generally share core assumptions about the nature of psychotic disorder (Fowler, Garety, & Kuipers, 1995). According to this model, the onset of symptoms is viewed as resulting from an interaction of personality, genetic vulnerability, experiential factors, social environment and degenerative brain dysfunction. For instance, decompensation into schizophrenia has been linked to periods when biologically vulnerable individuals identify life situations as unsatisfying, over-demanding and productive of conflict (Hassett 1997). Vulnerability is thought to come from a range of constitutional factors. Genetic predisposition is strongly implicated in developing schizophrenia, and organic factors (such as prenatal or perinatal injury, and neuropathological abnormalities in the temporal lobes) have also been indicated (Kingdon & Turkington 1994). Studies on LOP have found much weaker genetic influences, and this may indicate that other factors are more prominent in the aetiology of LOP.

As with LOP, personality traits have been indicated too. People with premorbid schizoid or paranoid personality traits appear at greater risk of developing schizophrenia (Kingdon & Turkington 1994), so it seems that people who develop psychosis at whatever age may
share similar personality factors that may make them vulnerable to this illness. But as in LOP, there are methodological issues relating to the measurement of premorbid traits, and it is impossible from the evidence so far to infer whether the traits are simply the beginning phase of the psychoses or a causal factor in its development.

In the Stress-Vulnerability model, these constitutional factors interact with environmental and experiential elements. Environmental factors associated with increased rates of schizophrenia include urban birth and rearing (McDonald & Murray 2000) and lower social class (Bromet & Fenig 1999). Also, people who have experienced physical and sexual abuse, and were described as being emotionally unstable (having behavioural problems, high reactivity to stress, excitable and anxious moods) in childhood are also more likely to develop schizophrenia (BPS 2000; Fowler et al 1995). However, the high base rates of emotional instability and abuse amongst the general population and people with other types of psychiatric difficulties suggests that these events cannot be considered specific causal factors for psychotic disorders (Fowler et al 1995).

Migration status has repeatedly been associated with psychosis. Studies suggest that the African-Caribbean population living in England shows a significantly elevated rate of psychosis compared with the white population and with rates of psychosis in the Caribbean itself (BPS 2000; McDonald & Murray 2000). Careful studies have eliminated the possibility that this may be due to over-diagnosis of psychosis in Afro-Caribbean people or biological risks such as cannabis use and exposure to unfamiliar viruses (McDonald & Murray 2000). It is thought that racism and social exclusion that
immigrants often experience increases the likelihood of developing psychotic experience (BPS 2000). Another mechanism might be that immigrants are more likely to be exposed to socially disadvantageous experiences, such as being in one-parent families, separation from parents, being raised in care and social isolation (McDonald & Murray 2000; Hutchinson, Mallett & Fletcher 1999). Exposure to socially disadvantageous events may also be the mechanism explaining the link between psychosis and low social class and urban environments. Of significance is the finding that the number of adverse life events experienced by African-Caribbean immigrants and white populations were not different (Gilvarry et al, findings submitted for publication and cited in McDonald & Murray 2000). However, the immigrant group was more likely to interpret such events as being part of a pattern of continuous adversity towards them on account of their ethnicity. Such interpretations could be a response to earlier adverse experiences and prejudice, and could predispose people to paranoia (McDonald & Murray 2000).

Other studies investigating the contribution of the environment in schizophrenia have tended to focus on events that occur in the months preceding the first episode or subsequent decompensation into illness. Most show a link between stress and psychotic episodes, especially for daily hassles (such as financial worries, planning of everyday events and difficulties in relationships) rather than major events (Bebbington et al 1993, Malla & Norman 1992). This elevation of events remains when social variables such as social class, ethnicity and marital status are controlled for (Bebbington et al 1996). Further lines of enquiry have shown a relationship between familial attitudes towards the person with psychosis and relapse rates. People with psychosis are more at risk to
relapses if their families are critical or hostile towards them, and/or over-involved with them (Bebbington & Kuipers 1993). These studies lend weight to the idea that social stress can precipitate onset and relapse of psychosis, although causal direction is impossible to establish (McDonald & Murray 2000).

Stress-vulnerability theories consider that environmental factors interact with the autonomic nervous system, which manages people's reactions to stress, and assume that people have different levels of vulnerability to developing psychotic experiences (BPS 2000). For instance, Zubin & Spring (1977) consider that as long as stress induced by the challenging event remains below the threshold of vulnerability, the individual remains within the limits of 'normality'. When it exceeds the threshold the individual is likely to develop a psychopathological state until the stress abates. It might also be that different vulnerability factors predict severity and outcome of psychotic disorders. Van Os, Lones, Sham, Bebbington & Murray (1998) have suggested that more severe psychotic illness and outcome is predicted by a high familial morbid risk of schizophrenia, early developmental difficulties, and enlarged cerebral ventricles. Less severe, good outcome psychosis is predicted by familial risk of affective disorder, adverse life events and ethnic group. Other theorists (Ciompí, 1988; Perris 1989) have emphasised the role of psychological processes associated with the way people learn to understand and react to the environment. They suggest that there may be transactions between biological factors and emotional schemata, which arise from adaption to adverse life events through social-emotional learning.
Clearly the idea of a stress-vulnerability process has already been implicated in the literature concerning LOP. As has been discussed, a number of different aetiological factors have been associated with LOP, some that are biological, some psychological and others that are environmental. However, the literature on LOP has not yet entirely adopted this framework of multiple and complex interactions with numerous causal factors playing a role in the development of the illness. Instead, researchers have very much concentrated on proving or disproving individual theories of organic causes for the illness. It may be a helpful development in the understanding of LOP to utilise a broader framework. Indeed, Fuchs (1999a & b, 1994) and Roth (1987) have made this link explicit in their ideas that propose that people with LOP are made vulnerable, maybe by personality style and life events, and cope throughout life via various mechanisms such as avoiding intimacy and working hard. When the stresses of old age ensue, such as retirement and a reduced capacity to use defences such as selective interaction (Atchley 1991), psychotic symptoms emerge.

Corin & Lauzon (1992) have suggested that avoiding emotional intimacy may also be a coping strategy of younger people with psychosis. They compared frequently hospitalised with non-hospitalised people with schizophrenia. Patients that were not frequently hospitalised tended to adopt a position outside the social world, a position corresponding to an attitude of detachment rather than perceived exclusion. The patients described low levels of social contact often accompanied by regular visits to public places. The researchers suggested that this stance allowed people to be in the world without being
obliged to interact with other people. It is possible that staying outside of intimate relationships may have helped to keep them well and out of hospital.

If we accept that intimacy difficulties are a feature of people with psychosis, of any age, the impact of any psychological intervention needs to be thought through carefully. Increasing social contact may actually prolong symptoms. It has certainly been suggested in one commentary on a CBT intervention with adults that using a social activity treatment condition for the control group may have made the control patients more likely to relapse or slow down their rate of recovery (Johnson 1996; Drury, Birchwood, Cochrane, & MacMillan 1996a & b). Therefore, the type of intervention preferred for people with psychosis who also show intimacy difficulties might be individual rather than group therapy, and one that uses a structured format that reduces the social pressures that might be experienced in unstructured therapies.

It seems then that a stress-vulnerability framework could be a beneficial way of thinking about psychosis in later life. It strongly implies the possibility of multiple causation in the aetiology of LOP, and points to relevant factors, such as personality factors, stress thresholds and relationship difficulties that may be extremely important in considering how to help people with LOP. However, this framework still tells us little about how to directly intervene with someone who is actively paranoid and hallucinating. Researchers of earlier-onset schizophrenia have gained important psychological understandings of psychotic phenomena that may also be applicable to people with LOP.
Cognitive Models of Schizophrenia

The stress-vulnerability approach to understanding psychosis opened the way for researchers to investigate other contributions to the illness aside from constitutional and biological factors. Researchers over the past few decades have advocated the development of cognitive-behavioural interventions for psychotic patients, either as direct therapies for specific symptoms (Bentall, Chadwick & Birchwood, Garety, Fowler); as a way of enhancing patients’ coping skills (Tarrier); or as part of a normalising strategy (Kingdon & Turkington). These approaches have partly come from the idea that it is more helpful therapeutically to consider ‘schizophrenia’ in terms of separate symptoms, rather than to think of all its manifestations as one ‘syndrome’ (e.g. Bentall 1996).

Symptoms resulting from cognitive deficits

Some authors have attempted to explain psychotic phenomena as resulting from cognitive deficits thought to be caused by underlying biological dysfunctions. For instance, hallucinatory experiences are supposed to occur when private or mental events are misattributed to an external source. Misattributions are hypothesised to be caused by a random firing of the speech processing mechanism, which brings memories into consciousness (Hoffman 1986). Alternatively, it could be that the actual inner speech mechanism is normal but the internal monitor is faulty (Frith 1992). Frith (1987) proposes an account to explain passivity experiences (such as being controlled by external forces) and third person auditory hallucinations. His model posits that there is a deficit in a cognitive mechanism that enables people to monitor their own actions and their preceding intentions. The deficit deprives the person of a ‘sense of effort’ that usually accompanies
willed actions and thoughts, and the thoughts that arise are experienced as alien to the person.

This model has been extended to suggest that people with psychosis also have an inability to understand accurately the intentions of other people – a 'theory of mind' deficit (Frith 1992). This disorder of social functioning lends the person to make incorrect inferences or become highly confused about the intentions of other people. This leads to the experience that the social world is different or unusual and may provide the basis for paranoid delusions. There is some evidence for theory of mind deficits in people with positive symptoms of psychosis (see Garety & Freeman 1999 for a recent review of these studies), but this model is in the early stages of development and more research needs to be conducted. However, a theory of mind deficit may be consistent with the personality profiles found in people with LOP and psychosis of earlier-onset. It could be that the premorbid and schizoid personality disorders and the relationship difficulties characteristic of people with psychosis could relate to an existing deficit in theory of mind.

Reasoning Processes

Many researchers now presume delusions to stem from the same processes that create and maintain ordinary beliefs, rather than reflecting gross or specific underlying biological deficits. Delusions and hallucinations can be viewed as points on a continuum with normality (Kingdon & Turkington 1994; Romme & Escher 1989, 1993; Strauss 1969). Maher (1974, 1988) has argued that delusions reflect rational attempts to explain
anomalous experiences such as hallucinations or abnormal bodily sensations, and that faulty perceptions provide the fuel for delusions. Therefore, delusions are derived from entirely normal reasoning processes. Although this view cannot explain all delusions because anomalous experiences do not precipitate delusions in every case, Maher’s proposal is important as it emphasises that delusions are explanations of experience and represent an individual’s attempt to make sense of events (Garety & Freeman 1999). That delusional beliefs are relatively normal explanations of unusual experiences also implies the possibility of addressing delusions directly by using cognitive strategies that aim to modify the beliefs (Fowler et al 1995).

Although delusions are thought to stem from ‘normal’ belief formation processes, people with psychosis have shown cognitive biases and incorrect inferences in their thought processes, over and above those seen in non-psychotic people. There is very good evidence from studies employing probabilistic reasoning tests that people with delusions tend to jump to conclusions when gathering information (Garety & Freeman 1999). In reviewing studies that have investigated reasoning biases, Garety & Freeman concluded that people with delusions, when compared with clinical and non-clinical control groups, showed a tendency to seek less information to reach a decision. However, people with delusions were not unable to use new information when it was presented to them and could estimate probabilities. Therefore, they do not have a probabilistic reasoning bias but rather a data-gathering bias (Garety & Freeman 1999). The bias consists of a willingness to accept a hypothesis on the basis of less evidence than control groups, and to a lesser extent, the early rejection of hypotheses. Garety & Freeman (1999) postulate that under
certain conditions this bias may contribute to erroneous inferences and therefore to delusion formation. It might be that this bias is also present in older people with psychosis, and research is needed to establish if this is the case.

The work of Bentall and his colleagues indicates that persecutory delusions might be maintained by a selective attention bias to threatening events. In tasks involving a variation of the Stroop, patients with paranoid delusions show an abnormal attention to threat-related stimuli (Kinderman 1994, Bentall & Kaney 1989). They also exhibit a tendency (compared to normal and depressed controls) to remember threat-related propositions during story recall tasks (Kaney, Wolfenden, Dewey & Bentall, 1991). People with paranoid delusions therefore seem to attend to threat-related material in the environment, similar to those processes found in neurotic disorders.

Persecutory Delusions as a consequence of emotional disturbance

It has been suggested that paranoia and persecutory delusions arise from psychological defences. Bentall and his colleagues have proposed that people with persecutory delusions construct their beliefs to maintain self-esteem. Zigler & Glick (1988) have also proposed that delusions serve a positive function as a defence against low self-esteem and depression. In the account of Bentall and colleagues, delusions prevent discrepancies entering consciousness between how the person perceives themselves to be (actual self) and how they would like to be (ideal self) (Bentall, Kaney & Dewey, 1991; Bentall, Kinderman & Kaney 1994; Kinderman & Bentall 1996). Bentall and his colleagues argue that persecutory delusions are essentially externalised causal attributions that are evoked
when negative events occur. By discarding responsibility for negative events through delusions that blame others, underlying negative self-representations are not activated and self-esteem is maintained.

A number of studies have found that paranoid patients tend to attribute negative outcomes to external causes, particularly to people rather than to situations (Kaney & Bentall 1989; Candido & Romney 1990; Kaney & Bentall 1992; Kinderman, Kaney, Morley & Bentall 1992). Thus it may be that delusions are part of an underlying cognitive attributional style that may minimise discrepancies between the actual and the ideal self. Whether delusions actually act as a defence against low self-esteem is more controversial. The model predicts that people with delusions will show overt normal or high self-esteem and low self-discrepancies. This scenario has been demonstrated in two studies (Lyons, Kaney & Bentall, 1994; Kinderman & Bentall 1996). However, others studies have not found this to be the case, often finding low self-esteem that seemed to relate more to levels of depression (Garety & Freeman 1999).

Bentall and colleagues have also postulated a ‘weaker’ formulation of the delusion-as-defence account. They have argued that the delusion could be only partially successful, and therefore fail to fully preserve self-esteem. They have tested this through the comparison of overt and covert measures of self-esteem and discrepancies. The strongest evidence comes from a study by Lyons et al (1994), who studied explicit and implicit attributions and found that paranoid patients acted like depressed patients (that is, they blamed themselves) when attributions for negative events were elicited covertly. On a
standard attribution test, where attributions were overt, paranoid patients reverted to attributing negative outcomes to others. Other studies have not yielded such convincing results, and strong empirical support for persecutory delusions as a defence has not yet been established (Garety & Freeman 1999). However, measuring covert self-esteem and discrepancies is a difficult process, and the delusion-as-defence account could be applicable to a sub-group of people with delusions (Garety & Freeman 1999).

This issue of depression and self-esteem in people with LOP has largely been neglected in the literature. This might be because people with primary affective psychosis are excluded from studies of LOP and therefore levels of depression are not routinely reported. In a recent investigation of Bentall et al's ideas in people with LOP, McCulloch (2000) found that people with LOP had levels of overt depression and self-esteem that were comparable to a healthy control group. Further, they were significantly less depressed and higher in self-esteem than a comparison group of depressed elderly people. However, the study did not find evidence of covert depression in the LOP participants, which was assessed using a Stroop Task. It might be that the Stroop task was not sufficiently sensitive enough to detect covert depression since the depressed group also showed no interference effect for depression-related words. The study then did not find evidence in support of the delusion-as-defence theory in people with LOP, but this may require further investigation.
Summary

No one account of delusions fully explains the phenomenon (Garety & Freeman 1999). There is strong support for a data-gathering bias, in that people with delusions tend to gather less evidence than controls so that they jump to conclusions. There is also evidence of an attributional bias, where people with delusions externalise blame for events, possibly to defend against low self-esteem. Further, there is some support for the idea that people with delusions have a theory of mind deficit. Garety & Freeman (1999) believe that these accounts are not contradictory, that they co-occur and may even interact together. For instance, a data-gathering bias may interact with a biased attributional style to result in hasty decisions about the intentions of others. They suggest that a multi-factorial account of delusions is consistent with current empirical findings, where different people would have symptoms generated by different factors. Whichever seems to be the underlying process – whether it be neurological deficits or cognitive biases in thinking - models of CBT for schizophrenia can be adapted to accommodate these.

Cognitive-Behavioural approaches to Schizophrenia

A key assumption of the cognitive-behavioural model is that people develop and maintain cognitive sets or schemata that allow them to make sense of their experiences (Beck, Rush, Shaw & Emery, 1979). In understanding the world, processing information and making inferences, people do not follow strictly the rules of formal logic, but employ these schemata as heuristics to screen, limit and organise perceptual experiences (Kingdon, Turkington & John 1994). Psychopathology and psychological difficulties are

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thought to result from distortions in the formation or use of schemata. Distortions may be generated by a number of mechanisms, including those discussed in the preceding section (neurological deficits, biases and attributions). Delusional beliefs are viewed as reflecting overly narrow or inflexible cognitive sets that are resistant to disconfirmation and which lead to the misinterpretation of new events in accordance with their belief system (Davidson, Lambert & McGlashan, 1998).

An advantage of the CBT model of the mind is that it is consistent with the stress-vulnerability paradigm and allows for an interactive interplay between biology and environment (Davidson et al. 1998). If hard-wired neurocognitive deficits were discovered to be at the core of psychosis, these deficits could assume a prominent role in explaining the production of distorted cognitive schemata. Alternatively, abnormal or distorted perceptual experiences (due to neurobiological causes or environmental sources) could produce maladaptive schemata. In either case, locating the problem at schema level provides a target for therapy.

In the CBT model, schemas (or core beliefs) and dysfunctional assumptions that guide behaviour are thought to have their origins in childhood. In particular, some authors have proposed that early relationships with attachment figures promote or threaten healthy psychological development (defined as a reasonable balance between attachment and autonomy) (Blatt & Zuroff 1992). For example, carers may be inconsistent, neglectful and abandoning leading a child to feel empty, isolated and vulnerable to feelings of dependence. Alternatively, carers that are intrusive, controlling and punitive lead the child
to avoid others, be critical of themselves and others and be prone to feeling worthless. The child then grows up with a view (schema) of themselves and the world that has been coloured by their early experiences and through which they process new information and events.

Harrop & Trower (2001) have proposed a psychological developmental explanation of schizophrenia that could easily be linked in with the development of early maladaptive schemas. To explain why schizophrenia often emerges in late adolescence, they have begun to investigate the idea that psychosis interacts with the specific developmental tasks of adolescence. They argue that certain characteristics typical of adolescence such as conflicted family relationships, grandiosity, egocentricism, and magical ideation bear a distinct resemblance to phenomena seen in psychotic disorders. For most adolescents, such phenomena are functional and will pass with successful psychological development. They argue that psychosis in later adolescence is a consequence of severe disruption in this normally difficult psychological maturational process in vulnerable individuals. The vulnerable individual is hypothesised to have problems with either or both of the two basic adolescent developmental tasks: in reaching psychological maturation with regard to parents (separating and becoming autonomous from them) or in bonding with peers (to replace the loss of attachment with the parents). They propose that this leads to crucial difficulties in self-construction and that psychosis emerges out of such “blocked adolescence”. The developmental tasks of adolescence involve the negotiation of separation and attachment, which are the themes reflected in CBT theories about the early experiences and difficulties that underlie maladaptive schemas. It might be that
earlier negative experiences concerning these themes make the individual less likely to be able to negotiate these tasks successfully when they reach adolescence.

Although there may not be a set of dysfunctional assumptions or schemas that are specific to people with psychosis, frequently encountered themes include feeling vulnerable to harm or losing self-control, feeling defective, having unrelenting standards and feeling doomed to social isolation (Fowler et al 1995). Different authors place varying emphases on the role of schemas in therapy for people with psychosis. The restructuring of core schemata is the ultimate aim of Perris & Skagerlind's (1998) approach, whereas Haddock & Tarrier (1998) believe that schemas should be addressed at a later stage in therapy, and then only if appropriate.

Chadwick, Birchwood & Trower (1996) have proposed a particularly coherent CBT model for intervening with people with schizophrenia. They draw on Beck's cognitive model (Beck et al 1979) and rational-emotive therapy (Ellis 1994). In their ABC model, a hallucination is an activating event for a belief about the hallucination - where a voice is seen as an activating event (A) to which the individual gives meaning (B or belief) and experiences the associated emotions (C or consequence). As such, hallucinations are seen as secondary delusions. The model asserts that it is the personal meaning of events for people that cause the distress. Along with beliefs about activating events there are also core beliefs (or schemas) that arise from early experiences and in particular are thought to reflect the amount of attachment (closeness) and autonomy (self-definition) the person with psychosis had with their carer as a child.
Chadwick et al (1996) argue that inferential thoughts, such as delusional interpretations of events, are necessarily influenced by antecedents and enduring beliefs. Therefore, delusional interpretations are not hypothesised to result solely from either top-down or bottom-up influences. They argue that what is clear is that certain delusions are much more strongly influenced by activating events (reference, passivity, thought insertion, thought broadcast) while others seem much more to reflect a psychological motivation, perhaps to protect a person's sense of self, such as paranoia and grandiosity. As paranoia is a key symptom in LOP, it might be that psychological motivation, past experiences and schemas play an important role in the formation of delusions for older people. Psychosis in later life might also be related to life stages and developmental tasks. It might be that people who develop LOP have similar difficulties to adolescents who develop psychosis, in that they struggle to overcome the specific developmental tasks of ageing. This hypothesis will be discussed in more detail later.

There have been numerous CBT interventions developed over the past two decades for people with psychosis, either as direct therapies for specific symptoms, as a way of enhancing patients' coping skills or as part of a normalising strategy. What they have in common with each other is that they subscribe to the basic principles of CBT (Beck et al 1979) in that they focus on the meaning of symptoms for individuals, view symptoms as part of a continuum with 'normal' thought processes, and conduct treatment in the spirit of collaborative empiricism.
Evidence for the efficacy of cognitive treatments of psychosis

Although still in its early stages, the evidence for the efficacy of CBT approaches for psychosis is promising. Jones, Cormac, Mota & Campbell (2000) reviewed four randomised trials that compared standard care treatment (SC) against CBT plus SC. The trials suggest that CBT plus SC reduces the risk of relapse by approximately 54%. It was also superior over SC-alone in accelerating discharge from hospital, reducing hallucinations and the distress caused by beliefs, and had better long-term outcomes in relation to symptomatology and interpersonal functioning. Dickerson (2000) has conducted a broad review that also includes case series and non-randomised studies, and different CBT approaches. She found good evidence that belief modification techniques, coping strategy enhancement, and combination CBT (using a variety of techniques) were effective in reducing convictions about delusional beliefs and reducing positive symptoms. Gains were superior to standard care control groups and were maintained at follow-up. Other approaches, such as focusing treatments, normalising therapy, and intervention in acute episodes all showed promise but needed more stringent testing. Shortcomings with CBT approaches include the similar rates of attrition to standard care groups (Jones et al. 2000), and the lack of evidence that treatment directly improves people’s depression, negative symptoms or social functioning (Dickerson 2000). However, as people with LOP tend not to suffer from negative symptoms, CBT might be an advantageous intervention for this group.
Summary

Just as psychological conceptualisations have illuminated some key issues in relation to psychosis in adolescence and adulthood, so too a psychological approach is needed in order to begin to understand the experience of LOP. For instance, given the likely relevance of difficult experiences in early life and problems with close relationships, this could be investigated in terms of salient schemas, using theoretical models derived from social cognition (e.g. Markus & Wurf 1987, Greenwald & Pratkanis 1984) and applied in schema-focused cognitive therapy (Young 1990). Schemas would be expected to influence adjustment and coping, to relate closely to self-esteem, and to interact with other relevant variables in determining mental health outcomes. Just as Harrop & Trower (2001) suggest that psychosis of earlier-onset may be a function of not being able to negotiate the specific developmental tasks of adolescence, it may be that LOP is similarly linked to a difficulty in negotiating the developmental tasks of older age. It is important then to look at the developmental tasks involved in getting older and how these may interact with mental health.

1.4 The process of ageing

Despite their interpersonal difficulties, and unlike people who develop psychosis in adolescence or adulthood, people with LOP tend to have reasonable pre-morbid occupational and developmental histories (Fuchs 1999b, Castle et al 1997, Hassett et al 1992). This again raises the question of why individuals with a presumed vulnerability, who have nevertheless functioned adequately throughout adult life, develop difficulties at a late age. As already indicated in the ideas of Fuchs and the stress-vulnerability
paradigm, one possibility is that this is related to the process and consequences of ageing and the way in which the individual adjusts to these changes. It may be that particular age-related factors produce conflicts that create stress and threaten an already vulnerable sense of self, resulting in the emergence of symptoms (Hassett 1997; Fuchs 1999b).

This idea can be understood within a developmental framework. As already discussed, schizophrenia of earlier-onset is beginning to be linked with a developmental life span perspective (e.g. Harrop & Trower 2001) and a similar perspective may provide useful insights into LOP. One influential framework that provides an account of development in later life is Erikson's psychosocial theory of lifespan development (Erikson, Erikson, & Kivnick 1986; Erikson 1980). This proposes that across the lifespan a series of developmental tasks must be negotiated. If these tasks are not successfully negotiated then problems arise with subsequent stages. Harrop & Trower (2001) have proposed that psychosis develops in adolescence because the particular tasks of adolescence have not been negotiated. It might be that people who develop LOP may have negotiated these adolescent tasks successfully enough by drawing on their strengths, but then have difficulties in old age.

Erikson proposed that after adolescence, with its developmental task of searching for a personal identity, adults pass through three psychosocial stages. The stages focus on the establishment of close interpersonal relationships in early adulthood (intimacy vs isolation) and, in later adulthood, the passing on of one's creative products to future
generations (generativity vs stagnation). The final task to be resolved by those reaching older adulthood is ego integrity vs despair.

Through a process of life review and critique the individual must resolve conflicted feelings about the past, adapt to the changes associated with the ageing process, and come to grips with the inevitability of death. This process results in either the acceptance or rejection of the life one has lived. Those who accept the events that make up their lives and integrate them into a meaningful personal narrative achieve a sense of personal integrity, coherence and wholeness. Such an individual has a positive attitude toward life, accepts life for what it was, and has a sense of accomplishment (Whitbourne 1996). Those individuals who avoid reviewing their lives, find they cannot accept the events of their lives or integrate them into a meaningful personal narrative, develop a sense of despair. They may feel that they did not fulfil their potential, or have a weak and fragmented sense of self and constantly regret past decisions. It might be that the way people cope with this existential despair depends on various factors such as social support, negotiation of previous development tasks and vulnerability factors, and for some it will all contrive to emerge as LOP.

The Stresses of Ageing

It has often been assumed that the process of ageing involves many features that may place self-esteem and self-concept increasingly under attack. Negative perceptions of old age depict it as a period of multiple losses – loss of spouse, friends, roles, income,
independence and health (Ruth & Coleman 1996). Authors have especially emphasised stresses occurring in very old age. After 85, changes in health, residence and connections to others challenge a sense of continuity (Troll & Skaff 1997), and illness and disability become virtually normative experiences (Becker 1993). Further, as persons outlive parents, their own generation and sometimes their own children, there are few providers of feedback to help maintain a sense of self (Johnson & Barer 1993).

However, many older people will experience these stresses without becoming psychotic. Indeed, studies have shown that the majority of people age ‘successfully’ and many older people are as happy or satisfied with their lives as their younger counterparts (Carstensen & Freund 1994). Coping, adaptation and resilience functions are well preserved throughout most of the life span (Foster 1997), and self-esteem and self-concept remain relatively stable with age (Brandtstädtter & Greve 1994a; Atchley 1991; Coleman, Ivani-Chalian & Robinson 1999). There is growing evidence that mental health is particularly well-preserved as people grow old, and for almost all disorders, except cognitive disorders such as dementia, both incidence and prevalence are generally lower in the elderly (Foster 1997).

Recently, the evaluation of old age as stressful has been questioned (Ruth & Coleman 1996) and the evidence does not allow for any definite conclusions about whether particular age groups suffer greater stress (Foster 1997). For example, categories of stress change over the life span, in that “challenges” are higher in younger people, while “threats” and “losses” are progressively higher in the elderly (Costa, Zonderman and
McCrae 1991). Also, there seem to be qualitative age shifts in roles, with younger adults being involved with "acquiring" roles (such as spouse, parent, employee) whilst older adults are typically "relinquishing" roles (through retirement, death of a spouse, health problems) (Hughes, Blazer & George 1988a). Hughes, George & Blazer (1988b) also found age-related differences in the quality of life events. For the elderly it was more "expected" that a family member became ill, more negative to have an illness requiring hospitalisation, and more positive to retire.

Therefore, major stressors occur throughout life and there is a qualitative shift in the types of stressors that are distributed over the adult life span (Foster 1997). Many authors, including Costa & McCrae (1993), have argued for the normative nature of ageing whereby changes can be well anticipated. Currently a middle position is taken whereby there can be both stress-ful and stress-free development in old age. Both stability and change can be found in the self-concept with ageing and life events are not thought to be more taxing than in earlier life (Ruth & Coleman 1996). It is unlikely then that developing LOP is merely a function of the stresses of old age, and it probably results from a combination of factors. The important factor may be less concerned with actual stresses, and more with how people adjust to these particular age-related stresses.

As in the literature on psychosis, accounts of ageing have suggested a stress-vulnerability model of adaption, where the homeostasis of life is disturbed by hassles and major events that place excess demands on the physical or psychological system of the individual (Ruth & Coleman 1996). As has also been found in studies on psychosis, daily hassles seem to
show stronger correlates to physical and psychological well-being in the elderly than do major life events (Landrevill & Vezina 1992). If we take the view that LOP is an interaction between stress and vulnerability, it could be useful to look at how people are thought to adjust ‘successfully’ to ageing and determine if these factors are likely to be lacking in a person who is ‘vulnerable’ to developing LOP.

**How do people adjust to ageing?**

Gerontologists postulate that *sense of self* is especially important in navigating the changes and challenges in later life (Troll & Skaff 1997). Self-esteem, an area strongly related to self-concept, has a well-recognised relationship to psychological well-being (Ranzijn, Keeves, Luszcz & Feather 1998). Rosenberg (1979) posits that self-esteem is developed and maintained through three social processes, each of which may be difficult for people with LOP as they remain socially isolated. The first involves reflected appraisals, which are evaluations and responses of others toward us. The second involves evaluating ourselves in comparison with a reference group or individual. The third involves self-attributions, which arise from the observation of our own behaviours and outcomes in situations and our subsequent attributing of characteristics to ourselves. All three processes are thought to contribute to self-worth and self-efficacy. If people with LOP are socially isolated they are less likely to have experience of other people’s feedback. Further, if they tend to be premorbidly paranoid then they may interpret other people’s evaluations and responses in a negative light and perhaps compare themselves negatively to other groups, or feel different from other people. Other studies have found that the importance of specific life domains change with age and that older people tend to
place greater importance on the social domain (Cross & Markus 1991, cited in Carstensen & Freund 1994). Again, the social isolation and social difficulties experienced by people with LOP may mean that this avenue of identity maintenance may not be open to them.

**The importance of the past in sense of self**

Compared to younger groups, older people tend to emphasise the past more (Coleman 1996). The centrality of the past could maintain a stable self-concept by drawing on past evidence to create or preserve the self-narrative (Troll & Skaff 1997). Some authors have postulated an increasing coherence of life story with age, and by late life the life history report is a significant indicator of well-being (Sherman 1994) – as would be predicted by Erikson’s theory of ego integrity (Coleman 1996). Both clinical and non-clinical observation suggests that some older people feel rather confused, hurt or depressed about what has happened to them – a satisfactory identity has not been negotiated (Coleman 1996). It might be that this is the case in people who develop LOP, and that due to their negative or perceived negative life experiences, they are unable to maintain a satisfactory identity in later life.

**Attitude to Ageing**

A person’s own attitude to ageing is a potentially important negative influence on the experience of self in later life (Coleman 1996). Fear of dependency and negative attitudes to ageing are predictive of loss of self-esteem and depression as frailty and dependency increase (Coleman, Aubin, Ivani-Chalian, Robinson & Briggs 1993). Other studies have
also found that negative attitudes to old age correlate with low self-esteem (Bengston, Reedy & Gordon 1985), and fear of the future self seems to be a significant factor in adjustment to ageing (Coleman 1996). The past life experiences of people who develop LOP could contribute to a general negative attitude towards life that may extend to how they feel about getting older. It might be that this group has a particularly negative attitude to getting older compared with people who do not experience mental health difficulties in later life.

**Self acceptance and the acceptance of change**

Studies have found that there are differences between the way younger and older people think about themselves (Coleman 1996). Older people tend to show a narrowing of discrepancies between ideal and actual selves (Cross & Markus 1991, cited in Carstensen & Freund 1994), greater self-acceptance and lowered expectations (Kogan 1990; Dittmann-Kohli 1990). Further, Ryff (1989, cited in Ruth & Coleman 1996) found that older people stressed the importance of accepting change as being important to well-being. In a study investigating the oldest-old (over 85 years), Troll & Skaff (1997) found that people felt they were the same person they had always been, even though their self-descriptive attributes had changed. Troll & Skaff (1997) concluded that changes in attributes can be assimilated into a continuous view of self, and that the core self can accept even major changes in attributes. Whitbourne & Collin (1998) have proposed a similar method of successful adaption to changes whereby the individual holds a stable sense of self but at the same time is open to change when large or continuous discrepancies between the self and external experiences occur.
Several authors have discussed the role of physical changes and frailty in ageing and sense of self. Coleman (1996) argues that when ageing reaches the point of frailty more serious challenges to the self occur. The problems of disability include interrupted continuity to the way of life, changes in reference group, the need for more extreme coping methods, and the reduced capacity to use defences such as selective interaction (Atchley 1991). The number of thoughts dealing with the ageing body and its physical status increases in later life (Dittmann-Kohli 1990). Whilst people as young as 40 are sensitive to age-related changes, particularly in appearance, people aged over 65 are more concerned with changes in competence (aching joint, mobility) and it seems that competence is central to many older people's sense of identity (Whitbourne & Collins 1998). It is likely that the frailer and less autonomous someone becomes, the greater the challenge posed to their sense of self.

The increased rates of sensory impairments found in populations of LOP could be a part of this process. Sensory deficits make communication harder and increase dependency needs. As sensory problems become more severe in the person who is vulnerable to LOP, perhaps this conflicts with their sense of being independent and autonomous (Fuchs 1999b) and a new self has to be incorporated into their self-concept. Perhaps this is particularly difficult for people with LOP as they have spent their lives avoiding social relationships and feedback on their self-concepts, and this makes them less able to alter their self-perceptions in the face of adversity. Dietz (1996) has found that, in older people, self-efficacy (competence and power) is a more resilient dimension of self-esteem than is self worth (a sense of moral worth as a person). She posits that self-efficacy is
maintained by looking inwards for a sense of meaning and accepting accomplishments in life as adequate. If people who are vulnerable to developing LOP feel they have been mistreated by life, and have not felt that life has gone the way they wanted it to, then this would reflect itself in a lower sense of self-efficacy and self-esteem.

Coping Strategies in Later Life

The ageing literature has also considered the types of strategies people use when coping with age-related changes. Distinctions have been made between problem-focused and emotion-focused coping, approach and avoidance coping, and active or passive coping (Ruth & Coleman 1996). Active, approach and problem-focused strategies decrease with age and this tendency has often been deemed to reflect resignation and regressive tendencies (Brandtstädter & Greve 1994). More recently, the emphasis in the literature has been on the self as competent and creative in response to the challenges it faces, rather than passive, dependent and reactive (Coleman 1996).

Brandtstädter and his colleagues (Brandtstädter & Renner 1990; Brandtstädter & Greve 1994) have proposed a cognitive developmental theory of ageing to explain how a consistency between actual and intended courses of personal development, and thus self-esteem, is maintained in old age. They propose that successful adaptation to losses and declines hinges on the interplay between two cognitive processes – assimilation and accommodation. Assimilation refers to strategies aimed at shaping or maintaining a desired course of personal development, such as optimising resources or compensating for losses in domains that are central to the individual’s self-esteem and identity. When
assimilation strategies become ineffective, accommodative processes come into play. Accommodation refers to cognitive strategies aimed at adjusting personal preferences and goals to given situational forces and constraints (e.g. altering performance standards, disengaging from barren goals, adjusting evaluative or comparative reference points). Accommodative coping only occurs when attempts at assimilative coping are ineffective in improving a person’s situation. If assimilative coping becomes ineffective, the person enters a depressed and disoriented phase that only ends if barren goals are disengaged from and new perspectives for personal development are built up (i.e. accommodative processes are adopted). It is also predicted that people can become depressed if they disengage prematurely from goals (i.e. fail to use assimilative processes).

In this model, assimilative and accommodative processes occur throughout the life span and help people to maintain personal continuity in the face of difficulties and changes. Brandtstädter & Greve (1994) argue that accommodative processes are only activated when losses and events are perceived as inevitable and uncontrollable, and that these types of events accumulate in later phases of life. Therefore, accommodative coping should gain dominance over assimilative coping as people get older. They developed two scales to measure both processes (Brandtstädter & Renner 1990). The Tenacious Goal Pursuit (TGP) scale measures the tendency to adhere to goals even in the face of great difficulties (assimilation), and the Flexible Goal Adjustment (FGA) scale measures the tendency to disengage from unobtainable goals and search for positives in situations (accommodation). Using these scales in cross-sectional studies, they confirmed that older people scored higher on the FGA than on the TGP scale. In fact, both modes of coping
were equally used before the age of 30, and then gradually FGA increased. By age 60 there was a clear difference between the scales (TGP mean score of 47 and FGA mean score of 56). Both scales correlated negatively with depression and positively with measures of life satisfaction and optimism. These findings support the authors' propositions that both processes are important in adjusting to old age, but that increasing losses and reduced resources means that accommodative strategies become more adaptive than employing assimilative/compensatory strategies.

In reviewing the general literature, Boyd, McKiernan & Waller (2000) concluded that there was some evidence for this model, in that older adults who had adapted successfully to ageing reported striving to maintain their current position rather than seeking improvement or disengagement. Further, older people tend to alter their standards and are more self-accepting. Coleman et al (1999) specifically applied this model to five longitudinal individual cases of older people and found that assimilation was the main form of adaptation shown and that there were fewer examples than anticipated of accommodative modes of coping. However, in accordance with Brandtstädter's model, the lack of accommodation did appear to be associated with the occurrence of depressive episodes.

For some individuals, then, a shift from assimilative and to accommodative coping strategies may be hard to achieve. It is hypothesised that this would be particularly true of those individuals with the predisposing characteristics for LOP, and that these individuals may be expected to have particular difficulties with adjusting to ageing. People with LOP
are not the only group who develop mental health problems for the first time in late life. Non-psychotic depression, too, can be experienced with first onset in late life. It can be hypothesised that adjustment to ageing may equally play a role here (Boyd 1999). People who develop depression for the first time in late life might be expected to show difficulties with accommodative coping (Boyd et al 2000). Indeed, depression is proposed to occur as a consequence of this (Brandtstadter & Renner 1990, Brandtstadter & Greve 1994), since depression may be a developmental stage in the shift to more accommodative coping. Therefore, within this model one might predict that both depressed people and people with LOP would show less adherence to accommodative strategies and a stronger tendency to assimilation than people who do not have mental health difficulties.

Summary

Empirical evidence suggests that it is not so much the particular age-related stresses that cause problems in later life, but more how they are coped with. A stress-vulnerability model has been suggested to account for these results. It is thought that the maintenance of sense of self in old age is crucial to mental well-being. It is thought that several processes influence sense of self: These include reflected appraisals from others; comparisons with others; assimilating changes in self-attributes into a consistent sense of self; a coherent life story; a positive attitude to ageing; self-acceptance and the acceptance of changes especially in the face of increasing frailty and dependency. It has been argued that people who are vulnerable to developing LOP may find adapting to changes particularly difficult because of their past life experiences, premorbid
personalities, social isolation and social difficulties. This inability to adapt to changes, including a difficulty in shifting from assimilative to accommodative coping strategies and together with pre-existing vulnerability factors may precipitate the onset of LOP.

1.5 Overview of literature & rationale for present study

So far, the understanding and treatment of LOP has primarily been biological however 50% of this group do not fully respond to anti-psychotic medication. It has been argued that a psychological understanding of LOP is needed in order to develop psychological interventions for this group. It seems that LOP shares many of the characteristics and phenomena associated with psychosis that occurs during adolescence and adulthood, although some differences are also apparent, including those in clinical presentation. However, the similarities between the disorders suggest that some of the psychological models and interventions that have successfully been applied to psychosis of earlier-onset might also be relevant to people with LOP. In particular, the stress-vulnerability model is a useful framework in which to understand the complex aetiologies and late presentation of LOP. Further, the cognitive-behavioural model fits easily within this framework and may be an advantageous intervention for this group, because CBT focuses on positive symptoms that are a feature of LOP. Factors that may be different and unique to people with psychosis of late-onset have also been discussed in relation to the ageing literature. This literature suggests that adaptation to stresses in later life may depend on a robust sense of self and a particular preference in coping strategy. It has been argued that people with LOP may have difficulty adjusting to ageing because of vulnerability factors.
Figure 1 depicts a cognitive formulation of LOP. In this model, biological, psychological and environmental vulnerability factors lead to the formation of maladaptive schemas. Specifically, people who are biologically and cognitively vulnerable to developing psychosis may also have personality attributes that predispose them to difficult interpersonal relationships. These factors may interact with early life experiences and events that occur during adulthood. Evidence suggests that particular themes are observed in the life experiences of people with LOP (Fuchs 1999a). For instance they report histories consisting of discriminating (e.g. illegitimate birth or child; handicap) and threatening experiences (e.g. expulsion from home; rape), and a history of fragile relationships (e.g. parents divorce; own divorce). Adverse life experiences have also been found in people with depression (Perris 1984, Brown & Harris 1978), and different themes have been observed for this group. For instance, people with late-onset depression report a history of serious early losses, such as death of a parent in childhood and death of a child (Fuchs 1999a).

In the cognitive model, adverse life experiences are thought to relate to maladaptive schemas. Therefore it follows that people with LOP and depression may have greater levels of maladaptive schemas than older people who do not have psychological difficulties in later life. Further, evidence suggests that people with LOP have premorbid personality difficulties therefore maladaptive schemas may be a particular feature for this group of people. Given the apparent differences in types of adverse life events reported by people with psychosis and those with depression, it might also be expected that the types of schemas that are salient for each group would be different.
Vulnerability Factors

1. Inherent
Biological / genetic, birth trauma, neurocognitive deficits, lower tolerance to stress, schizoid or paranoid personality traits, cognitive biases

2. Early Experiences
Adverse early experiences such as difficult relationships with caregivers (and later peers), divorce of parents, trauma, abuse, expulsion from home, being handicapped, and illegitimacy.

Core Beliefs or Schemas
Schemas may lead to coping mechanisms such as avoiding intimacy with people as a means of minimising stress.

Dysfunctional Assumptions (DA)
DAs feed into core beliefs and affect the way people with LOP react to events around them.

Context
Growing older including subtle cognitive changes, sensory impairments, decline of physical health and mobility.

Adaptation
Coping strategy: a predominance of assimilation / Tenacious Goal Pursuit
Negative attitude to ageing
Attempts to maintain self-esteem

Trigger events
Stressful age related experiences such as retirement, bereavements, money difficulties, physical ill health, mobility problems, and sensory impairments

Symptoms formation and maintenance
Delusions (possibly as a defence against low self-esteem)
In the cognitive formulation, maladaptive schemas affect the ways in which people react to events that happen to them throughout life. For people who are vulnerable to developing psychosis, this might manifest as a tendency to avoid intimate relationships and to strive to maintain autonomy by pursuing work-related goals. It is hypothesised that, in the context of ageing (e.g. changes in roles, health difficulties, decreasing autonomy) people with LOP will have particular difficulties in adjusting to growing older that may contribute to the eventual onset of psychosis. It might be that histories of adverse events predispose people to a dissatisfied view of life and a negative attitude to ageing, and that this might be particularly so for people with LOP. A negative attitude to ageing, their isolation and changes in roles may predispose them to difficulties in maintaining self-esteem. However, as the literature on earlier-onset psychosis suggests, delusions may actually defend against these threats to self-esteem, and self-esteem may not be as affected as in late-onset depression.

Finally, given their personal qualities of tenacity and independence and their lack of intimate relationships, this group of people may have difficulty with disengaging from barren goals and altering their performance standards (accommodative coping) because they have little else to maintain their self-esteem. In the Brandstädter model depression is hypothesised to be a consequence of failing to shift from an assimilative to an accommodative style of coping. It may also be true that people with LOP have a difficulty shifting to an appropriate coping style.
Research needs to explore in depth the psychological factors associated with LOP, both to try to understand more about LOP and its onset, and also to indicate the possible avenues for developing psychological interventions, especially for the 50% of people with LOP who do not respond to medication. Rather than large-scale studies that look at risk factors, what is needed is smaller scale and more detailed investigations that can delineate the salient psychological issues.

This research proposes to investigate three groups of people: a LOP group, a healthy control group from the community, and a group with late-onset depression. Comparisons with the healthy group will provide an indication of the relevance of the hypothesised variables. Comparison with the late-onset depression group will provide an indication of which factors are relevant to LOP in particular, rather than being generally relevant to the onset of mental health problems in late life.

**Hypotheses**

1. It is predicted that the clinical groups will report higher rates of adverse life events than the healthy volunteer group. Further, it is predicted that there will be differences in the types of events reported between the clinical groups. People with LOP will have discriminating (e.g. illegitimate birth or child; handicap) and threatening experiences (e.g. expulsion from home; rape), and a history of fragile relationships (e.g. parents divorce; own divorce). The depressed group will have a history of serious early losses, such as death of a parent in childhood and death of a child. It is
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2. It is predicted that the clinical groups will be higher on maladaptive schemas than the healthy volunteer group, and that this may be particularly true for the LOP group. It is also predicted that there will be differences in which schemas are salient for each group.

3. There will be differences between the groups in level of self-esteem. Clinical groups will have lower self-esteem than the healthy group. However, the LOP group will be closest on self-esteem scores to the healthy group, and the depressed group will be lower.
Chapter 2: Method

2.1 Design

The study employed a between and within subjects cross-sectional design. The mental health status of participants (i.e. belonging to late-onset psychosis, late-onset depression, or healthy volunteer groups) formed the independent variable. The dependent variables were life experiences, cognitive schemas, coping strategies, attitude to aging and morale, self-esteem, depression, and cognitive functioning.

2.2 Ethical Considerations

Ethical permission for this study was obtained from Camden & Islington NHS trust (appendix A) and the Institute of Psychiatry Ethics Research Committee (appendix A). A major ethical consideration related to obtaining the informed consent of the clinical participants. The Royal College of Physicians and the Royal College of Psychiatrists' Guidelines (British Medical Association and the Law Society 1995) were followed when seeking informed consent from people with psychosis and depression. Specifically, competence to consent was determined by the consultant psychiatrist and key worker assigned to each participant. Participants were then approached by either their consultant or key worker and invited to participate. The researcher, often in the company of the consultant or key worker, met those participants who agreed to participate and the study was explained in detail to them. They were invited to participate again, this time by the researcher. All participants were asked to sign a detailed consent form (see appendix I)
and were repeatedly told that they could withdraw from the study whenever they wished, without having to give a reason.

2.3 Measures

In order to address the hypotheses, the participants completed the following questionnaires:

**Mini-Mental State Examination** (MMSE, Folstein, Folstein & McHugh, 1975)

The MMSE is the most widely used screening evaluation of cognitive impairment. It has been used to screen for dementia, quantify the degree of cognitive impairment, and serially measure cognitive changes over time. Scores range from 0-30, and values of 23 and less suggest the presence of cognitive impairment. Zimmerman (1994) recommends that three levels of cognitive impairment be delineated: 24-30 = no cognitive impairment; 18-23 = mild cognitive impairment; and 0-17 = severe cognitive impairment. For this study, a cut-off of 24 was used.

**Geriatric Depression Scale – Short Form** (GDS: Sheikh & Yesavage, 1986)

This is a 15-item questionnaire developed as a screening tool for depression in older adults. The original version of this scale was designed specifically to avoid problems associated with the measurement of depression in older adults (e.g. somatic confounds). Scores range from 0-15 and a score of 6 or above indicates the presence of depression. Yesavage et al’s (1983) study of the original 30-item form reported test-retest reliability of 0.85, an alpha coefficient of 0.94 and split-half reliability of 0.94. There was also a
good correlation with alternative measures of depression ($r = 0.83$ for GDS and Hamilton Rating Scale for Depression-Revised, Hamilton 1960; $r = 0.80$ for GDS and Zung Self-rating Scale for Depression, Zung 1965). Sheikh & Yesavage (1986) found the short form correlated strongly with the original form ($r = 0.84$).

**Philadelphia Geriatric Center Morale Scale – Revised** (Morale Scale: Lawton 1975)

To measure Attitude to Ageing this 17-item scale was used. It was designed to assess overall morale in elderly people and the original paper describes a principal components analysis of the scale on over 1000 elderly people. Three consistently reproducible factors emerged: Agitation (6 items), Attitude Towards Own Ageing (5 items) and Lonely Dissatisfaction (6 items). Using these 17 items, internal consistency as determined by Cronbach's alpha statistic was 0.85, 0.81 and 0.85 respectively. The Morale scale is relatively short, and as such it was decided that the whole scale, rather than just the Attitude to Ageing sub-scale, would be administered to investigate overall morale and the various components believed to make up this construct assessed by the separate sub-scales. High scores indicate high / positive morale.

**The Robson Self-Esteem Questionnaire** (RSEQ: Robson 1989)

This is a 30-item self-report questionnaire that generates a 'global' self-esteem score. Responses are on an 8-point scale from 'strongly disagree' (0) to 'strongly agree' (7), giving a maximum score for global self-esteem of 210. In developing the scale, Robson reviewed the literature and used a multidimensional definition from a combination of prominent theories. He defined self-esteem as "the sense of contentment and self-
acceptance that results from a person’s appraisal of his own worth, significance, attractiveness, competence and ability to satisfy his aspirations” (Robson 1989, p.514).

The RSEQ has good reliability and validity. For example Robson (1989) reports split half reliability of 0.96, test-retest reliability of 0.87 and a Cronbach coefficient of 0.89. It has a high positive correlation with the Rosenberg Self-Esteem Scale (r = 0.83) and a moderately negative correlation with the Beck Depression Inventory (r = -0.69) (Addeo et al 1994). The scale could also significantly discriminate between clinical (anxious and psychotherapy patients) and control groups (Robson 1989). High scores indicate high / positive self-esteem.

**Tenacious Goal Pursuit and Flexible Goal Adjustment (TGP & FGA, Brandtstädter & Renner 1990)**

This 30-item questionnaire was designed to assess assimilative and accommodative coping tendencies on a dispositional level (see appendix B). It comprises of two independent scales of 15 items each. The FGA scale measures the readiness to easily disengage from blocked goals and to focus on positive aspects of aversive situations. The TGP scale assesses the tendency to cling to goals even in the face of aversive situations. Responses are on a 5-point scale, from strongly agree (4) to strongly disagree (0), giving a maximum score on each scale of 60. High scores indicate high TGP or FGA tendencies.

Both scales show adequate internal consistency, with Cronbach’s Alpha scores of 0.83 for FGA and 0.80 for TGP. Using a population aged between 30 and 70, both scales showed significant negative correlations with depression (FGA was -0.41 and TGP was -
Further, both scales were significantly correlated with measures of optimism and life satisfaction. Importantly, Brandtstadter & Renner found that the scales exhibited a clearly opposite regression with age. In later adulthood, an accommodative style of coping (FGA) becomes increasingly predominant and TGP decreases.

Young Schema Questionnaire – Short Version (YSQ-S, Young 1998)

This is a 75-item self-report inventory designed to measure 15 Early Maladaptive Schemas (EMSs). Schemas are deeply entrenched patterns of relating or viewing the world that are central to one’s sense of self (Young 1988). This scale evolved from the longer 205-item version of Young’s Schema Questionnaire (YSQ, Young 1994), which has been shown to have acceptable psychometric properties (Lee et al 1999; Schmidt et al 1995). Schmidt et al found the longer version to have a test-retest coefficient of r = .76 and internal consistency as assessed by Cronbach’s coefficient of .90. They also demonstrated the longer version’s convergent validity in that there were significant correlations between the YSQ total score and overall psychological distress and depression. Recently, Waller, Meyer & Ohanian (2000) compared the short version with the long version and found they had similar psychometric properties. The YSQ-S demonstrated good overall internal consistency (Cronbach’s alpha .96), and the alpha level for each sub-scale was greater than .80. Both versions were able to significantly discriminate between women with bulimia and a comparison group, suggesting that the YSQ-S may be a clinically useful scale.
Five items measure each schema and responses are rated on a six-point scale (0 = "completely untrue" to 5 = "describes me perfectly"). The schemas fall under 5 broad schema domains that relate to the basic emotional needs of people. The 5 domains and the schemas that contribute to each domain are shown in Table 1 below. Schema domains were scored by adding the responses to each item in the relevant schemas and dividing this by the number of items in the domain to give a standard score for each domain between 0 and 5. Further, a total YSQ-S score was obtained by adding together responses to all 75 items, giving a maximum possible score of 375. High scores in a given domain and total YSQ-S score indicate higher levels of maladaptive schemas.

Table 1 Schema Domains and contributing schemas (adapted from Young, J. E. (1998))

<table>
<thead>
<tr>
<th><strong>Impaired Autonomy &amp; Performance</strong></th>
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<tr>
<td>Expectations about oneself and the environment that interfere with one's perceived ability to separate, survive, function independently or perform successfully. This is made up of four schemas:</td>
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<tr>
<td>• <strong>Dependence / incompetence</strong> is the belief that one is unable to handle everyday responsibilities in a competent manner without considerable help from others.</td>
</tr>
<tr>
<td>• <strong>Vulnerability to Harm</strong> is the exaggerated fear that imminent catastrophe will strike at any time whether that be medical, emotional or accidental catastrophes.</td>
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<tr>
<td>• <strong>Enmeshment</strong> is the excessive emotional involvement and closeness with one or more significant others (often the parents) at the expense of full individuation or normal social development. May include feeling smothered by others or insufficient individual identity.</td>
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<tr>
<td>• <strong>Failure</strong> is the belief that one has failed, will inevitably fail or is fundamentally inadequate relative to one's peers.</td>
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<tr>
<th><strong>Other Directedness</strong></th>
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<tr>
<td>An excessive focus on the desires, feelings and responses of others at the expense of one's own needs to gain the love and approval of others or avoid retaliation. Made up of two schemas:</td>
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<tr>
<td>• <strong>Subjugation</strong> (of needs and emotions) is the excessive surrendering of control to others because one feels coerced.</td>
</tr>
<tr>
<td>• <strong>Self-sacrifice</strong> is the excessive focus on voluntarily meeting the needs of others at the expense of one's own gratification, to avoid causing pain to others, feeling guilty or selfish.</td>
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**Rejection & Disconnection**
This domain relates to the expectation that one's need for security, safety, stability, nurturance, empathy, sharing of feelings, acceptance and respect will not be met in a predictable manner. It consists of five schemas:

- **Abandonment / instability** involves the sense other people are unstable and unpredictable in providing emotional support, connection and strength for the person.
- **Mistrust / Abuse** is the expectation that others will hurt, abuse, humiliate, lie, manipulate or take advantage over the person.
- **Emotional deprivation** involves the sense that one’s desire for emotional support will not be met by the others, either through a lack of warmth and attention, a lack of empathy and understanding or a lack of guidance from others.
- **Defectiveness / shame** is the feeling that one is defective, bad, unwanted, and inferior in some way. This schema may involve hypersensitivity to criticism, rejection and blame.
- **Social isolation / Alienation** involves the feeling that one is isolated from the rest of the world, different from other people and not part of a group or community.

**Impaired limits**
Is a deficiency in internal limits, responsibility to others or long-term goal orientation leading to difficulty in respecting the rights of others, co-operating with others, making commitments or setting realistic goals. Made up of two schemas:

- **Entitlement / grandiosity** is the belief that one is superior to other people and entitled to special rights and privileges or not bound to rules of reciprocity that guide normal social interaction.
- **Insufficient self-control** is the pervasive difficulty to exercise sufficient self-control and frustration tolerance to achieve one’s goals.

**Over Vigilance & Inhibition**
Excessive emphasis on suppressing one’s spontaneous feelings and impulses and choices or meeting rigid internalised rules and expectations about performance and ethical behaviour. Made up of two schemas:

- **Emotional inhibition** is the excessive inhibition of spontaneous anger, joy and the communication of feelings to avoid disapproval of others, shame or losing control of impulses.
- **Unrelenting standards / hypercriticalness** is the underlying belief that one must strive to meet very high internalised standards of behaviour resulting in hypercriticalness toward the self and others.
Life Experiences Questionnaire

This questionnaire (see appendix C) was designed specifically for the study to gather information about each participant's life history and experiences. Established life events scales and interviews, such as those described by Dohrenwend et al (1993), Brown & Harris (1978), and Holmes & Rahe (1967), were considered as possible tools for this variable. However, given the need to limit the demands on participants, these tools were considered to be too long and involved. Further, they tended to focus only on events that occurred during a limited time frame, for example 12 months before the interview. For this study, it was important to gather as much information as possible about participants' earlier life experiences.

The items for the questionnaire were drawn from these established tools and also included events that have previously been linked to LOP and late onset depression (e.g. Fuchs 1999a&b; Gurian et al, 1992). Items asked a mixture of open, semi-closed and closed questions and covered the following areas: demographics; family of origin; school; experiences of abuse; marriage and love; children; social support networks; health; and work.

2.4 Participants

Data was collected over a period of 9 months. The participant population consisted of 35 females and 10 men. The age range of the sample was 63 to 93 years, with a mean age of 75 years, 5 months (S.d.=7.14). The number of participants recruited was largely
restricted by the availability of clinical participants who would agree to take part and could complete an involved interview. This was particularly the case for the LOP group, possibly because this is a relatively rare disorder and the characteristics of which include paranoia and suspiciousness. For these reasons it was decided not to interview people while they were actively psychotic. Similar difficulties in recruiting depressed subjects also meant participants were not interviewed whilst at their most depressed. This was to match with the LOP group and because it was also thought that people would not be able to engage with the detailed interview process if they were very low in mood. Consequently, both clinical groups represent people who had stabilised or were somewhat recovered from their initial presentations to the mental health services. In this manner, the information gathered in this study may reflect more residual and underlying psychological factors for these participants.

Inclusion criteria
For the LOP group, participants were included if they were aged 60 years and over, had a diagnosis of late-onset psychosis, with first onset of symptoms after the age of 60 and had MMSE scores of 24 and above, indicating no cognitive impairment. This group consisted of 6 people with a diagnosis of paraphrenia, 2 with paranoid psychosis, 3 with paranoid delusions and 3 with delusional disorder. For the late-onset depression group (DEP), participants were included if they were aged 60 years and over, had a diagnosis of late-onset depression, with first onset of symptoms after the age of 60 and had MMSE scores of 24 and above. Healthy volunteers (HV) were also aged 60 years and over and were included if they reported no current mental health difficulties or cognitive decline.
Exclusion criteria

People with identified or suspected neurological impairment (as indicated by a MMSE score of 23 or below) and substantial difficulties understanding English were excluded from the study. Those people deemed by the researcher or other mental health workers as currently too mentally or physically unwell to participate were also excluded. Finally, clinical participants whose symptoms began prior to age 60 were excluded, as were healthy volunteers who reported a history of depression, psychosis or significant memory / cognitive problems.

The final participant numbers for each group were 14 people with LOP, 13 with depression and 18 healthy volunteers. Table 2 shows the age range and gender of participants in each of the three groups (Late onset psychosis = LOP; late onset depression = DEP; Healthy Volunteer = HV). A total of 23 people were asked to participate in the LOP group. Of these, 5 declined outright and 4 people began but withdrew during the first meeting or became markedly psychotic and could not complete the interview. Three participants in the final LOP group completed only some of the interview and declined to answer some of the standardised questionnaires. Of the participants with DEP, 19 were invited to take part of which 6 people declined outright. Two people in the final DEP group declined to complete the YSQ-S because they did not feel it was applicable to them. Eighteen healthy volunteers returned the questionnaires sent to them and all sent complete data sets.
Table 2 – Age and Gender of Participants in each Group

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Age S.d.</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>range</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>LOP</td>
<td>77 yrs 7 mths</td>
<td>6.6</td>
<td>66.0-90.3</td>
<td>12</td>
</tr>
<tr>
<td>DEP</td>
<td>76 yrs 1 mth</td>
<td>6.4</td>
<td>65.7-86.5</td>
<td>8</td>
</tr>
<tr>
<td>HV</td>
<td>73 yrs 4 mths</td>
<td>7.8</td>
<td>63.6-93.8</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>75 yrs 5 mths</td>
<td>7.14</td>
<td>63.6-93.8</td>
<td>35</td>
</tr>
</tbody>
</table>

2.5 Procedure

The process of recruitment and data collection was different for the clinical and the healthy volunteer groups. It was decided that all participants would be told that the study was investigating attitude to ageing and its relationship with mental well-being. It was thought that such a general description would be easier for participants to understand and digest, would be more appealing, and feel more relevant to the broadest number of participants. Further, clinical observations indicate that few people with LOP actually refer to themselves as psychotic and it was thought that the use of the term “psychosis” might be threatening or misunderstood by a large number of this group.

Clinical Groups:

Participants were recruited via psychiatrists working in community older adult mental health services. In most instances, participants were approached by the team member who knew them best and asked if they would be willing to discuss with the researcher the possibility of participating in the study. The researcher would then contact the participant by phone, letter or meet them face-to-face, and explain the study to them. On their agreement, the researcher would arrange to meet with them, usually in their home setting,
hospital ward or day centre. During the first meeting, participants would be given an information sheet describing the study (see appendix D) which the researcher would also read for them if they were unable to do so for themselves. All participants signed a consent form (see appendix D), which stressed that they could withdraw at any time. For both clinical groups it was usual to complete the questionnaires as an interview, with the researcher reading out the questions to the participant. Where the participant was willing and able to, some questionnaires were left for the participant to complete in their own time.

The number of meetings and length of time spent with each participant varied according to factors such as talkativeness; eye-sight and hearing difficulties; ability with written and spoken English; and whether participants were willing and able to complete questionnaires in their own time. The number of meetings with individuals with LOP ranged from 1-4 (median 2), and the number of hours from 1-5 ½ (mean 3.14 hours). The number of meetings with individuals with depression ranged from 1 to 7 (median 2), and the number of hours from 1 to 11 (mean 3.8 hours). During the interviews the researcher frequently checked out how the participant felt about the process, whether they wished to stop, and whether they found the questions intrusive. Participants were always debriefed afterwards and invited to ask questions about the study and make comments about the experience of being interviewed.
Healthy Volunteer Group:

The healthy volunteer group completed the questionnaire pack via the post. This method was chosen due to the length of the interview and the time available, and because this group were willing and able to complete the questionnaires without the presence of the researcher. Most of this group were recruited through a contact at the University of the Third Age (U3A). Others were recruited through informal contacts. Volunteers received an information sheet (see appendix E) and signed a consent form (see appendix E). The information sheet gave a phone number to call if they wished to ask questions or debrief after completing the pack. Healthy volunteer participants were given a £5 voucher when they sent back their completed questionnaire pack with their signed consent forms.

As participants in the healthy volunteer group were not interviewed it was not possible to conduct MMSEs on this group due to the nature of this tool. The contacts that helped recruit this group were informed of the criteria for the study and were instructed to inform the people they approached of the criteria and then invite them to participate. Although it is not possible to know how they understood and used this information, it might be argued that people who attend the U3A are likely to be cognitively intact given that this is an organisation for continued learning. It might also be argued that given the length and complexity of the questionnaire pack, that people with scores of less than 24 on the MMSE would have difficulty completing the pack.
2.6 Data Analysis

The data was analysed using the SPSS computer package (version 9.0 for windows). Given the relative paucity of research in the area of LOP and psychological factors, the present study was considered to be largely exploratory in nature. The data was subject to descriptive analysis, followed by parametric statistical tests, and finally, detailed investigation of individual results in a single case framework for some LOP participants. The LOP participants described in the single case studies were chosen because two illustrate some of the issues discussed in the Introduction section, and a further participant because they were less representative of the literature discussed.

The modest number of participants in the clinical groups (14 for LOP and 13 for depressed) means that the statistical power of the parametric tests will be low and the results must be considered in this context. One-way Analysis of Variance (ANOVA) and post hoc tests (Bonferroni correction) were used to test the differences between groups on: mean level of depression scores; total mean number of adverse life events (hypothesis 1); total YSQ-S scores and mean schema domain scores (hypothesis 2); mean self-esteem scores (hypothesis 3); mean TGP and FGA scores (hypothesis 4); and mean attitude to ageing and morale scores (hypothesis 5). Further, differences in the types of life experiences for each group was subjected to descriptive analysis.

As indicated, a number of statistical tests were run to explore several hypotheses. Consequently, there was an increased likelihood of Type I error (i.e. finding a significant effect when in reality there may not be any differences between the groups). This fact was

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weighted against the possibility of reducing the alpha level and therefore risking not finding any significant differences between the groups when in reality there may indeed be differences (Type II error) if the sample size was larger. Given the relatively small participant numbers and the exploratory nature of this study, on balance it was felt that the alpha level should remain at .05. However, as will be addressed in the discussion section, this limits the conclusions that may be drawn from the findings and any significant differences have been considered in the context of these limitations of moderate statistical power and the possibility of Type I error.

2.7 Summary

This study aims to explore differences in adverse life experiences and psychological factors between people with LOP and two control groups - people with late-onset depression and healthy volunteer participants. Psychological factors investigated include depression, self-esteem, morale and attitude to ageing, coping strategy (assimilation and accommodation) and level and profile of maladaptive schema endorsements. The data was subject to statistical, descriptive and single-case study analysis.
Chapter 3: Results

The results of the study will be presented in three sections. Firstly, some baseline measures will be examined to ascertain differences between the three groups. Next the five hypotheses will be investigated using the relevant statistical tests explained in the previous section. Finally, three single case studies will be described for participants with LOP. Throughout this section the late-onset psychosis group will be referred to as "LOP"; the late-onset depression group as "DEP" and the healthy volunteer group as "HV"

3.1 Descriptive data for groups

Nationality

Figures 2-4 show the proportion (%) of participants from different nationalities in each group. As can be seen, there are differences between the three groups. The LOP group included a spread of participants born in Britain, Ireland, Europe and Ghana, with Ghanaians making up the largest proportion (28%). The participants in the "other" category came from India and the West Indies. Consequently, this was largely an immigrant group (86%). In contrast the HV group was mainly British-born (88%), with two immigrants from different parts of Europe. The DEP group also largely consisted of people born in Britain (61%), although over one-third (39%) of this group had emigrated to Britain: one person each from Europe, Ghana, the West Indies, the Caribbean and Mauritius.
Figure 2 Nationality of LOP group

- 28% British
- 14% European
- 14% Ghanaian
- 22% Other

Figure 3 Nationality of DEP Group

- 61% British
- 8% European
- 8% Ghanaian
- 8% Other

Figure 4 Nationality of HV Group

- 88% British
- 6% European
- 6% Irish
Social-Economic Status

Every participant in this study was retired from work. Therefore, to determine social-economic status (SES), participants’ prior work history was drawn upon and classified using the criteria provided by the Office of Population Censuses and Surveys (1995: Appendix F). Table 3 shows the SES of participants in each group. The LOP and DEP groups were similar in their SES composition, with people spread fairly evenly across all categories from professional to semi-skilled. The HV group however, consisted primarily of people from a professional (39%) or clerical / non-manual (39%) background, with only 4 people from manual professions.

<table>
<thead>
<tr>
<th></th>
<th>LOP</th>
<th></th>
<th>DEP</th>
<th></th>
<th>HV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Professional</td>
<td>14.5</td>
<td>(2)</td>
<td>7.5</td>
<td>(1)</td>
<td>39</td>
<td>(7)</td>
</tr>
<tr>
<td>Clerical, Non-manual</td>
<td>28.5</td>
<td>(4)</td>
<td>23</td>
<td>(3)</td>
<td>39</td>
<td>(7)</td>
</tr>
<tr>
<td>Skilled Manual</td>
<td>28.5</td>
<td>(4)</td>
<td>23</td>
<td>(3)</td>
<td>5.5</td>
<td>(1)</td>
</tr>
<tr>
<td>Semi-Skilled Manual</td>
<td>28.5</td>
<td>(4)</td>
<td>31</td>
<td>(4)</td>
<td>16.5</td>
<td>(3)</td>
</tr>
<tr>
<td>Own Business</td>
<td>0</td>
<td>(4)</td>
<td>15.5</td>
<td>(2)</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

N.B. classifications based on the Office of Population Censuses and Surveys, 1995

Clinical presentation of Clinical Participants

The clinical groups were compared on a measure of general cognitive functioning, age at onset of illness and length of illness. Both groups were equivalent on the MMSE, scoring a mean of 28 (range 24-30), with most people in both groups scoring 29. Therefore, the clinical groups seem to be well matched for cognitive functioning, and did not appear to have significant cognitive difficulties.

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Both groups also showed similar age of onset (see Table 4). Most participants first experienced symptoms at the age of 72 years (median scores), although the mean for the LOP group was two years higher than for the depressed group (72 years 11 months and 70 years 9 months respectively). Looking at the range of illness onset, it seems that the LOP group were also more likely to be slightly older (63-89 years for LOP; 61-84 years for DEP).

<table>
<thead>
<tr>
<th></th>
<th>Mean Age of Illness Onset</th>
<th>Range (SD)</th>
<th>Median Length of Illness</th>
<th>Range &amp; SD</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOP</td>
<td>72 years 11 mths</td>
<td>63-89</td>
<td>72 yrs</td>
<td>4 years 4 mths</td>
<td>1-15 (3.88)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.92)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEP</td>
<td>70 years 9 mths</td>
<td>61-84</td>
<td>72 yrs</td>
<td>5 years 2 mths</td>
<td>1-14 (4.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.12)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Length of illness at the time of interview was also broadly similar between groups (see Table 4), with LOP participants averaging 4 years 4 months (range 1-15 years in length) and the depressed group averaging 5 years 2 months (range 1-14 years).

At the time of interview all the LOP participants were taking anti-psychotic medication except for one person who was refusing drug therapy. Only partial data could be collected for this person. Similarly, 11 of the depressed participants were taking anti-depressant medication, while the remaining 2 had been discharged from the service and were no longer taking medication.
Delusions of LOP Participants

Ten (71.5%) of the participants with psychosis had partition delusions that were all persecutory in nature, nine of these participants were immigrants. Of these nine, five people also had concerns about being evicted or having their homes taken away from them by relatives. Of the remaining participants, three (21.5%) had persecutory delusions and one (7%) had grandiose delusions involving religion. Ten participants (71.5%) also had hallucinations, of which one was auditory, two visual, two olfactory (both relating to body odour) and five were somatic.

Levels of depression in each group

Depression was measured by the GDS and a score of 6 or above suggests depression. The descriptive data (illustrated in Figure 5) shows that both the clinical groups scored higher on the depression scale than the HV group. Interestingly though, it was the LOP group that scored the highest (mean score 7 ± 4) and neither the DEP nor the HV groups were clinically depressed (mean scores 4.68 ± 3.5 and 1.56 ± 3 respectively).
A one-way ANOVA showed that there were significant differences between the group means \((F=(2,42) 9.961, p<.001)\). Post hoc analysis using Bonferroni correction indicated that the LOP group scored significantly higher on the GDS than the HV group \((p<.001)\). Also, the depressed group was also (just) significantly more depressed than the HV group \((p=.05)\). There was no significant difference in level of depression between the clinical groups \((p=.272)\). By examining how many people in each group scored 6 or above on the GDS, it seems that 9 people (64%) of the LOP participants were clinically depressed, whilst only 3 (23%) of the DEP group and 2 (11%) of the HV group reached clinical levels of depression.

3.2 Testing the Hypotheses

Hypothesis 1 – Life experiences

It was predicted that there would be differences in the rates of adverse life experiences reported by the groups. Figure 6 shows the total mean number of adverse life events reported by each group (possible total was 29 events, for list of events see appendix G). Both the clinical groups had experienced an average of 10-11 events, compared with the HV group who reported an average of 6.72. In a one way ANOVA test, this difference was significant \((F=(2, 41) 7.588, p=.002)\).
It was also predicted that the types of life events experienced would differ between the clinical groups. Specifically, people with LOP were predicted to have discriminating (e.g. illegitimate birth or child; handicap) and threatening experiences (e.g. expulsion from home; rape), and a history of fragile relationships (e.g. parents divorce; own divorce). The depressed group was predicted to have a history of serious early losses, such as death of a parent in childhood and death of a child.

Table 5 shows the percentage and number of people in each group who reported to have experienced discriminating and threatening experiences and a history of fragile relationships. Similarly, Table 6 shows the percentages and number of people in each group who reported experiences of losses.
Table 5 Percentage and Number of people in each group who had experienced discriminating-threatening experiences and histories of fragile relationships

<table>
<thead>
<tr>
<th>Event</th>
<th>LOP Total</th>
<th>DEP Total n = 13</th>
<th>HV Total n = 18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%  n</td>
<td>%  n</td>
<td>%  n</td>
</tr>
<tr>
<td>Illegitimacy</td>
<td>36 5 (14)</td>
<td>23 3</td>
<td>5.5 1</td>
</tr>
<tr>
<td>Disabled</td>
<td>14.5 2 (14)</td>
<td>15.5 2</td>
<td>0 0</td>
</tr>
<tr>
<td>Expelled from home</td>
<td>17 2 (12)</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Abuse</td>
<td>15.5 2 (13)</td>
<td>31 4</td>
<td>11 2</td>
</tr>
<tr>
<td>Discrimination</td>
<td>46 6 (13)</td>
<td>46 6</td>
<td>17 3</td>
</tr>
<tr>
<td>Parents divorce</td>
<td>8 1 (13)</td>
<td>15.5 2</td>
<td>11 2</td>
</tr>
<tr>
<td>Own divorce / separated</td>
<td>28.5 4 (14)</td>
<td>0 0</td>
<td>11 2</td>
</tr>
</tbody>
</table>

N.B. for some categories information was not available for all participants in each group (e.g. only immigrants were included in the expelled from home category). Therefore the % was calculated according to the number of people who provided information for each category.

The LOP group reported greater amounts of illegitimacy, expulsion from home and being divorced or separated. The depressed group reported higher rates of abuse, and parental divorce. The clinical groups were similar on having a disability not relating to age (e.g. being deaf from a young age, being physically disabled since childhood) and the amount of discrimination they had experienced. Further, both groups had experienced similar types of discrimination: 4 participants in both groups reported racial discrimination, and one in each reported discrimination relating to their disability. The HV group reported fewer experiences of threatening-discriminating experiences and fragile relationships then either of the clinical groups. None of the HV participants had experienced racial discrimination (probably accounted for by the predominance of British-born people in this group) but 2 HV participants reported sexual and 1 religious discrimination. Figure 7 shows the data in the table diagrammatically and indicates that, overall, more LOP participants had suffered discriminating-threatening experiences and fragile relationships than members of either of the other groups.
Table 6 shows the percentages and number of people in each group who reported experiences of losses. The LOP group reported more deaths of siblings and friends in early childhood, deaths of parents in childhood (18 years and younger), and more deaths of their own children. The depressed group reported greater experiences of deaths of friends, were more likely to be widowed and more had had abortions. The clinical groups were roughly equivalent on deaths of siblings (at whatever age), miscarriages and stillborn babies. Generally, the HV group reported lower rates of these events, except that they were the group most likely to have experienced miscarriages and more reported deaths of friends than the LOP group. Figure 8 shows the data in the table diagrammatically and indicates that overall, the clinical groups reported roughly equivalent rates of losses that were greater than the HV group.
Table 6 Percentage and Number of people in each group reported experiences of losses

<table>
<thead>
<tr>
<th>Losses</th>
<th>LOP</th>
<th>DEP</th>
<th>HV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>Total</td>
</tr>
<tr>
<td>Death of parents in childhood</td>
<td>36</td>
<td>4</td>
<td>(14)</td>
</tr>
<tr>
<td>Death of friend or sibling in childhood</td>
<td>46</td>
<td>6</td>
<td>(13)</td>
</tr>
<tr>
<td>Death of siblings</td>
<td>78.5</td>
<td>11</td>
<td>(14)</td>
</tr>
<tr>
<td>Death of friends</td>
<td>54</td>
<td>7</td>
<td>(13)</td>
</tr>
<tr>
<td>Widowed</td>
<td>43</td>
<td>6</td>
<td>(13)</td>
</tr>
<tr>
<td>Miscarriage</td>
<td>21.5</td>
<td>3</td>
<td>(13)</td>
</tr>
<tr>
<td>Abortion</td>
<td>0</td>
<td>0</td>
<td>(14)</td>
</tr>
<tr>
<td>Death of own child</td>
<td>27</td>
<td>3</td>
<td>(11)</td>
</tr>
<tr>
<td>Stillborn</td>
<td>15.5</td>
<td>2</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>16.5</td>
<td>2</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>4</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>9</td>
<td>(12)</td>
</tr>
<tr>
<td></td>
<td>77</td>
<td>10</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>61.5</td>
<td>8</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>3</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>15.5</td>
<td>2</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>7.5</td>
<td>1</td>
<td>(13)</td>
</tr>
</tbody>
</table>

N.B. for some categories information was not available for all participants in each group (e.g. some people were only-children and therefore could not experience the death of a sibling). Therefore the % was calculated according to the number of people eligible for each category.

Figure 8 Losses and Early Losses for each Group
Next the health difficulties experienced by all three groups (see Table 7) were examined. The clinical groups reported more current health difficulties than the HV group (LOP 92%; DEP 100% and HV 72%). The difficulties were rated by the researcher according to severity (details given in appendix L). It seems that over half the DEP Group had moderate difficulties (such as diabetes) or numerous health problems, whereas the majority of both the LOP and HV groups had only minor difficulties (such as high blood pressure). Also, the DEP Group was much more likely to report past injuries or illnesses than either of the other groups. Both clinical groups reported equivalent rates of sensory problems that were higher than the HV group. Similar numbers of participants in the clinical groups had disabilities that were not related to age. None of the HV group reported any disabilities.

<table>
<thead>
<tr>
<th>Health</th>
<th>LOP %</th>
<th>LOP n</th>
<th>Total</th>
<th>DEP %</th>
<th>DEP n</th>
<th>Total</th>
<th>HV %</th>
<th>HV n</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health difficulties</td>
<td>92</td>
<td>12</td>
<td>(13)</td>
<td>100</td>
<td>13</td>
<td>(13)</td>
<td>72</td>
<td>13</td>
<td>(18)</td>
</tr>
<tr>
<td>Mild / minor</td>
<td>62</td>
<td>8</td>
<td>5</td>
<td>38</td>
<td>5</td>
<td>39</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate / numerous</td>
<td>15</td>
<td>2</td>
<td>8</td>
<td>54</td>
<td>7</td>
<td>28</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major &amp; debilitating</td>
<td>15</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>5.5</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensory problems</td>
<td>38.5</td>
<td>5</td>
<td>(13)</td>
<td>33</td>
<td>4</td>
<td>(12)</td>
<td>17</td>
<td>3</td>
<td>(18)</td>
</tr>
<tr>
<td>Past injury or illness</td>
<td>63</td>
<td>9</td>
<td>(14)</td>
<td>92</td>
<td>12</td>
<td>(13)</td>
<td>67</td>
<td>12</td>
<td>(18)</td>
</tr>
<tr>
<td>Disability not relating to age</td>
<td>14.5</td>
<td>2</td>
<td>(14)</td>
<td>15.5</td>
<td>2</td>
<td>(13)</td>
<td>0</td>
<td>0</td>
<td>(18)</td>
</tr>
</tbody>
</table>

Figure 9 illustrates the data in Table 7 diagrammatically and indicates the DEP group was somewhat more likely to report health difficulties, past and current. The LOP group also experienced greater health problems than the HV group.
The life experience questionnaire also collated information about events that do not fall under the domains already discussed. These events are shown in Table 8 and Figure 10. Again, more LOP participants reported experiencing early (childhood) negative events than the other groups (54%, compared with DEP 46% and HV 44.5%). The LOP participants were also much more likely to feel that they had been denied opportunities in life (77%, compared with DEP 31% and HV 44.5%). More people in the DEP group than the LOP group reported problems at school (54% compared with LOP 21.5%) and difficult periods in their career (38.5% compared with LOP 21.5%).
Table 8 Percentage and number of people in each group who reported Other Life Experiences

<table>
<thead>
<tr>
<th>Types of experiences</th>
<th>LOP</th>
<th>DEP</th>
<th>HV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Moved several times in childhood</td>
<td>7.0</td>
<td>1 (14)</td>
<td>15.5</td>
</tr>
<tr>
<td>Problems at school</td>
<td>21.5</td>
<td>3 (14)</td>
<td>54.0</td>
</tr>
<tr>
<td>Other childhood experience (negative)</td>
<td>54.0</td>
<td>7 (13)</td>
<td>46.0</td>
</tr>
<tr>
<td>Difficult periods in career</td>
<td>21.5</td>
<td>3 (13)</td>
<td>38.5</td>
</tr>
<tr>
<td>Financial problems</td>
<td>36.0</td>
<td>5 (14)</td>
<td>31.0</td>
</tr>
<tr>
<td>Trouble with police</td>
<td>7.0</td>
<td>1 (14)</td>
<td>15.5</td>
</tr>
<tr>
<td>Denied opportunities</td>
<td>69.0</td>
<td>9 (13)</td>
<td>31.0</td>
</tr>
</tbody>
</table>

N.B. for some categories information was not available for all participants in each group. Therefore the % was calculated according to the number of people eligible for each category.

Figure 10 Other Adverse Life Events reported by each Group
In summary, as predicted there were differences in the rates of adverse life events reported between the clinical groups and the HV participants. Further, there were differences in the types of events reported between the clinical groups. The LOP participants were more likely than the DEP to report experiences of threatening-discriminating events and early childhood losses and events. The DEP group were more likely to report health problems and losses in adulthood and old age.

**Hypothesis 2 – Maladaptive Schemas**

It was predicted that the clinical groups would rate more items on the schema questionnaire (YSQ-S) than the HV group. Figure 11 shows the mean total score on the YSQ-S for each group. As can be seen, the LOP group scored highest on this measure (Mean = 122 ±61), followed by the DEP group (Mean = 77 ±45) and then the HV group (Mean = 60±59). A one-way ANOVA showed that these means were significantly different (F (2,36) 5.383, p=.009). Post hoc analysis using the Bonferroni correction indicated that the LOP group scored significantly higher than the HV group (p=.007), but not significantly higher than the DEP group (p=.140). Although the DEP participants scored higher than the HV group, this difference was not significant (p=.99).
The YSQ-S has 5 domains that relate to the basic emotional needs of people. Figure 12 shows the mean score for each group for each domain. The pattern of rating in each group was broadly similar (for example all groups rated themselves highest on the Overvigilance & Inhibition scale, and lowest on the Rejection & Disconnection and the Impaired Autonomy & Performance scales). However, the LOP group scored higher than either of the control groups on each domain.
One-way ANOVA and post hoc analysis (Bonferroni correction) revealed that the LOP group scored significantly higher than the HV group on Rejection & Disconnection ($p=0.016$), Impaired Autonomy & Performance ($p=0.038$), Other Directedness ($p=0.017$) and Overvigilance & Inhibition ($p=0.035$). Further, the LOP scored significantly higher than the DEP group on Other Directedness ($p=0.034$) and on Overvigilance & Inhibition ($p=0.015$). Interestingly, the depressed group score was not significantly different from the HV control group on any of the scales.
The domains which demonstrated differences between groups were investigated descriptively, by comparing the number of people in each group who rated a schema as "more true than untrue" (that is, mean score on the schema was higher than 3).

**Disconnection & Rejection Domain**

Figure 13 shows the percentage of participants in each group who rated the constituent schemas as more true than untrue for them. As can been seen, many more LOP participants scored 3 or above for Emotional Deprivation and for Isolation / Alienation. Mistrust / Abuse also seemed to be salient for the LOP participants, although this schema was also salient for the DEP group.
For Impaired Autonomy and Performance

Figure 14 shows the percentage of participants in each group who rated the constituent schemas as more true than untrue for them. For the LOP group, the relevant schemas in this domain were Dependence/Incompetence, Vulnerability to Harm and Enmeshment/Undeveloped Self, with many more LOP participants scoring on these schemas than the HV group. For the DEP participants, Vulnerability to Harm seemed to be most salient, with similar numbers to the LOP group rating this as a schema. Failure was relevant for 20% of DEP people. The HV group scored very low on this domain, with only 11% rating Failure as a schema.
Other Directedness Domain

As can be seen in Figure 15 Self-Sacrifice was a schema for half the control groups and 73% of the LOP group. However, Subjugation seems to be more salient for the LOP group, with 45% rating this as a schema compared with 20% of DEP participants and only 1 HV person.

Overvigilance & Inhibition Domain

The Unrelenting Standards schema seemed to be salient for all groups, with 30% of DEP and 50% of HV participants rating this as a schema (see Figure 16). However, this schema was rated as more true than untrue by 82% of the LOP group. Also, more of the LOP participants rated Emotional Inhibition as a schema (54.5%), compared with 30% of DEP and only 11% of HV participant.
In summary, as predicted the clinical groups scored higher on maladaptive schemas than the HV group, although this was only significant for the LOP group. Further, as predicted there were differences in salient schemas across the groups. These differences will be discussed more fully in the Discussion section.
Hypothesis 3 – Self-esteem (RSEQ)

It was hypothesised that the HV would be highest on self-esteem, that the DEP group would score the lowest, and the LOP group would lie somewhere between them. As predicted, the HV group scored higher than the clinical group (see Figure 17). However, the LOP group scored the lowest of the three groups. One-way ANOVA found that these scores were not significantly different between the three groups (F (2,39) 1.580, p=.219).

Hypothesis 4 – Coping Strategy

It was predicted that coping strategy, as measured by FGA and TGP, would be different between the groups. It was thought that both clinical groups would score lower on FGA than the HV group, but higher on the TGP scale. As shown in Figure 18, compared with the HV group, both clinical groups did score marginally lower on FGA, but not higher on TGP. Essentially, there were no significantly differences between any of the groups.

![Figure 18 Coping Strategies of Groups](image)

**Hypothesis 5 – Attitude to Ageing & Morale**

It was predicted that clinical groups would have lower morale than the healthy volunteer group. Figure 19 shows the mean total score on the Morale scale for each group. Both the DEP and the LOP group were lower on morale than the HV group, although this only reached significance for the LOP group ($p=.015$). The DEP and HV mean scores were not significantly different ($p=.99$) and the clinical groups were not different ($p=.166$).
Figure 20 shows the mean scores on each of the morale sub-scales for each group. One-way ANOVA and post hoc analysis shows that the LOP were significantly lower on the Lonely-Dissatisfaction scale compared with the HV group (p=.003), and the difference between these groups on the Attitude to Ageing scale approached significance (p=.069).
3.3 Summary of Analysis

The statistical analysis supported several hypotheses. **Hypothesis 1** was supported in that the clinical groups reported greater rates of adverse life events than the HV group and there were differences in the types of events reported between the clinical groups. **Hypothesis 2** was partially supported in that the LOP group were significantly higher on maladaptive schemas than the HV group, but this was not the case for the DEP group. The second part to this hypothesis was supported by the descriptive analysis, as there were differences in schemas reported as salient by the clinical groups. **Hypothesis 3** was not supported, as there were no significant differences in level of self-esteem between the three groups. **Hypothesis 4** was not supported, as there were no significant differences in coping strategy used by the three groups. **Hypothesis 5** was not supported, as there were no significant differences between the three groups on Attitude to Ageing. However, there were significant differences between the LOP and HV groups on level of overall morale and on the Lonely-Dissatisfaction scale.

Three case histories of LOP participants will now be presented in relation to the literature reviewed in the Introduction section.

3.4 Case studies

**Case study 1**

Mr R was an 80-year-old man of Asian origin. He was 65 when he first presented to the mental health services with paranoid and partition delusions. He believed that he was being tape-recorded by his neighbours, whom he believed were planning to have him arrested for social security fraud. He told the assessing psychiatrist that he had been
hearing noises in the block of flats where he lived for five months (which he interpreted as the neighbours recording him) and feared that he was going to be evicted. Throughout the 15 years that he was known to the service, Mr R relapsed several times, which was thought to be largely due to non-compliance with anti-psychotic medication. His delusions consisted of the same themes, and after four years expanded to include olfactory hallucinations related to his body odour. At the time of interview for this study Mr R had been well for three years in that he had not experienced any psychotic symptoms, although he continued to meet four times a year with the consultant psychiatrist to check his progress.

Mr R was born in Africa, the second eldest of six children. The family moved back to their home country of Asia when he was young. At around age 2 Mr R suffered from polio that left him very lame in one leg. He reported no difficulties at school and was educated to degree level in a profession. He reported having friends at school, but said that due to his difficulties in walking he had spent most of his childhood indoors and was not able to enjoy life as the other children had. He also described the family as not having much money.

Despite his disability worsening during his early adulthood, resulting in the need to use walking aids, Mr R worked successfully back in Africa. When he was 50 the political situation was such that he had to leave and come to Britain. Once here, his qualifications were not recognised and he spent his final working years until retirement at age 63 in a much lower yet related position. Of his career, Mr R said he had felt frustrated in his final years, and also that his disability had kept him from better jobs. Although he felt
that he had had a moderately good career he also felt that people had discriminated against him because of his disability, and that “people don’t accommodate disabilities”.

Mr R had never married. He said that he had never had a relationship with a woman, and he consequently had no children. Since he retired his ability to walk had gradually deteriorated until he was dependent upon a wheelchair. His health generally was also deteriorating. Over the previous 5 years he had developed arthritis with deteriorating hand functioning and also digestive problems, which he was concerned were due to cancer. He reported that since his mobility had much decreased he had lost touch with friends, and he was now very socially isolated. He was dependent on home carers and a relative who cooked his meals, and he went to a day centre four times a week. During the research interviews, Mr R complained about his relationship with his carers and was very dissatisfied with the help he received. In one interview he was dressed in his pyjamas because the carer had refused to dress him that morning, against Mr R’s express wishes. When asked about his achievements in life or the best thing that had happened to him, he replied that every day that goes by when nothing bad happens was an achievement.

On the standardised measures, Mr R scored 30 on the MMSE, indicating that he had no significant cognitive difficulties. He was very depressed, scoring 14 on the GDS, and his self-esteem score (113) was much lower than the mean for the LOP group (130). His morale total score was only 3, again much lower than the group mean of 7.9. Further, he scored 0 on the Attitude to Ageing scale indicating a very negative attitude towards getting older, and 0 on the Lonely-Dissatisfaction sub-scale, suggesting that he felt very
lonely and generally dissatisfied with his life. On coping strategies, he scored higher on assimilative coping (TGP 28) than he did on accommodative (25). Finally, his overall schema score was 158, higher than the group mean (122). The schemas in which he scored over 3 on were Emotional Deprivation, Independence / Incompetence, Self-Sacrifice, Unrelenting Standards and Emotional Inhibition.

Mr R illustrates many of the risk factors for LOP discussed in the Introduction section. He has a history of discriminating-stigmatising experiences (Fuchs 1999a) in that he was disabled from a young age, was expelled from the country that he had chosen to settle in, and then was forced take jobs that were below his trained capacity due to the non-recognition of his qualifications in Britain. His disability made him feel different to other children when growing up, and he felt discriminated against because of his disability, in particular in relation to his career. It seems that although he had friends during adulthood, he formed no intimate personal relationships and had no children. This picture fits with findings of other studies that people with LOP are more likely to be single and have less children than other groups (Fuchs 1999b; Howard & Levy 1993; Almeida et al 1992b). He became psychotic in the context of age-related stressors, specifically his retirement and deteriorating health (that caused him to become isolated from his friends). His high score on the schema questionnaire indicates deeply rooted personality difficulties, also indicated in other studies (Fuchs 1999b; Howard & Levy 1993; Kay & Roth 1961; Post 1966). The schemas he endorsed reflect concerns with feeling in need of help, but also feeling that others are not there for him emotionally and that he has difficulty expressing his emotions and needs to others. (Perhaps these schemas are not surprising given his physical dependence on carers who appear to be
unhelpful and controlling). Further, Mr R sets high standards for himself. This may also be reflected in his scores on the coping inventories. He scored higher on assimilative coping indicating that he strove to change things in his environment and situation and was less likely to alter his personal goals and be flexible about goals. His low morale and negative attitude to ageing might be hypothesised to indicate that he was having difficulties adjusting to growing older. Further, Mr R was lonely and depressed and had low self-esteem. Therefore, despite remaining well for three years in terms of his psychosis, there were psychological factors that were not related to the acute experience of being unwell that may need to be targeted in treatment, as these factors may also make him more vulnerable to relapse.

Case Study 2

Mrs G was a 70-year-old woman from Africa. She had presented to the mental health services aged 66 with beliefs involving people coming into her home and stealing documents relating to her work before she retired. She also experienced olfactory hallucinations related to body odour and reported needing the bath several times a day. Her most recent psychotic episode had been precipitated by the failure of her heating system that meant she was left with no hot water.

Mrs G was the middle child of eight siblings. She said that she had had a happy childhood with a lot of friends at school. At 16, her father died and she left school to work and help bring money in for the family. Her mother died when she was 25, and Mrs G immigrated to Britain to further her education in her chosen profession and had
intended to return to Africa. In Britain, she experienced "the usual racism: no Blacks or Irish" but successfully qualified in her chosen career and married a man because she was pregnant by him. She had a miscarriage and later had a son. Following the birth of her son she needed to have a hysterectomy and said that she would have liked more children. After six years of marriage she divorced and Mrs G sent her son back to Africa for her relatives to look after. She said that she felt guilty about this. Her son was now also living in Britain and had mental health problems. She saw him occasionally, "when he feels like it", and said he criticised her and she did not enjoy his visits.

Mrs G had a successful career in Britain until she retired aged 60. She said that she had friends whilst at work, but none now that she had retired. Two of her siblings had died and she was rarely in contact with the rest of her family who were all back in Africa (including her ex-husband). She had recently developed arthritis in her legs that had somewhat decreased her mobility. At the time of the interview she had been turned down by the council for money to redecorate her home that she wanted to sell as she felt it was too large for her. She felt that this event was both a financial worry and an opportunity that was being denied her. She felt that her greatest achievement had been her career.

On the standardised measures, Mrs G scored 29 on the MMSE, indicating she had no significant cognitive difficulties. She scored 4 on the GDS (not clinically depressed) and her self-esteem was high (148). Her morale total score was 6, a little lower than the group mean of 7.9. Further, she scored 2 (out of 5) on the Attitude to Ageing scale indicating a more negative than positive attitude towards getting older, but 0 on the
Lonely-Dissatisfaction sub-scale, suggesting that she felt very lonely and dissatisfied. On coping strategies, she scored higher on assimilative coping (TGP 41) than she did on accommodative (36). Finally, her overall schema score was high (143). The schemas that were “more true” for Mrs G included Emotional Deprivation, Mistrust & Abuse, Self-Sacrifice, Unrelenting Standards, Emotional Inhibition and Entitlement & Grandiosity.

Mrs G also illustrates many of the characteristics of people with LOP discussed in the literature. She reported experiencing some discrimination since immigrating to Britain and predominantly reported a history of fragile relationships (Fuchs 1999a) in that she was divorced after a relatively short marriage and had a difficult relationship with her son. She seemed to have concentrated on her career throughout her life and supported herself, as were characteristic of Fuchs’ (1999a) sample of people with LOP. Although Mrs G had friends at work, the quality of these friendships is not known and since retirement she had become more and more isolated. Her loneliness and dissatisfaction was reflected in her score on the lonely-dissatisfaction sub-scale. She had a moderately negative attitude to ageing and her coping style indicates that she had not made the expected change to accommodative coping. Her schema profile indicates deeply rooted personality problems. Like Mr R, she felt that others were not there for her emotionally, set high standards for herself, and felt unable to communicate with others about her feelings and needs. Unlike Mr R she felt that others might abuse, hurt or take advantage of her and she also felt superior to other people. It could be hypothesised that these schemas contributed to the difficulty with social relationships evident in her narrative.
Any intervention with Mrs G will need to consider her interpersonal difficulties and address her maladaptive schemas that underlie these problems. Addressing her view of others and improving her ability to cope with social relationships might lead to an improved sense of satisfaction and morale, and make her less vulnerable to future relapse.

Case Study 3

Mrs L was a 90-year-old British-born woman who lived with her daughter and son-in-law. She presented to the mental health team several months before the research interview, because she believed that a neighbour was walking around her house with a flash-light with the express intention of annoying her (a partition delusion). The assessing psychiatrist thought that the lights she saw were most probably the headlights of cars from the busy road they lived on. At the time of the research interview, Mrs L was taking anti-psychotic medication and no longer experiencing this delusion.

Mrs L was the middle child of three from a working class family. She remembered that her father had been shot in the leg during WWI but had survived, and that she had missed him whilst he had been away. She had been a good student at school and aside from the death of a friend (who had been a “bit old-fashioned”) and often being ill, she reported no difficulties when growing up. She had married at age 28 and gave birth to two children. The first child had been stillborn and she remembered that the nurse had asked “you didn’t want to get rid of him did you?” which she had interpreted as putting the blame for his death on her. This had made her reluctant to try again for another child.
Mrs L had worked in a skilled-manual capacity until she had children, when she became a housewife. Both her siblings died when she was in her thirties, her parents died when in her 40’s, and her husband when she was 60. At this stage she moved in with her daughter. Socially, Mrs L seemed to have had friends in the past but all had died (not surprising for a 90-year-old). Physically, Mrs L complained of a 20-year history of problems with her “waterworks” and, more recently, had undergone surgery for cancer. She had experienced several falls and at the time of the interview appeared frail and was housebound unless accompanied by someone. She was almost blind and was hard of hearing, so that the interviewer had to speak loudly and clearly. When asked whether she had felt denied any opportunities in life, Mrs L recounted that the first job she had applied for after leaving school had been given to someone else and that she had felt very upset at the time about this. When asked about her achievements and accomplishments she commented that she “gets along with just about everyone”.

On the standardised measures, Mrs L scored 26 on the MMSE, losing points due to her visual impairment on items that required reading and writing. She scored 6 on the GDS, indicating she was in the clinical range for depression. Her self-esteem score (141) was higher than the mean for the LOP group (130). Her morale total score was 6, a little lower than the group mean of 7.9. Further, she scored 0 on the Attitude to Ageing scale indicating a very negative attitude towards getting older, but 3 on the Lonely-Dissatisfaction sub-scale, suggesting that she felt a little lonely and dissatisfied. On coping strategies, she scored lower on assimilative coping (25) than she did on accommodative (34). Finally, her overall schema score was low (48), and she endorsed none of the individual schemas as “more true than untrue”.

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Mrs L was chosen as a case example because, in many ways, she was not “typical” of the characteristics often reported in the literature about people with LOP. Aside from a lot of losses, that would be expected for someone of her age, she reported having had a happy life with seemingly good relationships with family and friends. Her psychotic episode seems to be discrete rather than enduring and can be understood in the context of failing vision, hearing and mobility that increased her sense of isolation. In these respects Mrs L’s presentation fits with the findings of increased sensory problems in this population (Castle et al 1997; Almeida et al 1995b) and isolation as a risk factor (Fuchs 1999b; Almeida et al 1995b; Kay & Roth 1961). Her low score on the schema questionnaire suggests that she does not have any deeply rooted personality difficulties and seems to corroborate her self-report of good relationships. She was depressed and had low morale, but her self-esteem remained good. It might be then that her depression and low morale are more directly related to her situation than to negative beliefs about herself. Her scores on the coping inventories suggest that Mrs L predominantly used accommodative coping, as would be expected of someone her age (Brandstädter & Renner 1990). For Mrs L, her sense of isolation could be addressed through improving her sensory deficits (if possible) and increasing her daytime contact with people through the use of a ‘befriender’ scheme. Her depression and morale may improve as a result of such an intervention, or may require direct intervention using cognitive strategies. Isolation seems to be the predominant risk factor for Mrs L and addressing this issue may make her less vulnerable to relapse.
3.5 Summary

The three case examples have illustrated some of the risk factors for LOP that have been highlighted in the literature. They also indicate that people with LOP are a heterogeneous group and that psychosis in later life is multifactorially determined. Consequently, treatment interventions need to be adapted to the individual needs of the person with LOP. Given the heterogeneity of this group, in-depth exploratory research with smaller numbers and single case study designs could be equally as enlightening in developing an understanding of LOP as research that involves larger numbers.
Chapter 4: Discussion

This study aimed to investigate some of the psychological factors thought to be associated with LOP. A group of people with LOP were compared on several measures to a late-onset depression and a healthy volunteer group. The groups were compared on demographic factors, clinical presentation, level of depression, self-esteem and morale, type of coping strategy, the number and type of adverse life events experienced and the number and profile of maladaptive schemas endorsed.

4.1 Summary of findings

There were differences between the three groups in nationality and therefore in immigrant status. Participants in the LOP group were predominantly from other parts of the world (86%) whilst the HV group were predominantly British-born (89%), and the Depressed group consisted of a mixture of British-born participants (61%) and people who had immigrated (39%). The clinical groups also differed from the HV group in social-economic composition. The HV group was largely from a professional or clerical / non-manual background (78%), whilst the clinical groups were more evenly spread across the variety of social-economic backgrounds, including skilled and semi-skilled manual workers.

Both clinical groups were roughly equivalent in age of onset and length of illness, and in level of cognitive functioning. The scores on the MMSE indicate that neither group experienced significant cognitive difficulties and were probably functioning at a similar level to the HV group. Almost all participants were taking the relevant medication for their difficulties. Given the broad similarities in age at onset, length of illness, SE status,
and nationality, it seems that the clinical groups were well matched on baseline measures. The differences between the clinical groups and the HV group may have implications for the conclusions drawn from this study and these will be discussed in more detail later.

Both clinical groups were significantly more depressed than the HV group, although the difference was much greater between the LOP and HV groups. The difference between the LOP and DEP groups on level of depression was not significant. However it seems that relatively few of the DEP participants scored above the cut-off for ‘clinical’ levels of depression (23%) whilst the majority of the LOP group scored above the cut-off (64%). No statistically significant differences in level of self-esteem were found between the three groups. As expected, the HV group scored highest on self-esteem, but contrary to prediction the LOP group scored the lowest.

There were no significant differences between the three groups on coping style. The data showed a small trend in the predicted direction on the FGA scale (accommodative coping), in that the clinical groups scored lower than the HV participants. Contrary to prediction there was not a trend for the clinical groups to score higher on TGP than the HV group. As predicted, the clinical groups were lower on morale than the HV participants, although this was only significant for the LOP group. On the sub-scales, the LOP group scored significantly lower than the HV participants on the lonely-dissatisfaction scale and the difference between these groups on attitude to ageing approached significance. The LOP scored lower than the depressed participants on morale although this difference was non-significant.
Both clinical groups reported similar rates of life events, and as expected, these were significantly higher than the HV group mean. The types of events experienced by participants also differed according to clinical group. LOP was associated with threatening-discriminating experiences and early losses, and DEP with health concerns and later losses. The LOP participants were more likely to feel that they had been denied opportunities in life and the DEP participants more likely to have encountered difficulties in their career and problems at school. There were no differences in the rates of sensory impairments and disabilities between the clinical groups. Fewer HV participants reported all types of experiences (except for miscarriages).

Finally, the LOP participants scored significantly higher on total level of maladaptive schemas than the HV group, but not the depressed participants. However, the LOP group scored significantly higher than the depressed group in two domains – Other Directedness and Overvigilance & Inhibition. The LOP participants scored significantly higher on four domains than the HV group: Rejection & Disconnection, Impaired Autonomy & Performance, Other Directedness and Over Vigilance & Inhibition. The interpretation of these differences will be discussed in more detail later.

The overall pattern of the results seems to indicate that the depressed and the HV participants scored similarly on all measures, although people with late-onset depression scored higher on life events and level of depression. The trend was in the expected direction for self-esteem and morale (scoring lower than the HV group) and the schema questionnaire (scoring higher than the HV group) although none of the differences
reached significance. In contrast, the LOP group differed from the HV group in several areas: with higher levels of depression, life events and maladaptive schema endorsement both overall and in four specific domains, and lower in levels of morale, including Lonely Dissatisfaction. The LOP group was surprisingly similar to the depressed group – with non-significant differences on measures of depression, number of life events, self-esteem and morale. Differences were found descriptively in some types of events experienced and statistically in two schema domains. All three groups were equivalent in coping style, with similar levels of tenacious goal pursuit and flexible goal adjustment.

The meaning of these findings will now be discussed in relation to the existing literature.

4.2 Comparability of Groups

The difference in nationality and social economic status between the clinical and HV groups could be due to one of two reasons. The first might be that immigrant and social-economic status are risk factors in developing mental health difficulties in later life. Other studies have certainly linked these two variables to schizophrenia of earlier onset (e.g. McDonald & Murray 2000), and immigration has also been linked with LOP (Fuchs 1994; Gurian et al 1992). In previous research when comparing LOP and HV groups there have also been differences in nationality between the groups (e.g. McCulloch 2000). This seems to reflect the difficulty in recruiting a HV group that is matched for this factor, which appears to reflect a salient feature of the LOP group where immigrant status is disproportionately represented in comparison to the wider community as a whole. Therefore, the significance of the difference in this study is
difficult to determine, but it is not surprising that there were differences between the
groups on these factors. It might be that being an immigrant is a risk factor for later
mental health difficulties (as suggested by other studies e.g. McDonald & Murray 2000,
Fuchs 1994; Gurian et al 1992), and that immigrant status is linked to social-economic
status. Low economic status may also be a source of stress that may contribute to the
emergence of psychotic symptoms.

The second possibility is that the difference could reflect the sampling procedures used.
The clinical groups were recruited from Older Adult Mental Health teams in inner city
areas. The HV group was recruited largely from the University of the Third Age (U3A),
an organisation that promotes the continued learning of people of non-working age. It
might be that although the HV participants were based in the same geographic area as
the clinical groups, this organisation attracts a certain clientele that is white and middle-
class. Due to the length of time it took to recruit and interview the clinical participants it
was not feasible to also interview the H.V. participants. The HV participants were
recruited from U3A because it was felt that the people would be able to easily complete
the questionnaires by post and with little support. The issue of nationality differences
between groups had been considered before recruitment began and there was an
intention to also recruit from a local ethnic social club. However, due to time
constrictions and some political issues this had not been possible.

If it was entirely the case that the sampling procedure produced two ethnically and
economically different groups then the results will need to be understood in this context.
However, as has been discussed, these differences are not particularly surprising.
Further, the HV participants may reflect a fairly "typical" group of older people who do not have specific mental health difficulties. The clinical groups were well matched on social-economic status, length and onset of illness and cognitive functioning. They were also fairly well matched on nationality, in that 39% of the DEP group were not British-born. This represents an advance on previous studies (e.g. McCulloch 2000) where depressed comparison participants have predominantly been British-born (93%). Interestingly, 40% of McCulloch's LOP participants were British-born. Therefore the present study might reflect a somewhat over-representation of immigrants in the LOP group, but perhaps a more realistic picture of nationality and ethnicity in the DEP group. It might be argued that the most important comparison is between the clinical groups, who are quite well matched, as any differences between these groups may signify more strongly those factors that are specific to the development and experience of LOP.

4.3 Depression in LOP

As expected both the clinical groups were more depressed than the HV group. However, it is interesting that the difference between the DEP and HV groups was only just significant. This might be because eleven of the thirteen participants were taking anti-depressant medication at the time of the interview and the remaining two had been discharged from the service after a period of drug therapy and could be considered recovered (both scoring only 1 on the GDS). This is encouraging as it obviously suggests that this group as a whole was receiving successful treatment for their depression. However, the mean score (4.68) indicates that the depressed group was not clinically depressed (as indicated by a score of 6 or above), and the fact that only 23% of this group scored above the cut-off for 'clinical' depression at the time of interview has
implications for this study. It might be that as the participants were not clinically depressed at the time of the interviews then the information gathered may not reflect the thoughts and feelings associated with clinical depression.

These factors need to be taken into account when drawing conclusions from this study, for instance they might help to explain the relatively few significant differences between the depressed and either of the other groups. However, during the data collection period it was extremely difficult to engage people who were actively depressed or psychotic, and for this reason it was decided not to interview people whilst they were acutely ill. Indeed, several of the DEP participants had postponed the interview until they felt better, and one participant who was in hospital for depression did not complete the interview and only partial data could be collected for this person. Therefore, this group reflects the fact that participants were not interviewed whilst acutely unwell, and consisted of people who had been more severely depressed but had recovered enough to complete the questionnaires and engage in the research process. Further, this study aimed to investigate the psychological factors involved in mental health issues in later life that were underlying, enduring and pre-disposing rather than reflecting the acute illness experience. The fact that most of the DEP group was not clinically depressed but, as a group, were significantly more depressed than the healthy volunteers is not at odds with the aim of this study.

It is also an interesting finding that the mean GDS score for the LOP group indicated clinical depression and further, that 64% of this group scored in the clinically depressed range. This has implications for the psychosis as a defence against depression argument
(Zigler & Glick 1988), and this study adds weight to the literature that suggests psychosis is not a successful defence against depression. This finding is contrary to that of McCulloch's (2000), who, using the Beck Depression Inventory, found that the LOP participants scored the same as the Healthy Volunteer group on level of depression, and that this was significantly lower than the Depressed group. Further, only 2 of the 15 LOP participants scored in the clinical range for depression. The present study used the GDI which is more appropriate to the age of the participants, and these results suggest that depression is more prevalent in people with LOP than previously thought. However, few studies seem to have addressed the issue of depression in LOP. This might be because most studies specifically exclude people with a primary affective disorder (as should be the case) but thereby neglect to measure levels of depression in the population of LOP participants that they do include.

The present study indicates that depression may be a relevant factor in the experience of LOP. Of course, it is difficult to ascertain the causal role of depression in psychosis. It might be that depression predates psychosis and becomes a contributing factor, in which case one could argue like Castle & Murray (1993) that LOP is really associated with affective disorders rather than schizophrenia. Alternatively, it might be that the experience of psychosis in itself is a depressant. Longitudinal research with people at risk of psychosis would help to delineate cause and effect issues however given the low rates of LOP in the general population longitudinal studies would be extremely time-consuming and expensive ventures.
4.4 The Role of Self-Esteem

This study found no significant differences in self-esteem between the three groups. However, there was a trend for the clinical groups to score lower than the HV group, and the LOP group scored the lowest of all three. Previous literature has suggested that low self-esteem is closely related to psychological well-being (Ranzijn, Keeves, Luszcz & Feather 1998). It might be that the differences in self-esteem between the groups were not significant due to low statistical power given the small participant numbers in each group.

It is particularly surprising that the depressed group was not significantly lower than the HV participants as low self-esteem is usually associated with depression (Roberts & Monroe 1994, Fennell 1997). The relatively high self-esteem of the depressed group may be explained by the fact that the depressed group was not clinically depressed at the time of interview despite scoring significantly higher than the HV group on the GDS. If this group was assessed when acutely depressed they might have shown lower levels of self-esteem. Boyd et al (2000) have suggested that people with late-onset depression are less internally vulnerable to depression than people with early-onset depression, and that late-onset depression is more likely to be environmentally precipitated. Therefore, self-esteem may be more robust in people with late-onset depression than those who experience depression earlier in their lives. Using the Rosenberg self-esteem scale, McCulloch (2000) found evidence of low self-esteem in her elderly depressed group. However, these participants consisted of a mixture of late-onset depression and early-onset depressed people who had grown old. The difference in level of self-esteem
between the present depressed participants and those from McCulloch’s study might then be because the present depressed group is purely late-onset.

It is also interesting that both clinical groups scored more like the healthy samples reported in other studies. For example, a control group of people with no psychological difficulties scored a mean of 137 (± 2.41) on the RSEQ (Robson 1989) and a college sample 146.47 (±23.58) (Addeo et al 1994). Further, an anxious group scored 109 (± 39) and a psychotherapy group 99.8 (± 24) (Robson 1989). The clinical groups in this study scored 130 ± 28 (LOP) and 137 ± 17.5 (DEP), therefore well above the levels of self-esteem found in the clinical samples in these studies and more in the range of the control groups. Like the present study, McCulloch (2000) also found that her LOP group scored equivalent to the HV group on self-esteem. However, she also noted that all her groups, including the depressed group, scored better than expected on level of self-esteem than the standardised norms for the Rosenberg questionnaire would predict. It might be that these measures do not accurately reflect self-esteem in elderly populations.

If the RSEQ is an accurate measure of self-esteem in the elderly then the similar levels of self-esteem between the LOP and the HV groups (and other healthy control samples found in other studies) has implications for the psychosis as a defence against low self-esteem argument (Bentall and colleagues 1991, 1994, Kinderman & Bentall 1996). It might be that the LOP participants’ self-esteem has indeed been maintained by psychotic symptoms. Bentall and colleagues hypothesise that people with psychosis discard responsibility for negative events through delusions that blame others and therefore
underlying negative self-representations are not activated and self-esteem is maintained. This might be the case for the sample of LOP participants studied here. Alternatively, these findings might be more consistent with the view of Garety & Freeman (1999), who argue that the self-esteem of LOP participants relates more to level of depression. In this study, LOP participants scored the lowest of the three groups on self-esteem and highest on depression, whereas the HV group was the inverse of this – high self-esteem and low depression. The low numbers of participants in this study precludes any inter-relational analysis, but clearly the role of self-esteem and depression in LOP needs further investigation.

4.5 Attitude to ageing and morale in LOP

As might be expected, the clinical groups were lower on overall morale than the HV participants. However, this was only significant for the LOP group. That the depressed participants were not significantly lower in morale than the healthy volunteer group might be due to low statistical power as the group mean for the depressed participants was much closer to the LOP than the HV group. In either case, this result suggests that morale is much more affected in people with LOP than those with depression. This could be because psychosis impacts on people in a different way to depression. Again, the issue of causality needs to be raised here. It might be that low morale is a risk factor for LOP in that the person feels dissatisfied with life and negative about the future. However, it might equally be true that low morale is caused by the experience of psychosis itself. Again, longitudinal research would be needed to delineate the cause and effect issues in relation to morale.
It has been argued in the literature that a positive attitude to ageing is important in maintaining self-esteem and sense of self in later life (Coleman 1996, Coleman et al 1993, Bengston et al 1985). On the sub-scale assessing attitude to ageing (ATA), the difference between the LOP and HV groups approached significance. Similarly, the depressed group were closer in ATA to the LOP rather than the HV group. It might be that a larger sample size would see this trend turn significant. This result is suggestive of the findings in the established literature that ATA does play a role in mental health difficulties in later life. Once again there is the issue of causality and attitude to ageing, and only longitudinal research could resolve this question.

What came out most clearly in this analysis was the importance of lonely-dissatisfaction (LD). This scale measures how much people feel lonely and how dissatisfied they are with their life and situation. The LOP group reported that they were significantly more lonely and generally more dissatisfied than the HV group. Greater dissatisfaction fits with the hypothesis that people's past experiences affect their outlook on life, and given that the LOP group reported more threatening-discriminating events and denied opportunities, this fits with a dissatisfied outlook in older age. These factors may have repercussions for their sense of self and contribute to the development of psychotic symptoms.

It is interesting that the LOP group reported greater loneliness than the other groups, as reflected in the LD scale. By examining responses to the particular question on the scale that asked “how much do you feel lonely”, over half of the LOP group (57%) reported that they felt lonely “very much”, compared with none of the HV and only 23% of DEP
group. This may relate to peoples’ appraisals of their support system, in that 11% of the HV participants thought that they did not see enough of their friends and relatives, compared with 57% of LOP participants and 31% of depressed people. Again, the relatively small sample size precludes inter-relational statistical analysis that would test if a relationship between self-ratings of loneliness and appraisal of support system exists.

The loneliness finding is interesting in relation to the hypothesis that people with psychosis avoid emotional intimacy as a coping strategy (Corin & Lauzon 1992, Fuchs 1999b, Roth 1987). It might not be a dislike of sociability (Fuchs 1999b) but rather an awareness of having difficulties with relationships that keeps people isolated in the context of a general desire for contact. It seems from this result that lonely-dissatisfaction could be a component specific to LOP. The mechanisms might be similar to those suggested by Rosenberg (1979) which stipulate the importance of other people’s feedback in maintaining self-concept. If people with LOP feel that they do not have satisfactory support networks then they will not have the usual avenues of maintaining self-esteem that Rosenberg suggests and morale may be affected.

### 4.6 Coping strategies

Contrary to prediction, this study did not find any differences between groups in predominant coping style. Brandtstädter & Renner (1990) found that their group of 60-year-old healthy participants scored a mean of 47 on tenacious goal pursuit and 56 on flexible goal adjustment. The participants in this study scored much lower on both scales regardless of group membership (mean scores of groups were between 28-30 on TGP
and 37-41 on FGA). This difference may partly be due to a cultural effect as Brandtstädter’s participants were German. However, all the groups in this study tended to use accommodative strategies more often than assimilative ones, with an approximate difference of 9 points between the scales similar to Brandtstädter’s population. Therefore, this study adds weight to Brandtstädter’s propositions that both processes are important in adjusting to old age, but that accommodative strategies become more adaptive than employing assimilative ones, possibly as a way of coping with increased losses and reduced personal resources.

The predicted predominance of assimilation over accommodation in clinical groups was not corroborated by these findings. The clinical groups did not differ from the HV group on either tenacious goal pursuit or flexible goal adjustment, and the LOP group did not score higher on the tenacious goal pursuit than depressed participants. This lack of an effect may be due to several reasons. The most likely reason is that coping strategies do not in fact differ according to membership of a group (i.e. the null hypothesis is true) and processes of accommodation and assimilation are not impaired in clinical groups and do not contribute significantly to mental health difficulties. It could be argued that a difference was not found due to low participant numbers (Type II error), but it could equally be argued that if high numbers are needed to find an effect then it is questionable how clinically relevant a difference would be. That the clinical groups scored marginally lower on both scales might reflect a generally less robust coping system, and higher participant numbers may result in improved statistical power to find an effect, but again the same argument about effect size and participant numbers applies. Finally, there may also be difficulties with the FGA and TGP scales and these will be discussed in detail.
later. From this study, therefore, assimilative and accommodative coping strategies do not seem to be a useful avenue to pursue in future research in this area.

4.7 The Role of Schemas in LOP

It was predicted that the clinical groups would endorse more maladaptive schemas (YSQ-S total score) than the HV group. This was the case however only the difference between the LOP and HV groups reached significance. This supports the idea that people with LOP may have premorbid personality difficulties. The non-significant finding of the DEP group is more puzzling. This group reported the highest level of adverse life experiences that, in the CBT model, would predict the formation of maladaptive schemas. However, the depressed group did not report as many early (childhood) experiences, such as loss of friends, siblings and parents before age 18, as the LOP group and this may have made them less vulnerable to forming maladaptive schemas. Further, Boyd et al (2000) have reviewed evidence that suggests late-onset depression is associated with a more robust personality than early-onset depression which has often been linked with avoidant and dependent personality disorders. Therefore, as the current depressed group consisted entirely of the late-onset kind, it fits that they did not differ significantly from the HV group on maladaptive schemas.

The LOP group scored significantly higher than the HV on four schema domains, and significantly higher than the depressed group two of these domains. These four domains will be discussed next.
Disconnection & Rejection

The LOP group scored significantly higher on this domain than the HV group, but not the depressed group. From examining the number of participants in each group who rated a schema as “more true than untrue” it seems that the most common schemas for the LOP group were Emotional Deprivation (63.5%), Social Isolation / Alienation (54.5%) and Mistrust & Abuse (36.4%). The picture is of a group of people who feel that others are not there for them emotionally, that they experience a lack of warmth, attention or empathy from others, feel isolated and alienated from society and feel that others will hurt, abuse and take advantage of them. Very few people in the HV groups marked these schemas as true, for them the most common schema was Emotional Deprivation (16.7%) i.e. the feeling that others were not there for them and experiencing a lack of warmth, attention and empathy from others. The depressed group were generally similar to the HV group except on Mistrust / Abuse where they were equivalent to the LOP group (40%). The picture for two-fifths of the depressed group is that they also felt that other people could be take advantage of, hurt or abuse them. This might be linked to the relatively high reports of abuse in this group (31% compared with 15.5% in LOP and 11% in HV). However, only one-fifth felt a lack of warmth, attention or empathy from others (Emotional deprivation 18.3%) and socially alienated (20%). Emotional Deprivation and Social Isolation / Alienation seem to be particular features of the LOP participants in this sample. This can be related to Fuchs’ (1999a, 1994) comments that people with LOP, because of their threatening-discriminating experiences, feel like “outsiders”. Over half the LOP participants in this study felt they were isolated and alienated from society. Further, it seems they also felt emotionally disconnected from other people.
Impaired Autonomy and Performance

The LOP group scored significantly higher on this domain than the HV group but not the depressed group. The schemas in this domain that seem to be relevant for the LOP group were Dependence/Incompetence (45.5%), Vulnerability to Harm (36.4), and Enmeshment/Undeveloped Self (27.3%). This is a picture of people who feel that they are unable to cope with everyday responsibilities without others’ help, that catastrophes can strike at any time and that they feel over-involved with a significant other, possibly leading to an undeveloped self or an insufficient individual identity. From the interviews it did not seem that the LOP participants were usually over-involved, except clearly in one case, and they were more typically isolated and alone. Therefore, this particular schema may reflect a lack of identity and undeveloped self rather than a current enmeshment. The items that make up the Enmeshment scale mostly relate to peoples’ relationships with their parents. For this sample, these items were answered in hindsight as practically all the participants’ parents had died. The enmeshment rated as relevant by 27.3% of the LOP participants was therefore about past relationships and not current ones.

This interpretation fits more with the ideas of Harrop & Trower (2001) who talk specifically about the problems of separation from parents and the development of psychosis in adolescence. They propose that adolescents who develop psychosis do so because they cannot separate fully from their parents and become their own person, or if they manage this, they are unable to form peer relationships that enable them to continue to develop their sense of self. Conceptually this fits with the picture of people with LOP feeling lonely and isolated, and the ideas gathered from the ageing literature (e.g.
Whitbourne & Collin 1998, Troll & Skaff, 1997) that suggest their sense of self is not strong enough to cope with changes in their self-attributes. It might be that people who develop psychosis in later life had similar difficulties with attachment and separation in adolescence as those earlier-onset people described by Harrop & Trower. These attachment difficulties may contribute to their vulnerability to developing psychosis. By avoiding the stress of social relationships through limiting their social contacts and concentrating on work, people with this vulnerability may successfully navigate their way through life by essentially minimising attachment issues. Their vulnerability may be reawakened in old age due to the particular demands of this time of life — including retirement, loss of those significant others they have attached to, increasing frailty, sensory problems, and increasing dependency needs. As this schema was only endorsed by just over a quarter of the LOP participants, the concept of undeveloped self may only apply to a sub-group of people with LOP.

So far, the picture for the LOP participants is of people who feel incompetent and in need of help, feel particularly vulnerable to harm but are distrustful of others capabilities of providing that help and emotional support, and do not feel that others are warm or understand them. In this domain the HV group profile was very low, with only one person rating Vulnerability to Harm and two Failure as schemas. Fewer depressed than LOP participants marked schemas in this domain. The relevant schemas for the depressed group were Dependence/Incompetence (20%), Vulnerability to Harm (30%) and Failure (20%). Therefore, one fifth of this group also felt in need of help and one third felt particularly vulnerable to harm, but unlike the LOP participants only 10% felt over-involved or had an undeveloped sense of self. While only 9.4% of the LOP felt
they had fundamentally failed or were inadequate, this was true for 20% of the depressed group.

The low numbers of LOP people who felt they had failed or were inadequate is interesting in relation to the life review literature (Sherman 1994) and particularly Erikson's (Erikson et al 1986, Erikson 1980) developmental task of ego integrity vs despair. The low figure suggests that the majority of the LOP group may have integrated failures and disappointments into their self-narrative and that this was more of a problem for the depressed participants. Possibly the story of Mr R illustrates this, in that despite all the adverse events that had happened to him including his perception that his disability had limited his career, he did feel a sense of achievement in the face of these difficulties and was moderately satisfied with his career.

Other Directedness

The LOP group scored significantly higher than both the control groups in this domain. The picture is of a group of people who focus excessively on meeting the needs of others, often at the expense of their own gratification (Self-Sacrifice, 72.7%), and subjugate their needs and emotions excessively, giving control to others often because they feel coerced (Subjugation 45%). Half the participants in both control groups marked Self-Sacrifice as a schema, therefore excessively focusing on the needs of others at the expense of their own needs to avoid causing pain, feelings of guilt or selfishness. However, subjugating their needs was a problem for only 20% of depressed participants and 5.6% of HVs.
It is perhaps surprising that so many, almost three quarters of the LOP group, felt that they focused on other people’s needs more than their own. This seems to be at odds with the descriptions of this group as cold-hearted, dictatorial, and determined (Almeida et al 1992b; Kay & Roth 1961), but these characteristics make more sense in the light of the second schema in this domain – subjugation of needs. These schemas might interact in the LOP participants to reflect a view that they take account of other peoples’ wishes but feel this is at the expense of their own. As such, they might easily feel controlled or coerced and react strongly against this sensitivity by behaving in a domineering and awkward way. This schema also relates to the earlier picture of people who feel emotionally deprived and socially alienated / isolated. It seems that a strong picture emerges of people who feel rejected and misunderstood by others but who believe they consider other peoples’ needs very much. This may lead them to feel resentful and angry at the world for not meeting their emotional needs.

Overvigilance & Inhibition

The LOP group scored significantly higher than both the control groups in this domain. The LOP group marked as “more true than untrue” the schemas emotional inhibition (54.5%) and unrelenting standards / hypercriticalness (81.8%). The picture is of a group of people who suppress their spontaneous emotions and impulses, and the communication of these to others, often to avoid disapproval of others, feelings of shame or losing control of their impulses. Further they strive to meet very high internalised standards, often resulting in hypercriticalness towards themselves and others. However, half the HV group marked Unrelenting Standards as a schema, as did almost a third of the depressed group. This makes it questionable as to whether this schema is a specific
problem for people with LOP. Further, one third of the depressed group also marked Emotional Inhibition as a problem, but only 11.1% of the HVs. So for a third of the depressed group the picture is similar to the LOP group, and unrelenting standards is a difficulty for half the HV group although few felt emotionally inhibited.

The overall picture gained from the schema profile is that people with LOP may feel unable to cope, possibly due to high internal standards, and may feel vulnerable to harm. However, they may find it difficult to approach people for help as they are distrustful of others and believe that others may hurt, abuse or take advantage of them. They also may not experience warmth, attention and empathy in the way most people do, and find that social relationships do not fulfil their emotional needs, despite being acutely aware of other peoples’ needs and demands on them. Therefore they tend to subjugate their emotions and suppress impulses and desires rather than share or express them. The overall picture fits conceptually with the idea that this group of people is socially isolated and has personality difficulties that are especially significant for affecting the quality of social relationships they have with others.

4.8 The Role of Adverse Life Events
Relatively small numbers in this study allowed for a predominantly descriptive analysis of adverse life events. This also means that there is limited statistical power for those analyses that were undertaken. However, the effects documented in the literature were still evident. The clinical groups did report significantly greater rates of adverse life experiences than the HV group. This finding is consistent with the stress-vulnerability
literature that has found increased rates of life events in the year preceding onset of psychotic symptoms (Bebbington et al 1993, Malla & Norman 1992, Bebbington et al 1996) and in the early life histories of people with late paraphrenia (Fuchs 1999a, 1994; Gurian et al 1992). Life events have also been associated with depression (Brown & Harris 1978, Perris 1984). Further, this study elicited events that could occur throughout the life span, asking about early childhood experiences (such as school problems, deaths of parents) as well as those in adulthood (deaths of friends, working career), and ones that could occur in late life (retirement). At present the timing of events has not been delineated in this study and it may be interesting to explore the relationship between the timing of events in participants’ histories, belonging to a particular group (LOP, DEP or HV) and onset of mental health difficulties.

This study also corroborated that clinical groups have experience of different types of events. In concordance with Fuchs (1999a) more LOP participants than the other groups reported greater levels of threatening and discriminating experiences. They were more often illegitimate or had illegitimate children, had been expelled from their home country and were divorced or separated. Interestingly though, it was the depressed group who reported higher rates of abuse and parental divorce, contrary to Fuchs’ study. Also contrary to Fuchs’ study LOP participants were no more likely to be disabled or to report discrimination than the Depressed group were. Although overall more LOP than depressed participants reported threatening-discriminating experiences (as found by Fuchs 1999a), they did not dominate in his ‘history of fragile relationships’ category because more of the depressed participants reported divorced parents. Therefore the
events encompassed in this domain were not solely experienced by the LOP participants and suggests predictors cannot be taken as generally applicable.

A similar pattern emerges with the experience of losses category. Broadly speaking, both the clinical groups reported similar levels of overall loss. Specifically, it was the LOP group that had the greatest incidences of early losses in that they more frequently had histories of deaths of siblings, friends and parents in childhood (18 years and younger). This is contrary to the findings of Fuchs (1999a) who found that his late-onset depression sample clearly had greater early losses. The depressed participants in this study were more likely to report losses experienced during adulthood or old age, for example the loss of their partner and friends. However, this might be influenced by the fact that the LOP group had fewer friends who could die to begin with (several of the LOP participants commented that they had no friends when asked about deaths of friends). The fact that more depressed participants had lost their partner was not influenced by relationship status between the groups, as similar numbers in each group had never been married (3 in each). A particularly interesting finding was that all three people who had experienced the death of a child belonged to the LOP group. Of these, one died at 6 months (because the hospital would not treat the child due to the nationality of the mother and the war), one aged 21 (from suicide) and one aged 45 years who had “got mixed up in the wrong crowd”. All these deaths occurred in the context of unusual and regrettable circumstances.

It was argued in the Introduction that LOP, and in particular partition delusions, might be related to a feeling of vulnerability about one’s own territory caused through being
expelled from home (Fuchs 1999a, 1994). Relatively few people in this study had been expelled from their home countries (only 2 LOP and none from the other groups). Therefore, there were more expellees in the LOP group but less than other studies have found (Fuchs 1994; 1999a). This is most probably due to the geographic location of Fuchs’ sample, who were located in Bavaria which has a high proportion of war refugees expelled from the Eastern territories lost by Germany after World War II. However, the LOP participants were almost entirely immigrants. Many (though not more so than the depressed group) had experienced racism, although fewer of the depressed group had immigrated to Britain. Importantly, many more of the LOP group than the depressed group marked Social Isolation / Alienation as a schema, reflecting a feeling of social difference and exclusion. This may take an extreme form in people with LOP in that they feel vulnerable about their own safety and security in the home. This is indicated by the high rates of partition delusions found in this group of people with LOP (71.5%). Further, 36% of this group specifically had delusions that centred around a fear that their homes were threatened or that the authorities were going to evict them. Other studies have found similar rates of partition delusions in people with LOP, and these rates are much higher than for early-onset psychosis and people with psychosis who have grown old (Howard et al 1992b). Therefore, partition delusions seem to be specific to LOP and these may be related to the high proportion of immigrants often found in this group.

4.9 Summary

In the light of these findings some adjustments to the initial cognitive formulation of LOP can be made (see Figure 21).
**Figure 21: A Cognitive Re-Formulation of LOP**

**Vulnerability Factors**

1. **Inherent**
   Biological / genetic, birth trauma, neurocognitive deficits, lower tolerance to stress, schizoid or paranoid personality traits, cognitive biases

2. **Early Experiences and experiences in adulthood**
   Adverse experiences such as difficult relationships, threatening-discriminating experiences including expulsion from home and illegitimacy or having an illegitimate child; early losses; emigration; divorce or separation from partner; death of own child

**Core Beliefs or Schemas**

Specifically Other-Directedness, Overvigilance & Inhibition, and possibly Disconnection & Rejection and Impaired Autonomy & Performance.

**Dysfunctional Assumptions**

That feed into core beliefs and affect the way they react to events around them.

**Context**

1. **Growing older** including subtle cognitive changes, sensory impairments, decline of physical health and mobility

2. **Adjustment to Ageing:** having a negative attitude to ageing and low overall morale. Possibility of low self-esteem (maybe covert). A general feeling of dissatisfaction with life and the desire for intimate social relationships precluded by personality difficulties that make these unrewarding, difficult to sustain or impossible to obtain for the person with LOP.

**Trigger events**

Stressful age related experiences such as retirement, bereavements, money difficulties, physical ill health, mobility problems, and sensory impairments

**Symptom formation and maintenance**

Psychotic symptoms and particularly partition delusions

Depression
This study supports previous findings that threatening and discriminating experiences are often part of the histories of people with LOP. Also, early losses may be prominent for this group. Early adverse experiences may interact with possible biological and psychological vulnerabilities (such as personality traits and cognitive biases) and enhance the presence of personality difficulties. These manifest in difficult social relationships, indicated by increased rates of divorce and separation in this group compared with other groups. However, it seems that the desire for intimate social relationships is not affected, and it might be the ability of people with LOP to initiate and maintain satisfying relationships that is disturbed. It could be hypothesised that early adverse life experiences and inherent personality styles can be linked with this group's tendency to inhibit their emotional needs and communications with others, seemingly because they distrust others and maybe do not experience warmth and empathy in the way other people do. Experiences of discrimination and particularly perhaps immigration lead to a feeling of being disconnected and isolated from society, and difficulties in social relationships lead to feelings of disconnection from and rejection by people.

In the context of growing older, where career or family roles change, health problems ensue and people are forced to re-evaluate themselves and their self-concept. Past negative events predispose this group of people to have a negative attitude to ageing, low morale, and feelings of dissatisfaction with life. The ending of work relationships and the lack of other social relationships make the person feel lonely, more dissatisfied and neglected. Specific events could then trigger the onset of psychotic symptoms in an individual made vulnerable to psychosis through biological, psychological and
psychosocial factors. Accommodative and assimilative coping strategies do not appear to differ in this group from healthy and depressed controls and as such have been taken out of the model.

4.10 Methodological Issues and Limitations of the Study

There are a number of reasons to be cautious in interpreting the findings of this study. These fall into three main categories: the research sample; statistical power; and the measures used.

The Research Sample

As discussed, there were differences between the clinical and the HV groups in nationality and social economic status. The reasons for this difference may in itself reflect an actual research finding, that is that being an immigrant and having a lower social-economic status are risk factors for LOP. However, as discussed previously, the difference may also be due, at least in part, to the recruitment procedures used in this study. Future research should make great efforts to find healthy volunteers who are matched for nationality and economic status to ensure that these variables can be controlled for in comparing clinical and healthy groups. This of course may be more difficult if these variables are in fact risk factors for developing mental health problems in later life.

For this study recruitment difficulties precluded matching groups. The difficulty in finding and recruiting clinical participants, in particular for the LOP group, and in
addition to the length of time it took to interview clinical participants (often involving several meetings) meant that the HV group were recruited via the post and through organisations that were easy to access. However, this study represents an advance on McCulloch's (2000) research in that the depressed and LOP groups were fairly well matched on the baseline measures, and that this depressed group was purely a late-onset group. This may indicate that the few differences found between the LOP and DEP groups in this study are probably robust findings.

Statistical Power

Once again, the difficulties involved in recruiting the clinical participants resulted in small participant numbers in this study. The sample size is equivalent to previous research that has looked at the psychological factors associated with LOP (e.g. McCulloch 2000). Smaller numbers allow for a more in-depth look at the psychological factors operating for each individual, and this in-depth exploratory approach is what is needed as a precursor to developing clinical interventions so therefore smaller numbers also have some advantages. Few studies have attempted to look in detail at the psychology of this group and therefore this approach contributes a different perspective, albeit an exploratory one. This naturally requires smaller numbers given the time involved and the difficulty of engaging people.

This said, it is recognised that a small sample size limits statistical power, hence the strong emphasis on descriptive and qualitative data, and reduces the generalisability of the results. Gaining a representative sample of the populations under study was constrained by the number of clinical participants that were currently using services in
the data collection time frame and, of course, the numbers of people who would agree to participate. It might well be that the LOP participants in this study represent a more "sociable" group of people than is normally associated with this condition. It could be argued, though, that any effects found using limited statistical power might in fact reflect large and clinically important differences between the groups.

The number of tests run on the data may also present a problem for the interpretation of these results. As discussed in the Method section, this study was considered exploratory in nature and on balance it was decided not to adjust the alpha level to reduce the risk of Type I errors. It was felt that, as little is known about the psychological factors associated with LOP, the risk of Type II error (missing an effect that is actually present) needed to be controlled for. It was felt that the low statistical power of this study due to the small sample size might somewhat counterbalance the occurrence of Type I error.

Overall, the findings of this study need to be taken with caution and need to be corroborated in future research that is conducted on larger sample sizes and correcting for Type I errors. A larger sample size would best be recruited over a long period of time and by clinicians with whom the participants already know and have reasonable relationships with. This might enhance the representativeness of the research population, but still only accesses those who have seen and engaged with clinicians. A larger sample size is one option, but equally research on smaller numbers using multiple case study designs may be more appropriate for developing psychological therapies for this group. This approach is supported by the heterogeneous nature of this group and that LOP seems to be multifactorially determined.
Validity of Measures

A general comment to make about the data collection relates to the validity of self-reports, and especially in the presence of an interviewer. The researcher interviewed all the clinical participants and the vast majority of people opted to answer the questionnaires with the items being read out to them by the researcher. This may impact on the responses they chose to give and they may have been more reluctant to present themselves negatively (the social desirability effect). Further, some participants asked the researcher to elaborate on the meaning of an item. However, the presence of the interviewer allowed participants who were unfamiliar with psychological questionnaires, in particular those that use Likert scales, to participate in the research. Finally, the difference in data collection between the clinical and the HV groups may hinder the validity of comparisons between the groups.

The lack of an effect of coping style between groups might have been affected by the scales used. The German versions of these scales have been well validated however it might be that the TGP and FGA scales do not translate well from German into English. Several of the clinical participants found that the scales were awkwardly worded and struggled with the meaning of some items, reducing the validity of the results. The scales also required an adequate level of reading ability. These might be some reasons behind the difference in mean scores between this study and Brandstädter’s population. The lack of effect might also reflect that the scales do not pick up on the subtleties involved. Single case analysis (such as conducted by Coleman et al 1999) may need to be applied to peoples’ use of these strategies according to the particular problem faced and the outcome of their choice. Again this argues against large sample studies and in
favour of a more in-depth approach. The cases of Mr R and Mrs G both indicated that assimilative coping was more prominent than accommodative for these people and this style of coping may hinder adjustment to ageing for these individuals, but may not be a factor for most people with LOP.

Using the Robson self-esteem measure with an older population may have affected the non-significant finding in relation to level of self-esteem between groups. The measure may not pick up on the factors that are relevant to older age and self-esteem. The Robson was chosen because it used a multidimensional definition of self-esteem based on a combination of prominent theories and it has been used to study self-esteem in people with earlier-onset psychosis (e.g. Freeman et al 1998). On reflection it might have been more appropriate to use a scale that has been validated on this population.

Similarly, the schema questionnaire has not yet been validated on an elderly population and the results may mean something different for this population to those discussed in relation to Young’s schemas. For instance, Emotional Inhibition might be more expected for this cohort, and maybe particularly so for older men. The cut-off score of 3 for the definition of a schema, indicating that the person rated the schema generally as “more true than untrue” might not be a particularly high cut-off and may not reflect a particularly ‘active’ maladaptive schema. Young (1998) suggests that a cut-off of 4 and above is clinically relevant for the long-form of the schema questionnaire, however he also suggests that a rating as low as 2 might be relevant when using the short form. The short form was used in this study and therefore a cut-off of 3 was higher than the recommended level for clinical relevance.
A strength of this study is the use of the GDS to measure depression. This measure has specifically been designed for an older population to avoid problems associated with the measurement of depression in older adults (e.g. somatic confounds). Unlike previous studies that have used the Beck Depression Inventory (e.g. McCulloch 2000), the findings of this study suggest that depression may be a relevant factor for people with LOP.

Despite these limitations and methodological limitations, this study raises many questions about this population that future research needs to explore.

4.11 Directions for Future Research

This study found evidence to support the hypothesis that people with LOP have personality difficulties. It is perhaps more beneficial to discuss schema profiles than diagnosable personality disorders. It seems that the personality difficulties are often more subtle than a fully diagnosable personality disorder (Howard & Levy 1993) and often only paranoid and schizoid diagnoses emerge as relevant for people with LOP in these studies. These diagnoses tell us little more than a description about how the person behaves rather than their inner thoughts and views. The schema questionnaire is one avenue into the inner world of this population and gives a detailed account of peoples’ emotional domains. Future research could take these initial and cautious findings further and explore the issue of personality difficulties through large-scale replication of these findings and also through individual qualitative analyses that could explore the meaning of these schemas in individual terms.
Another avenue for future research to explore is the relationship between feelings of loneliness and isolation. It is suggested here that people with LOP desire social contact but their skills at maintaining social relationship are inadequate. However, these are tentative hypotheses based on relatively low numbers and largely descriptive data from the schema questionnaire. The lonely-dissatisfaction scale did suggest statistically that loneliness might be a factor for this group. Future research might include qualitative analysis on peoples' views about isolation and relationships. It might also be enlightening to explore the interpersonal skills in this group of people using specifically designed measures.

It may also be useful to explore the hypothesis that people with LOP have difficulties with attachment and separation that are the root of their inter-relational difficulties. Research in this area may be difficult due to the intensely private nature of this group of people. However, exploration of attachment issues could be important for the case management of people with LOP, in that attachment and detachment from therapy might need to be carefully managed in the psychological treatment of this group.

With regard to the hypothesis that coping and adjustment to ageing contribute to the onset of psychosis in later life, some factors were found to be relevant. Lonely-dissatisfaction and low morale, and possibly a negative attitude to ageing, were evident in this group and could be explored further. Accommodative and assimilative coping styles do not seem to be pertinent for this group or indeed for people with late-onset depression. The literature suggests that it is the way events are coped with and not the event in itself that causes the difficulties. Therefore, other modes of coping might shed
more light on how coping strategies may affect adjustment to ageing. The literature also suggests that self-concept and accepting changes in self-attributes are important in ageing. Well-designed research with the appropriate tools could measure these factors in people with LOP and determine if they do have more difficulty than healthy groups in assimilating changes into their self-concepts.

The question of the relationship between life events and schemas was raised in this study, although due to low participant numbers relational testing was not conducted. This relationship needs to be addressed, for instance regression analysis might be able to determine whether life events account for the differences in schemas across groups. The hypothesised relationship between life experiences and the formation of maladaptive schemas is central to the CBT model, and future research needs to corroborate this relationship, not just in people with LOP but in terms of the general model.

This study found good evidence that depression may be a factor for many people with LOP. The role of depression in LOP needs to be addressed more directly in future research. The exclusion of affective psychoses from studies should not preclude the investigation of this variable. The relationship between existential questions and adjustment to ageing could be also addressed, in line with Erikson’s model. It would be interesting to see if people with LOP have less coherent self-narratives, as the literature would suggest, and if these relate to depression, self-esteem and morale. Qualitative analysis would be particularly illuminating in exploring the relationship of past life experiences and the resolution of ego integrity vs despair.
At the current stage of exploration of the psychological factors operating in people with LOP, single case study design might be the most illuminating method of study in terms of the richness and complexity of the issues involved. Given the heterogeneity of people with LOP, this method may also be the most advantageous in terms of developing psychological treatment interventions for this group.

4.12 Implications for Services for People with LOP

This study has emphasised the importance of psychological factors in the understanding of LOP. There is certainly evidence to suggest that past life experiences and personality factors, as well as emotional states, may contribute to the formation and maintenance of psychosis in later life. This has implications for services that are still predominantly treating people with LOP with drug therapies. Whilst it is not argued here that this is in any way inappropriate, it is argued that a shift in ethos may be indicated as is beginning to occur in the psychosis literature for people with earlier-onset psychosis. Psychological factors have been indicated for people with LOP and therefore the adjunct of psychological therapies with medication may be beneficial for this population, especially given the relatively high levels of maladaptive schemas endorsed by this group indicating long-term personality difficulties.

A second implication indicated by this study is that LOP seems to result from multiple causes, as has been strongly argued by Garety in relation to psychosis of earlier onset (Garety & Freeman 1999, Garety et al 2000). Some cases of LOP in these participants seemed to be clearly related to sensory difficulties (e.g. Mrs L), others seemed to relate
to issues around difficult interpersonal relationships, past experiences and feeling dissatisfied with life (Mrs G). Others fitted the model of vulnerability caused by early disability, discrimination, expulsion from home, rejection and isolation in the context of retirement and health difficulties (Mr R). The complexity of experience and events that may culminate in psychosis in later life indicates that service users should be considered primarily as individual cases, with individual formulations of their particular pathway to LOP and their particular manifestation of the disorder, rather than as a homogeneous group.

A third implication is the level of loneliness found in this sample. The findings here suggest that many people with LOP are lonely and in need of support, but cannot get this through normal peer and family relationships because they are isolated, perhaps because of their own inability to maintain good relationships. They may need the support of professionals who understand that they have these social difficulties, possibly related to earlier attachment-separation issues. Professionals need to facilitate the provision of appropriate continued social support for this group even in the face of difficult social behaviour.

Further, with relatively high levels of non-British-born people in this population, the experience of immigration needs to be understood by services and therapists, and teams must be culturally aware. Similarly, this study, unlike previous research, has implicated depression as a possible target for intervention. The role of depression in people with LOP certainly needs further research, but until this occurs services need to be aware of underlying or concurrent depression in this population.
4.13 Specific Implications for Clinical Psychologists and other Therapists

This study has attempted to construct an understanding of LOP within a cognitive-behavioural framework. This psychological approach is particularly indicated for this client group due to the successful work already being conducted with younger people with psychosis and by the occurrence of schema-level problems in people with LOP as indicated by the findings of this study. This implies that treatment needs to go beyond intervening with immediate thoughts, feelings and behaviours associated with LOP, and work with the schema level.

The broad aims of cognitive-behavioural therapy for people with psychosis are to reduce distress caused by symptoms, to reduce emotional disturbance and to help the individual arrive at an understanding of psychosis (Garety et al 2000). This approach focuses on the meaning of symptoms for individuals and treatment is conducted in the spirit of collaborative empiricism. Essentially, a CBT intervention for people with LOP will be similar to therapy with younger people with psychosis. Factors that may need to be taken into account with an older person might include sensorial and information processing changes that occur in old age, the issue of chronic physical illnesses, and having an awareness of the older person’s expectations towards therapy and the therapist (Bizzini 1998, Laidlaw 2001). However, Laidlaw (2001) cautions against the view that therapy for older people must always be adapted and he emphasises that possible adaptation should be considered on a case-by-case basis.

The CBT approach is structured and time-limited, although the duration and frequency of therapy sessions vary according to the nature of the client’s problems. For instance,
people whose cognitive processing has slowed may need more sessions in order to complete treatment. Many therapists working with early-onset psychosis have conceptualised treatment as a series of stages (e.g. Garety et al 2000, Perris & Skagerlind 1998). A possible stage-model for LOP is set out below. These stages often overlap, for example engagement will be enhanced when the distress caused by psychotic symptoms has been reduced.

Stage 1 Engagement
This phase (called the “attachment” and engagement phase by Perris & Skagerlind 1998) may be particularly important for LOP if the theories about attachment and separation issues are born out in future research. This stage is important in gaining the trust of the person, and an assessment of their individual needs and resources can be made. Following this initial treatment goals can be drawn-up. Often these meetings will be shorter and more frequent than a standard CBT approach as people who are distressed may not be able to tolerate long periods of contact. Gaining the confidence and trust of people with LOP may take a long time and the pace will need to be set by them. This is true of most people with psychosis, and seems even more so with this group due to the high rates of paranoia and histories of threatening-discriminating experiences, which promote distrust of others.

Stage 2 Reducing distress
The use of general CBT strategies to reduce the immediate distress caused by symptoms in this phase may also help to gain the trust of people with LOP. This phase may also include work on concurrent depression if this is evident in the client. Other areas to
target might include anxiety related to the experience of psychosis, and here a
normalising strategy might be useful. Further, this study suggests that for people with
LOP, low morale, lonely-dissatisfaction and a negative attitude to ageing may all be
areas to target in therapy. These may need to be addressed directly or may improve if
psychotic symptoms can be reduced.

Stage 3 Developing an understanding of LOP

This phase involves collaborating with the person to understand their experience, and
may also include a psycho-educational component where current understandings of
psychosis are shared with the client. Garety et al (2000) aims to help the client arrive at
an understanding of psychosis that promotes their active participation in reducing the
risk of relapse.

Stage 4 Working on positive symptoms

After both the client and the therapist have reached an understanding of psychosis, the
challenging of disabling and distressing beliefs about experiences can occur. However,
the emotional consequences of changing strongly held beliefs need to be explored.
Further, the challenging of beliefs is conducted in a gentle manner through
collaborative-empiricism, as direct confrontations will probably result in disengagement
from therapy.

Stage 5 Schema level work

The results of this exploratory study suggest that maladaptive schemas may present in
people with LOP. Therefore, working at schema-level may be necessary to reduce the
risk of future relapses. This work could be carried out during the other stages or only when the person is more stable and major delusional worries are no longer as distressing them. The aim of this work for people with LOP would be to address the underlying personality issues that may have contributed to the presence of LOP in the first place.

Stage 6 Building social networks

This group of people has often been identified as isolated. This study suggests that people with LOP might be isolated because they find relationships particularly stressful and difficult to maintain. For these individuals, any social network put in place may need to reflect a level of professionalism, such as day centres, who may be more tolerant and understanding of interpersonal difficulties. It may also be extremely important to allow the person with LOP some distance from social relationships, so that as suggested by the Corin & Lauzon (1992) study, these people can experience contact but in a rather distant way.

Stage 7 Reducing the risk of relapse

This phase would incorporate the identification of signs of relapse and also aim to ensure that the person has been able to successfully implement the CBT strategies learned during treatment.

Stage 8 De-attachment issues

It has been hypothesised in this study that people with LOP may have attachment and separation difficulties. After the process of therapy, where hopefully a good and trusting
therapeutic relationships has been built between client and therapist, issues around ending treatment may be particularly pertinent for this group.

4.14 Conclusion

It has been argued that a psychological understanding of LOP is needed. Current treatment methods are primarily biological, however as many as 50% of this group do not respond to anti-psychotic medication. From work conducted with younger people with psychosis it appears that a cognitive-behavioural understanding and treatment approach could be advantageous for people with LOP. As a first step in developing a psychological intervention for LOP, this study aimed to explore the psychological factors operating in LOP and how they related to ageing.

A group of people with LOP were compared with a late-onset depression and a healthy volunteer control group. It was found that the LOP group was significantly higher than the healthy volunteer group on level of depression, number of adverse life experiences reported, and the level of maladaptive schemas endorsed. They were more lonely and dissatisfied, had lower morale and a more negative attitude to ageing than the healthy volunteers. Further, LOP participants reported different life events to depressed participants and endorsed more maladaptive schemas on two domains.

These findings suggest that people who develop psychosis in late life may find it difficult to adjust to ageing (as reflected by their low morale, negative attitudes to ageing, and lonely-dissatisfaction). These difficulties might arise from particular adverse
life experiences and personality difficulties that affect the quality of their interpersonal relationships. This study did not find evidence to support the hypothesis that people with LOP have difficulty adjusting to ageing because of a predominance of assimilative coping strategies.

The findings have also emphasised that people with LOP are a heterogeneous group and that there are many pathways to developing psychosis in later life. In the light of this, the development of cognitive-behavioural approaches for this group may not only be possible but may also be advantageous, as this model can accommodate these factors. Until recently, the search for a biological understanding of LOP has led to the neglect of psychological factors. It is argued here that research into these psychological factors is what is needed in order to develop successful interventions for the significant proportion of people with LOP who do not respond to biological interventions.
References


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Appendices
Appendix A  Letters stating ethical approval for this study.
Thursday, 03 August 2000

Ms Linda Clare  
Sub-Department of Clinical Health Psychology  
University College London  
Gower Street  
LONDON WC1E 6BT

Dear Ms Clare

Ref: 00/79 (please quote in all further correspondence)  
Title: Adjustment to ageing in late onset psychosis

This project has been considered by the Ethics Committee, and I am pleased to inform you that they were able to give their approval for it to proceed. Please would you write and inform Angela Williams of the start date of your project, at the above address.

Please note that the following conditions of approval apply:

- It is the responsibility of the investigators to ensure that all associated staff including nursing staff are informed of research projects and are told that they have the approval of the Ethics Committee.

- If data are to be stored on a computer in such a way as to make it possible to identify individuals then the project must be registered under the Data Protection Act 1998. Please consult your department data protection officer for advice.

- The Committee must receive immediate notification of any adverse or unforeseen circumstances arising out of the project.

- The Committee must receive notification: a) when the study is complete; b) if it fails to start or is abandoned; c) if the investigator/s change and d) if any amendments to the study are made.
• The Committee will request details of the progress of the research project periodically (i.e. annually), and require a copy of the report on completion of the project.

Please forward any additional information/amendments regarding your study to contact the Local Research Ethics Committee Administrator or myself at the above address. If you have any queries, please do not hesitate to contact the Local Research Ethics Administrator at the Research office.

Yours sincerely

[Signature]

(9) Stephanie Ellis
Committee Chair
ETHICAL COMMITTEE (RESEARCH)

September 25, 2000

Dr Rob Howard
Section of Old Age Psychiatry
Institute of Psychiatry

Dear Dr Howard,

Re: Adjustment to ageing in late onset psychosis (161/00)

The Ethical Committee (Research) considered and approved the above study at its meeting on 15 September 2000. However, the Committee was concerned about the capacity of the subjects to sustain a questionnaire/interview for 90 minutes, and suggested that it be broken down into two sessions.

Initial approval is given for one year. This will be extended automatically only on completion of annual progress reports on the study when requested by the EC(R). Please note that as Principal Investigator you are responsible for ensuring these reports are sent to us.

Please note that projects which have not commenced within two years of original approval must be re-submitted to the EC(R).

Any serious adverse events which occur in connection with this study should be reported to the Committee using the attached form.

Please quote Study No 161/00 in all future correspondence.

Yours sincerely,

Margaret Chambers
Research Ethics Coordinator
### Appendix B  Tenacious Goal Pursuit and Flexible Goal Adjustment
*(Brandstädter & Renner 1990)*

Listed below are a series of statements that people sometimes feel about themselves. Please circle the number that corresponds with how much you agree or disagree with each statement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When I get stuck on something, it's hard for me to find a new approach.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The harder a goal is to achieve, the more appeal it has to me.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I can be very obstinate in pursuing my goals.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I find it easy to see something positive even in a serious mishap.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>When faced with obstacles, I usually double my efforts.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>To avoid disappointments, I don't set my goals too high.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Even when things seem hopeless, I keep on fighting to reach my goals.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>When everything seems to be going wrong, I can usually find a bright side to a situation.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I tend to lose interest in matters where I cannot keep up with others.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I find it easy to give up a wish if it seems difficult to fulfill it.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>When I run up against insurmountable obstacle, I prefer to look for a new goal.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Life is much more pleasurable when I do not expect too much from it.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I create many problems for myself because of my high demands.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>When I have tried hard but cannot solve a problem, I find it easy just to leave it unsolved.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>In general, I am not upset very long about an opportunity passed up.</td>
<td>0--------1------2------3------4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. I adapt quite easily to changes in plans or circumstances. 0--1--2--3--4
17. I usually find something positive even about giving up something I cherish. 0--1--2--3--4
18. I avoid grappling with problems for which I have no solution. 0--1--2--3--4
19. I usually have no difficulties in recognising where my limits are. 0--1--2--3--4
20. If I find I can not reach a goal, I’d prefer to change my goal than to keep struggling. 0--1--2--3--4
21. After a serious drawback, I soon turn to new tasks. 0--1--2--3--4
22. Faced with a serious problem, I sometimes simply pay no attention to it. 0--1--2--3--4
23. If I don’t get something I want, I take it with patience. 0--1--2--3--4
24. Faced with a disappointment, I usually remind myself that other things in life are just as important. 0--1--2--3--4
25. I find that even life’s troubles have their bright side. 0--1--2--3--4
26. It is very difficult for me to accept a setback or defeat. 0--1--2--3--4
27. Even when a situation seems hopeless, I still try to master it. 0--1--2--3--4
28. I stick to my goals and projects even in the face of great difficulties. 0--1--2--3--4
29. When I get into serious trouble, I immediately look how to make the best out of the situation. 0--1--2--3--4
30. I’m never really satisfied unless things come up to my wishes exactly. 0--1--2--3--4
Appendix C  Life Experiences Questionnaire

Below are some questions about your early life and your experiences since you were a child. It would be very helpful if you could answer as many of the questions as you can, although please do not feel pressured into answering a question if it makes you feel uncomfortable.

Personal information:
1. Are you: Male  Female (please circle)

2. What is your date of birth  _____ / ____/ _____

3. What nationality were your parents? Mother: ______________ Father: ______________

4. What nationality are you? __________________________________________

Early life experiences:
5. Have you moved from the place where you grew up
   (e.g. emigrated to England; moved county within England)  Yes  No

   If Yes, please state your age(s) when this occurred and explain the reasons why you moved:
   ________________________________________________________________
   ________________________________________________________________

6. What did your father work as? ________________________________

7. What did your mother work as? ________________________________

8. Who was in your family when you were growing up? (e.g. mother, father, siblings, extended family etc)
   ________________________________________________________________
   ________________________________________________________________

9. Are you: an eldest child
   a middle child (state position in family)
   a youngest child
   an only child (please circle)

10. Were your parents married when you were born?  Yes  No

11. Were you adopted?  Yes  No

12. Were you fostered?  Yes  No

13. Did your parents ever separate or divorce?  Yes  No
14. How old were you when your father died? _____ years old

15. How old were you when your mother died? _____ years old

16. Have you lost any other close family members (e.g. siblings) Yes No

   If Yes, please describe as best you can and say how old you and your family member were at the time:

   __________________________________________________
   __________________________________________________
   __________________________________________________

17. Did you experience the death of a close friend when you were a child Yes No

   If Yes, please describe as best you can and say how old you and your friend were at the time:

   __________________________________________________
   __________________________________________________
   __________________________________________________

18. Did you experience any problems at school? (e.g. bullying, problems learning) Yes No

   If Yes, please describe as best you can and say how old you were at the time:

   __________________________________________________
   __________________________________________________
   __________________________________________________

19. Have you ever experienced any form of discrimination at any time in your life (e.g. racial, sexual etc) Yes No

   If Yes, please describe as best you can and say how old you were at the time:

   __________________________________________________
   __________________________________________________
   __________________________________________________

20. Have you ever experienced any abuse – sexual, physical or emotional – at any time in your life? Yes No

   If Yes, please describe as best you can and say how old you were at the time:

   __________________________________________________
   __________________________________________________
   __________________________________________________

21. Would you like to add any other events that happened to you when you were growing up?

   __________________________________________________
   __________________________________________________
   __________________________________________________
Relationships:

22. Have you ever been married? 
   Yes  No
   If Yes, what year(s) were you married in?______________________________

23. Have you ever separated from / divorced your partner(s) 
   Yes  No
   If Yes, how old were you when this happened?______________________________

24. Do you have children? 
   Yes  No
   If yes: How many: ________________________
   Were you married when you / your partner were pregnant? Yes  No

25. Have you adopted any children? 
   Yes  No
   Have you fostered any children? Yes  No
   Have you / your partner ever experienced a miscarriage? Yes  No
   Have you / your partner ever experienced an abortion? Yes  No

25. Have you experienced the death of your spouse? 
   Yes  No
   If Yes, please describe as best you can and say how old you and your partner were at the time:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

26. Have you experienced the death of any of your children? Yes  No
   If Yes, please describe as best you can and say how old you and your child(ren) were at the time:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

27. Do you currently consider yourself to have enough friends to satisfy your needs? Yes  No

28. Have you experienced the death of close friends in adulthood? Yes  No
   If Yes, please describe as best you can and say how old you and your friend(s) were at the time:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
Health:

29. Do you have any current problems with your physical health? Yes No

If Yes, please describe as best you can and say how old you were when these began:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

30. In the past, have you ever experienced any serious illnesses or injuries? (please include any amputations or handicaps) Yes No

If Yes, please describe as best you can and state your age when this occurred:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Working Career:

31. What jobs have you had during your life?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

34. How satisfied are you with your working career? Very satisfied Moderately so Not Very

35. Have you experienced any difficult periods such as unemployment, threat of being fired etc? Yes No

If Yes, please describe as best you can and say your age when this occurred:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

36. Have you retired from work? Yes No

If Yes, please state when that was: ____________________________________________

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Financial:

37. Have you ever experienced major financial difficulties? Yes No

If Yes, please describe as best you can and when this occurred:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Judicial:

38. Have you ever been in trouble with the police? Yes No

If Yes, please describe as best you can and when this occurred:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Other:

39. Have you ever felt you have been denied any opportunities in life? Yes No

If Yes, please describe as best you can and when this occurred:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

40. Can you describe something that you feel you have achieved in life or the best thing that has happened in your life?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix D  Information sheet and Consent Forms for the clinical groups
Title of study: Adjustment to Ageing and Mental Health

Explanation of the study
We would like to invite you to take part in a research study looking at adjustment to ageing and its relationship to mental health difficulties in older persons. We are interested in finding out whether people who develop mental health difficulties for the first time in later life have different life experiences and ways of adjusting to ageing than people who do not experience difficulties.

This is an important area to investigate because it will help health professionals to understand and treat mental health problems in older persons.

Over the next few months we will be asking many people who attend mental health services in London to take part in this research. We would be grateful if you would agree to take part.

Participation in the study
You will be asked to spend about 90 minutes answering some questions and completing some questionnaires about yourself and past life experiences. You may take one or several breaks at any time during the interview.

You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason. Your decision whether to take part or not will not affect your care and management in any way.

Confidentiality
Any information you give will be kept confidential, and will not affect your treatment in any way. Any written reports or publications arising from this study will not identify you as an individual in any way.

All proposals for research using human participants are reviewed by an ethics committee before they can proceed. This proposal was reviewed by the Camden & Islington NHS Trust’s and the Institute of Psychiatry’s ethics committees.

If you are willing to take part in this study please read and sign the attached consent form. If you would like to discuss the study further please contact us on the number below.

Researcher:
Sharon Giblin: Clinical Psychologist in Training, Sub-Department of Clinical Health Psychology, University College London, Gower Street, WC1E 6BT. Tel: 07939 232 167

The Research Team:
Linda Clare: Chartered Clinical Psychologist, Sub-Department of Clinical Health Psychology, University College London, Gower Street, WC1E 6BT. Tel: 020 7679 1844
Gill Livingston: Psychiatrist, Mental Health Care of Older People, A13, Holborn Union Building, Archway Wing, Whittington Hospital, N19 5NF. Tel: 020 7288 3560
Rob Howard: Psychiatrist, Section of Old Age Psychiatry, Institute of Psychiatry, De Crespigny Park, Denmark Hill, London, SE5 8AF. Tel: 020 7703 5411
CONSENT FORM (Clinical Groups)

Title of study: Adjustment to Ageing and Mental Health
Researcher: Sharon Giblin

Please complete the following:

1. Have you read the information sheet about this study? Yes / No
2. Have you had the opportunity to ask questions and discuss this study? Yes / No
3. Have you received satisfactory answers to all of your questions? Yes / No
4. Have you received enough information about this study? Yes / No
5. Which health professional have you spoken to about this study? ..................
6. Do you understand that you are free to withdraw from this study:
   - at any time
   - without giving a reason for withdrawing
   - without affecting your future care & management Yes / No
7. Do you agree to take part in this study? Yes / No

I .......................................................... (name in block letters) hereby consent to participate
in the study described above.

Signed: .................................................. Date: .........................

Signed (researcher): ................................. Date: .........................

☐ Please tick this box if you would like to receive a summary of the project when it has
been completed (expected to be September 2001).

Address: ................................................................................

................................................................................

................................................................................

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Appendix E  Information sheet and Consent Forms for Healthy Volunteers
CONFIDENTIAL

INFORMATION SHEET

Title of study: Adjustment to Ageing and Mental Health

Explanation of the study
We would like to invite you to take part in a research study looking at adjustment to ageing and its relationship to mental health difficulties in people over 60 years old. We are interested in finding out whether people who develop mental health difficulties for the first time in later life have different life experiences and ways of adjusting to ageing than people who do not experience difficulties.

This is an important area to investigate because it will help health professionals to understand and treat mental health problems in older persons.

Over the next few months older persons who experience mental health difficulties and older persons who do not, will be asked to take part in this research. We would be grateful if you would agree to take part.

Participation in the study
We would like you to complete some questionnaires about yourself and past life experiences. We expect that this will take approximately 45 minutes.

You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason.

Confidentiality
Any information you give will be kept confidential. Any written reports or publications arising from this study will not identify you as an individual in any way.

All proposals for research using human participants are reviewed by an ethics committee before they can proceed. This proposal was reviewed by the Camden & Islington NHS Trust’s and the Institute of Psychiatry’s ethics committees.

If you are willing to take part in this study please read and sign the attached consent form. Then complete the questionnaires enclosed and send them, plus the consent sheet, to Sharon Giblin in the stamped-addressed envelope provided. If you would like to discuss the study further please contact Sharon on the number below.

Researcher:
Sharon Giblin: Clinical Psychologist in Training, Sub-Department of Clinical Health Psychology.
University College London, Gower Street, WC1E 6BT. Tel: 020 7737 5584

The Research Team:
Linda Clare: Chartered Clinical Psychologist, Sub-Department of Clinical Health Psychology.
University College London, Gower Street, WC1E 6BT.
Gill Livingston: Psychiatrist, Mental Health Care of Older People, A13, Holborn Union Building, Archway Wing, Whittington Hospital, N19 5QF.
Rob Howard: Psychiatrist, Section of Old Age Psychiatry, Institute of Psychiatry, De Crespigny Park, Denmark Hill, London, SE5 8AF.
CONFIDENTIAL

Consent Form

Title of study: Adjustment to Ageing and Mental Health

Researcher: Sharon Giblin

Please complete the following:

1. Have you read the information sheet about this study? Yes / No
2. Have you had the opportunity to ask questions and discuss this study? Yes / No
3. Have you received satisfactory answers to all of your questions? Yes / No
4. Have you received enough information about this study? Yes / No
5. Do you understand that you are free to withdraw from this study:
   - at any time
   - without giving a reason for withdrawing Yes / No
6. Do you agree to take part in this study? Yes / No

I ................................................. (name in block letters) hereby consent to participate in the study described above.

Signed: .................................................. Date: .........................

Signed (researcher): ................................. Date: .........................

☐ Please tick this box if you would like to receive a summary of the project when it has been completed (expected to be September 2001).

Address: .................................................................................................
Appendix F  OPCS Occupational Classifications

This study used the socio-economic classification of occupations detailed by the Office of Population Censuses and Surveys (1995). Socio-economic groups are derived from occupational coding in order to bring together people with jobs of similar social and economic status. The relevant groupings for this study are shown below:

1. Professional workers
   Employees engaged in work normally requiring qualifications of university degree standard.

2. Junior non-manual workers
   Employees, not exercising any general planning or supervisory powers, engaged in clerical, sales and non-manual communications occupations.

3. Skilled manual workers
   Employees engaged in manual occupations, which require considerable and specific skills.

4. Semi-skilled manual workers
   Employees engaged in manual occupations, which require slight but specific skills.

5. Own account workers (other than professional)
   Self-employed persons engaged in any trade, personal service or manual occupation not normally requiring training of university degree standard.

Appendix G  List of events included in the total number of adverse life events analysis

1  Immigrated
2  More than one childhood move
3  Illegitimacy (their own or having a child out of wedlock)
4  Divorce of parents
5  Deaths of siblings and friends in childhood
6  Deaths of siblings *
7  Deaths of friends *
8  School problems
9  Discrimination
10  Abuse
11  Other negative experience in childhood
12  Miscarriage
13  Stillborn baby / death within hours of birth
14  Abortion
15  Death of their own child
16  Health problems *
17  Sensory problems
18  Past serious illness or injury
19  Disability (not related to age)
20  Difficulties at work
21  Financial problems
22  Trouble with the police
23  Denied opportunities

*  These items were weighted to better reflect experience. Weighted items ranged from 0-3, increasing in severity of experience.

Health was rated:
0  no health problems
1  minor and few
2  moderate and numerous
3  severe such as greatly decreases mobility

Death of friends and siblings were rated:
0  no deaths
1  one death
2  several deaths
3  all friends / sibling have died

Maximum number of events (included weighted items) was 29