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Louise Keir

July 2014
D.CLIN. PSYCHOL.
UNIVERSITY OF EDINBURGH / NHS (SCOTLAND)
TRAINING PROGRAMME

Front sheet / Title Page for Submitted Academic Work

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Submitted in part fulfilment of the degree of doctorate in Clinical Psychology at the University of Edinburgh

Date Submitted: 31st July, 2014

Trainee Signature: ...............................................................................................................................................

Supervisor’s Name: Dr David Gillanders/ Dr April Quigley

D. Clin. Psychol. Declaration of own work
Name: Louise Keir
Assessed work: Thesis

I confirm that all this work is my own except where indicated, and that I have:

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- Acknowledged in appropriate places any help that I have received from others (e.g. fellow students, technicians, statisticians, external sources)
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Louise

Chapter 1: Whole Thesis Abstract

**Background:** Depression within the older adult population is common. Previous reviews of the literature have considered the efficacy of psychological therapies for older adults. However, they have exclusively focussed on evidence provided by randomised controlled trials neglecting emergent evidence from other therapeutic modalities.

Despite the efficacy of psychological and pharmacological treatments many depressed older people go without treatment. The barriers to treatment remain unclear, however the literature has previously suggested that they may fall within three factors; patients, health care providers and health care organisations. This study focussed on patient related factors. The literature has suggested that older adults not be as accurate in recognising symptoms of depression than adults of working age. In turn, lack of recognition of the presence of a mental health problem may influence older adult’s attitudes to seeking psychological help. The literature suggests a number of factors may influence treatment seeking attitudes in older people. These may include accuracy of depression recognition, cognitive fusion; engagement in valued activities although these did not appear to have previously been considered.

**Aims:** The aims of this thesis were addressed by the systematic review of the literature and empirical research paper comprising it.

Systematic review aimed, in light of a recent efficiency target issued by the The Scottish Government to update the literature relating to the efficacy of standalone psychological therapies for older adults and to consider the efficiency implications of the results.
The empirical article had two overall aims. It sought to determine the predictive effect of attitudes to ageing and degree of depression on older adult’s ability to conceptualise their symptoms of psychological distress as depression. This study also sought to consider, in light of a paucity of empirical evidence to date, the relative predictive effect of attitudes to ageing, depression, recognition of depression symptoms, cognitive fusion and engagement in valued activities on the treatment seeking attitudes of a cohort of depressed older adults.

Method: A systematic review of the literature was undertaken to consider the efficacy and efficiency of psychological therapies in the treatment of late life depression.

An empirical cross sectional survey recruiting older adults (n = 281), aged ≥ 65 years was undertaken to examine the effects of depression, cognitive fusion, attitudes to ageing, and valued behaviour on attitudes to seeking professional psychological help.

Results: In the systematic review, of the 1493 articles identified 11 were retained for review. Papers reviewed considered the effectiveness psychological interventions including: Cognitive Behavioural Therapies, Reminiscence Therapies, Acceptance and Commitment Therapy and Problem Solving Therapy.

The results of the statistical analysis in the empirical work suggested that a significant proportion of ‘depressed’ older adults (n = 43) recruited to our study were not able to recognise they were depressed at the time of their participation in the study. A binomial logistic regression suggested that depression severity rather than attitudes to ageing predicted depression recognition in this sample. A hierarchical multiple regression undertaken to analyse the predictive influence of depression, depression recognition, cognitive fusion, attitudes to ageing and engagement in valued activities suggested that non of these variables significantly predicted our sample’s attitudes to seeking professional psychological help.
**Conclusions:** Our results demonstrate that there is increasing evidence that some psychological therapies could be offered as alternatives to antidepressant medication for older people and within an efficient model of stepped care.

The results of the empirical element of this project suggest that attitudes to ageing and cognitive fusion are both predictors of attitudes to treatment seeking. The results further suggest that many depressed older people don’t recognise when they are depressed suggesting a lack of mental health. These findings suggest several implications for clinical practice, psychological therapies and public health.
Chapter 2: Systematic Review

Are psychological therapies effective as a standalone treatment for depression in older adults? An updated systematic review of the literature\(^1\).

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Declaration of Interests:
The authors have no competing interests to declare.

\(^1\) This systematic review is produced according to the guidance for authors from Aging and Mental Health. Instructions for authors are included in Appendix A, Style and Reference Guides are included in Appendix B.
**Abstract:**

**Background:**
Previous reviews have considered the efficacy of psychological therapies for older adults.

However, they have focussed solely on evidence provided by randomised controlled trials which has neglected emergent evidence from other therapeutic modalities.

**Aims:**
The Scottish Government has recently issued the National Health Service in Scotland with an efficiency target relating to the prompt delivery of psychological interventions. The purpose of this review is to update the literature relating to the efficacy of standalone psychological therapies for older adults and to consider the efficiency implications of the results.

**Method:**
Medline and Psychinfo were searched for the following terms depress*, affective disorders, mood disorders, age*, old* geriatr* psychother* psychol* in addition to special issues of journals and relevant authors. Those which met all inclusion criteria were retained for method review and quality assessment.

**Results:**
1493 articles were identified and 11 were retained for review. Four papers examined the effectiveness of Cognitive Behavioural Therapies, four focussed on Reminiscence Therapies, two considered Acceptance and Commitment based interventions and one considered the efficacy of problem solving therapy.
Conclusions:
We present evidence to support the efficacy of CBT and reminiscence therapy and we can be increasingly confident about their generalisability to the older adult population. We also found preliminary evidence to suggest that other therapies, including ACT, cCBT and PST are demonstrating effectiveness in this population.

We demonstrate that there is increasing evidence to suggest that some psychological therapies could be offered as alternatives to antidepressant medication for older people and begin to consider how these interventions might fit within the current model of stepped care employed in NHS Scotland.

Keywords: Depression, psychological therapy, review, CBT, ACT, RT, PST.
Introduction
The literature has become more concerned with the psychological treatment of depression in older people (Laidlaw & Panacha, 2009). This has been furthered due to the worldwide trend towards an aging population and the associated increase in the number of older people who will experience mental health problems (Laidlaw, 2001).

The Scottish Government has set a specific HEAT (Health improvement, Efficiency, Access to service and Treatment) target relating to the provision of psychological therapy in Scotland (The Scottish Government, 2012). HEAT targets offer an internal management system for the National Health Service (NHS) which allows the national monitoring of service delivery (The Scottish Government, 2014). The HEAT target relating to the provision of psychological therapy states that Health Boards should:

‘Deliver faster access to mental health services by delivering 18 weeks referral to treatment for psychological therapies from December 2014’ (The Scottish Government 2012, pg.17)

This target applies across the age span and is applicable to service provision for older people. To implement the target, services need to make available the most effective and efficient forms of psychological treatment (The Scottish Government, 2012). Efficacy and efficiency are empirical questions that can be answered by systematic review of the efficacy literature, with results being extrapolated to routine service settings.

What are psychological therapies?
The Scottish Government (2011) recognise that ‘psychological therapies’ is a term is widely used to cover a range of practices, they, therefore, offer this definition:

‘Psychological Therapies‘ refers to a range of interventions, based on psychological concepts and theory, which are designed to help people understand and make changes to their thinking, behaviour
and relationships in order to relieve distress and to improve functioning” (The Scottish Government, 2011, p.20).

Are models of psychological therapy the same for adults and older adults?
Older people may understand their difficulties within a different framework to younger adults (Knight, 2004). The literature suggests that this cohort are more likely to present to their GP with physical symptoms relating to depression rather than emotional based difficulties, even if these are the underlying cause of the problem (Fiske, Wetherell & Gaske, 2009; Speer & Schneider, 2003). Differences in the presentation of mental distress has provoked continued discussion in the literature regarding the optimal means of delivering psychological therapies to older people, namely whether adaptations are required to improve their efficacy in this population (Laidlaw, 2001; Laidlaw, Thompson and Gallagher-Thompson, 2004; Knight, 2004).

Why do we need to know the effectiveness of psychological therapies independent of antidepressant medication?
Antidepressant medication is a recommended treatment for major depression in older adulthood (Bartel et al., 2002). However, it may not be appropriate in all cases (NICE, 2009). The National Institute for Health and Clinical Excellence (NICE) Guidelines (2009) state that when treating depression a number of factors should be taken into consideration. These include patient choice, past experience of depression treatment and any contraindicated medical conditions.

Mintzer and Burns, (2000) note that later life is often a time of increased physical illness. The Royal College of Physicians (1997) noted that medications for older adults accounted for 45% of all UK prescribing and appropriate attention is not always paid to polypharmacy and potential side effects in this population. The literature suggests that
particular attention should be paid when prescribing antidepressant and psychotropic medications in this population. Drug interactions can cause dangerous anticholinergic side effects in addition to increased risk of falls and serious cardiovascular side effects (Landi, et al., 2005; Mintzer & Burns, 2000; Pacher & Kecskemeti, 2004).

Older people may be reluctant to be prescribed antidepressants for a variety of reasons including; fear of addiction and poor prior experience with depression medication and may prefer psychological therapy as a treatment option (Givens et al., 2006; Layard, 2006). Indeed, a study undertaken by Gum et al. (2006) found that the older people they sampled would prefer a counselling or psychological approach to antidepressant medication.

Why it is important to conduct this review?
The Scottish Government recently provided a guide to delivering psychological therapies (Scottish Government, 2011), which suggests that some therapies are effective in treating depression in older people. However, this document is subject to a number of limitations. It is not a systematic review and relies on evidence provided by other reviews and RCTs (Scottish Government, 2011). As a result, the evidence presented is subject to inconsistent inclusion criteria and lacks clarity regarding the effectiveness and efficiency of treatments without medication augmentation (e.g. Arean et al., 1993; Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990; Scottish Government, 2011 Wilson, et al, 2008).

We considered the recent literature concerning the efficacy of psychological therapies for depression and found two relatively recent reviews. A Cochrane Review (Wilson, Mottram and Vassilas, 2008) considered whether psychotherapy interventions are effective in the treatment of depression in later life, and compared psychological therapies to determine their relative efficacy. A further review undertaken by Kiosses, Leon and Areán (2011) also considered the effectiveness of psychological therapies in this age group with the addition of
personality variables which may account for variability in people’s ability to respond to psychological therapy.

The inclusion criteria of these reviews varied with regard to the standalone effectiveness of these interventions. Wilson et al. (2008) excluded any trials where psychological therapies were augmented. Therefore, we can be relatively confident in the standalone effectiveness of the therapies included in this review and the applicability of the findings to those older people who are not suitable candidates for antidepressants. However, Kiosses et al. (2011) allowed trials where antidepressants were used in addition to therapy. Consequently, we cannot be as clear about the independent effectiveness of the therapies presented.

Randomised controlled trials (RCTs) are considered to be the most reliable means of determining the effects of an intervention, but they may lack external validity (Rothwell, 2005). By only considering RCTs, emerging evidence about potentially useful interventions which offer additional treatment choices and real world applications are overlooked (Evans and Pearson, 2001; Kirkevold, 1997; Masley, Gillanders, Simpson and Taylor, 2012). These factors are important in our understanding of treatment efficacy and efficiency in the context of aiding psychological therapies services to meet the current access target (Scottish Government, 2011).

The recent reviews of psychological therapies in older adults also rely exclusively on RCTs. Wilson et al. (2009) found twelve RCTs which were eligible for review. The trials included were all cognitive behavioural (CBT) or psychodynamic psychotherapies. Kiosses et al. (2011) identified six RCTs for review. They found supportive evidence, for problem solving therapy (PST), adapted cognitive behavioural therapy (CBT) and Treatment Initiation and Participation Program (TIP). They note efficacy for a narrow range of therapies which
might be expanded if evidence from controlled or uncontrolled trials were considered (Masley et al., 2012).

Further supporting the rationale for this review is the constant evolution of psychological literature. The data from the Wilson et al. (2008) and Kiosses et al. (2011) reviews were collected in 2006 and 2010 respectively. It is likely that there have been developments in the literature since these reviews were undertaken. We, therefore, considered this an appropriate opportunity to review the literature relating to the standalone effectiveness of psychological therapies for depression in older people. As the review undertaken by Kiosses et al. (2011) allowed the inclusion of augmented therapy, the limit for our review was set at 2006 when Wilson et al. (2008) concluded their search of the available literature.

Method:
The following search terms (depress*, affective disorders, mood disorders, age*, old* geriatr* psychother*, psychol*) were identified and specifiers suggested by the searched databases were included.

Search terms were run through Medline and Psychinfo to access psychological literature. In addition to searching these databases, special issues of journals relating to the review topic, reference lists of included papers, and authors with particular interest in the area of the review were also searched for relevant papers. The titles of the results identified by the databases, journal and author searching were screened using the following criteria.

- English language only. It was beyond the scope of our review to undertake translations.

- 2006 to 2014 (April): The review by Wilson et al. (2008) suggested there was a lack of research in the area prior to their review, therefore the year they collected their data was set as the minimum limit.
• **Older adult:** This systematic review relates exclusively to older adults. The age criterion for older adult was set greater than or equal to 60 years old according to the United Nations (2009) definition of the commencement of older adulthood.

A visual representation of the search process is detailed in figure 1 below:

Figure 1: Visual representation of the review process

1492 of records identified through database searching

1 additional record identified through other Sources (Google Scholar, authors, special issues of journals, Manual searching, reference lists)

1351 titles and abstracts screened after removal of duplicates

1173 records excluded

168 full text articles excluded
  - Less than 5 patients (n = 3)
  - Maintenance treatment (n = 2)
  - Does not test efficacy of intervention (n = 1)
  - Depression not screened at inclusion (n = 19)
  - Participants are not within defined older adult age range (n = 120)
  - Not manualised therapy (n = 8)
  - Paper not available * (n = 1)
  - Secondary analysis of data (n = 13)

119 of full-text articles assessed for eligibility

11 studies included in qualitative analysis
Once identified by the databases, and the initial screening undertaken, the abstracts were reviewed and exclusion criteria were applied. Studies which met the inclusion criteria were retained for method review. Studies with insufficient information in the abstract to determine whether they met our criteria were read to determine they should be included. The inclusion criteria for abstract review are detailed below:

- **Original research.** Only original empirical studies published in peer review journals were included. All other forms of article were excluded from this review.

- **Depression:** Depression screening should have taken place as part of the study inclusion criteria. Other forms of mental illness, including personality disorder were excluded. Trials which explicitly included older adults who were undergoing treatment for serious illness or palliative care were excluded from trial as the literature suggests these to be a confound (Pinquart, Duberstein & Lyness, 2007).

- **Cognitively unimpaired:** Older adults with cognitive impairment may not respond in the same way to psychological therapy as those without (Pinquart et al., 2007). Therefore trials including this population were excluded.

- **Intervention study:** Similar to Masley et al. (2012), RCTs, controlled trials (CT), and uncontrolled trials (UT) with the exclusion of single case studies or studies with less than five participants were included.

- **Psychological therapy:** Studies which also referenced the efficacy of drug trials, hormone interventions, electric convulsive therapy (ECT), or transcranial magnetic stimulation therapy were excluded.

- **Pre- and post-discharge measures.** Studies which did not include measures at both time-points were excluded.
The full text versions of the remaining articles were reviewed regarding their compliance with the following detailed exclusion criteria. Studies which met all inclusion criteria were retained for quality analysis. These criteria are detailed below:

- **Characteristics:** Aged 60 and older (as defined by minimum participant age range or inclusion criteria). Trials incorporating adults and older people in an intervention were included if the data was analysed separately.

- **Criteria of psychological interventions:** Any psychological interventions were manualised with evidence of standardisation. Trials where psychotherapy was augmented with antidepressant medication were excluded.

- **Primary outcome measure:** Standardised, validated measures of depression were included.

- **Secondary Outcome measures:** Quality of life, Patient attrition from trials; Acceptability of interventions and number of patient sessions.

Standard mean difference effect sizes were calculated for each retained study using Cohen’s $d$ (Field, 2009). The literature suggests that Cohen’s $d$ can be positively biased and may overestimate effect sizes in small samples ($n < 50$) therefore a correction to the effect size calculation was used to minimise the bias (Durlak, 2009, p 928).

**Results:**
Eleven studies our selection criteria. Relevant data was extracted and, where possible, effect sizes calculated, the results are detailed in Table 1\(^2\).

Four studies considered the effectiveness of Reminiscence Therapy or Life Review (Chiang et al., 2009; Karimi et al., 2010; Preschl et al., 2012; Zhou et al., 2010). An additional four studies focussed on the effectiveness of CBT, of those, two considered

\(^2\) Table 1 is included in Appendix C.
therapist delivered interventions (Laidlaw et al., 2008; Serfaty et al., 2009) whilst a further two focussed on computer delivered CBT interventions (Dear, et al., 2013; McMurchie, MacLeod, Power, Laidlaw, & Prentice, 2013). Two trials considered the effectiveness of an ACT intervention (McDonald, Zausneiwski, Bekhet, DeHelian, & Morris, 2011; Karlin, et al., 2013.) and one study focussed on the effectiveness of PST (Gellis, et al., 2008).

**Quality assessment:**
The Scottish Intercollegiate Guidelines Network (SIGN 50) controlled trial methodology checklist used to assess and rate the quality of each study to differentiate between strong and weak evidence as per Masley et al. (2012)\(^3\). The main quality criteria included within the checklist were; clear focused research question, employment of a control group, similarity of treatment and control groups, randomisation method (if applicable), relevant outcomes measured in a valid and reliable way, participant attrition and adequate statistical power. Based on the extent to which each study addressed the quality criteria they were awarded one of the following quality ratings.

- ‘A’ was awarded to those high-quality RCTs that met all or most of the quality criteria and when they did not fulfil them, the conclusions in the study were deemed very unlikely to alter.
- ‘B’ was awarded to those RCTs and controlled trials that met most of the quality criteria and when the conclusions in the study were deemed unlikely to alter.
- ‘C’ was awarded to those RCTs or controlled trials when few or none of the quality criteria had been fulfilled and the conclusions of the study were deemed likely or very likely to alter.

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\(^3\) The SIGN Methodology Checklist used in this study along with the guidance notes on completing the checklist are included in Appendix C
In order to minimise bias in the quality ratings, two studies were rated again by two independent raters. Two papers were randomly chosen from those which required quality assessment. The independent raters were both issued with these papers in addition to the SIGN quality rating checklist and the guidance notes on checklist completion. The lead author met with the raters individually to discuss their quality appraisal of the papers. The raters and the lead author had independently agreed on the quality ratings given to each paper, therefore there was no requirement for further discussion or resolution of differences of opinion.

The quality ratings for each paper included in this study are summarised in Table 2.

**Acceptance and Commitment Interventions (ACT):**
We found two studies considering the effectiveness of ACT interventions in treating depression in older adults. One focussed on individual ACT therapy (Karlin et al., 2013) whilst another considered the effectiveness of a group ACT intervention (McDonald et al., 2011).

The results of the individual trial (Karlin et al., 2013) suggested positive effects for individual ACT in depression and quality of life in 12 to 16 sessions. The authors noted their findings were similar to those of larger trials for ACT reported in the adult mental health literature (Karlin et al., 2013).

The group ACT intervention met for 6 sessions (McDonald et al., 2011). They did not find a significant effect of the treatment on depression symptoms, although between post intervention and follow up depression symptoms appeared to be decreasing. There is

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4 Based on those used for SIGN 50 – taken from (Masley et al., 2012)
5 The independent raters were a trainee clinical psychologist currently enrolled on the Doctorate of Clinical Psychology Program at the University of Edinburgh and an Assistant Clinical Psychologist in NHS Borders.
6 Table 2 is included as Appendix E
precedent the effectiveness of group ACT approaches in psychological distress (Fledderus, Bohlmeijer, Smit and Westerhof, 2010).

Both ACT interventions (Karlin et al., 2013; McDonald et al., 2011) were uncontrolled trials, therefore it was not possible to make definitive statements about the efficacy of the interventions. Therefore, both trials were provided with a ‘D’ quality rating. However, the results are promising (Karlin et al., 2013; McDonald et al., 2011) and suggest more research into the efficacy of this type of intervention with older people is warranted to further establish the efficiency and efficacy of this treatment approach with older people.

**Cognitive Behavioural Therapy:**
Wilson et al. (2009) identified CBT to be as effective as psychodynamic psychotherapy and behaviour therapy and more effective than control conditions (Breckenridge, et al., 1985; Gallagher, 1992; Gallagher-Thompson & Stephan, 1994).

In the review undertaken by Kiosses et al. (2011) only one RCT met their inclusion criteria, which considered the impact of personality disorders on later-life depression outcomes (Morse, 2005). This study did not meet our inclusion criteria. However, Kiosses et al. (2011) reviewing the study found evidence that individual CBT was an effective treatment in this population and more effective when combined with a tricyclic antidepressant.

We identified four CBT studies which had not been previously systematically reviewed. Two focussed on therapist delivered interventions and two considered cCBT.

**Therapist delivered CBT:**
Laidlaw et al. (2008) considered a real world application of CBT for older adults and compared the treatment group to a non standardised TAU control delivered by local services. Those receiving TAU might have been received; no treatment, medication, regular General Practitioner (GP) visits, Community Psychiatric Nurse (CPN) or psychiatry contact. The study produced small treatment effects at 3 and 6 month follow up on both outcome measures
of depression. We awarded this study a ‘B’ quality rating due to the lack of consistency between treatment and control group although we acknowledge that this discrepancy is due to the ‘real world’ nature of this study.

The research undertaken by Serfaty et al. (2009) demonstrated the most credible evidence for the effectiveness of brief CBT in older people. Participants received 6 sessions of CBT compared with a 6 session TC+TAU and TAU. Their results demonstrated that individual therapist delivered CBT was more effective than TC+TAU and TAU. The methodological quality of this study allowed us to award an ‘A’ quality rating to this paper.

Overall, both papers suggested that individual therapist delivered CBT is an effective and efficient standalone psychological therapy for depression in older adulthood.

**Computer delivered CBT (cCBT):**
McMurchie et al. (2013) employed a controlled design to examine the effectiveness of cCBT. Self selecting participants enrolled into the intervention arm of the trial were allocated eight sessions of cCBT. TAU was provided by the local community mental health team. The authors noted moderate effect sizes for treatment at post intervention and follow up compared to a TAU control. There were some methodological constraints associated with this project it was therefore awarded ‘C’ quality rating.

Dear et al. (2013) also considered the effectiveness of cCBT. They used an uncontrolled design and consequently it is not possible to make definitive statements about the efficacy of the intervention and it was therefore awarded a ‘D’ quality rating. However, they noted significant pre-test, post test, improvements on symptoms of depression which were sustained at three month follow up.
Problem solving therapy:
Problem solving therapy was previously considered by Wilson et al. (2009) and Kiosses et al. (2011). Wilson et al. (2009) suggested that group PST was as effective as a reminiscence therapy control (Areán et al., 1993) and there was no evidence of the efficacy of individual PST when compared to a placebo drug group (Barrett, 1999).

In contrast, Kiosses et al. (2011) presented the results suggesting PST was more effective than supportive therapy in participants with depression and executive dysfunction (Alexpolous et al., 2011; Areán et al., 2010). This study was not considered in our review due to the potential confound of cognitive impairment on intervention outcomes (Pinquart et al., 2007).

We identified one further study on the effectiveness of individual PST. Gellis et al. (2008) considered the efficacy of six one hour sessions of manualised PST delivered within a home care environment compared with TAU. They noted large post intervention treatment effects for the PST condition at three and six month follow up.

The differences in outcomes the study included in our review (Gellis et al., 2008) and the one included in the earlier review (Barrett et al., 1999) appear to relate to the study population. Barrett et al. (1999) was a much larger study conducted over several cultures using a PST intervention designed for Primary Care, whereas Gellis et al. (2008) recruited participants from a home care population in the United States. It may be that cultural factors in addition to the types of presentation between these two studies may be attributable for the difference in outcome. In addition our appraisal of the Gellis et al. (2008) trial gave the trial a ‘C’ quality rating, suggesting that there were a number of methodological constraints which may make it likely that their conclusions may alter if these were addressed.
**Reminiscence therapy (RT):**
Reminiscence therapy was considered by Wilson et al. (2009). It had been intended as an active control but was found to be as effective as PST (Areán et al., 1993).

We identified four, recent RCTs considering the effectiveness of six to eight manualised sessions of RT and each reported favourable results (Chaing et al., 2009; Karimi et al., 2010; Preschl et al., 2012; Zhou et al., 2012). Three reported large effect sizes post intervention (Chaing et al., 2009; Preschl et al., 2012; Zhou et al., 2012) and Karimi et al. (2010) reported a moderate effect of treatment on depression post intervention. Further, the two studies which reported follow up data (Chaing et al., 2009; Preschl et al., 2012) positive treatment effects were maintained at the three month follow up. Despite the encouraging statistical results of these trials, we assessed each of these trials as having such methodological constraints associated with them that they were awarded ‘C’ ratings suggesting that as a result of these constraints their conclusions were likely to alter.

There are cultural effects which should be taken into consideration interpreting these results. All of the studies we identified were undertaken in countries where cultural references might be different to those in the UK. Despite this the results suggest that reminiscence is an intervention which produces positive treatment effects across cultures and different cohorts of older people.

**Discussion:**
Our review has identified a number of trials which have not been previously considered within systematic reviews. The results have produced some confirmatory findings about the stand alone efficacy of interventions such as CBT and RT. The results of this review also demonstrate some encouraging preliminary findings for other therapeutic modalities including ACT, PST and cCBT.
**Limitations:**
Many of the studies included in this review are subject to methodological limitations.

Similar to previous review findings, our review suggests that the research conducted in this area tends not to be of the highest quality, with problems such as small samples, lack of adequate control groups, poor control of other treatments.

Many trials used control groups which differed significantly from the intervention groups in terms of contact time and frequency (Chaing et al., 2009; Laidlaw et al., 2008; McMurchie et al., 2013; Preschl et al., 2012; Zhou et al., 2012) and others were uncontrolled trials (Dear et al., 2013; Karlin et al., 2013; McDonald et al., 2011). Both effect the internal validity of the studies.

Small sample sizes are characteristic of research in this area. The literature suggests that older adults encounter barriers to accessing psychological therapy for depression (Burroughs et al., 2006; Unützer et al., 1997). Consequently researchers may find it difficult to recruit to intervention trials. Perhaps further research in this area might also consider the characteristics of older adults who take part in intervention trials and those who drop out, a process already started (Marquett et al., 2012; Kiosses et al., 2011).

We noted a high level of attrition in some interventions (Karlin et al., 2013; Karimi et al., 2010; McDonald, 2011; Preschl et al., 2012). These studies did not report reasons for participants exiting the trial, therefore we should consider that the interventions may not have been acceptable them. It should be noted that the relatively small sample sizes comprising these trials only require a small drop out to show high attrition.

One of our inclusion criteria were that participants should be aged 60 years or over at the time of participation in the trials (UN, 2009). However, a number of recent trials considered later life to commence at 50 or 55 and were consequently excluded (e.g. Korte, 2012; Lichtenstien et al., 2013). One such study suggested that slightly younger participants
were included in their study as it was difficult to recruit older people (Lichtenstien, et al., 2013). Lowering the age of included participants to address recruitment problems inevitably changes the generalisability of the results.

The trials included in this review had reasonably short follow up, the longest was 6 months (Gellis et al., 2008; Laidlaw et al., 2008; Serfaty et al, 2009). Greater length of follow up would allow us to understand the potential long term benefits of psychological therapies in this population.

We propose the limitations of many of the studies we reviewed suggest the need for replication both with high quality RCTs and studies of clinical effectiveness before a definitive statement could be made about their effectiveness as treatments for depression in later life (e.g. Karlin et al, 2013; McDonald et al, 2011; Dear et al, 2012; McMurchie et al, 2013).

Clinical implications:
The results of our systematic review, in combination with the earlier review (Wilson, 2009), suggest that the strongest evidence for effective, standalone psychological therapies for older people with depression is CBT with less compelling, but encouraging, empirical evidence for other therapeutic approaches including ACT, cCBT and RT. Whilst our results demonstrating the strength of evidence for CBT approaches was expected given the results of previous reviews (Wilson et al., 2009; Kiosses et al., 2011), we were surprised by the lack of strength of evidence for other therapeutic approaches in this area. In particular, we were surprised by the lack of empirical evidence for Interpersonal Psychotherapy, where anecdotal evidence would suggest that practice has overtaken research. It would also suggest that there is perhaps a practice research bias within the published literature.

The combined results of our and the Wilson et al. (2009) review suggest there are a number of brief psychotherapeutic interventions which demonstrate effectiveness in treating
late life depression independent of antidepressant medication. Our review found therapies
(including ACT and cCBT) which had not previously been reviewed which are now
demonstrating preliminary evidence of effectiveness. Recent research also indicates that CBT
(individual and computerised) and RT are demonstrating effectiveness in a naturalistic
clinical environment. Our findings also suggest that PST may be an effective intervention,
contradicting earlier results (Barrett, et al, 1999).

These are findings are important for a number of reasons. NICE (2009) note that
people who are experiencing depression should have a choice in their treatment. The
literature suggests that antidepressant medication may not be acceptable or appropriate for
many older people (Givens et al., 2006; Gum et al., 2006; The Royal College of Physicians,
1997).

We note, in addition to the earlier work of Wilson et al. (2009), that there is emerging
evidence to suggest that some psychological therapies could be offered to older people as an
alternative to antidepressant medication. The studies considering RT were undertaken in
nursing home patients (Chaing et al., 2009; Karimi et al., 2010; Preschl et al., 2012; Zhou et
al., 2012) and one CBT intervention included homebound. The literature suggests that these
are particular populations where physical health complaints are common and further
prescribing may not be appropriate (Walley & Scott, 1995).

Integrated Care Pathways (ICPs; NHS Quality Improvement Scotland, 2007), for
mental health conditions were introduced by the Scottish Government in 2007. They were
designed to standardise care, improve quality and efficiency of service delivery and to enable
health boards to meet several of the required HEAT targets relating to mental health. Their
purpose was to ensure people with a variety of conditions, including depression, had access to
a stepped care treatment model (see NHS QIS, 2007 for a review). The ICP guidance (NHS
QIS, 2007) suggested that psychological therapies would be part of these stepped care approaches in addition to medication.

The Scottish Government (2011) provided guidance on the delivery of evidence based psychological therapies. It suggests tiers of care which include; ‘high volume’ interventions (designed for large groups but using psychological principles), ‘low intensity evidence based treatments’ (designed for less complex mental health problems), ‘high intensity interventions’ (standardised psychological treatments for more complex mental health problems) and ‘highly specialist interventions’ (typically delivered based on formulations drawn from a number of psychological models for people with highly complex or enduring mental health problems) (The Scottish Government, 2011).

Our results in combination with those of Wilson et al, (2009) found that a number of therapies may, with further supportive evidence, be appropriate for inclusion in a stepped care approach for depression treatment for older people and stepped care guidance issued by the Scottish Government (2011).

Wilson et al., (2009) had already demonstrated the effectiveness of cognitive bibliotherapies in an older adult population which is recognised as an appropriate low intensity psychological intervention for older people. Our results only demonstrated preliminary evidence of the efficacy of cCBT. Therefore, we are only able to tentatively suggest the appropriateness of its inclusion within a stepped care model at this stage. However, preliminary evidence is encouraging and should further evidence build on this cCBT and cognitive bibliotherapies may present useful low intensity interventions for older people as part of a stepped care model.

Our findings, provided the strongest evidence of the standalone efficacy of adapted CBT for older adults in a naturalistic environment and furthered earlier work of Wilson et al. (2009), which suggested that CBT may be an effective ‘high intensity’ intervention, with
some evidence provided by Kiosses et al. (2011) for it to also form a ‘highly specialist’ intervention for people with more complex difficulties.

Our review also suggests some tentative, preliminary evidence for the effectiveness of ACT based interventions, group and individual, within this population. Further empirical evidence supporting the standalone efficacy of ACT interventions within this population before a definitive conclusion could be made about their inclusion within a stepped care model.

The results of our review also suggest some preliminary evidence of reminiscence and problem solving as potentially effective ‘high intensity’ interventions in this population. However, these would also require further supportive empirical evidence of their efficacy before we could confidently suggest their inclusion within a stepped care model for treatment of depression in later life. In addition Wilson et al, (2009) suggested psychodynamic psychotherapy may be an effective ‘high intensity’ intervention.

Our review suggests that with further empirical support a number of therapies may be included within a stepped care model of therapy delivery which may help achieve the efficiency target set by the Scottish Government (2011). Whilst the results of our review suggest preliminary evidence for a number of therapeutic approaches and further confirmatory evidence of the efficacy of CBT, there appears to be a practice research bias, whereby some therapies are already being utilised within this population but there appears to be little information within the literature of reports of their efficacy. Practitioners should be encouraged to report the outcomes of these therapies to enable the therapeutic community to further establish the efficacy of interventions for depression within this population and establish a stepped care programme of interventions.
Conclusions:

The results of our systematic review present evidence for the effectiveness of stand alone psychological interventions for late life depression. We identified 11 recent studies which had not been previously considered in earlier reviews of the literature. Our findings built on the earlier work of Wilson et al. (2009) who had demonstrated the effectiveness of a number of psychotherapeutic interventions, including cognitive behavioural, reminiscence, bibliotherapies and psychodynamic psychotherapies. Kiosses et al. (2011) had a different focus to their review and the evidence they presented related therapies which were augmented by antidepressant medication.

We suggest that the effectiveness of CBT and reminiscence as interventions have now been replicated a number of times and we can be increasingly confident about their generalisability to the older adult population. We also found preliminary evidence to suggest that other therapies, including ACT, cCBT and PST are demonstrating effectiveness in this population.

These results suggest that there are some effective treatments which could be offered as alternatives to antidepressant medication for people who are unable to tolerate this form of medication or who would prefer ‘talking therapy’. However, a number of therapies (ACT, cCBT, PST) would require further empirical support before we could confidently include them within a stepped care model of treatment delivery. Our findings suggest some preliminary evidence which may provide services delivering psychological therapies to older people with further information which may enable them to meet the quality, efficiency and access targets specified by the Scottish Government (2011).
References:


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Laidlaw, K. (2001). ‘An empirical review of cognitive therapy for late life depression: does research evidence suggest adaptations are necessary for cognitive therapy with older adults?’.

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*Journal of the Royal Society of Medicine*, 93, 457-462.


Journal of Personality Assessment, 42, 290-294

Psychology and Aging. 19(2):272–277


The Scottish Government (2014) website as follows:. http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotlandperformance accessed on 24th July 2014 at 5.07pm


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Appendix A

Aging & Mental Health

Instructions for authors

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Appendix A

Manuscript preparation

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Manuscripts should be compiled in the following order: title page (including Acknowledgments as well as Funding and grant-awarding bodies); abstract; keywords; main text; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figure caption(s) (as a list). Please supply all details required by any funding and grant-awarding bodies as an Acknowledgement on the title page of the manuscript, in a separate Funding paragraph, as follows:

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This work was supported by the <Funding Agency> under Grant <number xxxx>.

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Structured Abstracts of not more than 250 words are required for all manuscripts submitted. The abstract should be arranged as follows: Title of manuscript; name of journal; abstract text containing the following headings: Objectives, Method, Results, and Conclusion.

Each manuscript should have 3 to 5 keywords.

Search engine optimization (SEO) is a means of making your article more visible to anyone who might be looking for it. Please consult our guidance here.

Section headings should be concise. The text should normally be divided into sections with the headings Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content.

All authors of a manuscript should include their full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page of the manuscript. One author should be identified as the corresponding author. Please give the affiliation where the research was conducted. If any of the named co-authors moves affiliation during the peer review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after the manuscript is accepted. Please note that the email address of the corresponding author will normally be displayed in the article PDF (depending on the journal style) and the online article.

All persons who have a reasonable claim to authorship must be named in the manuscript as co-authors; the corresponding author must be authorized by all co-authors to act as an agent.
Appendix A

on their behalf in all matters pertaining to publication of the manuscript, and the order of names should be agreed by all authors.

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Appendix A

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- Information about supplemental online material

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</tr>
<tr>
<td></td>
<td>with in-press citations last.</td>
</tr>
</tbody>
</table>

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### Appendix B

<table>
<thead>
<tr>
<th>Special Reference Situations</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate references by different authors with a semicolon.</td>
<td></td>
</tr>
<tr>
<td>If name and year are in parentheses, include the year in subsequent citations.</td>
<td></td>
</tr>
<tr>
<td>With a quotation</td>
<td>This is the text, and Smith (2012) says &quot;quoted text&quot; (p. 1), which supports my argument.</td>
</tr>
<tr>
<td></td>
<td>This is the text, and this is supported by &quot;quoted text&quot; (Smith, 2012, p. 1).</td>
</tr>
<tr>
<td></td>
<td>This is a displayed quotation. (Smith, 2012, p. 1)</td>
</tr>
<tr>
<td>Page number</td>
<td>(Smith, 2012, p. 6)</td>
</tr>
<tr>
<td>One author</td>
<td>Smith (2012) or (Smith, 2012)</td>
</tr>
<tr>
<td>Two authors</td>
<td>Smith and Jones (2012) or (Smith &amp; Jones, 2012)</td>
</tr>
<tr>
<td>Three to five authors</td>
<td>At first mention: Smith, Jones, Khan, Patel, and Chen (2012) or (Smith, Jones, Khan, Patel, &amp; Chen, 2012)</td>
</tr>
<tr>
<td></td>
<td>At subsequent mentions: Smith et al. (2012) or (Smith et al., 2012)</td>
</tr>
<tr>
<td></td>
<td>In cases where two or more references would shorten to the same form, retain all three names.</td>
</tr>
<tr>
<td>Six or more authors</td>
<td>Smith et al. (2012)</td>
</tr>
<tr>
<td></td>
<td>(Smith et al., 2012)</td>
</tr>
<tr>
<td>Authors with same surname</td>
<td>G. Smith (2012) and F. Smith (2008)</td>
</tr>
<tr>
<td></td>
<td>G. Smith (2012) and F. Smith (2012)</td>
</tr>
<tr>
<td>No author</td>
<td>Cite first few words of title (in quotation marks or italics depending on journal style for that type of work), plus the year:</td>
</tr>
<tr>
<td></td>
<td>(&quot;Study Finds,&quot; 2007)</td>
</tr>
<tr>
<td></td>
<td>If anonymous, put (Anonymous, 2012).</td>
</tr>
<tr>
<td>Groups of authors that would shorten to the same form</td>
<td>Cite the surnames of the first author and as many others as necessary to distinguish the two references, followed by comma and et al.</td>
</tr>
<tr>
<td>Organization as</td>
<td>The name of an organization can be spelled out each time</td>
</tr>
</tbody>
</table>

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# Appendix B

<table>
<thead>
<tr>
<th><strong>author</strong></th>
<th>It appears in the text or you can spell it out only the first time and abbreviate it after that. The guiding rule is that the reader should be able to find it in the reference list easily.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National Institute of Mental Health (NIMH, 2012) or (National Institute of Mental Health [NIMH], 2012) University of Oxford (2012) or (University of Oxford, 2012)</td>
</tr>
<tr>
<td><strong>Author with two works in the same year</strong></td>
<td>Put a, b, c after the year (Chen, 2011a, 2011b, in press-a)</td>
</tr>
<tr>
<td><strong>Secondary source</strong></td>
<td>When it is not possible to see an original document, cite the source of your information on it; do not cite the original assuming that the secondary source is correct.</td>
</tr>
<tr>
<td></td>
<td>Smith's diary (as cited in Khan, 2012)</td>
</tr>
<tr>
<td><strong>Classical work</strong></td>
<td>References to classical works such as the Bible and the Qur’an are cited only in the text. Reference list entry is not required. Cite year of translation (Aristotle, trans. 1931) or the version you read: Bible (King James Version).</td>
</tr>
<tr>
<td><strong>Personal communication</strong></td>
<td>References to personal communications are cited only in the text: A. Colleague (personal communication, April 12, 2011)</td>
</tr>
<tr>
<td><strong>Unknown date</strong></td>
<td>(Author, n.d.)</td>
</tr>
<tr>
<td><strong>Two dates</strong></td>
<td>(Author, 1959–1963) Author (1890/1983)</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td>Endnotes should be kept to a minimum. Any references cited in notes should be included in the reference list.</td>
</tr>
<tr>
<td><strong>Tables and figures</strong></td>
<td>Put reference in the footnote or legend.</td>
</tr>
<tr>
<td><strong>Reference list</strong></td>
<td>Alphabetical letter by letter, by surname of first author followed by initials. References by the same single author</td>
</tr>
</tbody>
</table>

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Appendix B

| Form of author name | Use the authors’ surnames and initials unless you have two authors with the same surname and initial, in which case the full name can be given:  
| | If a first name includes a hyphen, add a full stop (period) after each letter:  
| | Jones, J.-P.  

### Book

| More authors | Include all names up to seven. If there are more than seven authors, list the first six with an ellipsis before the last.  

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Author, A. A. (2012). This is a chapter. In J. J. Editor &amp; B. B. Editor (Eds.), <em>Book title: And subtitle</em> (pp. 300–316). Abingdon: Routledge.</td>
</tr>
<tr>
<td></td>
<td>Author, A. A. (2012). This is a chapter. In J. J. Editor, P. P. Editor, &amp; B. B. Editor (Eds.), <em>Book title: And subtitle</em> (pp. 300–316). Abingdon: Routledge.</td>
</tr>
</tbody>
</table>

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## Appendix B

| Publisher | Cambridge, MA: Harvard University Press  
| Abingdon: Routledge  
| Santa Cruz: University of California Press  
| Lincoln: University of Nebraska Press  
|  
| Give the name in as brief a form as possible. Omit terms such as ‘Publishers’, ‘Co.’, ‘Inc.’, but retain the words ‘Books’ and ‘Press’. If two or more publishers are given, give the location listed first or the location of the publisher’s home office. When the author and publisher are identical, use the word Author as the name of the publisher. |

### Multivolume works

| Use Vol. for a single volume and Vols. for multiple volumes.  
| In text, use (Levison & Ember, 1996). |

| In text, use (Nash, 1993). |

### Journal


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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>More authors</td>
<td>Include all names up to seven. If there are more than seven authors, list the first six with an ellipsis before the last.</td>
</tr>
<tr>
<td>author</td>
<td></td>
</tr>
<tr>
<td>Not in English</td>
<td>If the original version is used as the source, cite the original version. Use diacritical marks and capital letters</td>
</tr>
</tbody>
</table>

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Appendix B

<table>
<thead>
<tr>
<th>Style</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>for the original language if needed. If the English translation is used as the source, cite the English translation. Give the English title without brackets. Titles not in English must be translated into English and put in square brackets.</td>
<td>Author, M. (2000). Title in German [Title in English]. <em>Journal in German</em>, 21, 208–217. doi:xx.xxxxxxxxxxx</td>
</tr>
</tbody>
</table>
If you can update the reference before publication, do so. |
| Supplementary material | If you are citing supplementary material which is only available online, include a description of the contents in brackets following the title.  
[Audio podcast]  
[Letter to the editor] |
| Conference | To cite published proceedings from a book, use book format or chapter format. To cite regularly published proceedings, use journal format. |

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<table>
<thead>
<tr>
<th>Unpublished work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manuscript</strong></td>
</tr>
<tr>
<td><strong>Forthcoming article</strong></td>
</tr>
<tr>
<td><strong>Forthcoming book</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website</strong></td>
</tr>
<tr>
<td>When citing an entire website, it is sufficient just to give the address of the site in the text. The BBC (<a href="http://www.bbc.co.uk">http://www.bbc.co.uk</a>).</td>
</tr>
<tr>
<td><strong>Web page</strong></td>
</tr>
<tr>
<td>If the format is out of the ordinary (e.g. lecture notes), add a description in brackets. Author, A. (2011). <em>Title of document [Format description]</em>. Retrieved from <a href="http://URL">http://URL</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Newspaper or magazine</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author, A. A. (2012). <em>Title of work (Report No. 123).</em> Location: Publisher.</strong></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Reference Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal communication</strong></td>
<td>Personal communication includes letters, emails, memos, messages from discussion groups and electronic bulletin boards, personal interviews. Cite these only in the text. Include references for archived material only.</td>
</tr>
<tr>
<td></td>
<td>Producer, P. P. (Producer), &amp; Director, D. D. (Director). (Date of publication). <em>Title of motion picture</em> [Motion picture]. Country of origin: Studio or distributor.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>If the dataset is updated regularly, use the year of retrieval in the reference, and using the retrieval date is also recommended.</td>
</tr>
<tr>
<td><strong>Computer program</strong></td>
<td>Rightsholder, A. A. (2010). Title of program (Version number) [Description of form]. Location: Name of producer.</td>
</tr>
<tr>
<td></td>
<td>Name of software (Version Number) [Computer software]. Location: Publisher.</td>
</tr>
<tr>
<td></td>
<td>If the program can be downloaded or ordered from a website, give this information in place of the publication information.</td>
</tr>
</tbody>
</table>
### Methodology Checklist 2: Controlled Trials

**Study identification** *(Include author, title, year of publication, journal title, pages)*

<table>
<thead>
<tr>
<th>Guideline topic:</th>
<th>Key Question No:</th>
<th>Reviewer:</th>
</tr>
</thead>
</table>

**Before** completing this checklist, consider:

1. Is the paper a **randomised controlled trial** or a **controlled clinical trial**? If in doubt, check the study design algorithm available from SIGN and make sure you have the correct checklist. If it is a **controlled clinical trial** questions 1.2, 1.3, and 1.4 are not relevant, and the study cannot be rated higher than B.

2. Is the paper relevant to key question? Analyse using PICO (Patient or Population Intervention Comparison Outcome). IF NO REJECT (give reason below). IF YES complete the checklist.

Reason for rejection: 1. Paper not relevant to key question ☐ 2. Other reason ☐ (please specify):

### Section 1: Internal validity

**In a well conducted RCT study…**

<table>
<thead>
<tr>
<th>Key Question</th>
<th>Does this study do it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Yes ☐ No ☐ Can’t say ☐</td>
</tr>
<tr>
<td>1.2</td>
<td>Yes ☐ No ☐ Can’t say ☐</td>
</tr>
<tr>
<td>1.3</td>
<td>Yes ☐ No ☐ Can’t say ☐</td>
</tr>
<tr>
<td>1.4</td>
<td>Yes ☐ No ☐ Can’t say ☐</td>
</tr>
</tbody>
</table>

---

7 Unless a clear and well defined question is specified, it will be difficult to assess how well the study has met its objectives or how relevant it is to the question you are trying to answer on the basis of its conclusions.

8 Random allocation of patients to receive one or other of the treatments under investigation, or to receive either treatment or placebo, is fundamental to this type of study.

9 Allocation concealment refers to the process used to ensure that researchers are unaware which group patients are being allocated to at the time they enter the study. Research has shown that where allocation concealment is inadequate, investigators can overestimate the effect of interventions by up to 40%.

10 Blinding refers to the process whereby people are kept unaware of which treatment an individual patient has been receiving when they are assessing the outcome for that patient. It can be carried out up to three levels. Single blinding is where patients are unaware of which treatment they are receiving. In double blind studies neither the clinician nor the patient knows
Appendix C

| 1.5 | The treatment and control groups are similar at the start of the trial. | Yes □ No □ Can’t say □ |
| 1.6 | The only difference between groups is the treatment under investigation. | Yes □ No □ Can’t say □ |
| 1.7 | All relevant outcomes are measured in a standard, valid and reliable way. | Yes □ No □ Can’t say □ |
| 1.8 | What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed? | Yes □ No □ Can’t say □ |
| 1.9 | All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis). | Yes □ No □ Can’t say □ Does not apply □ |

which treatment is being given. In very rare cases studies may be triple blinded, where neither patients, clinicians, nor those conducting the analysis are aware of which patients received which treatment. The higher the level of blinding, the lower the risk of bias in the study.

11 Patients selected for inclusion in a trial must be as similar as possible. The study should report any significant differences in the composition of the study groups in relation to gender mix, age, stage of disease (if appropriate), social background, ethnic origin, or co-morbid conditions. These factors may be covered by inclusion and exclusion criteria, rather than being reported directly. Failure to address this question, or the use of inappropriate groups, should lead to the study being downgraded.

12 If some patients received additional treatment, even if of a minor nature or consisting of advice and counselling rather than a physical intervention, this treatment is a potential confounding factor that may invalidate the results. If groups were not treated equally, the study should be rejected unless no other evidence is available. If the study is used as evidence it should be treated with caution.

13 The primary outcome measures used should be clearly stated in the study. If the outcome measures are not stated, or the study bases its main conclusions on secondary outcomes, the study should be rejected. Where outcome measures require any degree of subjectivity, some evidence should be provided that the measures used are reliable and have been validated prior to their use in the study.

14 The number of patients that drop out of a study should give concern if the number is very high. Conventionally, a 20% drop out rate is regarded as acceptable, but this may vary. Some regard should be paid to why patients dropped out, as well as how many. It should be noted that the drop out rate may be expected to be higher in studies conducted over a long period of time. A higher drop out rate will normally lead to downgrading, rather than rejection of a study.

15 In practice, it is rarely the case that all patients allocated to the intervention group receive the intervention throughout the trial, or that all those in the comparison group do not. Patients may refuse treatment, or contra-indications arise that lead them to be switched to the other group. If the comparability of groups through randomisation is to be maintained, however, patient outcomes must be analysed according to the group to which they were originally allocated irrespective of the treatment they actually received. (This is known as intention to treat analysis.) If it is clear that analysis was not on an intention to treat basis, the study may be rejected. If there is little other evidence available, the study may be included but should be evaluated as if it were a non-randomised cohort study.
### Appendix C

**SECTION 2: OVERALL ASSESSMENT OF THE STUDY**

| 2.1 | **How well was the study done to minimise bias?** Code as follows: | 
|     | | High quality (++) □
|     | | Acceptable (+) □
|     | | Unacceptable – reject 0 □

2.2 Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention?

2.3 Are the results of this study directly applicable to the patient group targeted by this guideline?

2.4 **Notes.** Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above.

---

\[16\] In multi-site studies, confidence in the results should be increased if it can be shown that similar results were obtained at the different participating centres.
### Notes on Methodology Checklist 2: Controlled Trials

The top part of the form identifies the study and links it to the particular guideline and key question to which it relates. It includes reminders of factors you should consider before deciding whether it is worth progressing to a full appraisal of the paper concerned.

#### Section 1

This section makes a series of statements about aspects of the systematic review process that affect the **internal validity** of the review and asks you to assess how well the review addresses each issue. The objective is to assess how well the authors have dealt with the risk of bias in their methods.

If you would like more information on randomised controlled trials, their characteristics and weaknesses then please refer to Greenhalgh T. How to read a paper: the basics of evidence-based medicine. 3rd edition. Oxford: Blackwell;2006. Section 3.3 Page 44.

*Note that the “Response” column is for guidance only. You may opt for a different rating depending on how information is presented in any given review.*

<table>
<thead>
<tr>
<th>Statement 1.1</th>
<th>The study addresses an appropriate and clearly focused question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What does this statement mean?</strong></td>
<td><strong>When does this statement apply?</strong></td>
</tr>
<tr>
<td>Unless a clear and well defined question is specified, it will be difficult to assess how well the study has met its objectives or how relevant it is to the question you are trying to answer on the basis of its conclusions.</td>
<td>Always applies</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement 1.2</th>
<th>The assignment of subjects to treatment groups is randomised</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What does this statement mean?</strong></td>
<td><strong>When does this statement apply?</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Random allocation of patients to receive one or other of the treatments under investigation, or to receive either treatment or placebo, is fundamental to this type of study.

<table>
<thead>
<tr>
<th>Statement 1.3</th>
<th>An adequate concealment method is used</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does this statement mean?</td>
<td>Allocation concealment refers to the process used to ensure that researchers are unaware which group patients are being allocated to at the time they enter the study. Research has shown that where allocation concealment is inadequate, investigators can overestimate the effect of interventions by up to 40%.</td>
</tr>
<tr>
<td>When does this statement apply?</td>
<td>Always applies</td>
</tr>
<tr>
<td>Response:</td>
<td>Yes - if centralised allocation, computerised allocation systems, or the use of coded identical containers</td>
</tr>
<tr>
<td></td>
<td>No - if method of concealment used is regarded as poor, or relatively easy to subvert. Mark as ‘no’ if no concealment method is reported.</td>
</tr>
<tr>
<td></td>
<td>Can’t say - if concealment is mentioned, but not described.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement 1.4</th>
<th>Subjects and investigators are kept ‘blind’ to treatment allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does this statement mean?</td>
<td>Blinding refers to the process whereby people are kept unaware of which treatment an individual patient has been receiving when they are assessing the outcome for that patient. It can be carried out up to three levels. Single blinding is where patients are unaware of which treatment</td>
</tr>
<tr>
<td>When does this statement apply?</td>
<td>When blinding is possible</td>
</tr>
<tr>
<td>Response:</td>
<td>Yes - if the blinding levels are single, double or triple blinded where possible</td>
</tr>
<tr>
<td></td>
<td>No - if the study could have been blinded, but was not.</td>
</tr>
<tr>
<td></td>
<td>Can’t say - if the presence of blinding is not clear.</td>
</tr>
</tbody>
</table>
they are receiving. In double blind studies neither the clinician nor the patient knows which treatment is being given. In very rare cases studies may be triple blinded, where neither patients, clinicians, nor those conducting the analysis are aware of which patients received which treatment. The higher the level of blinding, the lower the risk of bias in the study.

Statement 1.5  The treatment and control groups were similar at the start of the trial

<table>
<thead>
<tr>
<th>What does this statement mean?</th>
<th>When does this statement apply?</th>
<th>Response:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients selected for inclusion in a trial must be as similar as possible. The study should report any significant differences in the composition of the study groups in relation to gender mix, age, stage of disease (if appropriate), social background, ethnic origin, or co-morbid conditions. These factors may be covered by inclusion and exclusion criteria, rather than being reported directly. Failure to address this question, or the use of inappropriate groups, should lead to the study being downgraded.</td>
<td>Always applies</td>
<td>Yes - if the patient groups look reasonably similar. In some trials a p value will be given for each factor considered. These values should ideally all be &gt;0.05. This is very good practice, but its absence should not affect your assessment of study quality. No - if the patient groups have important differences in factors that may influence the outcomes. Can’t say - if the patient groups have not been adequately described.</td>
</tr>
</tbody>
</table>

Statement 1.6  The only difference between the groups is the treatment under investigation

<table>
<thead>
<tr>
<th>What does this statement mean?</th>
<th>When does this statement apply?</th>
<th>Response:</th>
</tr>
</thead>
</table>
If some patients received additional treatment, even if of a minor nature or consisting of advice and counselling rather than a physical intervention, this treatment is a potential confounding factor that may invalidate the results. **If groups were not treated equally, the study should be rejected unless no other evidence is available.** If the study is used as evidence it should be treated with caution.

<table>
<thead>
<tr>
<th>Statement 1.7</th>
<th>All relevant outcomes measured in a standard, valid and reliable way</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What does this statement mean?</strong></td>
<td><strong>When does this statement apply?</strong></td>
</tr>
</tbody>
</table>
| The primary outcome measures used should be clearly stated in the study. **If the outcome measures are not stated, or the study bases its main conclusions on secondary outcomes, the study should be rejected.** Where outcome measures require any degree of subjectivity, some evidence should be provided that the measures used are reliable and have been validated prior to their use in the study. | Always applies | **Yes** – if there are clearly described outcome measures.  
**No** - if measures are entirely subjective and based on human judgement with no validation.  
**Can’t say** - if measures are unclear. |
## Appendix D

### Table 1: Summary of included studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Aim</th>
<th>Participant age 60 or older</th>
<th>Theoretical basis for intervention provided</th>
<th>Design</th>
<th>N</th>
<th>Setting</th>
<th>Intervention</th>
<th>Manualised?</th>
<th>Individual or group intervention?</th>
<th>Who delivered treatment?</th>
<th>Outcome measure</th>
<th>Conclusions</th>
<th>Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaing et al., 2009</td>
<td>To examine the effects of reminiscence therapy on psychological well-being, depression, and loneliness among institutionalised elderly people.</td>
<td>&gt;65</td>
<td>Cites' relevant literature</td>
<td>RCT</td>
<td>92</td>
<td>Nursing Home - Taipei</td>
<td>8 session of Reminiscence - Life Review</td>
<td>Yes</td>
<td>Group</td>
<td>Master's level student in mental health nursing</td>
<td>CES-D, Symptom Checklist (Radloff, 1977), SCL-90-R (Derogatis, 1978) ; RUS-V3 (Russel et al., 1978); MMSE (Folstien et al., 1983)</td>
<td>Large effect of treatment at follow up. Cultural differences and the institutionalisation indicate further research before it could be considered generalisable</td>
<td></td>
</tr>
<tr>
<td>Dear et al., (2013)</td>
<td>Participants would show statistically and clinically significant improvements on measures of depression, anxiety and disability</td>
<td>≥60</td>
<td>Cites’ relevant literature</td>
<td>UT</td>
<td>20</td>
<td>Outpatient - Australia</td>
<td>8 sessions of CBT</td>
<td>Yes</td>
<td>Individual</td>
<td>Clinical psychologist and computer therapy</td>
<td>PHQ-9 (Kroenke &amp; Spitzer, 2001); GDS (Yesavage et al., 1983); GAD-7 (Spitzer et al., 2006); K-10 (Kessler et al., 2003) ; SDS (Sheehan, 1983); CFQ (Broadbent et al., 1982) MINI (Sheehan et al., 1998)</td>
<td>Programme 'Managing your mood Program' obtained large effect sizes on established measures of depression, sustained at the 3 month follow up. Retention and acceptability were good. Larger, RCTs required before generalisability can be established.</td>
<td>Unable to compute</td>
</tr>
</tbody>
</table>

*continued...*
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<table>
<thead>
<tr>
<th>Study</th>
<th>Participating age 60 or older</th>
<th>Theoretical basis for intervention provided</th>
<th>Design</th>
<th>N</th>
<th>Setting</th>
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<th>Outcome measure</th>
<th>Conclusions</th>
<th>Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gellis et al., 2008</td>
<td>≥65</td>
<td>The experimental condition would significantly reduce severe depressive symptoms, improve problem solving abilities and lead to improved quality of life and greater satisfaction with treatment in home care patients.</td>
<td>RCT</td>
<td>62</td>
<td>Home Care - Hospital Based - United States</td>
<td>6 sessions of Problem Solving Therapy for Home Care Control received: TAU – standard home care with weekly telephone calls</td>
<td>Yes - Protocol based on procedures outlined by Nezu and D’Zurilla (2001)</td>
<td>Individual</td>
<td>PHD level clinical social worker</td>
<td>HRSD (Hamilton, 1960), GDS-15 (Yesavage, 1983), QoL (Frish, 1992); SPS-R (D’Zurilla, et al., 2002); PSQ-18 (D’Zurilla, et al., 2002)</td>
<td>Six sessions of PST-HC given to older adults receiving acute standard home care services led to decreased depressive symptoms when compared with a TAU group that received standard home care augmented by education about depression.</td>
<td>Large effect sizes on clinician rated HSRD at post treatment, 3-month and 6 month follow up (Cohen’s d 2.81, 2.45, 2.55 respectively). Further large effect sizes at post treatment, 3 and 6 month follow up for GDS (Cohen’s d 1.10, 1.02, 0.98 respectively)</td>
</tr>
<tr>
<td>Karimi et al., 2010</td>
<td>&gt;60</td>
<td>To examine the therapeutic effectiveness of integrative and instrumental types of reminiscence therapy for the treatment of depression in institutionalised older adults.</td>
<td>RCT</td>
<td>39</td>
<td>Nursing home - Iran</td>
<td>6 sessions of Integrative reminiscence Controls: 6 sessions of instrumental reminiscence +TAU Or TAU.</td>
<td>Yes - manual proposed by Watt and Cappelies (2000)</td>
<td>Group</td>
<td>Master’s level therapist</td>
<td>GDS-15 (Malakouti, 2006)</td>
<td>Integrative reminiscence demonstrated statistically significant reduction in depressive symptoms. The reduction in depressive symptoms in the instrumental reminiscence and social discussion groups were not significant. Cultural differences suggest further research before assumptions about generalisability can be made.</td>
<td>GDS- medium effect size integrative/instrumental reminiscence (Cohen’s d 0.76); large treatment effect between Integrative reminiscence and Social Discussion (Cohen’s d 1.26)</td>
</tr>
</tbody>
</table>

*continued...*
### Appendix D

<table>
<thead>
<tr>
<th>Study</th>
<th>Participant age 60 or older</th>
<th>Theoretical basis for intervention provided</th>
<th>Design</th>
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<th>Setting</th>
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<th>Individual or group intervention?</th>
<th>Who delivered treatment?</th>
<th>Outcome measure</th>
<th>Conclusions</th>
<th>Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karlin et al., 2013</td>
<td>&gt;65</td>
<td>To examine and compare outcomes of older and younger Veterans receiving ACT-D</td>
<td>UT</td>
<td>76</td>
<td>Veterans Associations - Outpatient - United States</td>
<td>12 to 16 sessions of ACT-D</td>
<td>Yes</td>
<td>Individual</td>
<td>Psychiatrists, psychologists, clinical social workers and advanced practice nurses with specialty training in mental health</td>
<td>BDI-II (Beck et al., 1996); WHOQOL-Bref (WHOQOL, 1995); WAI-SR; Tracey and Kokotovic, 1989</td>
<td>Initially the overall level of depression among older patients was approaching the &quot;severe&quot; range on the BDI-II, by the later phase of treatment was in the &quot;mild&quot; range. Also significant improvements in quality of life for both age groups. Suggest that ACT-D is an effective treatment for older Veterans with depression.</td>
<td>Unable to compute</td>
</tr>
<tr>
<td>Laidlaw et al., 2008</td>
<td>&gt;60</td>
<td>To empirically evaluate CBT alone vs. TAU for late life depression in a UK primary care setting.</td>
<td>RCT</td>
<td>40</td>
<td>Outpatient - United Kingdom</td>
<td>2 to 17 sessions of CBT</td>
<td>Yes</td>
<td>Individual</td>
<td>CBT Therapists (Mannuzza et al., 1986); HRSD (Hamilton, 1960); BDI-II (Beck, et al., 1996); GDS (Yesavage, 1983); BHS (Beck &amp; Steer, 1988); PSWQ (Meyer et al., 1990), WHO-QL-Bref; WHOQOL-Group, 1995</td>
<td>Participants in the CBT group did not receive antidepressant medication, while those in TAU may have. Participants in both treatment conditions showed improvements at the end of treatment and at 6 month follow up. When marital status was controlled for CBT performed better than TAU.</td>
<td>BDI-II post treatment, three and 6 month effect sizes were small (Cohen's $d$ 0.41, 0.45, 0.43); GDS post treatment and 6 month effect sizes were also small (Cohen's $d$ 0.4, 0.2) there was no effect at 3 months</td>
<td>Unable to compute</td>
</tr>
</tbody>
</table>
## Appendix D

<table>
<thead>
<tr>
<th>Study (2011)</th>
<th>Participant age 60 or older</th>
<th>Theoretical basis for intervention provided</th>
<th>Design</th>
<th>N</th>
<th>Setting</th>
<th>Intervention</th>
<th>Manualised?</th>
<th>Individual or group intervention?</th>
<th>Who delivered treatment?</th>
<th>Outcome measure</th>
<th>Conclusions</th>
<th>Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald et al, 2011</td>
<td>&gt;60</td>
<td>Cite's relevant literature</td>
<td>UT</td>
<td>62</td>
<td>Outpatient - United States</td>
<td>6 sessions - Acceptance Training</td>
<td>Yes</td>
<td>Group</td>
<td>Not known</td>
<td>IALHP; (Dion, 1990); (CES-D; Radloff, 1977); (STAI-State; Spielberger, 1983); (HAQ-QI; Fries, 1980);</td>
<td>Depression did not decrease significantly however there was a trend towards decreasing depression symptoms. The study of the effects of ACT, acceptance of chronic conditions was significantly greater immediately after the intervention and 6 and 12 weeks later.</td>
<td>Unable to compute</td>
</tr>
<tr>
<td>McMurchie et al., 2013</td>
<td>≤65 (65+)</td>
<td>Cites’ relevant literature</td>
<td>CT</td>
<td>58</td>
<td>Outpatient - United Kingdom</td>
<td>8 sessions of cCBT+TAU Control - TAU - community mental health team</td>
<td>Yes - dedicated computer program</td>
<td>Individual</td>
<td>Trainee clinical psychologist and standardised computer program</td>
<td>GDS (Yesavage, 1983, CORE-OM (Evans et al., 2000);</td>
<td>The results of the pilot suggest that BtB with older people is an effective treatment at post treatment and follow up</td>
<td>GDS - moderate treatment effects post treatment and one month follow up (Cohen’s d 0.84, 0.79 respectively)</td>
</tr>
</tbody>
</table>

*continued...*
### Appendix D

<table>
<thead>
<tr>
<th>Study</th>
<th>Aim</th>
<th>Participant age 60 or older</th>
<th>Theoretical basis for intervention provided</th>
<th>Design</th>
<th>N</th>
<th>Setting</th>
<th>Intervention</th>
<th>Manualised?</th>
<th>Who delivered treatment?</th>
<th>Outcome measure</th>
<th>Conclusions</th>
<th>Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschl et al., 2012</td>
<td>To investigate a life review therapy with computer supplements to treat depression in older adults.</td>
<td>&gt;65</td>
<td>Cites’ relevant literature</td>
<td>RCT</td>
<td>40</td>
<td>Outpatient-Switzerland</td>
<td>8 sessions Life Review Therapy</td>
<td>Yes - manual compiled from Haight, and Haight (2007), Maercker (2002) and Serra et al (2004).</td>
<td>Individual Psychologists</td>
<td>BDI-II (Beck et al., 1996); RSES (Rosenberg, 1985 LSIA, Diener et al., 1985)</td>
<td>Results suggest that depressive symptoms decreased significantly until three month follow up in the intervention compared to control group. Results also suggested that between pre testing and follow up there was a reduction in obsessive ruminations and an increase in wellbeing among the intervention group.</td>
<td>There was a large reported intervention effect size on BDI-II scores (Cohen’s d) 1.13 for the Reminiscence intervention group</td>
</tr>
<tr>
<td>Serfaty, et al., 2009</td>
<td>To determine the clinical effectiveness of CBT delivered in Primary Care for older people with depression</td>
<td>&gt;65</td>
<td>Cites’ relevant literature</td>
<td>RCT</td>
<td>204</td>
<td>Outpatient - United Kingdom</td>
<td>6 to 8 sessions of CBT</td>
<td>Yes</td>
<td>Individual Accredited therapists</td>
<td>BDI-II (Beck et al., 1996); BAI (Beck &amp; Steer, 1993); EuroQuol (EurQuol Group)Social Functioning Questionnaire, (Tyrer et al., 2005)</td>
<td>The results show that CBT is an effective treatment when compared with usual GP care or a TC intervention. Most participants reported that treatments were helpful and the therapist easy to talk to. Talking control was a methodological strength.</td>
<td>The unadjusted SMD data suggests negligible time one post treatment effect between CBT/TC and CBT/TAU (Cohen’s d 0.18 and 0.17 respectively) It demonstrates a small effect size at post treatment 2 between CBT/TC and CBT/TAU (Cohen’s d 0.20 and 0.24 respectively)</td>
</tr>
</tbody>
</table>

continued...
### Appendix D

<table>
<thead>
<tr>
<th>Study</th>
<th>Aim</th>
<th>Participant age 60 or older</th>
<th>Theoretical basis for intervention provided literature</th>
<th>Design</th>
<th>N</th>
<th>Setting</th>
<th>Intervention</th>
<th>Manualised?</th>
<th>Individual or group intervention?</th>
<th>Who delivered treatment?</th>
<th>Outcome measure</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhou et al., 2012</td>
<td>To study the effects of group RT on depressive symptoms, self esteem and affect balance among community dwelling older adults.</td>
<td>&gt;60</td>
<td>provided Cite's relevant literature</td>
<td>RCT</td>
<td>125</td>
<td>Outpatient - China</td>
<td>6 sessions of Group Reminiscence Therapy</td>
<td>Structured</td>
<td>Group</td>
<td>Trained community nurses</td>
<td>GDS (Yesavage, 1983); Chinese Version of the RSES (Rosenberg, 1969); Chinese version of the ABS (Bradburn, 1969)</td>
<td>GDS scores decreased significantly after therapy. Suggesting an effective intervention for older adults</td>
</tr>
</tbody>
</table>

GDS (Yesavage, 1983); Chinese Version of the RSES (Rosenberg, 1969); Chinese version of the ABS (Bradburn, 1969)
### Appendix E

Table 2: Quality assessment of included studies based on the SIGN (50) methodology.

<table>
<thead>
<tr>
<th>Study</th>
<th>Clarity of question</th>
<th>Control condition used?</th>
<th>Treatment and control run simultaneously?</th>
<th>Similar control condition in relation to intensity, duration, etc</th>
<th>Randomisation used?</th>
<th>Similarity of groups at start</th>
<th>Treatment Integrity Assessed?</th>
<th>Outcome Measures?</th>
<th>Measurement of Depression Change?</th>
<th>Retention</th>
<th>Intention to Treat Analysis</th>
<th>Design</th>
<th>Follow-up?</th>
<th>Quality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiang et al., 2009</td>
<td>Well covered</td>
<td>Yes</td>
<td>Poor</td>
<td>Block randomisation</td>
<td>Well covered</td>
<td>Yes</td>
<td>Yes</td>
<td>Well covered</td>
<td>Yes</td>
<td>69% reminiscence, 72% control - Poor</td>
<td>No</td>
<td>RCT</td>
<td>3 months</td>
<td>C</td>
</tr>
<tr>
<td>Dear et al., (2013)</td>
<td>Well covered</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Well covered</td>
<td>Yes</td>
<td>85%</td>
<td>No</td>
<td>UT</td>
<td>3 months</td>
<td>D</td>
</tr>
<tr>
<td>Gellis et al., 2008</td>
<td>Well covered</td>
<td>Yes (TAU with depression education)</td>
<td>Yes</td>
<td>Similar</td>
<td>Block randomisation</td>
<td>Well covered</td>
<td>Not known</td>
<td>Well covered</td>
<td>Yes</td>
<td>88% PST-HC, 91% TAU</td>
<td>No</td>
<td>RCT</td>
<td>3 and 6 month follow up</td>
<td>C</td>
</tr>
<tr>
<td>Karimi et al., 2010</td>
<td>Well covered</td>
<td>Yes (IR or social discussion)</td>
<td>Not covered</td>
<td>Yes</td>
<td>Stratified randomisation</td>
<td>Not covered</td>
<td>Yes</td>
<td>Well covered</td>
<td>Yes</td>
<td>Poor - 76% integrative R; 69% IRC; 76% SD</td>
<td>No</td>
<td>RCT</td>
<td>No</td>
<td>C</td>
</tr>
<tr>
<td>Karlin et al., 2013</td>
<td>Well covered</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Well covered</td>
<td>Yes</td>
<td>Poor - 77%</td>
<td>No</td>
<td>UT</td>
<td>No</td>
<td>D</td>
</tr>
<tr>
<td>Laidlaw et al., 2008</td>
<td>Well covered</td>
<td>Yes (TAU)</td>
<td>Yes</td>
<td>No- some differences</td>
<td>Computer generated randomisation</td>
<td>Well covered</td>
<td>Yes</td>
<td>Well covered</td>
<td>Yes</td>
<td>90.47% in CBT 82.60% in TAU</td>
<td>Yes in both</td>
<td>RCT</td>
<td>3 - 6 months</td>
<td>B</td>
</tr>
<tr>
<td>McDonald et al., 2011</td>
<td>Well covered</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Not known</td>
<td>Yes</td>
<td>Well covered</td>
<td>Yes</td>
<td>Poor 67%</td>
<td>No</td>
<td>UT</td>
<td>6 weeks and 3 month follow up</td>
<td>D</td>
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</table>
# Appendix E

<table>
<thead>
<tr>
<th>Study</th>
<th>Randomisation</th>
<th>Allocation</th>
<th>Blinding</th>
<th>Adherence</th>
<th>Follow-up</th>
<th>Results</th>
<th>Control Group</th>
<th>Setting</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>McMurchie et al., 2013</td>
<td>Poor</td>
<td>Yes (TAU)</td>
<td>No</td>
<td>Similar</td>
<td>Well covered</td>
<td>Yes</td>
<td>85% cCBT, 87% TAU</td>
<td>Yes in both</td>
<td>CT 2 and 3 months post baseline</td>
</tr>
<tr>
<td>Preschi et al., 2012</td>
<td>Well covered</td>
<td>Yes (WL)</td>
<td>Poor</td>
<td>Computer generated randomisation</td>
<td>Well covered</td>
<td>Yes</td>
<td>Poor - 67% Life review, 84% control</td>
<td>No</td>
<td>RCT 3 months</td>
</tr>
<tr>
<td>Serfaty, et al., 2009</td>
<td>Well covered</td>
<td>Yes (TC+TAU and TAU)</td>
<td>Yes</td>
<td>Yes</td>
<td>Stratified randomisation</td>
<td>Yes</td>
<td>84% CBT+TAU, 87% TC+TAU</td>
<td>Yes in both</td>
<td>RCT 4 and 10 months after baseline</td>
</tr>
<tr>
<td>Zhou et al., 2012</td>
<td>Well covered</td>
<td>Yes (HES)</td>
<td>No-some differences</td>
<td>Block randomisation</td>
<td>Well covered</td>
<td>Not known</td>
<td>95% in reminiscence, 99% in control</td>
<td>No</td>
<td>RCT No</td>
</tr>
</tbody>
</table>

Zhou et al., 2012
Chapter 3: Thesis Aims and Hypotheses:

Aims:

Despite the efficacy of treatments for late life depression, many older adults do not seek or access treatment. The aims of the thesis were to explore some of the ‘patient’ related barriers older adults experience in accessing treatment for depression. Specifically, the two overall aims of this thesis were as follows. It sought to determine the predictive effect of attitudes to ageing and degree of depression on older adult’s ability to conceptualise their symptoms of psychological distress as depression. This study also sought to consider, in light of a paucity of empirical evidence to date, the relative predictive effect of attitudes to ageing, depression, recognition of depression symptoms, cognitive fusion and engagement in valued activities on the treatment seeking attitudes of a cohort of depressed older adults.

Hypotheses:

The thesis is comprised of one main and one secondary hypothesis.

Main Hypothesis:

- Older people’s attitudes to seeking professional psychological help would be predicted by higher symptoms of depression, the ability to accurately recognise symptoms of depression, positive attitudes towards the ageing process, higher cognitive fusion and lower reported ability to engage in valued living.

Secondary hypothesis

- Depressed older adult’s ability to accurately recognise their own depression symptoms would be predicted by attitudes to ageing and the extent of reported depression symptoms.
Chapter 4: Empirical Research Journal Article

An Empirical Exploration of predictors of depression recognition and attitudes to seeking professional psychological help in a sample of community based older adults

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(2) Department of Clinical Psychology, School of Health in Social Science, University of Edinburgh, Edinburgh, UK.

(3) Mental Health for Older Adults Service, NHS Borders, Melburn Lodge, Melrose, UK.

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Acknowledgements:
We would like to extend our thanks and appreciation to various organisations and people, too numerous to name individually, who were so helpful in recruiting participants for this study.

Declaration of Interests:
The authors have no competing interests to declare.

Word count: 9553

17 This article has been presented in accordance with guidance for publication with the Journal Aging and Mental Health. Guidance notes and instructions for authors for publication within this journal and other Taylor and Francis publications are presented in Appendices A and B.
Abstract:
Introduction: Despite the efficacy of psychological and pharmacological treatments many depressed older people go without treatment. The barriers to treatment remain unclear. This study focussed on patient related factors. The literature has suggested that older adults may not be as accurate in recognising symptoms of depression as adults of working age. Lack of recognition of the presence of a mental health problem may influence older adult’s attitudes to seeking treatment. The literature suggests a number of factors may influence treatment seeking attitudes in older people. These may include accuracy of depression recognition, cognitive fusion; engagement in valued activities although these did not appear to have previously been considered.

Hypotheses: Older people’s attitudes to seeking professional psychological help would be predicted by higher symptoms of depression, the ability to accurately recognise symptoms of depression, positive attitudes towards the ageing process, higher cognitive fusion and lower reported ability to engage in valued living. In addition, depressed older adult’s ability to accurately recognise their own depression symptoms would be predicted by attitudes to ageing and the extent of reported depression symptoms.

Method: An empirical cross sectional survey recruiting older adults (n = 281), aged ≥ 65 years in the Scottish Borders. Binomial logistic regression and a hierarchical multiple linear regression were conducted to test the hypotheses relating to predictors of depression recognition and attitudes to seeking professional psychological help respectively.

Results: The results of the statistical analysis in the empirical work suggested that a significant proportion of ‘depressed’ older adults (n = 43) recruited to our study were not able to recognise they were depressed at the time of their participation in the study. Binomial logistic regression suggested that depression severity rather than attitudes to ageing predicted depression recognition in this sample. Hierarchical multiple regression undertaken to analyse the predictive influence of depression, depression recognition, cognitive fusion, attitudes to ageing and engagement in valued activities suggested that non of these variables significantly predicted our sample’s attitudes to seeking professional psychological help.
Discussion: The results suggested there were a significant percentage of depressed older adults who were unable to recognise they were experiencing depression. This is analogous with our finding that there was also a significant proportion of depressed older people who were receiving treatment. Depression severity was the predictor of participant’s recognition that they were experiencing a depressive illness. It is likely that this population experience a lack of mental health literacy which may explain their difficulty in recognising and seeking treatment for depression. It was surprising that none of the hypothesised variables significantly predicted attitudes to seeking professional psychological help. The study also considers the potential implications of our findings and their potential applicability to public health.

*Keywords*: Depression, older adults, recognition, attitudes, psychology, cognitive fusion.
Introduction
Major depression is one of the most prevalent mental health problems one of the leading causes of disability in high income countries (WHO, 2004).

Depression in older people is “common, under recognised and often undertreated” (Chew-Graham et al., 2012, p. 52). Untreated depression has a significant negative impact on the quality of life of older people (Blazer, 2010). The general population prevalence of depression in older adults is consistently reported as between one and four percent (Blazer, 2003). In addition, estimates of the prevalence of subclinical depression range from four to thirteen percent (Alexopolous, 2005; Beekman, Deeg & Geerlings, 2001) with 25% of these cases advancing to major depression within two years (Lyness, King, Cox, Yoediono, & Caine, 1999; Oxman, Barrett, Barrett, & Gerber, 1990). Further research reports that depressed older people have a higher rate of relapse and recurrence (Flint & Rifat, 1999) with a greater risk of the condition becoming chronic (Unützer, Katon, Sullivan & Miranda, 1999).

Depression in older people has been associated with increased risk of suicide (Minio et al., 2002), mortality (Black, Markrides & Miller 1998), poor medication compliance for physical health difficulties, and an increase in somatic complaints (Beekman et al., 1997). The literature suggests that non-treatment of depression in older adults creates additional strain on health care provider organisations (Katon et al., 1992).

Psychological interventions and pharmacological therapies are effective treatments for later life depression (Anderson, 2004; Alexopolous, 2005; Klysner et al, 2002; Keir, Quigley, Thomson, McLachlan & Gillanders, unpublished; Wilson, Mottram & Vassilas., 2008). Despite well established evidence on the prevalence and impact of depression in older age and the efficacy of treatment, research suggests that diagnosis and treatment in this age group remains problematic (Burroughs et al., 2006; Unützer et al., 1997).
Previous research has found that only one third of older people with depression will discuss their symptoms with their primary care physician (Chew-Graham, Baldwin & Burns, 2004; Licht-Strunk et al., 2009; Sarkisian, Lee-Henderson, & Mangione, 2003). Of those who do disclose symptoms of depression, less than half will be offered treatment that follows best practice guidance (Campbell, 2010; Crystal, Sambamoorthi, Walkup & Akincigil, 2003). Older adults appear to be less likely to report depression symptoms (Unutzer, 2002), and more likely to underutilise mental health treatment which is available to them, whilst remaining markedly high users of medical services (Speer & Schnieder, 2003).

There has been extensive discussion around barriers to older adults’ access to mental health services which has focussed on a number of different areas, including the patient, the health care provider and the health care organisation (Alexopolous et al., 2002; Burroughs et al., 2006; Speer & Schnieder, 2003; Unützer et al., 2007; Patel et al., 2002). However, it appeared that reliance on qualitative research (e.g. Burroughs et al., 2006) and case vignettes, whilst informative, did not allow a larger scale investigation of older adult’s attitudes toward psychological treatment seeking (e.g. Barry, 1994; Jorm et al., 2000b).

The present study aimed to focus on the ‘patient’ aspect of barriers to receiving mental health treatment (Patel et al., 2002). Pill et al. (2001) noted that whilst considerable investment has been made into training to enable medical professionals to increase detection rates for common mental health problems, patient’s lack of readiness to discuss emotional difficulties with their primary health care provider add significantly to the problem.

Brown et al. (2001) explained that the literature has not considered the factors which lead patients to engage in depression self management. In particular, they note that understanding how people understand and conceptualise depression is likely to be important in understanding how they seek treatment for and manage their illness.
The literature had previously considered whether people were accurately able to recognise emotional distress. Earlier research has suggested that when working age adult participants were presented with a case vignette of depression, 72% recognised that a mental health disorder was present, but only 39% were able to accurately label it as depression (Jorm et al., 1997). A further study into whether adults across the age range (18-93) were able to accurately identify symptoms of depression found that older people were less able than younger people to do so correctly (Wetherell et al., 2009). This suggested that older people may be less likely to recognise these symptoms as problematic within themselves; in turn making them less likely to seek treatment for mood disorders. However, these studies used vignettes to assess whether people were able to identify emotional distress. To date, there does not appear to have been research to consider whether older adults are able to conceptualise their own emotional distress as depression and the factors which may influence this recognition. Intuitively, it seems to make sense that if older people are not able recognise their symptoms they may have increasing difficulty in making decisions about whether to seek or accept mental health treatment (Pill et al. 2001). We believed this to be an important omission in the literature with regard understanding the barriers experienced by older adults in accessing appropriate mental health treatment.

In turn, lack of recognition of the presence of a mental health problem may influence older adult’s attitudes to seeking psychological help. The literature suggests a number of factors may influence treatment seeking attitudes in older people. These may include accuracy of depression recognition, cognitive fusion; engagement in valued activities although these did not appear to have previously been considered. There were theoretical reasons to suggest these variables may influence treatment seeking attitudes which we will consider, however, their relative effect had not been previously considered within the literature. Therefore, we
aimed to conduct an exploratory study to determine their effect on treatment seeking attitudes in older adults within the community.

Our attitudes are formed from the information we have about the world and form the underpinning for many of our responses to it (Azjen & Gilbert Cote, 2008). As such, they are often used to help us understand how people might behave in a given situation. Attitudes toward the ageing process have been considered important in understanding older adult’s attitudes toward seeking treatment for common mental health problems (Laidlaw et al., 2007).

Western societies tend to view ageing as a negative social phenomenon (Ron, 2007). Most people know little about the ageing process and tend to harbour negative attitudes, resulting in ‘ageist beliefs’ and stereotypes (Ron, 2007). The literature reports widely held views in the population that old age is a time for sadness, loss, isolation and illness (Laidlaw, Power & Schmidt, 2007).

It has been suggested that older people may internalise and endorse these negative stereotypes of ‘normal ageing’ which may explain their underrepresentation in mental health services (Levkoff, Sarfrana, Cleary, Gallop & Phillips, 1988; Nelson, 2005). A qualitative study undertaken with older people to explore their attitudes to mental health treatment suggested that older people fail to seek treatment because they believe that nothing can be done to alleviate their symptoms (Burroughs et al., 2006). Greater endorsement of negative attitudes to ageing may therefore be predictive of attitudes towards reporting and seeking treatment for depression.

Given this reported nihilism with respect to age and treatment seeking (Lefkoff et al., 1998), we also anticipated that negative attitudes toward the ageing process may influence older people’s ability to conceptualise their symptoms of emotional distress as depression.

The literature suggests that depression severity may influence people’s attitudes toward treatment seeking. An illness behaviour model (Mechanic, 1986) suggests that
behavioural and affective responses to depressive symptoms will affect how people react to symptoms of depression, for example seeking treatment. Mechanic (1986) suggests that increased psychological distress would serve as a motivator for patients to seek treatment. Indeed, previous research undertaken by Deane and Chamberlain (1994) found that psychological distress was a positive predictor of attitudes towards treatment seeking in a sample of undergraduate students. This finding replicated earlier work by Kushner and Sher (1989).

To date, the literature does not appear to have considered the role of psychological distress in relation to treatment seeking attitudes in older people nor the influence it exerts on their ability to recognise they are experiencing a depressive illness.

Cognitive fusion describes the process by which people stand in relation to their thoughts. When people become cognitively fused they tend to act upon as though their thoughts are true; these thoughts then tend to govern people’s behavioural responses to outside events (Gillanders et al., 2014). As people become enmeshed and entangled with their cognitions it can result in rigidity of behaviour and a feeling of “stuckness” (Gillanders et al., 2014). The concept of cognitive fusion may be an important factor in understanding older people’s attitudes seeking treatment for depression (Pektus & Wetherell, 2011). It has also been suggested that fusion can act as a barrier to behavioural change (Pektus & Wetherell, 2011). Consequently, depressed older people who are experiencing cognitive fusion may find it difficult to consider seeking psychological treatment as a means to resolving their difficulties. The relative effects of cognitive fusion on treatment seeking attitudes have not previously been considered within the gerontology literature. We therefore, hypothesised that depressed older people who endorse greater cognitive fusion may have more negative attitudes to seeking professional psychological help.
Values are considered to be the parts of life people care about, which provide meaning and motivate them to engage in particular forms of overt behaviour or activities (Twohig, 2012). The model suggests that when people begin to experience psychological distress they focus on how they may escape or avoid distress and in doing so they stop engaging in the behaviours they value (Hayes et al., 2012; Rector, 2013).

Values may also play a role in older adults’ attitudes to seek treatment. Older people’s manner of living may become divergent from their values following significant life events or times of change including, retirement, bereavement, or functional impairments (Pektus & Wetherell, 2011). The degree to which one is able to live within personal values even with depression will also likely influence treatment seeking behaviour. It is an assumed that people wish to continue to live in a way where they are able to engage in valued activities and may only wish to seek treatment for depression when the symptoms interfere their ability to do so. The literature has not previously considered the impact of engaging in valued on treatment seeking attitudes in older people. We hypothesised on the basis of the theory presented in engagement in valued activities that greater ability to engage in valued activities would negatively predict older people’s attitudes toward seeking professional treatment.

Aim: This study had two overall aims. It sought to determine the predictive effect of attitudes to ageing and degree of depression on older adult’s ability to conceptualise their symptoms of psychological distress as depression. This study also sought to consider, in light of a paucity of empirical evidence to date, the relative predictive effect of attitudes to ageing, depression, recognition of depression symptoms, cognitive fusion and engagement in valued activities on the treatment seeking attitudes of a cohort of depressed older adults.

The present study has two main hypotheses. We hypothesised that older adult’s ability to accurately recognise their own depression symptoms would be predicted by attitudes to ageing and the extent of reported depression symptoms. Secondly we hypothesised that older
people’s attitudes to seeking professional psychological help would be predicted by higher symptoms of depression, the ability to accurately recognise symptoms of depression, positive attitudes towards the ageing process, higher cognitive fusion and lower reported ability to engage in valued living.

Method

Study design:
The present study used a between participants design to test the hypotheses that attitudes to ageing and depression severity will influence older adult’s ability to accurately recognise whether they are depressed (binomial logistic regression) and the effect of relative predictors on older adults attitudes to seeking professional psychological help (hierarchical multiple regression).

Questionnaires were distributed to a cross sectional sample of the older adult population in the area of South East Scotland.

Inclusion and exclusion criteria:
The study maintained broad inclusion and exclusion criteria. Participants were included in the study if they were; aged 65 years and older and provided their informed consent.

Recruitment:
Participant recruitment took place over a six week period (26th Feb – 9th May, 2014).

The recruitment strategy deliberately sought to obtain as broad and representative sample as possible and attempted to reach those older people who might be reluctant to seek treatment. We recruited from sheltered housing complexes, social centres, carers and community participation and advocacy groups. Anecdotal information suggests that many people seem to be referred to social centres and community participation groups as an alternative or in addition to depression treatment.
Participants were recruited from the Scottish Borders area of Scotland. The population of the Scottish Borders is approximately 112,000 people, 23.3% of which are over 65 years of age (Scottish Borders Council, 2010). It is a predominantly rural area with variable rates of affluence and very little migration, particularly of older people (Scottish Borders Council, 2010).

Organisations working with older people were contacted with a brief explanation of the study and a request to distribute the questionnaires. All of the organisations agreed to participate.

*Questionnaire distribution:*

Distribution was conducted in a number of different ways; dependent on the organisation participants were recruited from. Sheltered housing providers distributed questionnaires via their on site wardens. An advocacy service posted the questionnaire to their members’ with their bi-monthly newsletter. The lead researcher attended community groups, explained about the purpose of the questionnaire and invited members to take part.

*Measures:*

*Demographic Information:*

Participants were asked to complete a brief questionnaire to gather the following demographic information: date of birth, gender, marital status, accommodation, level of education, physical and mental health conditions and treatment. The following six measures were selected for use in the study\(^{18}\).
**Patient Health Questionnaire (PHQ-9) (Kroenke & Spitzer, 2002):**

This is a nine item depression screening measure incorporating DSM-IV criteria for major depression. Participants are asked to indicate on how many days they have experienced symptoms of depression over a two week period. Possible scores range from 0-27 with a higher score indicating greater depressive symptoms.

The literature suggests that this measure has good content (Kroneke, Spitzer & Williams, 2001) and construct (Pinto-Meza, Serrano-Blanco, Peñarrubia, Blanco & Haro, 2005) validity and reliability (Cameron, Crawford, Lawton & Reid, 2008). The PHQ-9 has also been previously used in older adult research (Ell, Unützer, Aranda, Sanchez, & Lee, 2006). This questionnaire has validated cut off scores which indicate, “no depression” “mild depression” “moderate depression” and “severe depression”. This measure has been found to have 82% reliability and 83% specificity in identifying major depression in participants with scores of 8 or greater (Manea, Gilbody & McMillan (2012). It has been found to have good characteristics for identifying depression in an older adult population and has comparable results with the 15 item Geriatric Depression Questionnaire (Richardson, He, Podgorski, Tu & Conwell, 2010; Phelan, et al, 2010). It was also used as part of the current study as it is the primary measure of depression used by General Practitioners (NHS Confederation and British Medical Association, 2003).

**Recognition of depression:**

Older adult’s ability to recognise the concept of depression in their own presentation was measured using the following single question to which participants were asked to indicate a fixed choice yes or no response.

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18 The combined set of questionnaires will be included in Appendix III as a requirement of the thesis examination but not submission to the journal.
1. Do you believe you are depressed?

This question has been previously used with people with dementia and their caregivers where it yielded a specificity of 0.85 (95% CI 0.79, 0.90) (Watson et al., 2011). There is a precedent for use of single item questions in the literature with reasonable validity and reliability (see Youngblut and Casper, 2013 for a review).

*Attitudes to Ageing Questionnaire (Laidlaw et al., 2007):*

This is a 24 item self report measure which asks older people to express their attitudes to the ageing process within factors of psychological growth, psychosocial loss and physical change. The scale at development demonstrated good internal consistency (See Laidlaw et al., 2007 for further information on scale development).

The questionnaire asks participants to rate their agreement with a number of statements using a Likert type rating scale. A higher score on this measure indicates greater endorsement of negative or “ageist” attitudes towards ageing.

*Attitudes to Seeking Professional Psychological Help – Scale (Short Form) (Fischer and Farina, 1995):*

This questionnaire is based on an earlier established questionnaire which sought to measure attitudes to seeking mental health care. The short version of the scale has demonstrated internal consistency ranging from 0.82 to 0.84 (Fischer and Farina, 1995; Komiya, Good, & Sherrod, 2000; Constantine, 2002).

The version used in this study had minor wording changes to make the questions fit the Scottish context. For example, the original statement “Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me” was considered changed to “Considering the time involved in receiving psychological therapy, I’m not sure it
would have value to me”. The amended sentence was judged to have more relevance to the
Scottish community where people are less used to paying for their health care than are those
in other countries.¹⁹

*Intention to seek treatment (Mackenzie, Scott, Mather & Sareen, 2008):*

This scale was included as items in this questionnaire referred to stigma and participants
comfort in talking to a professional about mental health issues. Participants’ attitudes to seek
treatment were measured using three questions defined by Mackenzie et al. (2008) as follows:

1. Would you seek professional help if you were experiencing depression or low mood?
2. How comfortable would you feel talking to a professional about low mood or
   depression?
3. How embarrassed would you be if your friends knew you were getting help for low
   mood or depression?

Participants answer using a Likert rating scale, (0) definitely not, to (3) definitely. Item three
was reverse scored. This measure was used in this study as it is a previously used measure
within this population; it appears to have good face validity and was previously tested with a
large population sample (n = 5,692). This measure when used previously had low internal
consistency (α = 0.56) (Mackenzie et al., 2008) whilst this level of consistency is not
generally accepted as adequate, the questions consider particular concepts of treatment
seeking behaviour, including stigma, and embarrassment which are not measured in other
short questionnaires.

This measure was adapted slightly for use in this study. The original paper used the
expression “mental illness”, which was adapted slightly to “low mood or depression” as it

¹⁹ The original version of the questionnaire is included as Appendix IV for the purposes of thesis examination
was felt this would be better understood by and be more acceptable to an older adult population and more relevant to the specific focus of this study\textsuperscript{20}.

*The Cognitive Fusion Questionnaire (CFQ, Gillanders et al., 2014):*

This was used to measure the extent to which the older adults in the sample are enmeshed with their cognitions. This questionnaire is a 7 item Likert rating scale. This questionnaire is psychometrically sound and demonstrates good internal consistency and good test-retest reliability. See Gillanders et al. (2014) for information on scale development. It has also demonstrated good incremental validity in predicting depression symptoms over and above well established predictors of depression such as rumination and dysfunctional attitudes in adult and older adult populations (Gillanders et al., 2014).

*The Valuing Questionnaire (Smout & Davies 2014):*

This measure considers the extent to which older people surveyed in this questionnaire have been able to live in concordance with their values. This questionnaire was selected for use in this project prior to it’s acceptance for publication, therefore, the 20 item version is used. The scale uses a Likert rating scale (0) Not at all true to (6) completely true. The scale provides good internal validity and consistency within an adult population (Smout & Davies, 2014).

*Readability:*

Questionnaires were checked for readability values, this was felt to be particularly important due to the age of the participants. Readability scores showed Flesch Reading Ease Score (69.9) suitable for people who have undertaken Primary School Education (Flesch, 1948).

*Power Calculation:*

Power calculations were conducted using the tables recommended by Cohen (1992).

\textsuperscript{20} The original version of the questionnaire is included in Appendix V for the purposes of thesis examination
The hypothesis that older adult’s attitudes to seeking professional psychological help would be predicted by participant age, years of education, depression (PHQ-9), accuracy of depression recognition (one dichotomous variable), attitudes to ageing (AAQ-24), cognitive fusion (CFQ) and engagement in valued behaviour (VQ) was tested using a hierarchical multiple regression.

Previous research in factors predicting older adults attitudes to seek professional psychological help has yielded medium to large effect sizes (Mackenzie, 2000; Mackenzie, Gekoski and Knox, 2006), therefore with seven potential predictor variables estimating a medium effect size of 0.15 (statistically more conservative than a large effect size), 95% confidence intervals and power set at 80%, the sample size predicted by Cohen (1992) is 102 participants.

Therefore, as the hypothesis relating to older adults accuracy in recognition of depression was, statistically, the most conservative hypothesis, it was anticipated that power generated to enable this analysis would sufficiently power all further analyses in the project.

**Ethical Approval:**

Ethical approval was sought and granted from The School of Health in Social Science within the University of Edinburgh.\(^{21}\), \(^{22}\)

The research was conducted according to the ethical principles of the British Psychological Society (BPS) code of conduct for research with human participants, including confidentiality, informed consent, right to withdraw and steps taken to minimise exposure to distress (The British Psychological Society, 2009).

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\(^{21}\) The letter detailing University of Edinburgh ethical approval is attached as Appendix VI

\(^{22}\) Further research governance approval was also sought from NHS Borders. However, as the project did not recruit participants through the NHS and did not require the involvement of NHS Staff, the research governance
Questionnaire Pack:

Questionnaire packs contained all information relating to the study, including: information sheet; consent form; questionnaire pack and participant debrief form. The packs also included a pre-paid envelope with the study correspondence address. To allow an accurate response rate calculation, a record was kept of the numbers of questionnaire packs which were distributed to each group to allow recall of questionnaires which had not been distributed.

Order Effects:
Six separate questionnaires were combined to create one single questionnaire pack given to participants. To avoid the potential confound of order effects the questionnaires were counter balanced (original order and reverse order); an equal number of each version of the questionnaire was distributed.

Results:

Data analysis:
The Statistical Package for Social Sciences for Windows (SPSS v.21; IBM Corp, 2012) was used to perform statistical analysis on the data collected.

Of the 1277 questionnaires distributed, 281 were returned completed (22.00%). Three returned questionnaires were excluded as they did not meet the minimum age for inclusion (1.42%).

Missing Data Analysis:
The data was examined for missing values per questionnaire. Cases where ≥20% of the data was missing from any questionnaire were excluded from further analysis. In total 44 participants were excluded (15.6%), 234 completed packs were retained for analysis. Questionnaires where ≤20% of the data was absent, missing data values were calculated using
individual mean calculation per questionnaire (Shrive, Stuart, Quan & Ghali, 2006). In total 116 missing values were imputed, of the total values included in the study.

Outlier analysis was undertaken for each of the questionnaires. Twenty values across all measures were identified as falling out-with two standard deviations from the mean. Each of these outlying values were Winsorised (Tukey, 1962).

Sample:

It was considered appropriate to only include those participants whose PHQ-9 score would indicate they were experiencing symptoms of depression (score ≥ 8) at the time of participation (N= 43) to hypothesis test in this study. Therefore calculations relating to reliability of testing instrument and normal distribution were conducted on the scores from the ‘depressed’ subgroup of participants.

Reliability:

Cronbach’s α was calculated for each measure. The values for each are as follows: PHQ-9 α = 0.637, ITST α = 0.579, ATSPPT-SF α = 0.790, AAQ-24 α = 0.836, VQ α = 0.787, CFQ α = 0.921. The data suggests that the measures, apart from the ITST (MacKenzie et al., 2008), were sufficiently reliable for inclusion in the study. The ITST measure was therefore excluded from further analysis.

Normal Distribution:

Kolmogorov-Smirnoff tests and exploratory data analysis were undertaken to ascertain whether the data was normally distributed. The data were not significantly skewed and the kurtosis was within normal limits for all variables.
**Comparisons with missing data:**

Statistical comparisons were undertaken to gauge whether there were significant differences in the population of responders whose questionnaires were excluded due to a large amount of missing data.

An independent t-test found that there were no differences in age between participants in the excluded and included group \( (t(41.384) = 0.181, p = 0.857) \). Chi square analysis also suggested that these groups were similar in terms of proportions of males to females: \( \chi^2 (1, N = 270) = 0.750, p = 0.378 \), marital status \( \chi^2 (4, N = 263) = 8.697, p = 0.063 \), whether the respondents were currently receiving depression treatment \( \chi^2 (1, N = 270) = 0.310, p = 0.578 \) or whether the participants considered themselves to be depressed at the time of the study \( \chi^2 (1, N = 258) = 0.47, p = 0.829 \).

**Sample demographics:**

Data in tables 1 and 2 below provided the demographic and statistical data for the whole sample of participants in addition to the ‘depressed’ cohort.

The data in Table 1 below indicates that there were significant differences in the whole sample across a number of demographic variables including; gender \( \chi^2 (1) = 34.91, p \leq 0.001 \), marital status \( \chi^2 (3) = 115.82, p \leq 0.001 \), education \( \chi^2 (6) = 174.82, p \leq 0.001 \), the number receiving treatment for depression at the time of participation \( \chi^2 (1) = 140.6, p \leq 0.001 \), those who considered themselves to be depressed at the time of participation \( \chi^2 (1) = 145.95, p \leq 0.001 \) and those who were experiencing symptoms of major depression \( \chi^2 (1) = 126.43, p \leq 0.001 \).

Within the depression subgroup of the sample, the proportion of female participants with scores indicating depression was higher than males \( \chi^2 (1) = 12.3, p \leq 0.001 \), there were differences in marital status \( \chi^2 (3) = 13.47, p = 0.004 \), accommodation, \( \chi^2 (4) = 27.12, p \leq 0.001 \).
0.001; education, ($X^2(5) = 15.5, p= 0.008$; those who considered themselves to be depressed at the time of participation ($X^2(1) = 4.67, p = 0.031$ and whether participants were receiving treatment for depression at the time of participation in the study ($X^2(1) = 6.72, p = 0.01$.

<table>
<thead>
<tr>
<th>Table 1: Frequency statistics of study variables</th>
<th>Whole Sample</th>
<th>Depressed subgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Valid Percent</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>161</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Living with a partner</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>79</td>
</tr>
<tr>
<td>Accommodation</td>
<td>Own home</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>Residential Care</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>With Friends</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Rented Accommodation</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>With Family</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sheltered Accommodation</td>
<td>2</td>
</tr>
<tr>
<td>Highest Attained Level of Education</td>
<td>Grammar School</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Undergraduate Degree</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Postgraduate Degree</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Rather not say</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>Participant’s responses to PHQ-9 indicate presence of depression?</td>
<td>Yes</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>191</td>
</tr>
<tr>
<td>Does the participant currently consider themselves to be depressed?</td>
<td>Yes</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>211</td>
</tr>
<tr>
<td>Participant receiving treatment for depression?</td>
<td>Yes</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>207</td>
</tr>
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</table>
Table 2: Descriptive statistics of study variables for study sample and depression subgroup.

<table>
<thead>
<tr>
<th></th>
<th>Whole Sample Range</th>
<th>Participants whose PHQ-9 was ≥ 8 Range</th>
<th>Normative data (where available)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Participant age in years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>231</td>
<td>65</td>
<td>96</td>
</tr>
<tr>
<td>Attitude to Ageing (AAQ-24)</td>
<td>233</td>
<td>54</td>
<td>5</td>
</tr>
<tr>
<td>Attitude to Seeking Professional Psychological Help – (ATTSPPH-SF)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valuing Questionnaire (VQ)</td>
<td>232</td>
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<td>174</td>
</tr>
<tr>
<td>Patient Health Questionnaire (PHQ-9)</td>
<td>234</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Cognitive Fusion Questionnaire (CFQ)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention to Seek Treatment (ITST)</td>
<td>233</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>233</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

The data included in Table 2, above, provides the data from the sample as a whole and for those participants whose PHQ-9 score was ≥ 8, where possible, comparing it with normative data from the literature. The table suggests that the data provided from this sample was broadly comparable with the normative data.

23 Normative data for older adults in primary care take from Phelan et al. (2010)

24 Normative data from an sample of older adults registered with the Australasian Centre on Aging, (Woodward & Pachana, 2009)

25 Normative data for older adults in primary care take from Phelan et al. (2010)

26 Normative data for dementia caregivers taken from Gillanders et al. (2014)
Given the large proportion of ‘non depressed’ participants in this sample it was decided to test our study hypotheses using only the data of those participants whose score on the PHQ-9 had been greater than equal to 8.

The hypothesis relating to whether people’s ability to accurately recognise their symptoms of depression was predicted by their attitudes to the ageing process was tested using a binomial logistic regression. The ability to accurately predict depression was entered as the dependent variable, with participants who falsely identified themselves as not depressed set as the reference variable. Identified predictor variables were depression (PHQ-9 score) and attitudes to ageing (AAQ-24).

Binomial logistic regression was used to analyse relationships between a nominal dependent variable and continuous or dichotomous independent variables. The Hosmer and Lemeshow ‘goodness of fit test’ was non significant and suggested that the values observed did not differ significantly from those predicted by the model ($X^2(7) = 10.77, p = 0.149$). The results of the regression suggested that the overall model was non significant $X^2(2) = 5.613, p = 0.06$ (statistically significant at the 0.1 level).

The Wald criterion demonstrated that depression ($b = 0.203, \text{Wald } X^2 (1) = 4.74, p = 0.029$) but not attitudes to ageing ($b = 0.024, \text{Wald } X^2 (1) =0.481, p = 0.488$) predicted the variance in older people’s accuracy in recognising whether they were depressed. $\text{Exp}(B)$ value indicates that when depression score is raised by 1 unit older adults are 1.23 times more likely to indicate they are experiencing depression.

<table>
<thead>
<tr>
<th>Accuracy of Recognition of Depression</th>
<th>B (SE)</th>
<th>Wald</th>
<th>$\text{Exp}(B)$</th>
<th>95% Confidence Interval for $\text{Exp}(B)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes to Ageing (AAQ-24)</td>
<td>0.024 (0.035)</td>
<td>0.481</td>
<td>1.024</td>
<td>0.957 - 1.097</td>
</tr>
<tr>
<td>Depression (PHQ-9)</td>
<td>0.203 (0.093)*</td>
<td>4.74</td>
<td>1.225</td>
<td>1.02 - 1.472</td>
</tr>
<tr>
<td>Constant</td>
<td>-5.394(3.3456)</td>
<td>2.599</td>
<td>0.005</td>
<td></td>
</tr>
</tbody>
</table>

* $p = 0.05$
The hypothesis that participants attitudes to seeking professional psychological help would be predicted by higher scores on the PHQ-9, their ability to recognise whether they were depressed, greater cognitive fusion, lower endorsement of positive attitudes to aging and lower engagement in valued living was tested using a sequential multiple linear regression.

Multiple linear regression uses several potential independent variables to predict response of a dependent variable (Field, 2009). This form of regression requires that the dependent variable be metric and the independent variables be metric or dichotomous (Field, 2009, p. 220).

An acceptable ratio of valid cases to independent variables for multiple regression is 10 to one with a minimum ratio five to one (Brace, Kemp & Sneglar, 2003). With 43 cases and 7 independent variables, the ratio for this analysis is 6.14 to one. The power calculation undertaken above suggested that in only using participants whose scores indicated they were experiencing depression in the regression left the study slightly statistically unpowered to meet requirements of this regression. However, the sample size met minimum requirement stipulated by Brace et al. (2003) and it was judged that the results would be more robust using only the depressed portion of the sample.

Tests of collinearity indicated that multicollinearity was not a concern in this model.27,28 The data also met the assumption of Durbin-Watson independent errors (Durbin-Watson value = 1.706) and that of non zero variance.29

Participant attitudes to seeking professional psychological help (ATSPPH-SF) were entered as the dependent variable. The predictor variables were entered sequentially in the following blocks: (block 1 - depression) extent of symptoms of depression as measured by the PHQ-9 total scores and accuracy of older people’s depression recognition (one dichotomous

27 Full details of the collinearity diagnostics are included in Appendix VIII
28 A correlation table was also undertaken to test for multiple collinearity, it is included in appendix VIII
variable, participant accurately recognised they were depressed vs. participant was depressed but did not believe themselves to be depressed), (block 2 – cognitive variables) Participants attitudes to ageing (AAQ-24) and the extent to which they were experiencing cognitive fusion (CFQ), (block 3 – behavioural variable) the extent to which participants believed they were able to engage in valued behaviour (VQ) total scores. The results of the regression are detailed in Table 4 overleaf.

The results of the multiple linear regression suggest that none of the models significantly predicted older adults attitudes toward seeking professional psychological help.

29 Full details of variance diagnostics are included in Appendix X
# Table 4: Results of hierarchical multiple regression

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R²</th>
<th>R² change</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Participant age</td>
<td>-0.181</td>
<td>-0.972</td>
<td>ns</td>
<td>0.033</td>
<td>0.033</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>Number of years education</td>
<td>0.007</td>
<td>0.038</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Participant age</td>
<td>-0.186</td>
<td>-0.969</td>
<td>ns</td>
<td>0.052</td>
<td>0.019</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>Number of years education</td>
<td>0.004</td>
<td>0.018</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depression (PHQ-9)</td>
<td>0.159</td>
<td>0.726</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participant correctly identified themselves as depressed vs. not depressed</td>
<td>-0.087</td>
<td>-0.388</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Participant age</td>
<td>-.146</td>
<td>-0.732</td>
<td>ns</td>
<td>0.110</td>
<td>0.057</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>Number of years education</td>
<td>0.058</td>
<td>0.283</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depression (PHQ-9)</td>
<td>0.279</td>
<td>1.019</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participant correctly identified themselves as depressed vs. not depressed</td>
<td>-0.170</td>
<td>-0.725</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attitudes to Ageing (AAQ-24)</td>
<td>0.285</td>
<td>1.196</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive Fusion (CFQ)</td>
<td>0.148</td>
<td>0.645</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Participant age</td>
<td>-0.148</td>
<td>-0.721</td>
<td>ns</td>
<td>0.110</td>
<td>.000</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>Number of years education</td>
<td>0.055</td>
<td>0.261</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depression (PHQ-9)</td>
<td>0.282</td>
<td>0.998</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participant correctly identified themselves as depressed vs. not depressed</td>
<td>-0.176</td>
<td>-0.697</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attitudes to Ageing (AAQ-24)</td>
<td>0.295</td>
<td>1.051</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive Fusion (CFQ)</td>
<td>0.140</td>
<td>0.541</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valued Living (VQ)</td>
<td>-0.022</td>
<td>-0.075</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion:
The results of this study demonstrate a number of interesting findings. The data suggests that the prevalence of symptoms of major depression in this sample was 18.4% which is significantly higher than the range of population estimates predicted by Blazer (2003) at between one and four percent. It is, however, commensurate with other research in home care populations which has indicated that the number of older adults with significant depressive symptoms falls between 12 and 33% (Richardson, He, Podgorski, Tu and Conwell, 2010). The prevalence in our sample is also analogous with the results of a systematic review undertaken by Beekman et al., (1999), who found an average depression prevalence of 13.5% in community samples.

The frequency statistics (detailed in table 1) suggest there were a notable proportion of older adults within our sample who were experiencing significant symptoms of depression which were untreated. Within the ‘depressed’ subgroup (participants whose PHQ-9 score indicated the presence of depression) of our sample 69.8% of participants were not receiving treatment for depression, suggestive of under reporting or under recognition within our population. These results are commensurate with the literature that there will be older people in the community who will experience depression but will not receive treatment (Chew-Graham et al., 2004).

Literature from the younger adult population suggests that under-treatment of depression is a significant issue across populations. Mitchell, Vaze, and Rao (2009) undertook a meta-analysis of 118 academic papers which assessed the accuracy of depression diagnoses in primary care. Their results suggested that GPs accurately identified depression in 47.3% of cases, which appears to be consistent within the adults of working age literature (e.g. Rost et al., 1998; Freeling, Rao, Paykel, Sireling & Burton, 1985). This proportion of correctly identified cases is higher than that achieved in our study. The literature suggests that
the rate of recognition of depression by general practitioners might be lower within an older adult population, suggesting a treatment rate of approximately 38% (Watts et al., 2002) which is similar to the treatment rate of depression in our sample of 30%.

Earlier work has noted that there are a number of reasons older people will not receive treatment for depression. Ageism and nihilism, existent in both older people and the medical profession have been posited as reasons for older people not receiving treatment (Unützer, et al., 1999). The literature suggests that when older people disclose symptoms of depression less than half will be offered appropriate treatment (Campbell, 2010) which is suggestive of nihilism on the part of primary care (Unützer, 1999). In addition, there is a strong finding in the literature that people commonly believe that they should work through their own emotional distress (Pill, Prior & Wood, 2001). These earlier contributions to the literature suggest that negative attitudes toward seeking professional help may prevent older people not seeking treatment for emotional problems like depression.

Rickwood, Deane and Wilson (2007) suggest that a number of factors are involved in people’s decisions to seek treatment for mental health problems, including understanding what they are experiencing is something which would require treatment. It may be the case that older people, if they are unable to recognise their symptoms as something which constitutes depression may not be aware they should seek treatment.

The under treatment of depression has been discussed extensively in the literature (e.g. Unutzer, 1999). It has been suggested that there are three possible factors which contribute to this, the health professional who fails to diagnose it, the patient and the health care organisation (Davidson & Meltzer-Brody, 1999; Hirschfield et al., 1997). Patel et al. (2004) noted that patients may not seek treatment as they may not recognise that they are depressed.
The data in table 1 also suggested that 65.1% of participants who achieved scores on the PHQ-9 suggestive of significant symptoms of depression did not consider themselves to be depressed at the time of their participation in this study.

The literature has demonstrated that people can find it difficult to identify depression in themselves and others (Jorm, Korten, Jacomb, Christensen et al., 1997). In particular, it has been noted that whilst people can recognise emotional distress they often don’t know at what point they should conceptualise it as depression or any of the other common psychological problems, which suggests a lack of mental health literacy (Jorm et al., 1997). Interestingly, Cooper-Patrick et al. (2002) found that patients will often engage in a range of behaviours prior to seeking treatment for depression including denial and negative behaviours. This is consistent with earlier research which suggested that approximately only one third of older people with depression will discuss concerns about their mental health with their primary care health provider (Chew-Graham et al., 2004).

The ‘understandability phenomena’ of depression, manifesting in negative attitudes toward the ageing process in older adulthood, may also be associated with large proportions of older adults failing to recognise they are depressed (Burroughs et al., 2011). Much of the literature concerning barriers to older adults accessing mental health services has cited negative attitudes of western societies towards ageing (Ron, 2007). Particular beliefs appear to be that older adulthood is a time associated with loss, sadness illness and isolation which should be accepted as it is not possible to change (Laidlaw et al., 2007). It has been suggested that older adults internalising negative stereotypes of ageing which may explain their difficulty in recognising depression (Gallo et al., 1994; Nelson 2005).

Our main hypothesis tested the theory that negative attitudes towards the ageing process (ageism) and depression would predict older adults’ accuracy in recognising whether they were depressed. The overall model was not significant; however, it was approaching
significance. Within the model, the data did not support our hypothesis that older adults’ attitudes toward the ageing process predicted their ability to recognise whether they were depressed however, the extent to which they endorsed symptoms of depression did.

This led us to consider whether mental health literacy may be a factor in older adults recognition of their experience of depression (Jorm et al. (1997). Older people may not have good mental health literacy; whilst they might recognise emotional distress they may not be able to label it accurately as depression (Jorm et al., 2000). However, when older adults recognise that they have multiple symptoms they may then recognise depression.

Patel et al. (2004) considered depression recognition in a sample of younger adults. Their results suggested that when asked all of their participants were able to name one symptom of depression. However, those participants who had experienced a previous episode of depression were able to identify significantly more symptoms than those with no depression history. The authors suggested their results indicated people may lack mental health literacy concerning depression and in only being aware of some well known symptoms (e.g. loss of interest or anhedonia) may therefore unable to link symptoms together enabling their understanding that they are experiencing a clinical disorder. This is supported by the work of Cooper-Patrick et al. (2002) who found that prior to seeking treatment, patients had recognised one or two of the most commonly recognised symptoms of depression, however their interpretations of these symptoms had varied.

This is further supported by the exploratory work of Brown et al. (2001) who considered the role of cognitions and personal illness models in understanding patients approach and attitude to depression self management. They suggested that people may not engage in management of depressive symptoms because they may fail to conceptualise their difficulties within the framework of a depressive illness, nor recognise the seriousness of the disorder. In a small sample of primary care patients of working age Brown et al (2001)
attempted to explore illness models associated with depression. In their sample patients often viewed their depressive symptoms’ as caused by stress but most of their participants believed depression was not a serious condition nor could it be helped by treatment.

In addition, Patel et al. (2004) noted that their respondents tended to view depression as something which was brought on themselves rather than a clinical disorder. This attribution may also explain under treatment and participant’s lack of identification with the disorder when asked if they feel depressed. This may present a barrier to treatment. If older people do not recognise what they are experiencing as a treatable condition they will be unlikely to seek treatment. Equally, if they do not recognise they are experiencing symptoms of depression until their difficulties are more significant this potentially delays treatment and increases the potential for associated disability.

Our study also attempted to further explore the intrinsic barriers older people face in seeking treatment. Specifically, we hypothesised that several variables may influence older peoples’ attitudes towards treatment seeking including; depression, whether older people were able to accurately recognise whether they were depressed, their attitudes to the ageing process, the extent to which they were cognitive fused and the extent to which participants were able to engage in ‘valued behaviours’.

The results of the regression suggested that none of the variables significantly predicted older adult’s attitudes to seeking professional psychological help.

This finding was both surprising and inconsistent with existing literature which suggests that negative attitudes to ageing can result in nihilism about mental health treatment (Unützer et al., 1999). We had anticipated that negative attitudes to ageing were likely to be consistent with Abramson et al. (1978) attribution theory. We believed this to be likely as older people with more positive internalised attributions about the ageing process may be more likely to view their difficulties as specific, internal and within their control and therefore
amenable to change and would therefore have more positive attitudes about seeking treatment.

This was the first study to our knowledge which considered the role of cognitive fusion as a predictor of attitudes to treatment seeking. Whilst there was not a precedent in the literature to suggest that fusion may play a role, ACT theory suggested that it may. The extent to which people were cognitively fused influenced their treatment seeking attitudes would have been consistent with the ACT’s model of psychological flexibility (Hayes et al., 2012). The model describes that pain, or psychological distress in the context of this study, is a fundamental part of living (Hayes et al., 2012). ACT theory defines cognitive fusion in the context of depression in the following way:

‘the dominance of verbal relations over direct experience in controlling behaviour’

(Gillanders et al. 2014, p.97).

This suggests that in this context cognitive fusion is similar to rumination, the process of verbally problem solving to attempt to overcome depression (Gillanders et al., 2014). Therefore, it would have been natural that people experiencing more cognitive fusion would seek treatment, as they attempt to verbally fix or solve their symptoms rather than be accepting of them.

The correlation analysis undertaken as part of the multiple regression demonstrated a negative, moderate and highly significant correlation between attitudes to ageing and severity of depression. This result is consistent with those of Quinn, Laidlaw and Murray (2009) who found their subsample of depressed participants indicated more negative attitudes to ageing where the non clinical sample demonstrated more positive attitudes to ageing. The authors noted these results may suggest that non clinical participants may have further capacity to view ageing as a time where growth and increased functionality was possible (Quinn et al., 2009; Deppe & Jeste, 2006) Quinn et al. (2009) also noted that greater psychological
wellbeing may be more likely if many of the challenges associated with growing older have not already been encountered.

The findings of Law, Laidlaw and Peck (2010) would caution against attributing this finding solely to the ‘understandability’ phenomena. Their results suggested that participants who scored highly on the understandability phenomena were likely to have more negative attitudes to ageing than those who did not. Future research may wish to consider the relative effect of the ‘understandability’ phenomenon on attitudes to seeking mental health treatment.

**Limitations:**
Whilst this study met the absolute minimum requirements for power within a multiple linear regression (Brace et al., 2003) it is likely that a lack of adequate statistical power may have increased the probability of a type II error and contributed to the lack of significant findings in this study. Future work would require a greater sample of cases where participants were achieving a cut score indicative of a depressive disorder.

The PHQ-9, whilst used extensively in primary care and validated for use with older people, was not designed specifically for an older adult population. This measure was chosen as it is used within primary care to ascertain the presence of depressive illness (NHS Confederation & British Medical Association, 2003). In addition there was some precedence for the use of this measure within the literature (Ell et al., 2009). It might be considered that the cut point used in the PHQ-9 in this study to indicate depression (greater than or equal to a score of 8) was too low.

It has been suggested that a score of greater than 15 was appropriate to ascertain depression in adults of working age (Cameron, et al., 2011). However, findings within the older adult population suggested that a more appropriate cut point to indicate depression within this population was greater than or equal to 8. A meta-analysis undertaken suggested that 8 was an
appropriate cut point, with adequate sensitivity and specificity, to screen for moderate depression within this population (Manea, Gilbody & McMillan, 2012).

We believe that a lower cut point in this sample is defendable as research suggests that older people are likely to underreport depressive symptoms and when universal measures of depression are used older adults are likely to fall within the subclinical range (Blazer, 2010). Therefore, this sample has used a pragmatic score, based on previous population specific and measure specific data to ascertain the percentage population of depression in this sample.

The cross sectional nature of the project means that we are unable to establish causality in any of the relationships between variables and it is not possible to rule out the influence of self-report bias in the results (Oppenheim, 1992). The present study sought to explore people’s experiences of psychological distress therefore increasing the likelihood of a socially desirable response from respondents (Todaro, Sears, Rodriguez & Musto., 2005). However, other parts of the questionnaire which related to participants’ experiences may not have been as affected by social desirability responding, for example older people’s experiences of the ageing process, as experiences of discrimination and health beliefs tend to experience less influence from social desirability bias (van de Mortel, 2008). In addition, the Cognitive Fusion Questionnaire was found to be uncorrelated with socially desirable responding (Gillanders et al., 2014). Self completion postal surveys have also been found to be less influenced by this type of responding due to the absence of an interviewer (Sudman & Bradburn, 1982).

As there was no obligation to participate in the study it is unclear as to whether there were significant differences between responders and non-responders. However, the prevalence of depression in those who responded to the study suggests that the data falls in line with other prevalence estimates within this population (Beekman et al., 1999). It is also
possible that older people who experience undiagnosed depression may be less motivated to return the questionnaires.

The inclusion and exclusion criteria were left deliberately broad, excluding only those participants who were less than 65 years old or who had not provided their written consent. Frequently, studies that consider common psychological problems in older people exclude those with a diagnosis of dementia due to concerns regarding consent, reliability of data, potential confound of a measured condition, or a person with dementia’s suspected reduced ability to follow a research protocol (Taylor, DeMers, Vig and Borson, 2012).

Cognitive impairment was not set as exclusion criteria for this study for a number of reasons. Screening would require either, access to the participants’ medical notes, or completion of a cognitive screen like the Mini Mental State Examination (Folstein, Folstein and McHugh, 1975). Both of these methods would have compromised the anonymity of the participant and potentially discouraged participation. Therefore not explicitly excluding cognitive impairment did not feel a risk to the study integrity.

The study also excluded those older people who were significantly visually impaired. It should be considered a limitation of the generalisability of this study that these participants were probably excluded through the recruitment method.

A further possible limitation of this study is that a large number of participants were recruited from community groups where they were engaging in some form of social contact or from sheltered housing where social contact is more likely. It could be argued that these participants were engaged in the community and were less likely as a result to experience depression (Chaio, Weng & Botticello, 2011).

Our sample was drawn from a rural health board where there are well established community links and there tends to be little population migration (Scottish Borders Council,
Therefore, a more urban sample where there are less established community links may have produced different results (Chaio et al, 2011).

**Implications:**
This study has yielded some interesting findings, which have implications for both theory and clinical practice.

To date, much of the literature concerning the factors which consider the barriers to older adults seeking treatment for common mental health problems have been qualitative, conducted on small samples or sought to explore older adults attitudes to seeking treatment through indirect means (Barry, 1994; Jorm et al., 2000).

This is the first study to our knowledge to examine the role of cognitive fusion in predicting ‘depressed’ older adults’ treatment seeking attitudes.

The results of the study suggest none of the predictor variables significantly predicted attitudes towards seeking professional psychological help suggesting that other variable may play a significant role.

Stigma surrounding mental health problems was not considered as a variable in this study and may play a significant role in whether older adults seek treatment (Conner et al., 2010). Our data suggests that significant proportion of the older people in our sample experienced difficulty in recognising their depressive symptoms which may suggest a lack mental health literacy (Jorm et al., 1997). We could wonder whether this lack of literacy may extend to misconceptions about what psychological therapy might be, which may lead to older people viewing psychological therapy more negatively.

The availability of social support and the strengths of interpersonal networks may also have an effect on treatment seeking attitudes and behaviours (Cooper-Patrick et al., 1997). In addition, the views of others within the older persons’ social network about efficacy and
acceptability of psychological therapy may also have some bearing on their attitudes towards seeking professional help (Golberstien, Eisenberg & Gollust, 2008).

The results of our study have implications across a range of domains in clinical practice including primary and secondary care in addition to other organisations that may have contact with older people. Our overall sample was, in the majority, comprised of older adults who were not experiencing symptoms of depression.

Firstly, our results suggest a significant under-treatment rate of depression in our sample, the majority of participants whose PHQ-9 score indicated the presence of depression were not receiving any form treatment. Our results also indicated that older people may not have sufficient understanding of common mental health problems like depression to accurately recognise when their symptoms of emotional distress indicate they are depressed (Jorm et al., 1997). This has implications for primary care clinicians, mental health practitioners and community staff alike. Our results suggest appropriate diagnosis of depression is being missed within this population and that simply asking an older person whether they believe themselves to be depressed will not guarantee a response which accurately reflects the presence of depression.

In addition, the findings of our study suggested that severity of depression symptoms was the factor most likely to influence whether the ‘depressed’ cohort of our sample were likely to recognise whether they were currently experiencing depression. This suggested that older adults may not recognise they are experiencing a clinical problem until their symptoms are quite severe, when they could access treatment earlier in the process. Therefore, it would be appropriate to screen for depression using a measure like the PHQ-9 (Kroenke & Spitzer, 2001) which has been validated in older people. Our findings support the earlier work of Brown et al. (2001) and suggest that primary care professionals may need to spend time with older people who may be depressed exploring their attitudes and cognitions about illness to
enable to them to understand and accepting mental health treatment, in addition to helping professionals tailor appropriate treatment.

Public health campaigns can be effective in providing useful information and prompting health behaviour change (Health Development Agency, 2004). Our findings suggest that public health campaigns could provide useful information to older people. In particular, these campaigns could usefully promote messages about older adulthood not being an inevitably negative experience (Carstensen et al., 2011), the prevalence, symptoms and risk factors of depression in older adulthood and the efficacy of treatment. These may increase mental health literacy (Jorm et al., 1997) and perhaps a change in the way older age is conceptualised by society (Ron, 2007) thereby increasing accurate depression recognition and positive attitudes to aging within this population and influencing treatment seeking attitudes.

**Conclusions**
This study has produced some novel results. The data suggests there are a significant proportion of the older adult population in this sample who have untreated symptoms of depression. A further significant proportion of those depressed older adults were unable to accurately recognise they were depressed.

Our results suggested that severity of depression symptoms predicted how accurately older people were able to recognise whether they were depressed and attitudes to ageing did not. This was an interesting finding as it suggested that lack of mental health literacy (Jorm et al., 1997) was a more probable explanation for this inaccuracy, rather than the hypothesised nihilism about the treatment process (Unutzer, 1999).

The results of this study suggested that in a small depressed sample of older adults, depression, accuracy of depression recognition cognitive fusion, attitudes to ageing and engagement in valued living, did not predict attitudes towards seeking professional
psychological help. Inadequate statistical power may have limited the results here, however, it suggests that other factors could be considered for their relative influence on older adults attitudes to seeking professional help for common mental health problems.
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Appendix I

Aging and mental health instructions for submitting authors

*Aging & Mental Health*

**Instructions for authors**

*SCHOLARONE MANUSCRIPTS*

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- the manuscript is your own original work, and does not duplicate any other previously published work, including your own previously published work.

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- the manuscript contains nothing that is abusive, defamatory, libellous, obscene, fraudulent, or illegal.

Please note that *Aging & Mental Health* uses [CrossCheck™](#) software to screen manuscripts for unoriginal material. By submitting your manuscript to *Aging & Mental Health* you are agreeing to any necessary originality checks your manuscript may have to undergo during the peer-review and production processes.

Any author who fails to adhere to the above conditions will be charged with costs which *Aging & Mental Health* incurs for their manuscript at the discretion of *Aging & Mental Health* ’s Editors and Taylor & Francis, and their manuscript will be rejected.

This journal is compliant with the [Research Councils UK OA policy](#). Please see the licence options and embargo periods [here](#).
Appendix I

Aging and mental health instructions for submitting authors

Manuscript preparation

1. General guidelines

Manuscripts are accepted only in English. Any consistent spelling and punctuation styles may be used. Please use single quotation marks, except where ‘a quotation is “within” a quotation’. Long quotations of 40 words or more should be indented without quotation marks.

Manuscripts may be in the form of (i) regular articles not usually exceeding 5,000 words (under special circumstances, the Editors will consider articles up to 10,000 words), or (ii) short reports not exceeding 2,000 words. These word limits exclude references and tables. Manuscripts that greatly exceed this will be critically reviewed with respect to length. Authors should include a word count with their manuscript.

Manuscripts should be compiled in the following order: title page (including Acknowledgments as well as Funding and grant-awarding bodies); abstract; keywords; main text; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figure caption(s) (as a list). Please supply all details required by any funding and grant-awarding bodies as an Acknowledgement on the title page of the manuscript, in a separate Funding paragraph, as follows:

For single agency grants:
This work was supported by the <Funding Agency> under Grant <number xxxx>.

For multiple agency grants:
This work was supported by the <Funding Agency #1> under Grant <number xxxx>; <Funding Agency #2> under Grant <number xxxx>; and <Funding Agency #3> under Grant <number xxxx>.

Structured Abstracts of not more than 250 words are required for all manuscripts submitted. The abstract should be arranged as follows: Title of manuscript; name of journal; abstract text containing the following headings: Objectives, Method, Results, and Conclusion.

Each manuscript should have 3 to 5 keywords.

Search engine optimization (SEO) is a means of making your article more visible to anyone who might be looking for it. Please consult our guidance here.

Section headings should be concise. The text should normally be divided into sections with the headings Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content.

All authors of a manuscript should include their full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page of the manuscript. One author should be identified as the corresponding author. Please give the affiliation where the research was conducted. If any of the named co-authors moves affiliation during the peer review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after the manuscript is accepted. Please note that the email address of the corresponding author will normally be displayed in the article PDF (depending on the journal style) and the online article.
Appendix I

Aging and mental health instructions for submitting authors

- All persons who have a reasonable claim to authorship must be named in the manuscript as co-authors; the corresponding author must be authorized by all co-authors to act as an agent on their behalf in all matters pertaining to publication of the manuscript, and the order of names should be agreed by all authors.

- Biographical notes on contributors are not required for this journal.

- Authors must also incorporate a Disclosure Statement which will acknowledge any financial interest or benefit they have arising from the direct applications of their research.

- For all manuscripts non-discriminatory language is mandatory. Sexist or racist terms must not be used.

- Authors must adhere to SI units. Units are not italicised.

- When using a word which is or is asserted to be a proprietary term or trade mark, authors must use the symbol ® or TM.

- Authors must not embed equations or image files within their manuscript.

2. Style guidelines

- Description of the Journal’s article style.

- Description of the Journal’s reference style.

- Guide to using mathematical scripts and equations.

- Word templates are available for this journal. If you are not able to use the template via the links or if you have any other template queries, please contact authortemplate@tandf.co.uk.

3. Figures

- Please provide the highest quality figure format possible. Please be sure that all imported scanned material is scanned at the appropriate resolution: 1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour.

- Figures must be saved separate to text. Please do not embed figures in the manuscript file.

- Files should be saved as one of the following formats: TIFF (tagged image file format), PostScript or EPS (encapsulated PostScript), and should contain all the necessary font information and the source file of the application (e.g. CorelDraw/Mac, CorelDraw/PC).

- All figures must be numbered in the order in which they appear in the manuscript (e.g. Figure 1, Figure 2). In multi-part figures, each part should be labelled (e.g. Figure 1(a), Figure 1(b)).
Appendix I

Aging and mental health instructions for submitting authors

- Figure captions must be saved separately, as part of the file containing the complete text of the manuscript, and numbered correspondingly. The captions should include keys to symbols, and should make interpretation possible without reference to the text.
- The filename for a graphic should be descriptive of the graphic, e.g. Figure1, Figure2a.

4. Publication charges

Submission fee

There is no submission fee for Aging & Mental Health.

Page charges

There are no page charges for Aging & Mental Health.

Colour charges

Colour figures will be reproduced in colour in the online edition of the journal free of charge. If it is necessary for the figures to be reproduced in colour in the print version, a charge will apply. Charges for colour figures in print are £250 per figure ($395 US Dollars; $385 Australian Dollars; 315 Euros). For more than 4 colour figures, figures 5 and above will be charged at £50 per figure ($80 US Dollars; $75 Australian Dollars; 63 Euros).

Depending on your location, these charges may be subject to Value Added Tax.

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You must ensure appropriate acknowledgement is given to the permission granted to you for reuse by the copyright holder in each figure or table caption. You are solely responsible for any fees which the copyright holder may charge for reuse.

The reproduction of short extracts of text, excluding poetry and song lyrics, for the purposes of criticism may be possible without formal permission on the basis that the quotation is reproduced accurately and full attribution is given.
Appendix I

Aging and mental health instructions for submitting authors
For further information and FAQs on the reproduction of copyright material, please consult our Guide.

6. Supplemental online material

Authors are encouraged to submit animations, movie files, sound files or any additional information for online publication.

- Information about supplemental online material

Manuscript submission

All submissions should be made online at the Aging & Mental Health ScholarOne Manuscripts website. New users should first create an account. Once logged on to the site, submissions should be made via the Author Centre. Online user guides and access to a helpdesk are available on this website.

Manuscripts may be submitted in any standard editable format, including Word and EndNote. These files will be automatically converted into a PDF file for the review process. LaTeX files should be converted to PDF prior to submission because ScholarOne Manuscripts is not able to convert LaTeX files into PDFs directly. All LaTeX source files should be uploaded alongside the PDF. Authors should prepare and upload two versions of their manuscript. One should be a complete text, while in the second all document information identifying the author should be removed to allow the files to be sent anonymously to referees.

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Copyright policy is explained in detail here.
Appendix I

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Full details of our Open Access programme

Last updated 04/03/2014

Taylor & Francis
Author Services
## Appendix II

### Taylor and Francis referencing and style guidelines for submitting authors

| **Running heads** | *(verso) J. Smith and P. Jones or J. Smith et al. if 3 or more authors.*  
If J.B. Smith then initials are closed up  
*(recto) Journal Title*  
centred on pages |
|-------------------|-------------------------------------------------------------------|
| **Article type (when needed)** | **RESEARCH ARTICLE**  
bold caps, centred |
| **Title** | **Bold, first word and proper nouns cap only**  
centred |
| **Authors** | An Author and Another Author (initials closed up if J.B. Smith)  
centred |
| **Affiliation** | *Department, University, City, Country;  
Department, University,  
City, Country*  
centred |
| **Received dates** | *(Received 20 July 2011; accepted 17 August 2012)*  
After affiliation, centred |
| **Abstract** | Text smaller, indented both sides  
centred |
| **Keywords** | **Keywords:** word; another word; lower case except names  
Position aligned with abstract, same size as abstract |
| **Correspondence details** | Given as footnote on page 1*  
*Corresponding author. Email: xxxxxxx  
ranged left, no indent. Postal address not included in footnote.  
If there is only one author, use *Email: xxxxxxx |
| **Headings** | A. **Bold initial cap only**  
B. **Bold italic initial cap only**  
C. **Italic initial cap only**  
D. **Italic initial cap only.** Text runs on  
All ranged left, numbers to be included if supplied, no indent below. |
| **Paragraphs** | Indented |
| **Tables** | *(Table 1) in text.*  
Table 1. Title initial cap only. (ranged left above table)  
Note: This is a note. (ranged left under table) |
| **Figures** | *(Figure 1) in text.*  
Figure 1. Caption initial cap only. (ranged left under figure)  
Note: This is a note. (ranged left under figure) |
| **Permissions statement for third-party figure and table captions** | If the rightsholder has supplied text for this purpose, use their text.  
Otherwise, insert the rightsholder’s name within the square brackets:  
© [Rightsholder]. Reproduced by permission of xxx. Permission to reuse must be obtained from the rightsholder. |
| **Displayed quotations** | Indented left and right, smaller font (over 40 words, or when appropriate) |
| **Lists** | (1) for numbered lists  
Bullets if wanted |
| **Equations** | Equation (1) in text  
Centred |
| **Acknowledgements** | A heading  
Goes before notes, bio notes and refs  
Text smaller |
| **Funding** | A heading. Goes after Acknowledgements  
Text smaller  
Funding agency written out in full. Grant number in square brackets.  
Multiple grant numbers separated by comma and space. Agencies separated by semi-colon, e.g.  
This work was supported by the Wellcome Trust [grant number].  
This work was supported by the Wellcome Trust [grant number]. |
## Appendix II

### Taylor and Francis referencing and style guidelines for submitting authors

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**Appendix II**

**Taylor and Francis referencing and style guidelines for submitting authors**

|                | Next review follows after a space  
|----------------|------------------------------------  
|                | No copyright line on first page of reviews  
| **Obituary**  | **OBITUARY** (section heading)  
|                | Name and dates if given (as title)  
|                | Author Name  
|                | Affiliation  
|                | Email  


Appendix II

Taylor and Francis referencing and style guidelines for submitting authors

Taylor & Francis Standard Reference Style: APA


Contents of this guide

References in the text
Tables and figures
Reference list
  Book
  Journal
  Conference
  Thesis
  Unpublished work
  Internet
  Newspaper or magazine
  Report
  Personal communication
  Other reference types

In the text

Placement

References are cited in the text by the author’s surname, the publication date of the work cited, and a page number if necessary. Full details are given in the reference list. Place them at the appropriate point in the text. If they appear within parenthetical material, put the year within commas:
(see Table 3 of National Institute of Mental Health, 2012, for more details)

Within the same parentheses

Order alphabetically and then by year for repeated authors, with in-press citations last.

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<table>
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<th>Repeat mentions in the same paragraph</th>
<th>Separate references by different authors with a semi-colon. If name and year are in parentheses, include the year in subsequent citations.</th>
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<td>This is the text, and Smith (2012) says &quot;quoted text&quot; (p. 1), which supports my argument.</td>
</tr>
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<td></td>
<td>This is the text, and this is supported by &quot;quoted text&quot; (Smith, 2012, p. 1).</td>
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<td>This is a displayed quotation. (Smith, 2012, p. 1)</td>
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<td>One author</td>
<td>Smith (2012) or (Smith, 2012)</td>
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<tr>
<td>Two authors</td>
<td><strong>Smith and Jones (2012) or (Smith &amp; Jones, 2012)</strong></td>
</tr>
<tr>
<td>Three to five authors</td>
<td>At first mention: Smith, Jones, Khan, Patel, and Chen (2012) or (Smith, Jones, Khan, Patel, &amp; Chen, 2012)</td>
</tr>
<tr>
<td></td>
<td>At subsequent mentions: Smith et al. (2012) or (Smith et al., 2012)</td>
</tr>
<tr>
<td></td>
<td>In cases where two or more references would shorten to the same form, retain all three names.</td>
</tr>
<tr>
<td>Six or more authors</td>
<td>Smith et al. (2012)</td>
</tr>
<tr>
<td></td>
<td>(Smith et al., 2012)</td>
</tr>
<tr>
<td>Authors with same surname</td>
<td>G. Smith (2012) and F. Smith (2008)</td>
</tr>
<tr>
<td></td>
<td>G. Smith (2012) and F. Smith (2012)</td>
</tr>
<tr>
<td>No author</td>
<td>Cite first few words of title (in quotation marks or italics depending on journal style for that type of work), plus the year:</td>
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<td></td>
<td>(&quot;Study Finds,&quot; 2007)</td>
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<td></td>
<td>If anonymous, put (Anonymous, 2012).</td>
</tr>
<tr>
<td>Groups of authors that would shorten to the same form</td>
<td>Cite the surnames of the first author and as many others as necessary to distinguish the two references, followed by comma and et al.</td>
</tr>
<tr>
<td>Organization as</td>
<td>The name of an organization can be spelled out each time</td>
</tr>
</tbody>
</table>

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**Taylor and Francis referencing and style guidelines for submitting authors**

| **Author** | It appears in the text or you can spell it out only the first time and abbreviate it after that. The guiding rule is that the reader should be able to find it in the reference list easily.

National Institute of Mental Health (NIMH, 2012) or
(National Institute of Mental Health [NIMH], 2012)
University of Oxford (2012) or (University of Oxford, 2012) |
|---|---|
| **Author with two works in the same year** | Put a, b, c after the year
(Chen, 2011a, 2011b, In press-a) |
| **Secondary source** | When it is not possible to see an original document, cite the source of your information on it; do not cite the original assuming that the secondary source is correct.

Smith’s diary (as cited in Khan, 2012) |
| **Classical work** | References to classical works such as the Bible and the Qur’an are cited only in the text. Reference list entry is not required. Cite year of translation (Aristotle, trans. 1931) or the version you read: Bible (King James Version). |
| **Personal communication** | References to personal communications are cited only in the text:

A. Colleague (personal communication, April 12, 2011) |
| **Unknown date** | (Author, n.d.) |
| **Two dates** | (Author, 1959–1963)
Author (1890/1983) |

| **Notes** | Endnotes should be kept to a minimum. Any references cited in notes should be included in the reference list. |
| **Tables and figures** | Put reference in the footnote or legend. |

| **Reference list** | Alphabetical letter by letter, by surname of first author followed by initials. References by the same single author |

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| Form of author name | Use the authors’ surnames and initials unless you have two authors with the same surname and initial, in which case the full name can be given: Smith, J. [Jane]. (2012). Smith, J. [Joel]. (2012). If a first name includes a hyphen, add a full stop (period) after each letter: Jones, J.-P. |

<table>
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<tr>
<th><strong>Book</strong></th>
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<tr>
<td>More authors</td>
<td>Include all names up to seven. If there are more than seven authors, list the first six with an ellipsis before the last. Author, M., Author, B., Author, E., Author, G., Author, D., Author, R., ... Author, P. (2001).</td>
</tr>
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</table>
Appendix II

Taylor and Francis referencing and style guidelines for submitting authors

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<td>Author, A. A. (2012). This is a chapter. In J. J. Editor &amp; B. B. Editor (Eds.), Book title: And subtitle (pp. 300–316). Abingdon: Routledge.</td>
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<td>Author, A. A. (2012). This is a chapter. In J. J. Editor, P. P. Editor, &amp; B. B. Editor (Eds.), Book title: And subtitle (pp. 300–316). Abingdon: Routledge.</td>
</tr>
<tr>
<td>Place of publication</td>
<td>Always list the city, and include the two-letter state abbreviation for US publishers. There is no need to include the country name:</td>
</tr>
<tr>
<td></td>
<td>Washington, DC: Author</td>
</tr>
<tr>
<td></td>
<td>Newbury Park, CA: Sage</td>
</tr>
<tr>
<td></td>
<td>Pretoria: Unisa</td>
</tr>
<tr>
<td></td>
<td>Chicago, IL: University of Chicago Press</td>
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Issued 2007; Revised 25 January 2013. Changes in this revision: more guidance on providing URLs. Revised 1 April 2014. Changes in this revision: more info on multivolume works and on titles not in English.

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Taylor and Francis referencing and style guidelines for submitting authors

| Publisher | Cambridge, MA: Harvard University Press Abingdon: Routledge
|           | If the publisher is a university and the name of the state is included in the name of the university, do not repeat the state in the publisher location:
|           | Santa Cruz: University of California Press Lincoln: University of Nebraska Press

**Publisher**

Give the name in as brief a form as possible. Omit terms such as ‘Publishers’, ‘Co.’, ‘Inc.’, but retain the words ‘Books’ and ‘Press’. If two or more publishers are given, give the location listed first or the location of the publisher’s home office. When the author and publisher are identical, use the word Author as the name of the publisher.

|                   | Use Vol. for a single volume and Vols. for multiple volumes.
|                   | In text, use (Levison & Ember, 1996).

|                                           | In text, use (Nash, 1993).


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# Appendix II

## Taylor and Francis referencing and style guidelines for submitting authors

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<td>Issue begins on page 1</td>
<td>Provide the issue number ONLY if each issue of the journal begins on page 1. In such cases it goes in parentheses: <em>Journal, 8</em>(1), pp–pp. Page numbers should always be provided.</td>
</tr>
<tr>
<td>Journal retrieved from online</td>
<td>If there is no DOI and the reference was retrieved from an online database, give the database name and accession number or the database URL (no retrieval date is needed):</td>
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<td>Journal homepage</td>
<td>If there is no DOI and the reference was retrieved from a journal homepage, give the full URL or site’s homepage URL:</td>
</tr>
<tr>
<td>More authors</td>
<td>Include all names up to seven. If there are more than seven authors, list the first six with an ellipsis before the last.</td>
</tr>
<tr>
<td>Not in English</td>
<td>If the original version is used as the source, cite the original version. Use diacritical marks and capital letters</td>
</tr>
</tbody>
</table>

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Issued 2007; Revised 25 January 2013. Changes in this revision: more guidance on providing URLs. Revised 1 April 2014. Changes in this revision: more info on multivolume works and on titles not in English.

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Appendix II

Taylor and Francis referencing and style guidelines for submitting authors

<table>
<thead>
<tr>
<th>Type</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you can update the reference before publication, do so.</td>
</tr>
<tr>
<td>Supplementary material</td>
<td>If you are citing supplementary material which is only available online, include a description of the contents in brackets following the title.</td>
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<tr>
<td></td>
<td>[Audio podcast]</td>
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<td>[Letter to the editor]</td>
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</table>

**Conference**

| Proceedings                               | To cite published proceedings from a book, use book format or chapter format. To cite regularly published proceedings, use journal format. |

**Thesis**


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## Appendix II

Taylor and Francis referencing and style guidelines for submitting authors

<table>
<thead>
<tr>
<th>Unpublished work</th>
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<table>
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<th>Internet</th>
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</table>
| **Website** | When citing an entire website, it is sufficient just to give the address of the site in the text.  
The BBC (http://www.bbc.co.uk). |
| **Web page** | If the format is out of the ordinary (e.g. lecture notes), add a description in brackets.  

<table>
<thead>
<tr>
<th>Newspaper or magazine</th>
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## Appendix II

### Taylor and Francis referencing and style guidelines for submitting authors

<table>
<thead>
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<th>Example</th>
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<tr>
<td>Personal communication</td>
<td>Personal communication includes letters, emails, memos, messages from discussion groups and electronic bulletin boards, personal interviews. Cite these only in the text. Include references for archived material only.</td>
</tr>
</tbody>
</table>
Producer, P. P. (Producer), & Director, D. D. (Director). (Date of publication). *Title of motion picture* [Motion picture]. Country of origin: Studio or distributor.  

Issued 2007; Revised 25 January 2013. Changes in this revision: more guidance on providing URLs. Revised 1 April 2014. Changes in this revision: more info on multivolume works and on titles not in English.

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# Appendix II

## Taylor and Francis referencing and style guidelines for submitting authors

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<td>If the dataset is updated regularly, use the year of retrieval in the reference, and using the retrieval date is also recommended.</td>
</tr>
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<td>Rightsholder, A. A. (2010). Title of program (Version number) [Description of form]. Location: Name of producer.</td>
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</tr>
<tr>
<td></td>
<td>If the program can be downloaded or ordered from a website, give this information in place of the publication information.</td>
</tr>
</tbody>
</table>
Appendix III

Example of the combined questionnaire pack distributed to participants

Participant Information Form

My name is Louise Keir; I am Trainee Clinical Psychologist with NHS Borders and the University of Edinburgh. As part of my final year’s training I have to complete a research project in an area of interest, which for me is people who have past the age of retirement. This information sheet is inviting you to take part in my project. This project is supervised by a Consultant Clinical Psychologist in NHS Borders and a Clinical Psychologist in the University of Edinburgh.

What is the project about?
There has been some research done which looks at older people and how their mental wellbeing (by this we mean feelings of being down, low in mood, or feeling agitated and edgy) might change as they become older. It has been suggested that for some older people, their mental wellbeing might change and that they do not always access the help which might be available to them. There might be lots of reasons that older people might not require help for changes in their mental wellbeing but there has been no research to help us to understand where older people get help. My project aims to look at the mental wellbeing of some older people in the community and to understand what they think about mental health and where they might get support if they needed it.

If I decide to take part, what will I need to do?
If you would like to take part in the project there are some questionnaires to fill in. The consent form attached will ask you to give your name, address and date of birth, this will be kept separately to your completed questionnaire so you will not be identifiable from your responses. The questionnaire will take around about 20 minutes to complete. Please be as honest as you can when you answer the questions. Often, the best way to do this is not to think about your answer too much and give the first answer which comes to you.

Once you have completed the questionnaire, please return it in the pre-paid envelope attached. Please return the questionnaire, even if you are not able to complete it all. Any information you can provide will be very helpful.

What will happen to the information I give as part of the project?
The information you give will be converted into numbers and will be compared with lots of other people’s answers, to see if other people think similar things. The information you give will not be identifiable. Once the information has been compared and analysed, the results will be written up as part of my final project. The results may also be used to help NHS Borders think about the way we provide services for older people.
Appendix III

Example of the combined questionnaire pack distributed to participants

Are there any risks to my taking part?
It is unlikely, but there is a very small chance that some of the questions which form part of the questionnaire might leave you feeling a little upset because they ask about your mental wellbeing. If you do feel upset after completing the questionnaire please feel free to contact me, or there is a sheet attached at the end of the questionnaire which tells you of some places where you will be able to access some support.

Do I have to take part?
No. It is completely up to you whether or not you would like to take part in this project. If you decide that you don’t want to, or you complete the questionnaire and decide later that you wish to withdraw your consent, you may do this at any time. Deciding not to take part will not affect any health care or treatment you might get from NHS Borders.

If I have any questions, who should I ask?
If there is anything you would like to ask about the project please feel free to contact me and I will be happy to answer your questions.

My telephone number is 01896 668821, my email address is louise.keir@borders.scot.nhs.uk and my work address is Psychological Services, 12 Roxburgh St, Galashiels, TD1 1PF.

Thank you for reading this information sheet, and thank you in advance for completing the questionnaire.

Yours sincerely,

Louise Keir
Trainee Clinical Psychologist
NHS Borders/University of Edinburgh
Appendix III

Example of the combined questionnaire pack distributed to participants

Participant Consent Form

In undertaking research it is important that people understand what they are taking part in. This page is to check that you have been given all the information you need to decide if you would like to take part.

If you would like to take part in this study, please read the following statements:

- I understand why this study is taking place.
- I understand that my participation in this study entirely voluntary and confidential.
- I understand that I may ask for more information about the study and withdraw my participation at any time.
- I understand that whether or not I consent to taking part in this project does not in any way affect the health or social care provided to me.
- I understand that although it is unlikely, some of the questionnaires could leave me feeling a little upset as they ask me about my own well being.

If you agree with the statements above can you please complete the information below:

Name:………………………………………………………………………………

Date of Birth:……………………………………………………………………

Address:…………………………………………………………………………

Signature:………………………………………………………………………

I would like a copy of the research findings once complete: YES / NO
Appendix III

Example of the combined questionnaire pack distributed to participants

Some Questions about you.....

1. What is your age in years?  .........................

2. Gender?  Male  Female

3. What is your marital status?
   Living with a partner  Single
   Married  Widowed

4. Where do you live?
   Own home  Rented accommodation
   Residential Care  With Family
   With friends  Other?  ..............................

5. What is the highest level of education you achieved?
   Grammar School  Undergraduate Degree
   High School  Postgraduate Degree
   College  Rather not say

6a. Do you currently consider yourself to be physically healthy?  Yes  No

6b. If you do not consider yourself to be physically healthy, please state the medical conditions you experience
........................................................................

7. Are you currently receiving any treatment for depression, anxiety or any other mental health problem?  Yes  No

b. If yes, what treatment do you currently receive?
   Medication  Counselling  Psychological Therapy  Other?.........................

8. At the moment, are you depressed?  Yes  No

9. Would you seek professional help if you were experiencing depression or low mood?
   Definitely  Probably  Probably not  Definitely not

10. How Comfortable would you feel talking to a professional about low mood or depression?
    Very  Somewhat  Not very  Not comfortable at all

11. How embarrassed would you be if your friends knew you were getting help for low mood or depression?
    Very  Somewhat  Not very  Not at all
### PHQ-9 Patient Questionnaire

1. Over the *last 2 weeks*, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several Days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Feeling down, depressed, or hopeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Trouble falling/staying asleep, sleeping too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Feeling tired or having little energy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Poor appetite or overeating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Feeling bad about yourself - or that you are a failure or have let yourself or your family down</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Thoughts that you would be better of dead or of hurting yourself in some way</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Please continue to the next page*
Appendix III

Example of the combined questionnaire pack distributed to participants

AAQ-24

This questionnaire asks you how you feel about growing older.

Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response. You should circle the number that best fits how true the statements are for you.

1. As people get older they are better able to cope with life.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

2. It is a privilege to grow old.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

3. Old age is a time of loneliness.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

4. Wisdom comes with age.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

5. There are many pleasant things about growing older.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

6. Old age is a depressing time of life.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

7. It is important to take exercise at any age.

| Strongly disagree | Disagree | Uncertain | Agree | Strongly agree |

Please continue to the next page...

The next part of the questionnaire asks you to rate how true each statement is to your experience of growing older.
Appendix III

Example of the combined questionnaire pack distributed to participants

8. Growing older has been easier than I thought.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

9. I find it more difficult to talk about my feelings as I get older.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

10. I am more accepting of myself as I have grown older.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

11. I don’t feel old.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

12. I see old age mainly as a time of loss.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

13. My identity is not defined by my age.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

14. I have more energy now than I expected for my age.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

15. I am losing my physical independence as I get older.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

16. Problems with my physical health do not hold me back from doing what I want to.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

17. As I get older, I find it more difficult to make new friends.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>
Appendix III

Example of the combined questionnaire pack distributed to participants

18. It is very important to pass on the benefits of my experiences to younger people.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

19. I believe my life has made a difference.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

20. I don’t feel involved in society now that I am older.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

21. I want to give a good example to younger people.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

22. I feel excluded from things because of my age.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

23. My health is better than I expected for my age.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

24. I keep myself as fit and active as possible by exercising.

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Slightly true</th>
<th>Moderately true</th>
<th>Very true</th>
<th>Extremely true</th>
</tr>
</thead>
</table>

Please continue to the next page...
Appendix III

Example of the combined questionnaire pack distributed to participants

Attitudes toward Seeking Professional Help

Please read each statement and indicate how much you agree by circling the response that best suits you, this might be the response you think of first.

1. If I believed I was experiencing low mood or depression, my first inclination would be to get professional help
   Disagree    Partly disagree    Partly agree    Agree

2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of low mood or depression.
   Disagree    Partly disagree    Partly agree    Agree

3. If I were experiencing a serious emotional difficulties at this point in my life, I would be confident that psychological therapy would help me
   Disagree    Partly disagree    Partly agree    Agree

4. There is something admirable in the attitude of a person who can cope with their emotional problems without resorting to professional help.
   Disagree    Partly disagree    Partly agree    Agree

5. I would want to get psychological help if I were worried or upset for a long period of time.
   Disagree    Partly disagree    Partly agree    Agree

6. I might want to have psychological help or counselling in the future.
   Disagree    Partly disagree    Partly agree    Agree

7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.
   Disagree    Partly disagree    Partly agree    Agree

8. Considering the time involved in receiving psychological therapy, I'm not sure it would have value to me
   Disagree    Partly disagree    Partly agree    Agree

9. A person should work out his or her own problems; getting psychological help would be a last resort
   Disagree    Partly disagree    Partly agree    Agree

10. Personal and emotional troubles, like many things, tend to work out by themselves
    Disagree    Partly disagree    Partly agree    Agree
Appendix III

Example of the combined questionnaire pack distributed to participants

**Valuing Questionnaire**

Please read each statement carefully and then circle the number which best describes how much the statement was true for you during the *past week*, including today.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all true</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completely True</td>
</tr>
</tbody>
</table>

1. I spent a lot of time thinking about the past or future, rather than being engaged in activities that mattered to me  
0 1 2 3 4 5 6

2. I was basically on “auto-pilot” most of the time  
0 1 2 3 4 5 6

3. I worked toward my goals even if I didn’t feel motivated to  
0 1 2 3 4 5 6

4. I spent most of my time doing things that matter to me in some way  
0 1 2 3 4 5 6

5. I was proud about how I lived my life  
0 1 2 3 4 5 6

6. I did what was important to me even if it was difficult to do  
0 1 2 3 4 5 6

7. My behaviour was a good example of what I stand for in life  
0 1 2 3 4 5 6

8. I felt lost and not at all sure about where I was going in life  
0 1 2 3 4 5 6

9. I tried to work towards important goals, but something always got in the way  
0 1 2 3 4 5 6

10. I regularly started to engage in important activities, but became quickly distracted  
0 1 2 3 4 5 6

11. I was satisfied with the effort I put into important activities  
0 1 2 3 4 5 6

12. I didn’t get moving and engage in what I wanted to do  
0 1 2 3 4 5 6

13. I made progress in the areas of my life I care most about  
0 1 2 3 4 5 6

14. Most of what I did was to please other people, rather than doing what’s important to me  
0 1 2 3 4 5 6

15. Difficult thoughts, feelings or memories got in the way of what I really wanted to do  
0 1 2 3 4 5 6

16. I continued to get better at being the kind of person I want to be  
0 1 2 3 4 5 6

17. When things didn’t go according to plan, I gave up easily  
0 1 2 3 4 5 6

18. I felt like I had a purpose in life  
0 1 2 3 4 5 6

19. It seemed like I was just ‘going through the motions’, rather than focusing on what was important to me  
0 1 2 3 4 5 6

20. I was active and focused on the goals I set for myself  
0 1 2 3 4 5 6
Appendix III

Example of the combined questionnaire pack distributed to participants

CFQ7

Below you will find a list of statements. Please rate how true each statement is for you by circling a number next to it. Use the scale below to make your choice.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>never true</td>
<td>very seldom true</td>
<td>seldom true</td>
<td>sometimes true</td>
<td>frequently true</td>
<td>almost always true</td>
<td>always true</td>
</tr>
</tbody>
</table>

1. My thoughts cause me distress or emotional pain
2. I get so caught up in my thoughts that I am unable to do the things that I most want to do
3. I over-analyse situations to the point where it’s unhelpful to me
4. I struggle with my thoughts
5. I get upset with myself for having certain thoughts
6. I tend to get very entangled in my thoughts
7. It’s such a struggle to let go of upsetting thoughts even when I know that letting go would be helpful

Thank you for your participation in this research study.

Please return the questionnaire in the pre-paid envelope even if it is not complete. Any information you can provide is useful.

Kind Regards
Louise Keir
Appendix IV

Original version of the Fisher and Farina (1995) attitude towards seeking professional psychological help scale

**Attitudes Toward Seeking Professional Help**

<table>
<thead>
<tr>
<th>Your sex:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your race/ethnicity:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/European American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab/Middle Eastern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other: Please specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Instructions**

Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

0 = Disagree     1 = Partly disagree     2 = Partly agree     3 = Agree

1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

5. I would want to get psychological help if I were worried or upset for a long period of time.

6. I might want to have psychological counseling in the future.

7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.

8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.

9. A person should work out his or her own problems; getting psychological counseling would be a last resort.

10. Personal and emotional troubles, like many things, tend to work out by themselves.
Appendix V

Original version of the McKenzie et al. (2008) intention to seek treatment scale
Intention to Seek Psychological Treatment – Three Item Questionnaire (Original Version), (McKenzie, Scott, Mather and Sareen, 2008)

1. Would you seek professional help if you had serious emotional problems?

   Definitely    Probably    Probably not    Definitely would not

2. How comfortable would you feel talking about personal problems with a professional?

   Definitely    Probably    Probably not    Definitely would not

3. How embarrassed would you be if your friends knew you were getting professional help for an emotional problem?

   Very      Somewhat      Not very      Not at all embarrassed
Appendix VI

University of Edinburgh Ethics approval

Louise Keir
Trainee Clinical Psychologist
NHS Borders / University of Edinburgh

25 July 2014

Dear Louise,

Application for Level 2/3 Approval

Re: Predictors of attitudes to seeking professional psychological help in older adults: A community sample.

Thank you for submitting the above research project for review by the Section of Clinical Psychology Ethics Research Panel. I can confirm that the submission has been independently reviewed and was approved on the 18th February 2014.

Should there be any change to the research protocol it is important that you alert us to this as this may necessitate further review.

Yours sincerely,

Kirsty Gardner
Secretary
Clinical Psychology
Appendix VII

Communication from NHS Borders Research Governance

From: Governance, Research
Sent: Thu 20/02/2014 14:29
To: Keir, Louise
Subject: Research Project

Hi Louise

I have had a look at this and I do not think that it requires our approval, as it is not research or a service evaluation. It seems to me that it is service development, and as you are not actually involving NHS patients, it is outwith our remit. Having said that obviously you have to ensure that you adhere to NHS Borders policy as an employee, but I am sure that your supervisor will ensure this as well!

Regards

Joy

Joy Borowska
Research Governance Co-Ordinator
Clinical Governance and Quality
NHS Borders
Borders General Hospital
01896826717
research.governance@borders.scot.nhs.uk

From: Keir, Louise
Sent: 14 February 2014 12:17
To: Governance, Research
Subject: Research Project

Hi Joy,

I'm currently completing my doctoral thesis in clinical psychology. I am employed by NHS Borders and although my project will not involve recruiting patients through the NHS I am recruiting a community sample I was wondering if as I am completing it as part of my contractual obligations to NHS Borders if I still need to register it with you? It is being undertaken through the University of Edinburgh and is currently going through their ethics process, my thesis supervisor at the university believes that it will not require IRAS approval as I am not recruiting anyone as part of their involvement with NHS Borders. I attach my ethics proposal for info.

Kind regards

Louise

Louise Keir
Trainee Clinical Psychologist
NHS Borders
01896 668821
Appendix VIII: Colinearity diagnostics of variables included in the multiple linear regression

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<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>(Constant)</th>
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<th>Number of years of education received by participants</th>
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<th>Patient Accuracy in Depression Recognition</th>
<th>Attitude to Ageing - Total Score</th>
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a. Dependent Variable: Attitude to Seeking Professional Psychological Help - Total Score
## Appendix IX: Pearsons’ correlations of relationships between variables

### Pearsons’ correlations of relationships between variables

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<tr>
<th></th>
<th>Attitude to Ageing - Total Score</th>
<th>Attitudes to Seeking Professional Psychological Help</th>
<th>Valuing Questionnaire</th>
<th>Cognitive Fusion Questionnaire</th>
<th>PHQ-9 Total Score</th>
<th>Participant Age in Years</th>
<th>Number of Years of Education received by participants</th>
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* $p < 0.05$; **$p < 0.001$
Appendix X: Variance diagnostics of the multiple linear regression

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a. Predictors: (Constant), Number of years of education received by participants, Participant age in years
b. Predictors: (Constant), Number of years of education received by participants, Participant age in years, Patient Accurately Recognises Themselves as depressed, Patient Falsely Identifies Themselves as Depressed, PHQ-9 Square Root Transformation, Patient Accurately Recognises Themselves as not depressed
c. Predictors: (Constant), Number of years of education received by participants, Participant age in years, Patient Accurately Recognises Themselves as depressed, Patient Falsely Identifies Themselves as Depressed, PHQ-9 Square Root Transformation, Patient Accurately Recognises Themselves as not depressed, Attitude to Aging Total Score, CFQ Square Root Transformation
d. Predictors: (Constant), Number of years of education received by participants, Participant age in years, Patient Accurately Recognises Themselves as depressed, Patient Falsely Identifies Themselves as Depressed, PHQ-9 Square Root Transformation, Patient Accurately Recognises Themselves as not depressed, Attitude to Aging Total Score, CFQ Square Root Transformation, Valuing Questionnaire Total Score
e. Dependent Variable: Attitude to Seeking Professional Psychological Treatment Total Score-highest score greater intention to seek treatment
References for Whole Thesis


Korte, J. (2012). *The stories we live by: The adaptive role of reminiscence in later life*. Enschede, the Netherlands: University of Twente


The Scottish Government (2014) website as follows:. 
http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotlandperformance accessed on 24th July 2014 at 5.07pm


