Cognitive-Reminiscence Therapy for the Treatment of Depression in Young Adults

by

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Submitted in partial fulfilment of the requirements for the degree of

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Abstract

Young adulthood is a critical period in psychosocial development, yet also one in which research indicates clinical depression is both more prevalent and severe in nature relative to other stages of adulthood. Although some effective therapies for depression in adulthood currently exist, few have been assessed specifically for use with young adults. Further, no treatments are effective for all individuals, and therefore the evaluation of additional interventions is warranted. This thesis aims to explore the feasibility and utility of reminiscence-based therapy, and specifically cognitive-reminiscence therapy, for young adults with depressive symptoms. Five studies are presented that provide theoretical and empirical support for the effectiveness of this therapy for young adults, as well as the processes through which it produces change. The first study reviews literature on reminiscence functions and reminiscence-based therapy and develops an argument that this approach may be appropriate and useful for young adults. The second study reports on quantitative research examining associations between adaptive reminiscence functions and depressive symptoms as the proposed mechanism of change in cognitive-reminiscence therapy. The third study reports on pilot data from a clinical trial of cognitive-reminiscence therapy that was conducted in a community mental health service with young adults with clinically-significant depressive symptoms. The fourth study reports on qualitative research from the same trial that explores participants’ perceptions of receiving this therapy and the process through which change occurred. The fifth and final study reports on clinical observations that were made during therapy, specific challenges that arose, and recommendations for implementing this therapy with young adults. Findings from these studies are then discussed more generally, along with their
implications. The limitations of findings from this thesis are then examined, and recommendations for future research are provided.
Chapter 1

Young Adulthood and Depression

The life stage of young adulthood is a critical period in terms of psychosocial development, and is marked by important educational, occupational, and social milestones. Transitioning from adolescence to emerging adulthood, and through young adulthood, involves a prolonged period of exploration and experimentation before settling into stable adult roles and responsibilities, and becoming fully self-sufficient. For example, this stage of life typically involves embarking on more specialised education, establishing an initial career path, forming and maintaining long-lasting friendships and romantic partnerships, reaching legal status, transitions in living arrangements, testing and developing worldviews and attitudes, and gaining independence from parents. The achievement of developmental tasks such as these predicts successful transition into subsequent stages of adulthood (Roisman, Masten, Coatsworth, & Tellegen, 2004). Arnett (2000) proposed that identity formation is also distinct during the period of emerging adulthood (age 18-25) in which work on many of these developmental tasks occurs. Individuals explore their identity by trying out various possibilities in life and reflecting on their relevance to their self-concept, forming internal standards of worth, and attaching more personal meaning to their experiences in work, relationship, and educational spheres. Indeed, the failure to develop and maintain a sense of self-continuity of personal identity in this period of life has been found to be associated with psychiatric illness, and an increased risk of suicide (Ball & Chandler, 1989; Chandler, Lalonde, Sokol, & Hallett, 2003). Given the range of psychosocial domains in which growth and change occur at this time of life, there exists a strong potential for stressors and maladaptive development to adversely impact on mental health (Friis, Wittchen, Pfister, & Leib, 2002).
Congruent with this, the prevalence of clinical depression has been found to be relatively higher for young adults than other age groups in adulthood (e.g. Hasin, Goodwin, Stinson, & Grant, 2005; Rohde, Lewinsohn, Klein, Seeley, Gau, 2013; Slade et al., 2009). For young adults experiencing depression, the impact on their psychosocial functioning has significant ramifications for the achievement of the aforementioned development milestones, and adversely affects their developmental trajectory and later functional and psychological outcomes (Howard, Galambos, & Krahn, 2010; Paradis, Reinherz, Giaconia, & Fitzmaurice, 2006). Depression derails young adults’ ability to adaptively function during this time (Lewinsohn et al., 1999; Rao et al., 1995), resulting in more interpersonal problems, an increased need for social support, and higher dissatisfaction with their career or workplace (Reinherz, Giaconia, Hauf, Wasserman, & Silverman, 1999). Depressed young adults also report the occurrence of disruption to their sense of self during this time in life, which impedes their ability to form and achieve valued life goals, and increases concerns about meeting expectations of themselves now and in the future (Kuwabara, Van Voorhees, Gollan, & Alexander, 2007).

Unfortunately, mounting evidence indicates that the onset of clinical depression in early adulthood is associated with relatively more severe clinical symptomatology, prolonged disease course, and poorer outcomes compared to depression in other age-groups (Coryell et al., 2009; Korten, Comijs, Lamers, Penninx, 2012; Zisook et al., 2007). Effective intervention for depression therefore appears particularly important during this vulnerable period so as to curtail the chronicity and morbidity of symptoms, to ensure that adaptive psychosocial development can be achieved and a stable and positive sense of identity formed and maintained, and to reduce the likelihood of future occurrences of depression. This chapter presents the diagnostic classification, effects, prevalence and course, and aetiology of depressive disorders. Recent findings on the relatively higher adversity of depression when onset occurs in early adulthood will then be presented, along with a brief review of currently available treatment methods. A case
for the development of novel treatments for adult early-onset depression will then be argued, and reminiscence-based therapies will be put forward as a psychotherapeutic approach that might be explored for this purpose.

**Diagnostic Classification of Depression**

The Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5; American Psychiatric Association, 2013) recognises Major Depressive Disorder (MDD) as the most commonly diagnosed and severe form of unipolar depression. According to the DSM-5, to meet criteria for a Major Depressive Episode individuals must experience five (or more) depressive symptoms nearly every day for a period of at least two weeks. At least one of these symptoms must be depressed mood or a markedly diminished interest or pleasure in all or almost all activities most of the day, nearly every day, with other possible symptoms being significant weight loss/weight gain or decrease/increase in appetite, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive or inappropriate guilt, diminished ability to think or concentrate or indecisiveness, and recurrent thoughts of death or suicidal ideation. These symptoms must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning during this period, and cannot be due to the direct physiological effects of a substance or another medical condition.

The DSM-5 also identifies Persistent Depressive Disorder as the presentation of chronic depressive symptoms for at least two years (where the person has not been without these symptoms for more than two months at a time). These symptoms may meet criteria for MDD, or consist of depressed mood for most of the day, for more days than not, with the presence of two (or more) accompanying symptoms of poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor
concentration or difficulty making decisions, and feelings of hopelessness. Consistent with MDD, these symptoms must not be attributable to the effects of substance, or another medical condition, and must cause clinically significant distress or impairment in psychosocial functioning.

Effects of Depression

Clinical depression is one of the leading causes of disability worldwide (World Health Organisation, 2011), and is associated with a substantial negative impact on individuals’ quality of life (Papakostas et al., 2004). The wide range of adverse outcomes include impairments in social, occupational, and physical functioning (McKnight & Kashdan, 2009), increased experience of pain (Agüera-Ortiz, Failde, Mico, Cervilla, & López-Ibor, 2011), and higher rates of mortality caused by an increased risk of suicide, poorer self-care, and physiological changes such as immunosuppression that increase susceptibility to death (Cuijpers & Smit, 2002; Donohue & Pincus, 2007). Cognitive impairment is also often a result of depression, with noted deficits in executive functioning, attention, memory, and a generally lowered neuropsychological profile (Hammar & Årdal, 2009).

The high economic burden of depression has been well documented across a large number of studies (Luppa, Heinrich, Angermeyer, König, & Riedel-Heller, 2007), and is related to factors such as loss of work productivity, days absent caused by sickness, and specialist treatment (Donohue & Pincus, 2007; Luppa et al., 2007). Healthcare costs are typically higher for depressed patients compared to non-depressed patients (Druss, Rosenheck, & Sledge, 2000; Simon, Ormel, VonKorff, & Barlow, 1995). This is due to depression amplifying the symptoms of physical illness (Katon & Ciechanowski, 2002), as well as the poorer self-care associated with depression leading to more adverse medical conditions and subsequently higher frequency and cost of healthcare service
engagement (Donohue & Pincus, 2007). Depression is also highly co-morbid with a range of other psychological afflictions such as anxiety disorders (Kessler, Chiu, Demler, Walters, 2005), substance use disorders (Davis, Uezato, Newell, & Frazier, 2008; Kessler et al., 2005), and personality disorders (Hirschfield, 1999). These findings have been mirrored recent in a large sample of the Australian population (Teesson, Slade, & Mills, 2009). From the brief review above it is clear that depression has a wide-ranging negative impact on personal well-being, and a substantial impact on broader society.

Prevalence and Course of Depression

Depression is one of the most prevalent psychological disorders, with current estimates indicating that more than 360 million people of all ages suffer from depression worldwide (WHO, 2012). A review of 17 large studies ($N = 152,044$) of the prevalence of depressive disorders in Europe reported the median 12-month prevalence to be 6.9% (Wittchen & Jacobi, 2005), whilst a representative random community sample of six European countries ($N = 21,245$) suggested the lifetime prevalence to be 12.8% (Alonso et al., 2004). Findings from large-scale epidemiological studies in the U.S. population are relatively consistent, with a 12-month prevalence of 6.6%, and a slightly higher lifetime prevalence of 16.2% (Kessler et al., 2003). In Australia, findings from the 2007 National Survey of Mental Health and Wellbeing (Slade, Johnston, Browne, Andrews, & Whiteford, 2009), based on interviews conducted with a stratified sample ($n = 8841$) of household members aged from 16 to 85 years, indicated the 12-month prevalence of Major Depressive Episodes to be 4.1% (men 3.1%; women: 5.1%). Another recent study based on a representative Australian sample ($n = 3014$) that utilised face to face interviews, reported the point prevalence of Major Depression to be 10.3% (Goldney, Eckert, Hawthorne, & Taylor, 2010). Despite variations across studies, attributable in part
to measurement and accompanying diagnostic issues (Patten, 2003), epidemiological studies consistently return high prevalence rates for depression.

Depression affects individuals across the lifespan, with the average age of onset being around 25 years (Burke, Burker, Regier, & Roe, 1990; González, Tarraf, Whitfield, & Vega, 2010; Jacobi et al., 2004). Depression affects both genders, however, females are more frequently reported to be sufferers, with an average gender ratio close to 2.0 (Angst et al., 2002; Kessler, McGonagle, Swartz, Blazer, & Nelson, 1993; Kuehner, 2003). Although isolated episodes of depression are common, research indicates that the lifetime risk for further episodes of Major Depression following an initial episode is approximately 50% (Eaton et al., 2008; Judd, 1997). Furthermore, the risk of recurrent episodes (Solomon et al., 2000), as well as the severity of these episodes (Kessing, 2008), has been found to increase with each episode thereafter. Population-based studies utilising prospective follow-up methods have reported the median length of depressive episodes to be three months (Eaton et al., 2008; Spijker, 2002); however, episodes may last much longer than this and, for a significant proportion of individuals (approximately 15-20%), depressive episodes may be unremitting and last for years (Eaton et al., 2008; Spijker et al., 2002). Since long-term studies on the course of depression began to be reported in the 1980’s (Angst, 1986), it is understood that depression can variably occur as a single episode, recurrent intermittent episodes, or follow a chronic course, that earlier and recurrent episodes indicate a poorer prognosis, and that age of first onset has become earlier over recent times (Uhmann, 2010).

**Aetiology**

Current understanding of the causes of depression indicates aetiological heterogeneity, with a range of factors contributing to the likelihood of the development and maintenance of clinical depression (Hasler, 2010). Given this, the notion of a unified
hypothesis of depression, although appealing from clinical treatment and prevention perspectives, does not appear plausible. Perhaps the most pragmatic perspective on depression aetiology is that of the gene-environment model that emphasises the interaction of various neurobiological and psychosocial factors in depression. The underlying theory is that a genetic predisposition, coupled with stressful experiences in development, may lead to a vulnerability to the development of depression, with manifestation of clinically significant depressive symptoms and disorder occurring in the face of psychosocial adversity (Goldberg, 2006; Lesch, 2004). In support of this aetiological framework, family, twin, and adoption studies indicate that the influence of genetic factors on major depressive disorder is 30-40%, with individual-specific environmental contributions estimated to be between 60-70% (Sullivan, Neale, and Kendler, 2000). In terms of specific genes and gene-by-environment interactions that are sufficient for the prediction of depression, no reliable evidence currently exists (Drago, De Ronchi & Serretti, 2009). However, a range of neurobiological and psychosocial pathogenetic factors that are associated with the development of depression have been identified, and will now be discussed.

Research has provided evidence for numerous neurobiological precipitants and correlates of depression. Among the most evidenced are the deficiency of monoamines (i.e. serotonin, norepinephrine, and dopamine), dysfunction of specific brain regions (such as volume reductions in the ventromedial prefrontal cortex and hippocampus, and functional abnormalities in the left subgenual prefrontal cortex), impaired circadian rhythms, and reduced gamma-aminobutyric acid (GABA) in the prefrontal and occipital cortex (Hasler, 2010). Although each of these findings provides some predictive validity for the development of depression, evidence is typically inconsistent across individuals who develop depression, and the causal pathways are difficult to disentangle. For example, while serotonin deficiency has been reliably found to predict an increased risk of depression (Neumeister et al., 2002, 2004), and has been associated with higher levels
of monoamine oxidase which metabolises serotonin (Meyer et al., 2006), there is no reliable explanation for the mechanisms pre-empting this occurrence in depressed patients. Further, a significant proportion of individuals do not respond to antidepressants with serotonergic properties (Kirsch, Scoboria, & Moore, 2002; Moncrieff, Wessely, & Hardy, 2004). Despite this, genetic factors do appear to play a role in the genesis of these neurobiological phenomena, and offer some predictive validity for depression in conjunction with the occurrence of stressful life events (Goldberg, 2006).

Early life stress, such as sexual abuse, physical abuse, and poor paternal relationships and attachment, have been shown to be major risk factors for developing depressive disorders later in life (Heim & Binder, 2012). Animal and human studies indicate that such experiences can produce lasting changes in the stress regulation systems of the developing brain, such as those of the autonomic, endocrine, and immune systems, which in turn increase vulnerability to stress and subsequent depression risk (Lupien, McEwen, Gunnar, & Heim, 2009). Proximal association between life events, stress, and depression has also been well documented in past several decades. Research has shown that most episodes of depression are preceded by stressful life events, such as interpersonal loss, relationship difficulties (such as acute disappointment in confiding relationships; Goodyer, Herbert, Tamplin & Altham, 2000), perceived personal failures, and role loss (Hammen, 2005). As well as major life events, chronic stress from adverse conditions, such as poverty, physical illness or disability, and lack of social support, increases the risk of depression, as does the accumulation of minor stressors (Hammen, 2005). Indeed, the higher number and severity of stressful events that individuals experience, the more likely it is that they will experience clinical depression (Kendler, Karkowski, & Prescott, 1998).

Cognitive theories of depression, most notably Beck’s diathesis-stress (Beck, 1983), and hopelessness models (Abramson, Gerald, Metalsky, & Alloy, 1989) emphasise the role of cognitive vulnerability as a casual factor for depression. These
theories posit that individuals are more likely to develop depression as a result of stressful events if they possess dysfunctional modes of thinking, such as having negativistic biases in processing information (e.g., pessimistic views of the world and the future through selective filtering of information) and negative schema of the self, world, or future (for example, viewing the self as being worthless or incompetent, or one’s future as likely to involve failure and poor outcomes). Research generally supports the predictive validity of these models, and the notion that the way in which people draw inferences, form attitudes, and interpret themselves and events in their lives are important factors in the genesis and maintenance of clinical depression (Joorman, 2009).

The above discussion indicates that the aetiology of depression likely involves an interaction of biological, psychological, and social factors, and promotes the adoption of a heterogeneous epigenetic and diathesis-stress perspective. The focus of this chapter will now turn to adult early-onset depression, and its treatment.

**Adult Early-Onset of Depression**

Whilst the diagnostic criteria for a depressive disorder is consistent across the adult lifespan, recent research has indicated there may be some significant differences in terms of disease course and outcomes between adult early-onset (typically referring to young and middle-adult populations between 18-45 years of age) and adult late-onset depression in adults (middle to older adulthood, and 45+ years of age). Adult early-onset depression, relative to later onset, has been found to be associated with an increased number of depressive episodes, longer duration of episodes, higher severity of symptoms, increased social and occupational impairment, increased suicidal ideation and attempts, greater medical and psychiatric comorbidity, and a significantly higher economic disease burden (Korten et al., 2012; Zisook et al., 2007). This indicates a markedly poorer clinical presentation for depression that manifests in early or middle adulthood. Research
utilising a prospective design method to track adults of different ages over a 20 year period has shown that earlier age of onset, particularly in young adults aged 18-29, is associated with a greater persistence of depressive symptoms compared to onset in middle or older adulthood (Coryell et al., 2009). These findings suggest that depressive symptoms are significantly less likely to subside of their own volition in young adult populations. Unfortunately, young adults are also less likely to seek treatment for depression relative to other adult age-groups, a finding replicated in several large scale epidemiological studies showing earlier onset of depression in adults is correlated with failure to seek treatment, or longer delays in treatment seeking (Christiana et al., 2000; Wang et al., 2005, 2007). This is worrying, given that up to three quarters of all lifetime cases of mood disorders start at or before 24 years of age (Kessler et al., 2005), prevalence of depression is typically higher in young adulthood relative to other age groups (Hasin, Goodwin, Stinson, & Grant, 2005; Rohde, Lewinsohn, Klein, Seeley, Gau, 2013; Slade et al., 2009), and that the age of onset may be becoming progressively earlier in successively younger birth cohorts (Uhmann, 2010). Collectively these findings show that adult early-onset depression is, on average, likely to be both more common and more adverse than at other times in adult life. Given this, there exists an imperative for accessible and effective treatments for depression during this stage of life. A brief review of currently available treatments suitable for adult early-onset depression will now be presented.

Treatments for Depression

Antidepressants. Antidepressants are a class of drug that regulate neurotransmitters in the brain related to mood and behaviour. Various types of antidepressant drugs are currently available and have differential mechanisms of action. These include monoamine oxidase inhibitors that increase the availability of monoamine
neurotransmitters in the synapse, selective serotonin reuptake inhibitors that block the reuptake of serotonin from the synapse thereby increasing its availability, and bupropion which also acts through inhibition of reuptake of norepinephrine and dopamine (Yıldız, Gönül, & Tamam, 2002). Although studies have not specifically investigated the efficacy of antidepressant medication in young adults, antidepressants are often considered front-line treatments for adults with depression (Thase & Denko, 2008). However, recent reviews have argued that they lead to a clinically significant reduction in depressive symptoms for as few as 10-20% of depressed people (Kirsch et al., 2002; Moncrieff et al., 2004), and typically only those who are severely depressed (Kirsch et al., 2008). Further, these effects are only marginally more efficacious than those found with active placebos (Pigott, Leventhal, Alter, & Boren, 2010). Antidepressant treatments are also often accompanied by adverse side-effects such as nausea, sexual dysfunction, and fatigue (Cascade, Kalali, & Kennedy, 2009; Goethe, Woolley, Cardoni, Woznicki, & Piez, 2007; Papakostas, 2008) which contribute to poor treatment compliance (Akincigil et al., 2007; Sawada et al., 2009). A further weakness of pharmacological treatments is that they do not account for variability in aetiological factors, or associated therapeutic response (Uher, 2008). Pharmacogenetic research indicates that a response to antidepressants may be regulated by genetic variations affecting a range of neurobiological targets such as serotonin transporters and receptors and brain-derived neurotrophic factor (Drago et al., 2009). However, there is a high rate of failure in replication of such findings, and current understanding of these mechanisms indicates that predicting a response to medication with a reasonable degree of certainty is not currently achievable (Crisafulli et al., 2011; Drago et al., 2009). Further, psychosocial aetiological factors that precipitate the development of depression, and moderate the maintenance of symptoms, cannot be addressed through medication solely. Accordingly, research has shown that pharmacological treatments produce less improvement in broader psychosocial functioning compared to psychotherapeutic treatment during the maintenance and
continuation phase of treatment (Papakostas et al., 2007). This is perhaps unsurprising given that medications treat symptoms, and not the broader psychosocial impact that depression has on individuals.

**Psychological treatments.** Psychological treatments for depression typically involve talk therapy which is most often delivered face-to-face in individual or group settings. Therapists utilise psychotherapeutic techniques from differing theoretical frameworks of depressive psychopathology to work with individuals to attenuate depressive symptoms. This process usually involves providing psychoeducation on depression, as well as the identification and changing of problematic thoughts, beliefs, behaviours, relationships etc. to be more adaptive. As with antidepressant treatments, most of the evidence for psychological treatments for adults with depression is derived from studies utilising samples of various ages rather than young adults in isolation. In this context, a range of psychotherapies have been shown to be efficacious in the treatment of depression in adults, including interpersonal therapy, cognitive-behaviour therapy, and behaviour therapy (Hollon & Ponniah, 2010). Psychotherapies have also been shown to lead to significantly reduced rates of relapse in comparison to treatment with pharmacotherapy (Vittengl, Clark, Dunn, & Jarrett, 2007). Although large-to-moderate effect sizes are typically reported for psychotherapies in meta-analyses, these effects are found to be lower when only high-quality studies are examined (Cuijpers, van Straten, Bohlmeijer, Hollon, & Andersson, 2010). Systematic reviews of outcome studies have indicated that often there is little difference between the effectiveness of these therapies (e.g. Cuijpers, van Straten, Andersson, & van Oppen, 2008), although individuals’ preferences for treatment (Swift & Callahan, 2009) and their perspective on psychological disorder and treatment techniques (Groth-Marnat et al., 2001; Herman, 1998; Reis & Brown, 1999) affect the suitability of interventions on a case-by-case basis. As with antidepressant medications, a substantial number of individuals do not respond to
currently available psychological treatments (Hollon, Thase, & Markowitz, 2002), and psychological treatments are typically adapted for young adults rather than being specifically developed for them. Although scarce, some evidence does exist to support beneficial effects of specific psychological interventions in young adult populations as an exclusive group, including behaviour therapy and behavioural activation, problem-solving therapy, and psychodynamic therapy (Purcell et al., 2013).

Other treatments. Although antidepressant and psychological treatment represent the most utilised interventions for depression, a variety of adjunct or alternative treatments have also been studied. Self-help treatments, such as St John’s wort, saffron, relaxation training, exercise, and sleep deprivation, have shown some promising effects in reducing depression symptoms (Morgan & Jorm, 2008). Much of this research has been inconsistent in terms of purported effects though, and plagued by poor study design (Morgan & Jorm, 2008). Further, young adults are typically subsumed into larger samples of adults with broader age ranges. For example, light therapy, involving exposing the eyes to bright lights for lengths of time, often in the morning, has been shown to be efficacious in reducing depressive symptoms in adult populations, but has not yet been tested specifically in young adult populations (Golden et al., 2005). Bibliotherapy involves independently working through a standardised treatment book with information and activities, which are usually cognitive-behavioural in nature. Bibliotherapy has been found to be effective in reducing depressive symptoms for adults (Cuipers, 1997), however, no studies have been conducted specifically in young adult populations.

Several treatment methods are available for treatment-resistant depression also. Transcranial magnetic stimulation is a treatment that generates a brief but intense magnetic field from a coil resting on the scalp. This magnetic field then converts to an electrical field within the brain and actives neural matter that may be hypoactive in
depressed patients, most often in the left prefrontal cortex (Dell’Osso et al., 2011). Electroconvulsive therapy, a method used to induce seizure in depressed individuals (Pagnin, de Queiroz, Pini, Cassano, 2008), has been found to be effective in severe and treatment-resistant depression, however, a range of side effects such as amnesia, delirium, and a small risk of death contraindicate its use as a front-line treatment (Beyer, Glenn, & Weiner, 1998). Deep brain stimulation to encourage neuronal activity in specified areas related to depression has also more recently been applied for treatment-resistant depression, showing promising results with significant reductions and remission of depressive symptomatology (Anderson et al., 2012). However, the aforementioned forms of treatments have not been specifically studied in young adults, are relatively expensive or invasive, and are typically reserved for only severe or non-remitting forms of depression.

The Need for New Treatments for Adult Early-Onset Depression

As noted above, the range of aetiological factors contributing to the development of depression may vary greatly across individuals, and given this it is unsurprising that no single treatment approach is effective for all people. Though less time-consuming and resource intensive than psychotherapy, antidepressant treatments produce a clinically significant effect in only a minority of individuals, and their effect for mild depression may be minimal or non-existent (Fournier et al., 2010). Current psychological treatments appear more promising, but to date little research has focussed specifically on young adults. Furthermore, approximately 30% of individuals suffering from depression fail to respond to either of these treatments (Warden, Rush, Trivedi, Fava, & Wisniewski, 2007). Although the morbidity rate of depression is relatively higher in young adults, and the impact more severe and adverse, many fail to seek help, or delay this behaviour. A lack of helpful treatment experiences and low confidence in currently practised treatment
models are also important factors relating to this help-seeking behaviour that have been found to predict a lower perceived need for treatment in young adults (Van Voorhees et al., 2006). In short, there appears a need for further development of appropriate treatments for adult early-onset depression, a sentiment echoed from expert working groups who have recommended the continued development of psychological therapies for this purpose, or a refinement of those that already exist (Callahan, Liu, Purcell, Parker & Hetrick, 2012; Hollon et al., 2002)

**Reminiscence-Based Therapy as a Novel Intervention for Adult Early-Onset Depression**

Reminiscence-based therapy may represent one such psychological intervention that could be developed for use in the treatment of adult early-onset depression. Reminiscence refers to the use of autobiographical memory to recall personal experiences, such as past events, relationships, and achievements, and may be spontaneous or intentional, and privately experienced or shared with others (Bluck & Levine, 1998). In addition, reminiscence is understood to intrinsically involve an implicit or explicit analysis of the experiences represented in the autobiographical memories that are recalled (Staudinger, 2001). For the purposes of this thesis, reminiscence will be defined as above, and the term reminiscence-based therapies will refer to any therapeutic activity or intervention that utilises reminiscence as a core component. Life review, a term sometimes used interchangeably with reminiscence, will refer specifically to the systematic use of reminiscence to integrate and reflect on events across the lifespan in a temporally-ordered manner.

Reminiscence-based therapies involve the use of individuals’ own life experiences in oral, written, or combined form, to improve psychological well-being (VandenBos, 2007). Therapists help individuals to explore and utilise their memories of
events, circumstances, relationships etc. for the purpose of fostering a more adaptive sense of self-esteem, self-efficacy, meaning in life, and self-continuity. Reminiscence-based therapies are implemented for a range of purposes, and have been shown to be effective in improving some cognitive abilities in individuals suffering dementia (Cotell, Manenti, & Zanetti, 2012), increasing well-being in the terminally ill (Ando, Morita, Okamoto, & Ninosaka, 2008; Ando, Morito, Akechi, & Okamoto, 2010), and reducing subclinical anxiety (Harp, Scates, Randolph, Gutsch, & Knight, 1986; Korte, Bohlmeijer, Cappeliez, Smit, & Westerhof, 2011). Importantly, reminiscence-based therapies have also been evidenced as an effective intervention for depression, and have been demonstrated to produce large effect sizes (Pinquart & Forstmeier, 2012). Historically, these therapies have been used almost exclusively for depression in older adult populations. However, no clear rationale against adopting them for use with young adults has been offered to date, and various lines of developmental, cognitive, and clinical evidence converge to indicate this form of intervention may well be appropriate and useful for adult early-onset depression (See Chapter 3, Hallford & Mellor, in press). Indeed, young adults receiving psychotherapy have indicated that exploring their life and using this to find out how they want to live and how they will form their future lives is viewed as “a way out of depression” (von Below, Werbart, & Rehnberg, 2010).

Conclusion and Aim

To summarise, the adult early-onset of depression is associated with greater severity, chronicity, and psychosocial impairment relative to later onset. Although some efficacious treatments are currently available, not all individuals respond to them, and the development of additional treatments would expand the range of intervention options available to this population. Reminiscence-based therapies represent one potential treatment that could be investigated, however, to date there has been virtually no
examination of this possibility. Clinical research on the effectiveness of reminiscence-based therapy for attenuating symptoms in adult early-onset depression, including study of its mechanisms of change, and the experience of younger adults in this therapy, would assist in clarifying its appropriateness for this task. Against this background, the aim of this thesis is to explore the feasibility and utility of reminiscence-based therapy for adult early-onset depression. The remainder of this thesis describes a series of studies that collectively aim to answer the question of whether or not reminiscence-based therapy might be effective in treating depression in young adults, and the process through which it might produce positive change. References for the preceding content are provided at the end of the thesis. Because some of this work is published, in press, or under review, in the chapters that follow there may be elements of repetition.
Chapter 2

Description of Publications and Studies

In order to study reminiscence-based therapy for depression in young adults, a research programme incorporating quantitative and qualitative research methods was carried out. This began with a review of reminiscence and its functions, the theoretical basis of reminiscence-based therapies and their effectiveness in the treatment of depression, and the building of a rationale for their use in young and middle-aged populations. Empirical research was then conducted into the mechanisms of change that are hypothesised to underlie cognitive-reminiscence therapy. Following this, a clinical trial of reminiscence-based therapy for young adults with depressive symptoms was instigated in a community youth mental health service. To assess the effects of this therapy, quantitative data were collected on depressive symptoms and the hypothesised mechanisms of change, and interviews were conducted with participants to examine their experience receiving this therapy. As part of the aforementioned research programme, a total of five studies were conducted. This resulted in four articles that were submitted to peer-reviewed journals, as well as pilot data from the clinical trial which has been written up as part of this thesis. This chapter will describe the purpose and content of these five studies.

Study 1: Reminiscence-Based Therapies for Depression: Should They be Used Only with Older Adults? (Hallford, D. J., & Mellor, D., Accepted for publication and in-press in the journal Clinical Psychology: Science and Practice)

Prior to planning and conducting new empirical research into reminiscence-based therapy for adult early-onset depression, a review was conducted of the research literature. This review aimed to collate and present research on reminiscence functions
and reminiscence-based therapies, with a focus on evidence that was deemed relevant to the study of reminiscence-based therapy for use with young and middle-aged adults. The article (Chapter 3) begins with an introduction to reminiscence, and then reviews evidence relating to the various functions that reminiscence serves, and its correlates with mental health and well-being. Reminiscence-based interventions and their effectiveness are then reviewed, with a particular focus on recent evaluations of structured reminiscence-based therapies that utilise pre-existing therapeutic frameworks for the treatment of depression. The exclusive use of reminiscence-based therapies with older adult populations is then challenged, and various lines of evidence are reviewed that indicate these approaches may be useful for reducing depression symptomatology in adult early-onset depression. Considerations for the use of reminiscence-based therapies for depression in this age group are then discussed, cognitive-reminiscence therapy is identified as a strong candidate for this purpose, and future directions for research are presented.

**Study 2: Adaptive Autobiographical Memory in Younger and Older Adults: The Indirect Association of Integrative and Instrumental Reminiscence with Depressive Symptoms** (Hallford, D. J., Mellor, D., & Cummins, R. A., Published in the Journal *Memory, 2013, Volume 21, Pages 444-457*)

Study 1 provided an introduction to the theoretical basis and evidence for reminiscence-based therapy, and provides a rationale and prelude to empirical research on cognitive-reminiscence therapy for adult early-onset depression. Despite the established effectiveness of reminiscence-based therapies, little research exists into the pathways through which adaptive reminiscence functions are related to depressive symptoms, and therefore what might underpin the effect of guided, adaptive reminiscence on depression in these therapies. The mechanisms of change underpinning cognitive-
reminiscence therapy, one of the most effective forms of these therapies, have been previously proposed (Watt & Cappeliez, 1995), but not yet empirically studied. This article (Chapter 4) reports on a study conducted to test hypothesised indirect associations between adaptive integrative and instrumental reminiscence functions and depressive symptoms. A cross-sectional study design was used with a large community sample of the Australian population. Multiple mediation models were used to test whether associations between reminiscence functions and depressive symptoms are mediated by psychological wellbeing variables. The results indicate, as hypothesised, that adaptive reminiscence is not directly associated with depressive symptoms, however, a higher frequency of adaptive reminiscence is indirectly associated with lower depressive symptoms through increases in these mediating variables. Further, these pathways were found to be consistent across younger and older adults. These findings are discussed in relation to the mechanisms of change in cognitive-reminiscence therapy and implications for future research.

Study 3: Results from Pilot Data of a Trial of Cognitive-Reminiscence Therapy for Depression in Young Adults

On the basis of rationale developed in studies one and two, a clinical trial of cognitive-reminiscence therapy for young adults with depressive symptoms was conducted. Due to time constraints, this trial was not completed at the time of writing, and therefore Chapter 5 reports on pilot data from this trial. Participants were recruited from a youth community mental health service in Melbourne, Australia and were provided with six-sessions of weekly, individual cognitive-reminiscence therapy. The primary outcome was depressive symptoms, and secondary outcomes consisted of the variables established in the previous study to mediate the association between adaptive reminiscence and depression symptoms. Details on the methodology of the study
including the procedures used in recruitment, the demographic composition of the sample, the measures used to assess outcomes, and the content and administration of the intervention itself are provided. The quantitative results are then presented using descriptive statistics and parametric statistical analyses to assess the effect of the intervention on the primary and secondary outcomes. These results indicated that cognitive-reminiscence therapy produced significant reductions in depression, and significant increases on all secondary measures of psychological wellbeing from pre to post-intervention. These results are briefly summarised, with further discussion reserved for the concluding general discussion of this thesis (Chapter 8).

Study 4: A Qualitative Study of Young Adults’ Perceptions of Reminiscence-based Therapy for Depression (Hallford, D. J., Mellor, D., & Burgat, M. E., Submitted to the Journal Psychotherapy)

Chapter 6 reports on qualitative data gathered as part of the clinical trial described in Chapter 5. The study was conducted in order to obtain a richer, phenomenologically-informed understanding of young adults’ experiences receiving cognitive-reminiscence therapy. Semi-structured interview schedules were used during individual interviews with participants following completion of the course of six sessions of therapy. The interviews aimed to investigate young adults’ perceptions of a reminiscence-based approach to therapy for depression, the perceived effects or outcomes of receiving this treatment, the process through which any change occurred, and what they found helpful or unhelpful. The data were analysed using thematic analysis, with six main themes and associated sub-themes identified. The findings indicated that participants found the intervention helpful, and experienced positive outcomes and change associated with the processes of generating new perspectives, increasing awareness of a broader life story, learning from the past to feel more confident and able to cope, and having a stronger sense of self-worth
and self-acceptance. These themes provided evidence for the positive effects of cognitive-reminiscence therapy with young adults and the processes through which these occur, and identify some potential avenues for refinement of this treatment. The findings are discussed in the context of previous research, and how they enrich understanding of young adults’ experience receiving cognitive-reminiscence therapy.

Study 5: A Therapist’s Perception of Reminiscence-Based Therapy for Young Adults with Depressive Symptoms: Clinical Observations, Challenges, and Recommendations (Hallford, D. J., & Mellor, D., Submitted to the Journal Clinical Psychology: Science and Practice)

Consistent with the general paucity of research on reminiscence-based interventions with young adults, no specific clinical guidance currently exists on the use of cognitive-reminiscence therapy for depression with this age group. While studies two, three, and four report on empirical data, the aim of Chapter 7 was to disseminate the therapist’s clinical experience of engaging in this intervention. Discussion is presented in relation to clinical observations that were made during therapy, specific challenges that arose, and recommendations for implementing this therapy with young adults. Firstly, a framework for undertaking therapeutic reminiscence work at different levels of analysis is presented, and comment made on the rationale for, and process of, eliciting specific memories. Common life events and issues that emerged as the focus of reminiscence with young adults in the trial are reviewed. Following this, the process of orienting to the mechanisms of change in cognitive-reminiscence therapy is discussed. Finally, several clinical issues and insights that emerged during the provision of this therapy are presented: contextualising emerging adulthood as a time of transition, creating continuity across individuals’ lives, the process of reflection on reminiscence, and homework adherence.
Chapter 3

Study 1: Reminiscence-Based Therapies For Depression: Should They Be Used Only With Older Adults? (Accepted for Publication and In-Press in the Journal Clinical Psychology: Science and Practice)¹

Hallford, D. J. & Mellor, D.

Abstract

Reminiscence-based therapies have been reliably evidenced to be an effective intervention for depression. However, to date their use has been restricted primarily to older adults. This article reviews empirical findings related to the various functions of reminiscence and their correlates with mental health. Reminiscence-based interventions and their effectiveness are then reviewed, with a particular focus on recent evaluations of structured reminiscence-based therapies that utilise pre-existing therapeutic frameworks for the treatment of depression. The exclusive use of reminiscence-based therapies with older adult populations is then challenged, and it is argued that these approaches may be useful for reducing depression symptomatology for young and middle-age adults also. Considerations for the use of reminiscence-based therapies in these populations are discussed, and future directions for research are presented.

¹ references are presented at the end of the chapter
Reminiscence refers to the recall of personal experiences, such as past events, relationships, and achievements, which may be spontaneous or intentional, and privately experienced or shared with others (Bluck & Levine, 1998). In addition to the recount of factual details, reminiscence can be understood as incorporating some level of implicit or explicit interpretation of autobiographical memories, and can relate to single life events, sequences of events, central life topics, or one’s life as a whole (Staudinger, 2001a).

Historically, reminiscence was viewed as an indication of dysfunction and cognitive decline that occurred primarily in individuals in late life (Kaminsky, 1984). Butler, in his seminal 1963 article, however, reinterpreted reminiscence as being a universal product of aging, and a life-review process that is triggered by the increasing realisation of mortality and impending death (Butler, 1963). Importantly, he also observed that reminiscence is not a wholly negative phenomenon, but one that may also have adaptive functions and positive outcomes for individuals. These observations broadened the understanding of reminiscence and its relationship with psychological well-being, and marked the beginning of a programme of research into reminiscence that continues to this day.

One outcome of the increased research focus on reminiscence has been the challenge to views that reminiscing is more important or relevant for older adults than younger people (Merriam, 1993; Parker, 1995, 1999; Webster, 1994, 1999), a challenge supported by consistent research findings that reminiscence is common across the adult life-span (Webster, Bohlmeijer, & Westerhof, 2010). In light of this, reminiscence is now understood to be an important cognitive process that occurs for all adults, and the tendency for researchers to focus solely on older adult populations therefore appears to be outdated, and no longer justified.

Reminiscence-based interventions, involving the purposeful use of autobiographical memory as a core component of therapy, have also received increasing attention over time. Most notable has been the application of reminiscence-based
interventions for depression, which are now recognised as an evidence-based treatment approach for this disorder (Scogin, 2006). However, consistent with outdated notions of reminiscence as a pursuit or domain that is exclusive to older adults, the application of reminiscence-based interventions for depression has been restricted primarily to older adults, with participant samples consistently reported as having mean ages of more than 60 years (Bohlmeijer, Roemer, Cuijpers, & Smit, 2007; Bohlmeijer et al., 2003). To date, published evaluations of this therapeutic approach to treat depression in young or middle-aged adults have been extremely scarce, and typically concerned with very specific populations, such as persons living with HIV disease (Vaughn & Kinnier, 1996) or wives of alcoholics (Cho, 2008). Given this, the hypothesis that these approaches are effective for individuals in early or middle-adulthood remains virtually untested. This lack of investigation is particularly striking given that numerous studies have demonstrated that these interventions can significantly reduce depressive symptoms, with reported effect sizes comparable to contemporary cognitive-behavioural and psychopharmacological treatment approaches (Bohlmeijer et al., 2003; Pinquart, Duberstein, & Lyness, 2007; Pinquart & Forstmeier, 2012).

In this article we will review empirical findings on the various types of reminiscence and their correlates with mental health. Reminiscence-based interventions and their effectiveness will then be discussed, with a particular focus on recent evaluations of structured reminiscence-based therapies that utilise pre-existing therapeutic frameworks for the treatment of depression. The exclusive use of reminiscence-based therapies with older adult populations will then be challenged, and it will be argued that these approaches are likely to be useful for reducing depression symptomatology for adults across the life-span.
Types of Reminiscence

Over time, the conceptualisation of reminiscence has progressed from the simple recall or reliving of memories, to comprising of various forms with distinct purposes that can be either positive and adaptive, or negative and maladaptive. While some earlier taxonomies of reminiscence tended to be oversimplified (see Coleman, 1974; LoGerfo, 1980; McMahon & Rudick, 1967; Merriam, 1993; Romaniuk & Romaniuk, 1981), and have not been widely utilised, several overlapping taxonomies have emerged as useful, and commonly employed as a basis for theory and research. Watt and Wong (1991) proposed six different types of reminiscence on the basis of a content analysis of qualitative data derived from 460 participants. Extending on this work, Webster (1993) developed the Reminiscence Functions Scale (RFS) as a quantitative measure of the frequency with which individuals reminisce for different purposes. Using factor analysis on a pool of statements beginning with the stem ‘When I reminisce it is to…’, and followed by statements such as, “reduce boredom” or “help me plan for the future”, Webster identified eight factors, or purposes of reminiscence. Six of these factors related to those described by Watt and Wong (1991), while two new factors were added: death preparation, which refers to using the past to foster an accepting attitude of mortality, and intimacy maintenance, which refers to cognitive and emotional resurrections of significant others who have died.

Confirmatory factor analyses have replicated and confirmed the reliability of this eight factor structure (O’Rourke, Carmel, Chaudhury, Polchenko, & Bachner, 2012; Robitaille, Cappeliez, Columbe, & Webster, 2010; Webster, 1997, 2003), providing statistical validity for this typology of reminiscence, and demonstrating it to be a useful measure of the frequency with which people utilise various types of reminiscence. While these typologies demarcate types of reminiscence by their purpose it is important to note these are not necessarily mutually exclusive, and the act of reminiscing may concurrently serve several purposes. Higher-order categorisations of these reminiscence types have
also been proposed, with identity, problem-solving, and death preparation purposes combined as a self-positive factor, teach/inform and conversation purposes as a pro-social factor, and boredom reduction, intimacy maintenance, and bitterness revival as a self-negative factor (e.g. Cappeliez & O’Rourke, 2006; O’Rourke, Cappeliez, & Claxton, 2011; O’Rourke et al., 2012). Bluck and Alea (2002) have also proposed a further typology of the reasons why people reminisce, identifying purposes relating to self-direction (planning for present and future behaviour), self-continuity (to support and promote a sense of coherency of the self extended over time), and social-bonding (developing, maintaining, and enhancing relationships with others). They have developed a scale to measure the frequency of these uses of reminiscence (the Thinking About Life Experiences questionnaire: TALE; Bluck & Alea, 2011) (see Table 1 for the names and proposed purposes of the aforementioned reminiscence taxonomies).

**Types of Reminiscence and their Associations with Mental Health**

A series of studies have provided evidence for the relationships between the various types of reminiscence and mental health. Initially, Wong and Watt (1991) found that in a sample of 171 men and women (ranging in age from 65 to 95) higher levels of integrative and instrumental reminiscence were associated with more successful aging, as defined by higher than average ratings of mental health, physical health, and adaptation to aging. Subsequent research utilising the RFS with older adult populations has found that reminiscence for self-positive purposes is associated with lower levels of psychiatric distress and higher levels of psychological well-being, while reminiscence for self-negative purposes appears to be maladaptive, and is associated with higher levels of psychiatric distress and lower levels of psychological well-being (Cappeliez & Robitaille 2010; Cappeliez & O’Rourke, 2006; O’Rourke et al., 2011). Other studies utilising the RFS have shown that bitterness revival reminiscence is significantly positively correlated with scores on the Beck Depression Inventory-II (Beck, Steer, & Brown, 1996; Cully,
LaVoie, & Gfeller, 2001) and the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977; Korte et al., 2011b). Similarly, Cappeliez, O’Rourke, and Chaudhury (2005) found that after controlling for personality traits, reminiscing for bitterness revival and boredom reduction purposes predicted psychiatric distress as measured by the General Health Questionnaire (Goldberg, 1978), a measure of non-psychotic mental illness. A qualitative study of African-American people over the age of 60 ($n = 52$) found that, when reminiscing, participants reported identity and problem-solving reminiscence as having adaptive and positive functions, while reminiscence for bitterness revival, boredom reduction, and death preparation purposes were viewed as negative and as leading to depression (Shellman, Ennis, & Bailey-Addison, 2011).

Although few direct associations have been reported for teach-inform and conversation purposes, some research has shown positive correlations with happiness (Webster, 1998; Webster & McCall, 1999) and life satisfaction (Cappeliez et al., 2005), and an indirect association with psychological well-being through self-positive and self-negative reminiscence (O’Rourke et al., 2011).

More recently, researchers have also investigated mediating relationships between types of reminiscence and mental health. Hallford, Mellor, and Cummins (2013) found a higher frequency of identity reminiscence was indirectly associated with lower depressive symptoms through increases in meaning in life, self-esteem, and optimism, while a higher frequency of problem-solving reminiscence was indirectly associated with lower depressive symptoms through increased primary control and self-efficacy. Utilising structural equation modelling, Korte, Cappeliez, Bohlmeijer, and Westerhof (2012) found that reminiscing for negative purposes (bitterness revival and boredom reduction) was related to higher reported depressive and anxiety symptoms, however, this relationship was fully mediated by reductions in mastery and meaning in life. Cappeliez and Robitaille (2010) reported that reminiscence for self-positive and self-negative purposes predicted psychological well-being at a follow-up time-point, and that these effects were
completely mediated by assimilative and accommodative coping. From these findings it appears that the effects of reminiscence on mental health are likely operate in an indirect manner, by influencing psychological resources related to self-perception.

Table 1.

*Reminiscence types and purposes proposed by Watt and Wong (1991), Webster (1993), and Bluck and Alea (2011).*

<table>
<thead>
<tr>
<th>Watt and Wong</th>
<th>Webster</th>
<th>Bluck and Alea</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrative</td>
<td>Identity</td>
<td>Self-continuity</td>
<td>To provide meaning and continuity of the self, and reconcile past negative experiences</td>
</tr>
<tr>
<td>Instrumental</td>
<td>Problem-Solving</td>
<td>Self-direction</td>
<td>To draw on past experiences in planning, coping, and solving current problems</td>
</tr>
<tr>
<td>Transmissive</td>
<td>Teach-inform</td>
<td>/</td>
<td>To instruct or share wisdom, values and cultural knowledge</td>
</tr>
<tr>
<td>Escapist</td>
<td>Boredom Reduction</td>
<td>/</td>
<td>To dwell on the past to escape a current lack of engagement or disillusionment</td>
</tr>
<tr>
<td>Obsessive</td>
<td>Bitterness Revival</td>
<td>/</td>
<td>To recall negative memories of unresolved conflicts or adverse events</td>
</tr>
<tr>
<td>Narrative</td>
<td>Conversation</td>
<td>Social-bonding</td>
<td>To describe details of past events as a means of developing, maintaining, and enhancing social bonds</td>
</tr>
<tr>
<td>/</td>
<td>Death Preparation</td>
<td>/</td>
<td>To accept mortality</td>
</tr>
<tr>
<td>/</td>
<td>Intimacy Maintenance</td>
<td>/</td>
<td>To maintain memories of significant others that have died</td>
</tr>
</tbody>
</table>

The research discussed above provides compelling evidence of the associations between reminiscence and mental health, and suggests that some types of reminiscence
appear to be primarily positive and adaptive (i.e. integrative/identity, instrumental/problem-solving), some negative and maladaptive (i.e. obsessive/bitterness revival, escapist/boredom reduction, and intimacy maintenance of significant others who have passed) and some with positive or negative functions dependent on the context or life stage of individuals (death preparation). Despite advances in our understanding of these correlates, there is much still to be done. Most salient is the need for further study with young and middle-aged populations, to identify any possible age-related patterns in these relationships. Furthermore, as previous work has been largely cross-sectional in nature, more longitudinal research to establish causal associations between the types of reminiscence and mental health would also be useful. Indeed, these associations do not appear to be simply uni-directional, with self-positive purposes shown to be a causal factor of higher well-being over time (Cappeliez & Robtaille, 2010; O’Rourke et al., 2011), problem-solving reminiscence as both an outcome of critical life events and predictive of subsequently lower anxiety (Korte et al., 2011b), and bitterness revival and boredom reduction as a potential outcome of depression, or both a predictor and a symptom (e.g. Cully et al., 2001; Korte, Bohlmeijer, Westerhof & Pot, 2011a).

**Reminiscence-Based Therapies**

The term “reminiscence-based therapies” refers to a heterogeneous group of psychotherapeutic interventions that target autobiographical memories as the foci of therapeutic work. Whilst the use of autobiographical memory is not a unique attribute of reminiscence-based interventions, the central role that it is given serves to distinguish it from other approaches. In reminiscence-based therapies, past experiences and events are the predetermined focus of therapy, and typically a range of memories across the lifespan are discussed, rather than only those that are specific to a presenting problem. Instead of necessarily relating past experiences to the present or future, they are focussed upon in their own right. The methods used to elicit and engage with these personal memories vary
widely across interventions, for example, sharing past experiences in a group or undergoing an individually-guided life-review.

Recently, pragmatic distinctions have been made between three different types of reminiscence-based interventions dependent on their therapeutic aims and processes (Webster et al., 2010; Westerhof et al., 2010). *Simple reminiscence* involves largely unstructured autobiographical storytelling and spontaneous reminiscence which is usually facilitated in groups. Some examples of purposes for which simple reminiscence has been effectively used are to increase the life-satisfaction of nursing home residents (Cook, 1998), and to reduce subclinical anxiety amongst older adults (Harp Scates, Randolph, Gutsch, & Knight, 1986). *Life-review* involves systematically reviewing the life-span and evaluating and integrating memories to gain insight into one’s development, and to reflect on one’s life. The focus in life-review is on self-acceptance and the creation of a sense of cohesion and continuity in one’s life. This form of intervention has been shown to be effective, for example, in increasing the life satisfaction and psychological well-being of homebound individuals in late life (Haight, 1988), and increasing spiritual well-being in the terminally ill (Ando, Morita, Okamoto, & Ninosaka, 2008; Ando, Morito, Akechi, & Okamoto, 2010). Finally, *life-review therapy* is an approach used predominantly in psychotherapeutic settings to treat psychopathology, most commonly depression (e.g. Korte, Bohlmeijer, Cappeliez, Smit, & Westerhof, 2011; Watt & Cappeliez, 2000). Guided and purposeful therapeutic techniques are used by therapists when reviewing individuals’ past lives to reframe and reinterpret memories of past failures, guilt, or feelings of worthlessness, to increase their sense of meaning and identity cohesion, and to increase their coping skills by drawing on effective problem-solving from the past. The emphasis is therefore on positively changing individuals’ perceptions of themselves and increasing their sense of self-efficacy to reduce depressive symptoms and improve adaptive functioning.
Pinquart and Forstmeier (2012) have provided the most comprehensive meta-analysis to date of the effect of reminiscence-based therapies on depressive symptoms. Across 92 samples they found significant controlled pre-post treatment effects of $g = 0.57$, which were maintained at follow-up ($g = .50$). Moderator analyses showed that studies that utilised participant groups with clinically significant depressive symptomatology reported higher effect sizes ($g = 1.09$). Small-to-moderate pre-post effect sizes were also reported for other well-being variables such as self-esteem ($g = .20$), purpose in life ($g = .48$), mastery ($g = .40$), and life-satisfaction ($g = .22$). Consistent with the proposal that different types of reminiscence-based interventions have different therapeutic goals, and thus predicted outcomes, reductions in depressive symptoms were found to be significantly stronger for structured and theoretically-guided interventions ($g = 1.28$) than for those involving simple reminiscence ($g = 0.52$) or life-review ($g = .31$). These findings are consistent with those of Bohlmeijer et al.’s (2003) prior meta-analytic review, wherein an overall effect size for reminiscence-based therapies of $d = .84$ across 20 studies was reported, with higher effect sizes for participants with severe depressive symptoms ($d = 1.23$), and larger effects for theory-based, structured therapy ($d = .92$) relative to simple reminiscence ($d = .46$).

These findings indicate that for reminiscence-based therapies to be most effective in reducing depressive symptoms they should be implemented in a systematic and theoretically-guided way. Congruent with this, treatment approaches that explicitly draw on the adaptive functions of integrative and instrumental reminiscence and utilise structured reminiscence within existing therapeutic frameworks have been formulated. These represent the latest and most sophisticated clinical advancements in reminiscence-based intervention.

**Narrative-Reminiscence Therapy.** Due to its focus on life-stories, narrative therapy has been recognised as a useful framework for reminiscence-based intervention
(Bohlmeijer, Kramer, Smit, Onrust, & Marwijk, 2009). Narrative therapy refers to social constructionist and constructivist approaches to the process of therapeutic change which are based on the idea that problems are manufactured in social, cultural, and political contexts (White & Epson, 1990). Some central aims of narrative therapy are seeing problems as external to the person, exploring the contexts in which these problems occur and identifying values and norms inherent to them, distinguishing between experiences of events and the meanings or interpretations that are made of them, identifying unique or contradictory events or experiences, and creating alternative stories or ways of understanding stories that reframe issues and highlight personal strengths (Carr, 1998; Morgan, 2000; White, 2007). The integration of narrative therapy with structured reminiscence promotes a more systematic focus on individuals’ experiences over their past life and how it might relate to the present, rather than predominantly examining the present time and themes that clients introduce. Negative life events are reconstructed and positive life events are emphasised, including those that may have been forgotten or obscured, a common occurrence for depressed individuals (Williams et al., 2007). Near the end of therapy, attention is focused on the near future so that individuals can translate their reinterpreted identity into concrete actions (Korte, Bohlmeijer, & Smit, 2009).

An initial trial of narrative-reminiscence therapy (Bohlmeijer et al., 2009) with 108 participants (mean age = 63.8 years) with elevated depressive symptoms showed significantly lower levels of depression as measured by the CES-D compared to a control group, with a small-to-moderate effect size of \( d = 0.37 \). At a five-month follow-up these gains were maintained \( (d = 0.39) \). A subsequent randomised-controlled trial of the same intervention with a larger sample \( (n = 202, \text{mean age} = 63 \text{ years}) \) found significantly lower levels of depressive symptomatology compared with a care-as-usual condition on the CES-D at post-treatment \( (d = 0.60) \) and three-month follow-up \( (d = 0.50) \) (Korte et al., 2011a).
Creative-Reminiscence Therapy. Bohjmeijer, Valenkamp, Westerhof, Smit, and Cuijpers (2005) have combined reminiscence with creative therapy as an early intervention for depression. Rather than challenging or reinterpreting cognitions, participants engage in non-verbal and creative expression tasks such as visualisation, poems, and drawings which are used in conjunction with structured reminiscence aimed at specific themes such as childhood houses, norms and values, and working careers. This process allows for the creation and discovery of symbolic representations of meaning in life, and provides avenues for self-expression that may be less complicated than oral-based psychotherapy, and thus more suitable for certain individuals.

In a pilot study of this intervention with 79 older adult participants (mean age = 66 years) significant decreases in depressive symptoms were found, with a mean reduction of 3.4 points on the CES-D (Bohlmeijer et al., 2005). After a revision of this intervention to include more verbal exchange and problem-solving techniques, Pot et al. (2010) conducted a large, randomised controlled follow-up trial with 171 participants (mean age = 64.3 years), and reported significant reductions in depressive symptoms on the CES-D with a controlled effect size of $d = 0.58$.

Cognitive-Reminiscence Therapy. Watt and Cappeliez (1995) have provided detailed frameworks for the use of integrative reminiscence within a Beckian cognitive therapy model of depression (Beck, 1976; Beck, Rush, Shaw, & Emery, 1979) and instrumental reminiscence within a stress and coping model of depression (Billings & Moos, 1982, 1985), utilising problem-solving therapy techniques (Nezu, 2004). Through guided-integrative reminiscence, individuals positively restructure their perspective on past events, conflicts, and views of the self to identify a pattern of continuity between the past and present, and to find meaning and worth in their life as they have lived it (Webster & Haight, 1995). Past negative experiences and maladaptive appraisals which may be linked to core schema are reinterpreted in a more rational and adaptive manner.
using cognitive reattribution techniques, while positive experiences are also emphasised. Individuals build meaning in life by incorporating an integrated and positive narrative of themselves in the context of past events. Through guided-instrumental reminiscence, individuals recall examples of re-prioritisation and compromise in their life and reinterpret these experiences as part of a process of change and response to challenge, rather than threat or failure. Past and present life goals and accomplishments are reviewed and these are threaded together cohesively on a more global level. Particular examples of when challenging and difficult situations were successfully coped with are drawn upon to help individuals increase their sense of self-efficacy and to foster a problem-solving orientation to stressors rather than one of threat, avoidance, and helplessness (Aldwin & Revenson, 1987). Past effective coping strategies are used to provide solutions to current or future situations, and are broken down into specific strategic steps to be analysed and applied.

Watt and Cappeliez (2000) evaluated these intervention frameworks by randomising 26 moderately-to-severely depressed older adults (mean age = 66.8 years) to either an integrative reminiscence therapy condition, instrumental reminiscence therapy condition, or an active control condition that involved discussion of topics of concern to contemporary older adults. After six weekly sessions of group therapy and a single follow-up session at six weeks and three months post-treatment, 58% of participants in the integrative condition and 56% of participants in the instrumental reminiscence condition had shown clinically significant improvement in depressive symptoms on the Geriatric Depression Scale-30 (GDS-30; Yesavage, 1983), denoted by post-treatment scores that fell inside the functional population range. The reported effect sizes were $d = 0.86$ for integrative reminiscence and $d = 0.81$ for instrumental reminiscence. At the three-month follow-up, at which the Hamilton Rating Scale for Depression was used (Hamilton, 1967), 100% of participants in the integrative condition and 78% of participants in the instrumental condition had shown clinically significant improvements.
Effect sizes were $d = 0.96$ for integrative reminiscence and $d = 0.89$ for instrumental reminiscence. No participants in the active control condition showed clinical improvements on measures of depression.

Karimi et al. (2010) conducted a replication of this study with 29 older adult participants in a nursing home (mean age = 70.5 years) and reported mean reductions in depressive symptoms across all conditions on the Geriatric Depression Scale-15 item version (GDS-15; Sheikh & Yesavage, 1986), and effect sizes of $d = 1.66$ for the integrative, $0.73$ for the instrumental, and $0.41$ for the active control condition. Karimi et al. suggest that the relatively greater effectiveness of integrative reminiscence in this trial was likely due to individuals in the nursing home context being near the end of their life, and thus predominantly focussed on issues of meaning in life and self-worth. No follow-up data were obtained from participants.

Combining integrative and instrumental reminiscence therapy approaches, Cappeliez (2002) reported a non-controlled trial with older adults ($n = 16$, mean age = 72 years) which found significant reductions in depressive symptomatology on the GDS-30, with an effect size of $d = 1.09$. No follow-up data were reported. Although not explicitly utilising Watt and Cappeliez’s (1995) framework, Shellman, Mokel, and Hewitt (2009) evaluated the effect of guided integrative reminiscence with cognitive therapy and problem-solving techniques in a sample of 56 older African Americans (mean age = 72.6 years) with subclinical depressive symptoms. Participants were randomised to integrative reminiscence, general health education, or no intervention control conditions. Following treatment, depression scores in the reminiscence condition were found to be significantly lower on the CES-D than in the other conditions, with a reported effect size of $d = 0.61$. Again, no follow-up data were reported.

The above review demonstrates that effective reminiscence-based therapy can be delivered within a number of frameworks, although study replications with follow-up data are needed to establish the longer-term outcomes. Given the consistent findings
showing their effectiveness, and the fact that reminiscence is engaged in by adults of all ages, it seems surprising that these interventions have not yet been trialled for the treatment of depressive symptoms in young or middle-aged adults.

An Examination of the Rationale for the Use of Reminiscence-based Therapy in Older Adult Populations

The dominant theoretical rationale for the use of reminiscence-based therapy with individuals in late life appears to be rooted in the notion that reminiscence plays its most predominant role in psychosocial development amongst older adults, and in the process of successful aging in late life (Butler, 1974; Erikson, 1980). However, evidence shows that reminiscence does not appear to be more frequent among individuals in late life (Webster et al., 2010). Whether or not it is a relatively more important process for psychosocial development in older adults, compared to young or middle-aged adults, is a more complex question, and one that does not appear to be supported by current empirical evidence.

Enthusiasm for the use of reminiscence-based therapies for older adults sprang from Robert Butler’s (1963, 1974) initial premise that the life-review was a universal occurrence in older people and was associated with mental health disorders in this age group. Given that Butler’s work was primarily directed towards older adults, and conceptually connected with psychosocial processes occurring in later stages of life, the focus of burgeoning clinical theory and therapeutic application of reminiscence was predominantly on this population. In addition to this, much of the perceived utility of reminiscence-based interventions for older adults has been based on Erik Erikson’s (1980) theory of the stages of psychosocial development, with numerous authors explicitly or implicitly referring to this as a basis for intervention (e.g. Afonso, Beueno, Loureiro, & Pereira, 2011; Arean et al., 1993; Butler, 1963, 1974; Cook, 1991, 1998; Haight & Burnside, 1993; Holland et al., 2009; Wu, 2011). Erikson posited that
individuals advance through hierarchically ordered, sequential stages of psychosocial development over the life cycle (however, Erikson did indicate that these psychosocial issues are not wholly exclusive to specific age groups, and were likely to be somewhat relevant across the lifespan). The final and primary developmental goal of older adults is to look back on their lives to develop ego integrity, described as a reliable sense of identity and belief that one’s life has been significant and meaningful. This is contrasted with the experience of despair resulting from the perception of disappointments and unachieved goals in life when individuals are confronted with impending mortality. While Erikson believed that the process of achieving ego integrity occurred throughout the life cycle, he proposed that it is in the period of older age (approximately 65+ years) that it becomes the primary development task (Erikson, 1982), and that the willingness to remember and review life is old-age specific (Erikson, Erikson, & Kivnick, 1986).

Supporting the centrality of Erikson’s concept of ego integrity in healthy psychosocial development, studies with older adults have found correlations between levels of ego integrity and well-being (James & Zarrett, 2005; Torges, Stewart, & Duncan, 2009), regret resolution (Torges, Stewart & Duncan, 2008), life satisfaction (Torges et al., 2008), and low mood state (James & Zarett, 2005).

Although this perspective has gained currency with many gerontological researchers, it has been challenged on the grounds that the positive psychological components of ego integrity (such as consistency in identity, meaning in life, and positive self-esteem; Wong, 1995) are equally as important in any stage of the adult lifespan (for example, see Melia, 1999; Pasupathi, Weeks, & Rice, 2006; Westerhof et al., 2010). Indeed, there is little evidence that the associations between ego integrity and psychological well-being are comparatively stronger or more important for older adults than for young or middle-aged adults. Moreover, studies have generally not supported the view that ego integrity increases with age (Hannah et al., 1996; Helm, 2000; Leidy & Darling-Fisher, 1995; Ryff & Heincke, 1983; Sneed, Whitbourne, & Culang, 2006; Tesch
1985; Whitbourne et al., 1992), indicating that this is not a psychological variable that typically becomes stronger as a product of normal development and aging (for an exception to this see Darling-Fisher & Leidy, 1988). Furthermore, evidence shows that not all older adults actually review their life through reminiscence, and that these processes do not necessarily occur normatively in older age (Fitzgerald, 1995; Merriam, 1993). Given these findings, Erikson’s late-life developmental tasks may not always be the most appropriate theoretical foundation for reminiscence-based interventions, or a valid reason for the focus of reminiscence therapies to be limited to individuals in late life.

It may also be that the rationale for the use of reminiscence-based interventions exclusively with older adults is somewhat based on a common understanding of its effectiveness in this population. Although effective it may be, there is no evidence to suggest it is uniquely or even incrementally more effective for older adults when compared to those who are young or middle-aged. Evidence showing that it is effective among older adults does not reduce the possibility that it may also be effective with younger populations, nor does the absence of trials with young or middle-aged adults provide evidence of a lack of effectiveness in this age group.

A telling finding from moderation analyses on outcome studies of reminiscence-based therapy has been that age is not a prognostic factor for changes in depression following treatment (Bohlmeijer et al., 2005; Bohlmeijer et al., 2009; Korte et al., 2011a; Pot et al., 2010). While the age range of participants in these studies has only ranged between 51 and 90 years (with samples means approximating 65 years), the findings show that adults in earlier stages of life (< 65 years of age) do benefit from this type of psychotherapy. The fact that treatment effects are not stronger for adults in the higher age range of these samples refutes the notion that reminiscence becomes a more relevant or effective therapeutic tool as adults enter, and progress through, late life. Recent meta-analytic findings also show that therapeutic effects on depression do not differ between
older adults and young or middle-aged adults (Pinquart & Forstmeier, 2012), although notably there were very few studies available for this comparison.

**Why Reminiscence is an Adaptive Life-Span Phenomenon**

An emerging trend among theorists has been to view reminiscence as a lifespan phenomenon, rather than a psychosocial process engaged in by the discrete category of older adults. Research has found that interpretations of autobiographical memories articulating desires, emotions, and beliefs emerge during middle-to-late adolescence (Habermas & Bluck, 2000; Pasupathi & Wainryb, 2008). These interpretations are then used consistently across the adult life-span to integrate memories of events with a sense of self (Bauer, McAdams, & Sakaeda, 2005; McLean, Pasupathi, & Pals, 2007; Pasupathi, 2006) and for the purposes of learning (Bauer et al., 2005; Bluck & Glück, 2004). Accordingly, reminiscence has been found to be common across the adult life-span, with studies reporting that young adults, and even adolescents, reminisce as much or more frequently than older adults (e.g. Hyland & Ackerman, 1988; Merriam & Cross, 1982; Parker, 1999). Numerous studies utilising the RFS have also shown that there are no age differences in the total amount of reminiscence reported by adults (Webster 1993, 1994, 1995, 1998; Webster & Gould, 2007; Webster & McCall, 1999).

Given the commonality of reminiscence across age, a number of theorists have pointed to the general psychosocial utility of this process for all adults. Applying Atchley’s (1989) continuity theory to reminiscence, Parker (1995, 1999) proposed that reminiscence provides a mechanism by which individuals can adapt to changes that occur across the entire adult lifespan. To preserve a psychological continuity in internal (e.g. meaning in life, identity) and external (e.g. social behaviour and circumstances) structures, changes that occur in individuals’ lives are ordered and interpreted in the context of past experiences of themselves and the world. Although limited, research has provided support for the notion that both young and old adults reminisce during times of change (Melia, 1999; Parker, 1999), and that integrative (Merriam, 1993; Quackenbush
& Barnett, 1995) and problem-solving (Korte et al., 2011a) reminiscence increases during or following major life events. Similarly, on the basis of a review of empirical literature Pasupathi et al. (2006) discuss how the successful management of life transitions, and the effect this has on individuals’ sense of identity and self-efficacy, appear to be influenced by the types of stories people construct about transition events through reminiscence. The notion of an ‘extended self’ proposed by Neisser (1988) further articulates how reminiscence serves as a mechanism to combine knowledge of the self in the past and present, and extend this into the future.

In addition to uses that are generalised across the adult lifespan, reminiscence can be viewed as a social-cognitive process that serves different functions dependent on age (Staudinger, 2001). In young-adulthood, individuals begin the developmental tasks of forging their self-concept, formulating longer-term goals and plans, and constructing meaning in their life. The notion that reminiscence is a mechanism to preserve identity and self-efficacy during transition appears particularly pertinent for young adults then, who are likely to be adopting new social, occupational, and familial roles, and experiencing increased autonomy and responsibility as a consequence of entering adulthood. In support of this, research has indicated that young adults reminisce significantly more for identity and problem-solving purposes than older adults, who comparatively reminisce more for teach-inform, intimacy maintenance (relating to memories of deceased loved ones), and death preparation purposes (Cappeliez, Lavallée, & O’Rourke 2001; Webster 1993, 2002, 2003; Webster & Gould, 2007; Webster & McCall, 1999). Research utilising the TALE has also shown that young adults, relative to older adults, have a higher reported use of reminiscence for self-continuity purposes (Bluck & Alea, 2008), and think and talk more about the past to promote self-concept clarity and continuity, and to direct future goal or task-based behaviour (Bluck & Alea, 2009). For younger adults, reminiscence-based therapies may provide a useful tool to facilitate the process of gathering insights from the past to use in the present, and to
prepare for the future. Young adults, compared to middle-aged and older adults, also show a tendency to reminiscence more for bitterness revival purposes, remembering times of distress or negative feelings (e.g. Cappeliez et al., 2001; Webster 1993, 2002, 2003; Webster & Gould, 2007; Webster & McCall, 1999). Given these memories are likely to be more recent, young adults may benefit from contextualising these experiences and reappraising them relative to the present, as well as balancing negative with positive memories. This process is likely to be particularly useful for depressed younger-adults.

In contrast, middle-aged adults are at a later stage of the life cycle, and are therefore likely to perceive themselves as having relatively more time in life behind them than ahead (Staudinger & Bluck, 2001). They also face unique challenges of consolidating various domains of life, and reappraising personal goals and their perceived success in achieving them. Given this, one purpose of reminiscence at this stage was suggested by Neugarten (1968) to be the evaluation of one’s self and one’s life through parallel consideration of the past and the time left to live. The temporal perspective of middle-aged adults, which is likely to be more balanced between past, present and future, therefore provides opportunities to conjointly reflect on past experiences that define individuals in the present, and how they can shape the future. Jung’s (1971) notion of individuation in the context of middle-adulthood is also apt here, whereby individuals’ psychological maturation leads to a change from concern with the external, normative world, to concern with the internal and personal psychological world. The importance that middle-aged adults place on internally-derived meaning and identity cohesion and continuity, in which reminiscence plays an important role, indicates the worth of reminiscence-based approaches in these populations.

To summarise, adults across the life-span utilise reminiscence to weave cohesion between their past and present, and to promote adaptive psychological and behavioural functioning. However, reminiscence may also serve differing psychosocial purposes dependent on the challenges that are faced at certain ages. Stage-based views of
psychosocial development that have been more readily adopted in prior reminiscence work may serve to obscure or preclude the potential for reminiscence-based therapies for young or middle-aged adults. On the other hand, theories that emphasise reminiscence as a lifespan process point to the utility of these interventions for adults of all ages.

**Reminiscence-Based Therapy for Depression with Young and Middle-Aged Adults**

The above discussion points to several considerations in the application of reminiscence-based therapies in younger and middle-aged adult populations. Firstly, age-dependent differences in time perspective may have important ramifications. In young adulthood, individuals have more time ahead of them in life than behind them, and this awareness of their position in the life cycle is likely to foster a more future-oriented time perspective relative to middle or older-aged adults (Carstensen, 2006). Reminiscence-based therapies in this population may require more explicit links between the past, present, and future, so as to increase the perceived relevance of exploring memories, and their use in therapy as directives. Discussing past coping experiences and their relevance to current issues, and highlighting continuity between past meaningful activity and the present and future activity may be particularly advantageous. Given the comparatively lower number of experiences that young adults have had in life, eliciting and selecting memories to discuss in therapy may be a more considered process. This is likely to be made even more difficult in light of depressed individuals’ difficulty with memory specificity (Williams et al., 2007).

Depressed individuals are more likely than those that are not depressed to identify negatively-valanced memories (Habermas, Ott, Schubert, Schneider, & Pate, 2008; Williams et al., 2007), however, as discussed above, young adults’ also report using bitterness revival reminiscence in general more frequently than other adult age groups. Therefore, when treating depression through reminiscence-based approaches in this age group having strategies to reconstruct negative beliefs about the self, the world, and the
future might be particularly necessary. Specific techniques to reframe or adaptively contextualise past experiences may be used in addition to balancing negative memories with a focus on positive, meaningful experiences. Given this, cognitive-reminiscence therapy (Cappeliez, 2002; Watt & Cappeliez, 1995) appears particularly promising for young adults, due to its focus on reappraisal of negative memories with evidenced-based cognitive-therapy techniques (Beck, 2005). Studies evaluating this type of reminiscence-based intervention have demonstrated large effects with older adults (see above), and high levels of patient-reported satisfaction (Cappeliez, 2002).

The addition of specific components of reminiscence-based therapy into courses of cognitive-behavioural therapy may also be useful. A concerted focus on the past may assist in strengthening the effect of schema change sought through cognitive therapy, by way of a more temporally comprehensive reinterpretation and reattribution approach across individuals’ accounts of their life. Incorporating several sessions of structured cognitive-reminiscence that focuses on past events or experiences identified by clients as important may be one way to do this. For middle-aged adults, similar considerations as those discussed are likely to apply, but to a lesser degree given their larger stock of past experiences on which to draw, and relatively attenuated future time-perspective (Carstensen, 2006).

**Future Directions**

Due to the paucity of available data, trials evaluating reminiscence-based therapy for reducing depressive symptoms in young or middle-aged adult populations would be a welcome development. Obtaining qualitative feedback from participants in these trials would further assist in increasing our understanding of young and middle-age adults’ perceptions of this approach and its relevance for them. Investigation into the underlying mechanisms of change in reminiscence-based therapy for these adult populations represents another area for future research. Some studies with older adults have provided
evidence for increases in meaning in life (Bohlmeijer, Westerhof, & de Jong, 2008; Westerhof, Bohlmeijer, & Valenkamp, 2004) and self-esteem (Lappe, 1987) following reminiscence-based therapy, while one study has shown that changes in meaning in life during reminiscence-based therapy partially predicted the variance in depressive symptoms at post-treatment, and fully predicted the variance in depressive symptoms at a six-month follow-up (Westerhof, Bohlmeijer, van Beljouw, & Pot, 2010). Another recent study found that reductions in the use of bitterness revival and boredom reduction types of reminiscence, and increases in mastery and positive thoughts, mediated the effects of reminiscence-based therapy on symptoms of depression and anxiety (Korte, Westerhof, & Bohlmeijer, 2012). Given the accumulated evidence for the indirect associations between types of reminiscence and depression through variables such as meaning in life, coping, self-efficacy, self-esteem, and optimism (Hallford et al., 2013; Korte et al., 2012; Cappeliez & Robitaille, 2010) future trials should seek to include identified mediating variables and report formal tests of mediation to delineate and clarify these mechanism of change. Indeed, changes in these variables likely represent the method through which reminiscence serves its adaptive functions. Although some findings suggest these indirect pathways may be somewhat age-invariant (Hallford et al., 2013), further investigation of any differences based on adults’ life stage, or the particular reminiscence approach used, will allow for greater specificity in treatment protocols.

**Conclusion**

Given that factors such as patients’ personality (Quilty et al., 2008), patients’ perspectives on psychological disorder and treatment techniques (Groth-Marnat et al., 2001; Herman, 1998; Reis & Brown, 1999), and patient preferences for treatment (Swift & Callahan, 2009) can affect individuals’ responsiveness to treatment (Cuijpers et al., 2008; Herman, 1998; Mohr, 1995; Quilty et al., 2008) and treatment compliance (Brogan, Prochaska, & Prochaska, 1999; Cuijpers et al., 2008), it appears there is probably no one
universal psychotherapy for depression that will be effective across all cases. As such, the continued development and augmentation of psychotherapeutic treatment approaches for depression is warranted. Reminiscence-based therapy represents one such treatment approach that has yet to be evaluated in young and middle-aged adults. Considering the robust evidence showing that reminiscence-based therapy is effective in reducing depression, as well as having additional benefits such as reducing symptoms of anxiety (Korte et al., 2011a), and increasing personal mastery (Bohlmeijer et al., 2009) and well-being (Bohlmeijer et al., 2007) among older people, this may be a particularly fruitful endeavour for future research.
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Chapter 4

Study 2: Adaptive Autobiographical Memory in Younger and Older Adults: The Indirect Association of Integrative and Instrumental Reminiscence with Depressive Symptoms. (Published in the Journal Memory)1

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Abstract

Despite the established effectiveness of reminiscence-based interventions for depression, little research exists into the pathways through which specific reminiscence functions are related to depressive symptoms. Drawing on theory of the mechanisms of change in cognitive-reminiscence therapy, the current study tests the hypothesised indirect associations of adaptive integrative and instrumental reminiscence functions with depressive symptoms and whether these relationships might differ among younger and older adults. Questionnaires were completed by a large community sample of the Australian population. Multiple mediation models were tested in two groups: younger adults (n = 730, M age = 52.24, SD = 9.84) and older adults (n = 725, M age = 73.59, SD = 6.29). Results were consistent across age groups, indicating that there was no direct relationship between these reminiscence functions and depressive symptoms, but that integrative reminiscence is indirectly associated with depressive symptoms through meaning in life, self-esteem, and optimism, and that instrumental reminiscence is indirectly associated with depressive symptoms through primary control and self-efficacy. This study provides support for the relationships between constructs underlying the proposed mechanisms of change in cognitive-reminiscence therapy for the treatment of depression, and suggests these relationships are similar for younger and older adults.

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1 references are presented at the end of the chapter
Reminiscence refers to the recall of autobiographical memories such as experiences, events, and relationships. It has been proposed that these memories play an important role in the maintenance of depression, as indicated by clinically depressed individuals’ tendency to remember relatively more emotionally-negative events than non-depressed individuals (Fromholt, Larsen, & Larsen, 1995) and to use a more depressive explanatory style when recalling life narratives (Habermas, Ott, Schubert, Schneider, & Pate, 2008). Furthermore, depressed individuals exhibit an over-general style of autobiographical memory retrieval, which has been associated with impaired problem-solving, a reduced ability to use past events and experiences to accurately predict future events, and delayed recovery from episodes of affective disorders (Williams et al. 2007).

In older adult populations, reminiscence-based therapies have been found to be effective in reducing depressive symptomatology, and are now considered an evidence-based treatment (Bohlmeijer, Smit, & Cuijpers, 2003; Scogin, 2006). Central to these interventions is the recall and integration of positive and adaptive memories, along with the reinterpretation of negative or maladaptive memories. Although the ability of earlier reminiscence-based interventions to produce reductions in depressive symptomatology was inconsistent (e.g. Cook, 1991; Stevens-Ratchford, 1993; Youssef, 1990), this has been attributed primarily to the absence of a theoretically-guided application (Webster, Bohlmeijer, & Westerhof, 2010). Bolstered by ongoing research that has clarified the functions and correlates of autobiographical memory, contemporary interventions have improved, with structured and theory-guided approaches proving to be highly effective (for a recent meta-analytic review see Pinquart & Forstmeier, 2012).

A recent trend has been to incorporate structured reminiscence into existing therapeutic frameworks for the treatment of depression. One such approach, cognitive-reminiscence therapy, has been developed by Watt and Cappeliez (1995, 2000), who specify frameworks for the use of reminiscence within a Beckian cognitive therapy model of depression (Beck, Rush, Shaw, & Emery, 1979) and stress and coping model of
depression (Billings & Moos, 1982, 1985). Clinical outcome trials that have evaluated this approach have consistently reported clinically and statistically significant reductions in symptoms, with large effect sizes (e.g. Cappeliez, 2002; Karimi et al., 2010; Watt & Cappeliez, 2000).

In cognitive-reminiscence therapy, depressive symptoms are alleviated through the guided use of adaptive integrative and instrumental reminiscence functions to promote positive appraisals of oneself and one’s life, and to increase adaptive coping (Cappeliez, 2002). Integrative reminiscence involves constructively reappraising the past through the remembering of values and goals that have provided a sense of meaning and purpose, identifying continuity between the past and present, and working through negative feelings related to past conflict or failure (Wong, 1995). The function of integrative reminiscence is therefore to achieve a sense of meaning and positive self-esteem, as well as an optimistic future-orientation, by building coherence between past and present, and challenging negative feelings and beliefs related to past events and experiences. Instrumental reminiscence involves remembering past activities involving coping, plans that were developed to resolve difficult situations, activities that were goal-directed, and instances of when one’s own goals were met or other’s goals were helped to be met (Wong, 1995). Instrumental reminiscence therefore functions as a means to invoke a sense of self-efficacy and primary control over stressors through the review of past achievements and problem-focused coping strategies.

Watt and Cappeliez’s (1995) theory of therapeutic change in cognitive-reminiscence therapy implicitly denotes the involvement of indirect relationships between thinking about the past and changes in the experience of depression. That is, rather than being directly associated with depressive symptoms, adaptive reminiscence functions affect well-being through mediating psychological variables, which in turn serve to decrease depressive symptoms. In support of this hypothesis, some studies have found that the frequency of use of integrative and instrumental reminiscence functions is
not directly correlated with self-reported depressive symptoms (Cully, LaVoie, & Gfeller, 2001; Korte, Bohlmeijer, Westerhof, & Pot, 2011) but is correlated with psychological variables such as meaning in life (Bohlmeijer, Westerhof, & de Jong, 2008; Westerhof, Bohlmeijer, & Valenkamp, 2004) and self-esteem (Pinquart, 2012), which themselves are related to depressive symptoms. Other evidence of these indirect effects comes from a longitudinal study showing that integrative and instrumental functions (when combined with reminiscence for the purpose of death preparation to form a latent self-positive reminiscence variable) predict psychological well-being through coping variables (Cappeliez & Robitaille, 2010). Finally, a randomised trial of reminiscence-based therapy (incorporating elements of creative therapy and problem-solving therapy) has demonstrated that changes in meaning in life following treatment fully predicted the variance of depressive symptom reduction at follow-up (Westerhof, Bohlmeijer, van Beljouw, & Pot, 2010). To date, however, little systematic empirical research has been conducted to test the hypothesised multiple-mediated indirect processes that underlie the hypothesised framework of cognitive-reminiscence therapy.

Further examination of the relationships between these reminiscence functions and depressive symptoms should assist our understanding of the relative direct or indirect strength of associations between these variables, and provide information to help improve the specificity of cognitive-reminiscence therapy. Whilst other delineated reminiscence functions (such as for purposes of escapism, or teaching and informing others; Webster & Haight, 1995) may also be related to depression, the increased and effective use of memory for integrative and instrumental purposes is a central therapeutic aim of cognitive-reminiscence therapy. The aim of this current study is therefore to test the hypothesised indirect relationships between these types of reminiscence and depressive symptoms. On the basis of the therapeutic framework proposed by Watt and Cappeliez (1995, 2000) and past research into the correlated and causal relationships of reminiscence functions discussed above, integrative reminiscence is proposed to be
associated with an increased sense of personal meaning, self-esteem, and optimism about the future. Instrumental reminiscence is proposed to be associated with adaptive perceptions of primary control and self-efficacy.

A further aim of this study is to investigate whether these associations are similar or different among older and younger adults. Despite reminiscence being recognised as a lifespan process (Webster et al., 2010; Westerhof, Bohlmeijer, & Webster, 2010), the majority of work in this field has focussed on older adults, with a paucity of research into reminiscence functions and correlates, and reminiscence-based interventions, in young and middle-aged adults (Hallford & Mellor, submitted). Given that young adults report reminiscing significantly more than older adults for adaptive integrative and instrumental purposes (e.g. Webster 1994, 1997; Webster & Gould, 2007), and that no age differences in the correlates of these reminiscence functions have been reported, it is likely that these indirect relationships are similar across the adult lifespan. Indeed, reminiscence is understood to be an important process in psychological functioning over the adult lifespan (Staudinger, 2001; Pasupathi, Weeks, & Rice, 2006). Therefore, identifying associations between adaptive reminiscence and positive psychological functioning in samples other than older adults would point to the potential utility of reminiscence-based approaches in the alleviation of depressive symptoms in this age group.

In summary, it is hypothesised that integrative and instrumental reminiscence functions will have no direct association with depressive symptoms, but that integrative reminiscence will have an indirect association with depressive symptoms through the mediating variables of meaning in life, self-esteem, and optimism, while instrumental reminiscence will have an indirect association with depressive symptoms through the mediating variables of primary control and self-efficacy. Further, it is expected that these associations will be similar across younger and older adults.
Method

Participants and Procedure

To achieve the aims of the study, a cross-sectional, survey-based design was used. After ethics approval was granted, the relevant measures were included as part of one of the 2011 longitudinal follow-up surveys of the Australian Unity Well-Being Index (AUWI). The AUWI is an annual survey that monitors the subjective wellbeing of the Australian population. At the time of the initial surveys, each sample is representative of the geographic distribution of the population and gender composition of Australia. All reports and raw data from these surveys are available from http://www.deakin.edu.au/research/acqol/index_wellbeing/index.htm. At the end of an initial telephone interview, participants are asked whether they would be willing to be involved with the project on a future occasion. Those who reply ‘yes’ are then followed-up with a paper questionnaire and re-contacted on an annual basis thereafter. At each follow-up longitudinal survey, some 40% of participant attrition occurs, which causes the remaining samples to become progressively older, dominated by females, and no longer systematically stratified by geographic location. Despite this imbalance, there is no reason to expect that the results of the current study will be systematically biased due to this sample composition. The current sample was derived from a mail out of 3,000 agreeable participants from previous surveys. A package consisting of a plain language statement detailing the aims of the current study, as well the paper based questionnaire is mailed out to participants. Consent is implied by return of the completed questionnaire. Of the 3,000 questionnaires that were mailed out, 1,653 were returned completed, giving a response rate of 55.1%. This sample was then split into younger adults (below 65 years of age) and older adults (65 years of age and above) based on the commonly adopted definition of older adults given in Erikson’s (1980) theory of psychosocial life stages of development. Considering the mean age of participants in studies of reminiscence processes and reminiscence-based interventions is commonly above 65 years
(Bohlemeijer et al., 2003, 2007; Westerhof et al., 2010) this was viewed as an appropriate cut-off to test for age group differences. The resulting groups differed in sample size (younger adults, n = 896 vs. older adults, n = 757), and so 757 participants were randomly sampled from the younger adult group to create equal group sizes. Following data cleaning, the final sample consisted of 1455 participants (younger adults, n = 730; older adults, n = 725). The age range of participants was 19-64 years in the younger adult group ($M = 52.24$, $SD = 9.84$) and 65-92 in the older adult group ($M = 73.59$, $SD = 6.29$). The proportion of females was 58.1% in the younger adult group and 50.1% in the older adult group.

In the younger adult group, the breakdown of relationship status was: 13.4% never being married, 2.9% separated but not divorced, 63.7% married, 8.4% divorced, 8.1% defacto or living with a partner, 3.3% widowed, and 0.3% did not respond to the question. In the older adult group, it was reported as: 5% never being married, 2.1% separated but not divorced, 57.9% married, 9.8% divorced, 2.6% defacto or living with a partner, and 22.6% widowed.

In terms of work circumstances of participants in the younger adult group: 51.5% were in full-time paid employment, 9% full-time home or family care, 14.7% retired, 2.3% full-time study, 10.8% semi-retired, 4.1% unemployed, 0.4% full-time volunteers, and 15.3% did not respond to the question. In the older adult group work circumstance were as such: 2.8% were in full-time paid employment, 1.7% full-time home or family care, 81.9% retired, 0.3% full-time study, 9.2% semi-retired, 1.3% unemployed, 0.6% full-time volunteers, and 2.6% did not respond to the question.

**Materials**

Among other items included as part of the AUWI, the questionnaire included self-report measures that were relevant to the current study. Participants responded to all
items using 11 point, end-defined scales, a format utilised in the Australian Unity Well-
Being Index that produces increased scale sensitivity (Cummins & Gullone, 2000).

**Depressive symptoms.** Depressive symptoms were measured using the seven-
item depression subscale of the 21-item short-form Depression, Anxiety and Stress Scale
(Lovibond & Lovibond, 1995), a valid and reliable method of assessing depressive
symptoms that has shown good psychometric properties (Antony, Bieling, Cox, Enns, &
Swinson, 1998). Higher scores indicate higher severity of depressive symptoms.
Previously reported Cronbach’s alphas are $\alpha = 0.94$ (Antony et al., 1998) and $\alpha = 0.88$
(Henry & Crawford, 2005).

**Reminiscence functions.** The six-item Identity and Problem-Solving subscales
from the Reminiscence Functions Scale (Webster, 1997) were used to measure the
frequency of integrative and instrumental reminiscence, respectively. These scales are
widely used and are considered to measure the use of integrative and instrumental
functions of autobiographical memory, respectively (Webster & Haight, 1995; Westerhof
et al., 2010). Higher scores indicate more frequent use of autobiographical memory for
the specified purposes. These scales have shown good psychometric properties (Webster,
1997), with previously reported Cronbach’s alphas of $\alpha = 0.94$ for Identity and $\alpha = 0.94$
for Problem-Solving (Webster, 1999).

**Meaning in life.** The existential concept of meaning in life refers to how people
comprehend, understand, or see significance in their lives, as well as perceiving
themselves as having a purpose, mission, or over-arching aim (Steger, 2009). The five-
item Presence subscale of the Meaning in Life Questionnaire was used to assess the
extent to which participants felt that their lives were meaningful (Steger, Frazier, Oishi,
& Kaler, 2006). This measure has shown good psychometric properties (Steger et al.,
and measures meaning in life as a distinct psychological construct. Higher scores on this scale indicate a stronger sense of personal meaning in life. Previous studies have reported Cronbach’s alphas ranging from $\alpha = 0.82$ to $\alpha = 0.86$ (Steger et al., 2006).

**Self-esteem.** In the current study, a shortened version of the Rosenberg Self-Esteem Scale (Rosenberg, 1965) utilising the five positively-worded items was used to assess self-esteem. The decision to shorten this scale was made so as to lessen the time burden on participants, and is consistent with previous reports of the relatively weaker psychometric qualities of the negatively-worded items and low likelihood of compromising measurement fidelity as a result of reducing the number of items (Gray-Little, Williams, & Hancock, 1997). Higher scores on this scale indicate higher levels of perceived self-worth. Previous studies have reported full-scale Cronbach’s alphas ranging from $\alpha = 0.88$ to $\alpha = 0.90$ (Robins, Hendin, & Trzesniewski, 2001).

**Optimism.** Optimism refers to the extent to which people hold favourable expectancies for the future. Again, to reduce burden on participants the present study used a shortened version of The Life Orientation Test - Revised (LOT-R; Carver & Scheier, 2003), which consisted of the three positively-worded items relating to optimism and excluding the three items that measure pessimism and four ‘filler’ items. Higher scores on this scale indicate more positive generalised outcome expectancies. The LOT-R has demonstrated good psychometric properties (Carver & Scheier, 2003), with previous research reporting a Cronbach’s alpha of $\alpha = 0.85$ for the three-item shortened version (Lai & Cummins, 2012).

**Primary control.** Perceived control refers generally to the belief in one’s ability to influence important outcomes in life (Folkman, 1984), with primary control, relating to changing the environment to achieved desired outcomes (Rothbaum, Weisz, & Synder,
Primary control was measured with a six-item scale using questions developed by Holloway (2003). Higher scores on this scale reflect higher levels of perceived primary control. Previous studies have reported acceptable reliability for these primary control items ($\alpha = 0.82$; Lai & Cummins, 2012).

**General self-efficacy.** General self-efficacy refers to perceived personal competence to deal effectively with a variety of stressful situations (Sherer et al., 1982), and is a uni-dimensional construct that underlies notions of task or domain-specific self-efficacy (Scholz, Doña, Sud, & Schwarzer, 2002). To measures this, the eight-item New General Self-Efficacy Scale (NGSE; Chen, Gully, & Eden, 2001) was used. The NGSE has demonstrated psychometric superiority over other measures of general self-efficacy (Scherbaum, Cohen-Charash, & Kern, 2006). Higher scores on this scale indicate a stronger sense of general self-efficacy. Studies have previously reported Cronbach’s alphas between $\alpha = 0.85$ and $\alpha = 0.88$ (Chen et al. 2001).

**Data Cleaning**

All data were converted to a standardised Percentage of Scale Maximum score, which recodes all responses onto a 0-100 scale. Missing data analyses revealed that no variables were missing more than 1.6% of responses, and estimation maximization was used to replace missing values in accordance with Tabachnick and Fidell (2001). Within groups, univariate outliers were assessed for by examining standardised $z$-scores and scatter plots, whereby 24 cases where found to be in excess of 3.29 standard deviations from the mean. Multivariate outliers were assessed using Mahalanobis distance (critical $\chi^2 = 26.13$, $p < 0.001$). Thirty-five cases were found to be multivariate outliers, with subsequent iterations finding no further outliers. As the influence of outliers may distort analyses, they were deleted as recommended by Tabachnick and Fidell (2001). Upon
inspection of histograms and Q-Q plots, all variables appeared to be distributed normally, with skewness statistics between -0.89 and +1.1 and kurtosis statistics between -0.90 and +0.81. Although Kolmogorov-Smirnoff tests for normality indicated all variables were distributed non-normally (p < 0.001), the high statistical power resulting from large sample sizes make formal tests of normality such as this extremely sensitive to any deviation from normal distribution. Further, the Central Limit Theorem states that large numbers of independent random variables will generally be distributed normally around the true population mean, with regression analyses such as these not requiring any assumption of normal distribution in samples over N = 100 (Lumley, Diehr, Emerson, & Chen, 2002). On this basis, no data transformations were conducted. Statistical power was high for all analyses (> .80).

**Data Analytic Strategy**

The Statistical Package for the Social Sciences 20.0 (SPSS) was used to conduct all statistical analyses. Pearson correlation coefficients were used to examine zero-order correlations between variables. A one-way (younger adults; older adults) multivariate analysis of variance (MANOVA) was used to test for group differences on the variables being studied. In regards to analyses of indirect associations, contemporary approaches to mediation propose that the total effect of an IV on a DV is the sum of its direct paths, as well as its indirect paths through other variables. Therefore, IV’s may exert their effect on a DV indirectly through intervening variables, and thus do not require a significant direct relationship to estimate and test hypotheses about indirect effects (for a more in-depth discussion see Hayes, 2009). Indirect effects are quantified as the product of the effect of the IV on a mediator, $a$, and the effect of a mediator on the DV, $b$, partialling out the direct effect of the IV, $c’$. Given the hypothesis of no significant direct relationship between reminiscence functions and depressive symptoms, indirect effects were assessed using bootstrapping methods in conjunction with multiple mediation regression models,
so as to test the significance of the indirect effect of the independent variable on the
dependent variable through the proposed mediators. Bootstrapping is a nonparametric
approach to effect size estimation that computes indirect effects by using sampling with
replacement to generate repeated observations using the study sample as a basis. After a
set number of bootstrap samples have been generated (5,000 in the current study, as
recommended by Hayes, 2009), a bias-corrected and accelerated 95% confidence interval
(CI) is provided which is suitable for non-normally distributed variables (Efron, 1987). If
the indirect effect is statistically different from zero (i.e. if zero does not lie between the
lower and upper CI) then it can be inferred as significant at the $p < 0.05$ level. Studies
have demonstrated that bootstrapping is the most statistically powerful approach
available for testing for indirect effects (MacKinnon et al., 2004; Williams & MacKinnon,
2008). An SPSS macro provided by Preacher, Rucker, and Hayes (2007) was used to test
for indirect effects with multiple mediators, with formal tests to assess for moderated
mediation where these relationships differed across age groups. The hypothesised
multiple mediation models are depicted in Figure 1 and 2.

As suggested by Courville and Thompson (2001), structure coefficients were
interpreted alongside standardised regression coefficients ($\beta$). Structure coefficients are
correlations between observed predictors and predicted variance in the dependent
variable, and represent the portion of the total variance explained by predictors in a
regression model. They provide information about the observed effect of each predictor
without the influence of other predictors, and thus are particularly useful for interpreting
results in the context of multicollinearity or suppressor variables.
Figure 1. Hypothesised multiple mediation model depicting the direct (weight $c'$) and indirect effects (sum of all $a \times b$ weights) of integrative reminiscence on depression.

Figure 2. Hypothesised multiple mediation model depicting the direct (weight $c'$) and indirect effects (sum of all $a \times b$ weights) of instrumental reminiscence on depression.
Results

Preliminary Analyses

Table 1 shows the mean scores, standard deviations, Cronbach alpha’s and zero-order correlations between variables for each age group. For both age groups, high levels of multicollinearity were evident between the two reminiscence functions (younger adults, $r = 0.83, p < 0.01$; older adults, $r = 0.88, p < 0.01$), and self-esteem and self-efficacy (younger adults, $r = 0.85, p < 0.01$; older adults, $r = 0.86, p < 0.01$). In regards to the reminiscence subscales, although statistically associated, they are conceptualised as being qualitatively different in various taxonomies of memory functions (Webster & Haight, 1995; Westerhof et al., 2010), and prior empirical research has provided evidence that they have divergent relationships with various psychological constructs (e.g. Westerhof et al., 2010). Therefore, to test for the hypothesised mediation models, and retain continuity with prior studies, these subscales were kept separate. It is also notable that these high interrelations contraindicate the test of a full model of mediation including both functions, as this shared variance is likely to result in a loss of precision in regression estimates, and erroneously exclude otherwise significant relationships. In regards to self-esteem and self-efficacy, again evidence strongly suggests they are conceptually and empirically distinguishable (Chen, Gully, & Eden, 2004), with self-esteem more strongly related to affective-laden evaluations of the self, and self-efficacy to evaluations about one’s task abilities and competency. On this basis, they were also retained as separate variables.

As hypothesised, there was no apparent relationship between reminiscence functions and depressive symptoms in either age group, with correlations close to or at zero, and not statistically significant ($p > 0.05$). In both age groups there were significant correlations between reminiscence functions and the proposed mediating variables, as well as between the mediating variables and depressive symptoms, thereby satisfying the necessary requirements for possible indirect effects.
A MANOVA of group differences on the variables showed a significant multivariate effect, \((F = 12.14 \ (8, 1446), \ p < 0.001)\), with follow-up univariate tests indicating the older adult group had significantly higher scores on all variables except for self-efficacy (See Table 1).

### Table 1

**Means, standard deviations, Cronbach’s alpha’s, and zero-order correlations of variables for younger and older adult groups**

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Younger M (SD)</th>
<th>a</th>
<th>Older M (SD)</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Depression</td>
<td>-</td>
<td>-.01</td>
<td>-.03</td>
<td>-.41</td>
<td>-.44</td>
<td>-.38</td>
<td>-.32</td>
<td>-.40</td>
<td>19.02 (20.10)</td>
<td>.90</td>
<td>21.40 (22.01)</td>
<td>.92</td>
</tr>
<tr>
<td>2. Integrative</td>
<td>.00</td>
<td>-.88</td>
<td>.31</td>
<td>.25</td>
<td>.29</td>
<td>.29</td>
<td>.26</td>
<td>59.69 (20.48)</td>
<td>.91</td>
<td>63.71 (21.89)</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>3. Instrumental</td>
<td>-.01</td>
<td>.83</td>
<td>-.33</td>
<td>.28</td>
<td>.31</td>
<td>.35</td>
<td>.32</td>
<td>61.28 (19.43)</td>
<td>.95</td>
<td>64.76 (20.56)</td>
<td>.95</td>
<td></td>
</tr>
<tr>
<td>4. Meaning in life</td>
<td>-.46</td>
<td>.25</td>
<td>.26</td>
<td>-.56</td>
<td>.58</td>
<td>.48</td>
<td>.56</td>
<td>66.71 (18.97)</td>
<td>.88</td>
<td>71.75 (20.38)</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>5. Self-esteem</td>
<td>-.54</td>
<td>.15</td>
<td>.19</td>
<td>.54</td>
<td>-.68</td>
<td>.56</td>
<td>.86</td>
<td>72.14 (13.34)</td>
<td>.91</td>
<td>73.98 (14.66)</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>6. Optimism</td>
<td>-.47</td>
<td>.15</td>
<td>.15</td>
<td>.50</td>
<td>.64</td>
<td>-.56</td>
<td>.69</td>
<td>69.51 (17.38)</td>
<td>.86</td>
<td>75.19 (16.22)</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>7. Primary control</td>
<td>-.31</td>
<td>.29</td>
<td>.33</td>
<td>.58</td>
<td>.58</td>
<td>.45</td>
<td>.59</td>
<td>78.34 (13.16)</td>
<td>.84</td>
<td>80.31 (13.19)</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>8. Self-efficacy</td>
<td>-.48</td>
<td>.14</td>
<td>.20</td>
<td>.52</td>
<td>.85</td>
<td>.65</td>
<td>.59</td>
<td>.75.71 (13.89)</td>
<td>.95</td>
<td>76.85 (14.41)</td>
<td>.95</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05, ***p < 0.001. Variable correlations for younger adults appear below the diagonal, n = 730, and above the diagonal for older adults n = 725. All bolded correlations are significant at the p < 0.01 level.

**Indirect Effects of Integrative Reminiscence on Depressive Symptoms**

The results of the bootstrapped multiple-mediation analyses for integrative reminiscence are reported in Table 2. Integrative reminiscence was found to be significantly associated with meaning in life, self-esteem, and optimism in both age groups (p < 0.001). With all variables entered simultaneously in the multiple mediation models, thus controlling for the shared effects of mediators, meaning in life, self-esteem, and optimism were all found to be significant predictors of depressive symptoms in both age groups (p < 0.001). Bootstrapping results showed that integrative reminiscence indirectly predicted depressive symptoms through all three mediators, for both younger and older adults (p < 0.05).

Contrasts of indirect effects showed that in both age groups meaning in life and self-esteem were significantly stronger mediators than optimism (p < 0.05). No difference was found between the strength of indirect effects through meaning in life and self-esteem (p > 0.05).
Contrary to prediction, the direct effect of integrative reminiscence on depressive symptoms was observed to be significant in the mediation model in both groups ($p < 0.01$). Given that the zero-order correlation between integrative reminiscence and depressive symptoms approximated zero, and was non-significant in both groups, these findings suggest a statistical suppression effect. A suppressor is an independent variable that is unrelated to the dependent variable, but increases the regression coefficient between another independent variable (or set of independent variables) and a dependent variable by its inclusion in a regression equation (Conger, 1974). That is, a suppressor variable may not explain variance in a dependent variable, but ‘cleanses’ other independent variables that it is related to of irrelevant variance, thereby making their relative association with the dependent variable stronger. Once the shared variance between the suppressor and non-suppressor independent variables is accounted for, the remaining variance in the suppressor may indicate a significant relationship with the dependent variable, despite a non-significant zero-order correlation. Therefore standardised beta-weights may not be representative of a variable’s true contribution to a regression equation. It is noteworthy also that the combined direct and indirect effects of integrative reminiscence on depressive symptoms lead to a non-significant total effect approximating zero, a common occurrence when suppression is present (MacKinnon, Krull, & Lockwood, 2000). Shrout and Bolger (2002) discuss how spurious suppression effects occur often when associations are completely mediated, and warn that in these cases the total effect must be interpreted with caution.

Table 4 shows the standardised beta-weights of the direct effects in the regression models alongside their corresponding structure coefficients. When standardised beta-weights have a proportionately small structure coefficient, the presence of a suppression effect is indicated (Courville & Thompson, 2001). Although the standardised beta-weight of integrative reminiscence was positive and significant in both age groups, it contributed very little to the explained variance in depressive symptoms. In this case integrative
reminiscence appears to be acting as a suppressor variable, increasing the association of
the mediating variables with the dependent variable by removing extraneous variance. In
summary, integrative reminiscence appears to have no direct association with depressive
symptoms, but has indirect associations that are fully mediated by meaning in life, self-
esteem, and optimism.
Table 2
Summary of bootstrap results for the hypothesised multiple mediation models of the indirect effects of integrative reminiscence on depressive symptoms

<table>
<thead>
<tr>
<th>Group</th>
<th>Independent variable</th>
<th>Mediating variable</th>
<th>Dependent variable</th>
<th>Effect of IV on M (SE)</th>
<th>Effect of M on DV (SE)</th>
<th>Direct Effect (SE)</th>
<th>Indirect Effects (SE)</th>
<th>Total Indirect Effects</th>
<th>Total Effect (SE)</th>
<th>Total variance explained in DV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(IV)</td>
<td>(M)</td>
<td>(DV)</td>
<td>(a)</td>
<td>(b)</td>
<td>(c')</td>
<td>(a x b) (95% CI)</td>
<td>(c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger adults</td>
<td>Integrative Reminiscence</td>
<td>Meaning in life</td>
<td>Depression</td>
<td>.23*** (.03)</td>
<td>-.25*** (.06)</td>
<td>.13' (.03)</td>
<td>-.06 (.01) (-.09, -.03)</td>
<td>-13' (.03)</td>
<td>-.01 (.04)</td>
<td>36***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Optimism</td>
<td></td>
<td>.10*** (.02)</td>
<td>-.51*** (.06)</td>
<td>-.05' (.01) (-.08, -.03)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.12*** (.03)</td>
<td>-.18*** (.05)</td>
<td>-.02 (.01) (-.04, -.01)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older adults</td>
<td>Integrative Reminiscence</td>
<td>Meaning in life</td>
<td>Depression</td>
<td>.29*** (.03)</td>
<td>-.25*** (.06)</td>
<td>.16' (.03)</td>
<td>-.08' (.02) (-.12, -.05)</td>
<td>-18' (.03)</td>
<td>-.03 (.04)</td>
<td>26***</td>
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<tr>
<td></td>
<td></td>
<td>Self-esteem</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Optimism</td>
<td></td>
<td>.15*** (.02)</td>
<td>-.45*** (.08)</td>
<td>-.07' (.02) (-.10, -.04)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.21*** (.03)</td>
<td>-.13' (.06)</td>
<td>-.03' (.02) (-.06, -.01)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>*p &lt; 0.05, **p &lt; 0.01 ***p &lt; 0.001</td>
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</tbody>
</table>

Table 3
Summary of bootstrap results for the hypothesised multiple mediation models of the indirect effects of instrumental reminiscence on depressive symptoms

<table>
<thead>
<tr>
<th>Group</th>
<th>Independent variable</th>
<th>Mediating variable</th>
<th>Dependent variable</th>
<th>Effect of IV on M (SE)</th>
<th>Effect of M on DV (SE)</th>
<th>Direct Effect (SE)</th>
<th>Indirect Effects (SE)</th>
<th>Total Indirect Effects</th>
<th>Total Effect (SE)</th>
<th>Total variance explained in DV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(IV)</td>
<td>(M)</td>
<td>(DV)</td>
<td>(a)</td>
<td>(b)</td>
<td>(c')</td>
<td>(a x b) (95% CI)</td>
<td>(c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger adults</td>
<td>Instrumental Reminiscence</td>
<td>Primary Control</td>
<td>Depression</td>
<td>.22*** (.03)</td>
<td>-.12' (.06)</td>
<td>.11' (.04)</td>
<td>-.03 (.01) (-.06, -.01)</td>
<td>-12' (.02)</td>
<td>-.01 (.04)</td>
<td>25***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-efficacy</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14*** (.03)</td>
<td>-.66*** (.06)</td>
<td>-.10' (.02) (-.14, -.06)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older adults</td>
<td>Instrumental Reminiscence</td>
<td>Primary Control</td>
<td>Depression</td>
<td>.25*** (.03)</td>
<td>-.25*** (.06)</td>
<td>.15' (.04)</td>
<td>-.06' (.02) (-.10, -.03)</td>
<td>-18' (.03)</td>
<td>-.03 (.04)</td>
<td>19***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.22*** (.03)</td>
<td>-.53*** (.06)</td>
<td>-.12' (.02) (-.16, -.08)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*p &lt; 0.05, **p &lt; 0.01 ***p &lt; 0.001</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
**Indirect Effects of Instrumental Reminiscence on Depressive Symptoms**

The results of the bootstrapped mediation analyses for instrumental reminiscence are reported in Table 3. Instrumental reminiscence was found to be significantly associated with primary control and self-efficacy in both age groups \((p < 0.001)\). Again, controlling for their effects, primary control and self-efficacy were both found to be significant predictors of depressive symptoms in both age groups \((p < 0.001)\). Bootstrapping results showed that instrumental reminiscence indirectly predicted depressive symptoms through both mediators, for both younger and older adults \((p < 0.05)\).

Contrasts of indirect effects showed that in the younger adult group self-efficacy was a significantly stronger mediator than primary control \((p < 0.05)\). No difference between the strength of these mediators was found in the older adult group \((p > 0.05)\). Following procedures outlined by Preacher and Hayes (2008), formal tests of moderated mediation were carried out to assess if age was a moderator of differences in the mediation pathways relating to primary control and self-efficacy. Although there were differences in the strength of indirect effects within the younger adult group, the results indicated age was not a moderator for the strength of indirect effects between groups \((p > 0.05)\).

A statistical suppression effect was also apparent in these multiple mediation models, with instrumental reminiscence having a statistically significant positive direct effect on depressive symptoms \((p < 0.01)\), with a non-significant total effect approximating zero \((p > 0.05)\). Again, as demonstrated by low structure coefficients and variance explained, instrumental reminiscence directly predicted very little of the explained variance in depressive symptoms and appears to have acted as a suppressor variable (see Table 4).
Table 4
*Standardised beta-weights and structure coefficients of direct effects, and proportion of variance explained in depressive symptoms*

<table>
<thead>
<tr>
<th>Group</th>
<th>IV</th>
<th>Standardised beta-weight (SE)</th>
<th>Structure coefficient</th>
<th>% of variance explained</th>
<th>Variance explained in DV ($R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger adults</td>
<td>Integrative reminiscence</td>
<td>.13*** (.03)</td>
<td>.01</td>
<td>2.3%</td>
<td>.36***</td>
</tr>
<tr>
<td></td>
<td>Meaning in life</td>
<td>-.23*** (.03)</td>
<td>-.76</td>
<td>29.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td>-.10*** (.02)</td>
<td>-.90</td>
<td>42.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimism</td>
<td>-.12*** (.03)</td>
<td>-.78</td>
<td>26.4%</td>
<td></td>
</tr>
<tr>
<td>Older adults</td>
<td>Integrative reminiscence</td>
<td>.16** (.03)</td>
<td>-.03</td>
<td>4.1%</td>
<td>.26***</td>
</tr>
<tr>
<td></td>
<td>Meaning in life</td>
<td>-.25*** (.06)</td>
<td>-.81</td>
<td>34.8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td>-.45*** (.08)</td>
<td>-.86</td>
<td>38.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimism</td>
<td>-.13* (.06)</td>
<td>-.75</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Younger adults</td>
<td>Instrumental reminiscence</td>
<td>.11** (.04)</td>
<td>-.02</td>
<td>2.3%</td>
<td>.25***</td>
</tr>
<tr>
<td></td>
<td>Primary Control</td>
<td>-.12* (.06)</td>
<td>-.63</td>
<td>21.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-efficacy</td>
<td>-.66*** (.06)</td>
<td>-.98</td>
<td>76%</td>
<td></td>
</tr>
<tr>
<td>Older adults</td>
<td>Instrumental reminiscence</td>
<td>.15** (.04)</td>
<td>-.07</td>
<td>4%</td>
<td>.19***</td>
</tr>
<tr>
<td></td>
<td>Primary Control</td>
<td>-.25*** (.06)</td>
<td>-.74</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-efficacy</td>
<td>-.53*** (.06)</td>
<td>-.92</td>
<td>63%</td>
<td></td>
</tr>
</tbody>
</table>

* * p < 0.05, ** p < 0.01 *** p < 0.001

**Discussion**

This study tested relationships between adaptive functions of autobiographical memory and depressive symptoms. As hypothesised, the results showed that both integrative and instrumental reminiscence were not directly associated with depressive symptoms, but did have indirect associations through the proposed mediating variables. These findings are the first to demonstrate that these reminiscence functions predict depressive symptoms through multiple mediation pathways, and that these relationships are similar for younger and older adult groups.

The finding that no direct association exists between integrative and instrumental reminiscence functions and depressive symptoms replicates those of previous studies (e.g. Cully et al., 2011; Korte et al., 2011), and further supports the notion that the use of autobiographical memory for these adaptive purposes does not itself directly predict
levels of depressive symptoms. Rather, these associations are indirect and are influenced by changes in other psychological variables.

The reported frequency of integrative reminiscence was found to predict higher levels of meaning in life, which is consistent with prior findings (Cappeliez & O’Rourke, 2002), and higher levels of self-esteem and optimism, as postulated in prior literature (Watt & Cappeliez, 1995; Wong, 1995). Moreover, increased use of integrative reminiscence was found to indirectly predict lower levels of depressive symptoms through these mediating variables. Although interrelated, these mediators were shown to have unique associations with depression, and to be distinct mediators of the effects of integrative reminiscence. That these mediation paths are unique suggests that changes in the frequency of integrative reminiscence are distinguishably associated with a sense of meaning in life, self-esteem, and expectancies of the future, and that these changes subsequently have a distinctive influence on depressive symptoms. This may not be altogether surprising considering the diverse range of content and experiences that are likely to be represented in personal memories, and which may be recalled for the purpose of integrative reminiscence (Watt & Wong, 1991). These indirect effects were found to be significantly stronger through meaning in life and self-esteem compared to optimism. This suggest that using personal memories as a means to increase self-continuity and coherence may predict stronger decreases in depressive symptoms through the mechanisms of increased existential meaning and perceived self-worth, rather than more positive outcome expectancies for the future.

Instrumental reminiscence was found to predict higher levels of primary control and self-efficacy, and indirectly predict levels of depressive symptoms through these mediating variables. Again, these mediators were found to be uniquely related to depressive symptoms, and to mediate distinct indirect pathways from instrumental reminiscence to depressive symptoms. These results build on previous findings that coping mediates the effect of adaptive functions on psychological well-being over time.
(Cappeliez & Robitaille, 2010), by also providing evidence of mediated associations through generalised self-efficacy and perceptions of primary control. Given previous findings that the demonstrably reduced specificity of depressed individual’s autobiographical memories can impair their problem-solving ability (Williams et al., 2007), these findings suggest increased use of reminiscence for remembering coping situations and solutions to previous problems is associated with increases in adaptive coping and decreased depressive symptoms. This model supports the use of instrumentally-oriented approaches in reminiscence-based interventions to psychologically buffer stress (e.g. Pot et al., 2010), and helps to delineate their effect on depressive symptoms.

In the younger adult group, self-efficacy was found to be a stronger mediator of the effects from instrumental reminiscence to depressive symptoms than primary control. For these adults, thinking about past coping experiences may influence depressive symptoms more strongly through increases in self-appraisals of generalised competence rather than increases in beliefs regarding one’s ability to manipulate environmental circumstances to influence outcomes. Watt and Cappeliez (1995) discuss the positive contribution of instrumental reminiscence to coping and self-efficacy in the context of a feedback loop. They suggest that the explicit recall of examples of past effective coping strategies may serve to increase one’s sense of self-efficacy and past mastery which, in turn, promotes the future use of problem-focussed coping strategies. Prior research has shown that when individuals believe they are able to manage stressful or negative events in their lives they are more likely to view them as challenges with which they can cope (Bandura & Locke, 2003; Lazarus & Folkman, 1984). Although outside of the scope of the current study, future research may benefit from further investigating this proposed feedback loop in the context of instrumental reminiscence.

Contrary to expectation, the older adult group reported higher frequencies of reminiscence compared to the younger group. Despite this, the direct associations
between reminiscence functions and mediating variables, and indirect associations with depressive symptoms, were consistent across groups. This finding, although correlational, supports prior research (Cappeliez & Robitaille, 2010), and also indicates that relationships between the frequency of adaptive reminiscence functions, these psychological well-being variables, and depressive symptoms, are similar across the adult lifespan.

**Limitations and Future Directions**

The current study utilised a cross-sectional design, which, by its nature, cannot provide evidence of causal associations. However, these findings are discussed in the context of numerous prior demonstrations of relationships between the use of adaptive autobiographical memory and subsequent reductions in psychiatric distress such as depressive symptoms (e.g. Cappeliez & Robitaille, 2010; Karimi et al., 2010; Watt & Cappeliez, 2000; Westerhof et al., 2010). It may also be hypothesised that increases in psychological well-being, such as the experience of more meaning in life or a stronger sense of self-efficacy, could also cause increases in the frequency with which individuals use adaptive reminiscence. Whilst it is likely that there is indeed a bi-directional causal relationship between psychological well-being and adaptive reminiscence, the current study indicates that any effect on depressive symptoms is still likely to occur through these well-being variables, as no relationship between these reminiscence functions and depressive symptoms is apparent (Cully et al., 2001; Korte et al., 2011). Nonetheless, future studies should seek to employ research designs to further test for the possibility of these feedback loops, and further clarify the temporal relationships of these mediated pathways.

Whilst the current study focussed on those memory functions more closely aligned with the theoretical underpinnings of cognitive-reminiscence therapy, future studies would benefit from incorporating broader measurement of reminiscence functions
to further test for differential mediation pathways, and any interaction effects (Takano & Tanno, 2009). This could include measurements of maladaptive functions of autobiographical memory, such as for ruminating over unpleasant past events and failures. Studies could also sample adults younger than those in the current study to build upon these findings and further elucidate whether these associations are age-variant or age-invariant over the adult lifespan.

Evaluations of reminiscence-based therapies for depression have previously focused solely on older adults. On the basis of these findings and other lines of evidence (Hallford & Mellor, submitted), it is suggested that the proposed mechanisms of change underlying reminiscence-based interventions may also be relevant for non-elderly adults, and therefore these interventions could represent useful approaches to the reduction of depressive symptoms across the adult life-span. Future trials of these interventions with young or middle-aged adults could test this hypothesis. Further, including measurements of the mediating variables examined in the current study in future outcome trials of reminiscence-based therapies for depression would provide further clarification of how these interventions affect individual’s view of themselves and the world, and in turn, whether these mediators explain changes in depressive symptoms as a result of treatment. It is also important to note that given the suppression effects found in the current study, future researchers should ensure structure coefficients are examined when conducting regression analyses with reminiscence functions, lest erroneous conclusions be drawn.

Conclusion

This study supports prior assertions that the use of autobiographical memory for integrative and instrumental functions is associated with psychological well-being and lower levels of depressive symptoms (Wong, 1995; Watt & Cappeliez, 1995). It also builds on current understandings of the direct and indirect associations of these functions and points to the multifaceted and mediated nature of these relationships. These findings
increase confidence in the proposed mechanisms of change underlying cognitive-reminiscence interventions (Watt & Cappeliez (1995, 2000), and suggest that they apply to non-elderly adults also.


Chapter 5

Study 3: Results from Pilot Data of a Trial of Cognitive-Reminiscence Therapy for Depression in Young Adults

The previous two chapters presented a review of reminiscence functions and reminiscence-based therapies, a rationale for their use in treating adult early-onset depression, and results of an empirical investigation into the mechanisms of change that are proposed to underpin the effects of adaptive types of reminiscence on depressive symptoms in cognitive-reminiscence therapy. The aforementioned research was then used to inform the design and implementation of a randomised clinical trial to explore the feasibility and utility of cognitive-reminiscence therapy for young adults with depressive symptoms. Given time constraints pertaining to the submission of this thesis, the clinical trial was still ongoing at the time of writing. This chapter presents pilot data of the first 10 participants who received a full course of cognitive-reminiscence therapy as part of this trial. At the time of writing, the relatively small sample size of the usual care group, intended to be used as a comparison to cognitive-reminiscence therapy, precluded its utility in analysis.

In this study, participants were recruited from a youth community mental health service in Melbourne, Australia and provided with six-sessions of weekly, individual cognitive-reminiscence therapy. The primary outcome was depressive symptoms. The secondary outcomes were drawn from the variables examined in the previous study that are proposed to mediate the effects of cognitive-reminiscence therapy on depression. At the request of the participating youth mental health service, efforts were made to reduce the burden on participants by making the questionnaires as short as possible without compromising the study objectives. In this context, and on the basis of the conceptual overlap with general self-efficacy, the measure of primary control was not used. On the basis of rationale constructed in prior chapters, it was hypothesised that this intervention
would result in significant decreases in depressive symptoms and significant increases on secondary outcomes related to psychological well-being from baseline to post-intervention (after the sixth and last session). This chapter provides details of the methodology of the trial including the procedures used in recruitment, the sample characteristics, the measures used to assess outcomes, and the components of the intervention and its administration. The quantitative results are presented using descriptive statistics and parametric statistical analyses to assess the effect of the intervention on the primary and secondary outcomes. These results are then briefly summarised and discussed. References for this chapter are provided at the end of the thesis.

Method

Design

The current study utilised a single-group, within-subjects, repeated measures design with three time-points (baseline; following three sessions of therapy; and following six sessions of therapy/post-intervention). The primary dependent variable was depressive symptoms, and the secondary dependent variables were self-esteem, self-efficacy, meaning in life, and optimism. All variables were measured at each of the three time-points.

Participants

Young adults were recruited through a participating community youth mental health service in the city of Melbourne, Australia that provides services to young persons aged 12-25 years (see Appendix A). These were young adults who had presented to the service for support for mental health issues, and were screened by intake staff. The following inclusion and exclusion criteria were used to identify potential referrals:
1. at least 18 years of age, with a limit of 25 years in accordance with the age limit for intake at the participating youth mental health services;

2. the presence of at least moderate depressive symptoms, as indicated by a score of seven or higher on the DASS-21 depression subscale (Lovibond & Lovibond, 1995);

3. not currently receiving any other treatment for depression;

4. depressive symptoms are not the product of physical causes (e.g. hypothyroidism);

5. not at high risk of suicide or harm to others (as assessed through intake interviews);

6. not presenting with a primary problem related to psychotic symptoms, disordered eating, manic symptoms, body image disturbance, anxiety, substance use, or sexual dysfunction;

Individuals were only excluded from participating in the study where problems other than depression were the primary reason for presentation (as assessed at intake), or other problems emerged as the primary reason for help-seeking during treatment and therefore superseded depressive symptoms as the likely target for therapy (as assessed by the treating practitioner during the course of therapy).

The sample of 10 participants used in the current study comprised five males and five females with ages ranging from 18 to 23 years ($M = 20.2, SD = 1.87$). In regards to highest attained education level, one participant had completed post-graduate studies, two had finished bachelor-level degrees, six had finished high school, and one had completed primary school. Four participants were studying at the time they entered the study (two studying a bachelor degree, one studying a diploma, and one completing their last year of high school). Eight participants were currently employed: two in full-time work and six in part-time or casual employment. Three participants were in romantic relationships,
while seven were not. Three participants had received previous treatment for reasons pertaining to mental health (two had received counselling or psychotherapy, and one had received both antidepressant medication and psychotherapy), while seven had not.

**Materials**

**Depressive symptoms.** To assess depressive symptoms the seven-item self-report depression subscale from the short-form Depression, Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) was used. Each item is rated on a four-point scale from 0 (*did not apply to me at all*) to 3 (*applied to me very much, or most of the time*), with higher scores indicating higher levels of depressive symptomatology. The DASS-21 assesses core depressive symptomatology (low positive-affect, anhedonia, lack of motivation, low self-esteem, and hopelessness), possesses good psychometric properties, correlates strongly with longer measures of depressive symptoms (Antony, Bieling, Cox, Enns, & Swinson, 1998), and has been validated for use with young adults (Mahmoud, Hall, & Staten, 2010). In the current study, an acceptable average Cronbach’s alpha of $\alpha = 0.85$ was found over the three time-points.

**Self-esteem.** A shortened version of the Rosenberg Self-Esteem Scale (Rosenberg, 1965) utilising the five positively-worded items of the original scale was used to assess self-esteem. This short-form scale has previously demonstrated good convergent and divergent validity, and good internal reliability ($\alpha = 0.91$; Hallford et al., 2013). Participants responded to items using an 11 point, end-defined scale ranging from 0 (*do not agree at all*) to 10 (*agree completely*), with higher scores on this scale indicating higher levels of perceived self-worth. In the current study, an acceptable average Cronbach’s alpha of $\alpha = 0.90$ was found over the three time-points.
**Self-efficacy.** The New General Self-Efficacy Scale (NGSE; Chen, Gully, & Eden, 2001) was used to assess individuals’ perceived personal competence to deal effectively with a variety of stressful situations. The NGSE consists of eight items, and participants responded using an 11 point, end-defined scale ranging from 0 (*do not agree at all*) to 10 (*agree completely*), with higher scores on this scale indicating higher levels of perceived general self-efficacy. The NGSE has demonstrated psychometric superiority over other frequently used measures of general self-efficacy (Scherbaum, Cohen-Charash, & Kern, 2006). Studies have previously reported Cronbach’s alphas between $\alpha = 0.85$ and $\alpha = 0.88$ (Chen et al. 2001). In the current study, an acceptable average Cronbach’s alpha of $\alpha = 0.91$ was found over the three time-points.

**Meaning in life.** The five-item Presence subscale of the Meaning in Life Questionnaire (Steger, Frazier, Oishi, & Kaler, 2006) was used to assess the extent to which participants felt that their lives were meaningful. This questionnaire has shown good psychometric properties and measures meaning in life as a distinct psychological construct (Steger et al., 2006). Participants responded to items using an 11 point, end-defined scale ranging from 0 (*absolutely untrue*) to 10 (*absolutely true*), with higher scores on this scale indicating a stronger sense of personal meaning in life. Previous studies have reported Cronbach’s alphas ranging from $\alpha = 0.82$ to $\alpha = 0.86$ (Steger et al., 2006). In the current study, an acceptable average Cronbach’s alpha of $\alpha = 0.86$ was found over the three time-points.

**Optimism.** A short-form version of The Life Orientation Test - Revised (LOT-R; Carver & Scheier, 2003) was used to measure optimism. This consisted of the three positively-worded items relating to optimism and excluded the three items that measure pessimism and four “filler” items. This short-form of the LOT-R has previously demonstrated good convergent and divergent validity, and good internal reliability ($\alpha =$
Participants responded to items using an 11 point, end-defined scale ranging from 0 (absolutely untrue) to 10 (absolutely true), with higher scores on this scale indicating more positive generalised outcome expectancies for the future. In the current study, an acceptable average Cronbach’s alpha of $\alpha = 0.95$ was found over the three time-points.

**Procedure**

Prior to commencement of data collection, ethics approval was granted by the Deakin University Human Research Ethics Committee (DU-HREC 2012-278; See Appendix B). Initially, intake clinicians working at the youth mental services identified individuals eligible to participate in the study through assessments conducted as part of their normal triage protocol. This included a structured face-to-face assessment of psychosocial and mental health problems (Parker, Hetrick, & Purcell, 2010), which provided the information necessary to determine eligibility based on the stipulated criteria. The study was then introduced to eligible individuals and they were screened for the presence of at least moderate depressive symptoms using the DASS-21 depression subscale (a score of 7 or higher; Lovibond & Lovibond, 1995), and provided with a plain language statement describing the study and what participation would involve (see Appendix C). Permission for a member of the research team to contact them was then sought. Conditional on this permission being granted, a member of the research team then contacted the individual to discuss the details of the study further, and answer any questions they had. Individuals who agreed to participate then provided written informed consent.

Participants were randomised to either a cognitive-reminiscence therapy or usual care condition using an adaptive biased-coin approach, the “urn design” (Wei & Lachin, 1988). In an urn design the probability of assignment to a group begins at 1:1, and is subsequently altered based on the magnitude of imbalance between groups. If the
allocation ratio is found to be too far in one group’s favour then the probability is altered to increase the odds of allocation to the smaller group until this imbalance is rectified. This approach was chosen so as to counteract the risk of unequal group sizes, whilst still preserving most of the unpredictability of simple randomisation. Randomisation was performed by a third-party outside of the research team using the online software Research Randomizer Version 3.0 (Ubaniak & Plous, 2013). As noted above, this study reports only on the first 10 participants randomised into the cognitive-reminiscence therapy group. None of the participants who were allocated to this group dropped out, and all participants completed measures at all time-points. Six individual sessions of cognitive-reminiscence therapy were provided on a weekly basis by the author (D. J. Hallford), a registered provisional psychologist, on the premises of the youth community mental health service at which the individuals had sought support. Demographic datum were collected as part of the intake process, and outcome measures were completed via online links that were emailed to participants prior to the first session, and immediately following the third and sixth sessions of therapy (see Appendix D for an “offline” copy of the questions used for outcome measures). On completion of the six weeks of therapy, participants were free to utilise any further services or support that they wished, including support from the youth community mental health service as per their usual pathways of care.

**Format of the Intervention**

The format and content of cognitive-reminiscence therapy was adapted from a manualised framework for integrative and instrumental reminiscence therapies formulated by Watt and Cappeliez (2000) for use with older adults. Although the intervention followed the general protocol of this approach to reminiscence therapy, there were several distinct adaptations made for the current study. Firstly, the original manual described separate but overlapping protocols for integrative and instrumental
reminiscence therapy. The current intervention combined these two approaches, as per Cappeliez (2002). Secondly, the content of sessions was organised on the basis of individual therapy, rather than delivery in a group, for which it was originally designed. With regards to the first and second points, this was done on the basis that individuals would have more time in individual therapy, compared to a group format, and could therefore cover more topics of reminiscence. It was thought that a focus on both integrative and instrumental types of reminiscence would provide greater flexibility in terms of therapeutic focus, and utilise multiple adaptive forms of reminiscence thereby potentially affecting depressive symptoms through the range of mediating pathways identified in the previous study. Thirdly, the questions used in sessions and on homework sheets to elicit purposeful reminiscence were altered to be age-appropriate for young adults and their stage of psychosocial development. A copy of the adapted, manualised cognitive-reminiscence treatment is provided in Appendix E. The intervention comprised six, 60-minute weekly sessions of individual psychotherapy.

In the first session the individuals’ current depression-related issues are briefly reviewed, psychoeducation is provided on cognitive and stress and coping models of depression, and autobiographical memory (specifically integrative and instrumental types of reminiscence). Information is provided about the intervention, including evidence for its effectiveness and what it entails for the participant and therapist. A problem list, involving the identification and clarification of current problems in the client’s life, is then elicited for use in subsequent sessions. Therapeutic reminiscence work is then engaged in using a list of questions to stimulate memories. At the end of each session a summary is provided and feedback is elicited from the participant on their impressions of what was discussed, what they have learned, and any changes that have occurred for them. Homework sheets containing information about problem-solving, and questions designed to elicit reminiscence related to the next week’s topic are provided. A rationale is provided for this homework, including the effectiveness of homework in promoting
positive change (Kazantis, Whittington, & Dattilio, 2010). All remaining sessions follow a procedure of reviewing homework for the week, identifying memories to elaborate on and engaging in therapeutic work with these memories, reflecting on this reminiscence, and then utilising a problem-solving framework to choose solutions to identified problems to implement over the next week. Specific coping strategies that have been discussed in session are drawn on to assist in the problem-solving work, as well as content related to self-efficacy and approach-coping behaviour that is broadly promoted over the sessions. In the last session, a final summary is provided by the therapist of the work completed over the intervention, and the participant is invited to provide feedback of their experience and reflect on any change that has occurred for them.

Over the course of therapy, six different topics are used to stimulate memories as a basis for therapeutic work. In order of use, these are: turning points, family life, significant/important activities in your life, loves and hates, stressful experiences, and meaning in life. These topics have previously been used in trials of cognitive-reminiscence therapy, and were initially drawn from Birren and Deutchman’s (1991) Guided Autobiography intervention. Memories are elicited and among these several are collaboratively identified by the therapist and participant as being of importance and to be discussed. The therapist ensures that there is at least one event or experience reflective of integrative reminiscence and instrumental reminiscence. These memories are then elaborated on, with the therapist ensuring that sufficient details of the memories are provided so as to promote increases in memory specificity. The respective therapeutic techniques are drawn upon dependent on whether integrative or instrumental reminiscence is being undertaken (see pages 33-34), for example restructuring beliefs about perceived failures and negative experiences, focussing on positive experiences and achievements, and breaking down previous coping step-by-step and highlighting effective strategies. As a general guideline, the therapist aims to help the individual learn from the past, create a cohesive and positive narrative of their life, and develop a view of
themselves that realistically integrates good and bad experiences. Further, therapists orient themselves towards improving clients’ perceptions of their self-esteem, self-efficacy, meaning in life, and optimism, given that these variables have been shown to mediate relationships between adaptive reminiscence functions and depressive symptoms (Hallford et al., 2013; Chapter 4), and underpin changes produced by reminiscence-based therapies (Korte et al., 2012; Westerhof, Bohlmeijer, van Beljouw, & Pot, 2010).

**Data Cleaning**

Prior to conducting analyses, datum were cleaned in accordance with guidelines set out by Tabachnick and Fidell (2007). There were no missing data on any variables, and all values were found to be within the acceptable ranges of responses. Univariate outliers were assessed for by examining standardised z-scores, whereby no cases where found to be in excess of 3.33 standard deviations from the mean. Upon inspection of histograms and Q-Q plots, all variables appeared to be distributed normally. Skewness statistics between -0.70 and +1.54 and kurtosis statistics between -1.58 and +1.9 also indicated a normal distribution of responses. On the basis of data cleaning, parametric analyses were deemed to be suitable and appropriate for this dataset.

**Data Analytic Strategy**

Descriptive statistics were generated for baseline demographic variables and for outcome variables at all time-points. A series of within-subjects repeated measures ANOVAs were conducted to assess for changes over time on the primary and secondary outcomes. The alpha level was set at $\alpha = .05$. Post-hoc analyses consisted of pairwise $t$-tests to assess for change between baseline and three-weeks, and three-weeks and six-weeks time-points, with Bonferroni corrections to control for the familywise error rate ($.05/2 = \alpha$ of .025 required for significance at the .05 level). Effect sizes were calculated from baseline to post-intervention using Cohen’s $d$, which is based on the pooled
standard deviation of the means. The magnitude of effect sizes were judged according to criteria described by Cohen (1988) as small ($d = .20$), medium ($d = .50$), and large ($d = .80$). To assess individuals for clinically significant change on the primary outcome, the reliable change index was calculated using Jacobson and Traux’s (1991) approach, with changes categorized as improved, unchanged, or deteriorated. Pre and post-changes in severity were also assessed, including whether participants recovered and were in the normal, functional range of symptoms (as defined relative to data from the Australian population; Lovibond & Lovibond, 1995). Changes in the percentile ranking of the group mean for depression scores on the DASS-21 were also calculated using normative data from a large Australian community sample (Crawford, Cayley, Wilson, Lovibond, & Hartley, 2011).

**Results**

**Analyses**

The range of scores, means, and standard deviations for the measures of primary and secondary outcomes at baseline, three-week, and six-week time-points are provided in Table 1, along with effect sizes between baseline and six-week time-points. Sphericity was not found to be violated on any measure across time-points, as indicated by $p$ values > .05 on Mauchly’s test of sphericity. A repeated measures ANOVA on depressive symptoms showed a significant decrease over time on scores, $F(2, 18) = 14.39, p < .001$. Post-hoc contrasts showed a significant reduction from baseline to three-weeks, $t(9) = 4.65, p = .001$, but no significant change from three-weeks to six-weeks, $t(9) = .93, p = .375$. Figure 1 shows a line graph of DASS-21 depression subscale scores across time-points. A repeated measures ANOVA on self-esteem showed a significant increase over time on scores, $F(2, 18) = 25.72, p < .001$. Post-hoc contrasts showed a significant increase from baseline to three-weeks, $t(9) = -5.04, p = .001$, but no significant change from three-weeks to six-weeks after accounting for a Bonferroni correction, $t(9) = -2.56,$
A repeated measures ANOVA on self-efficacy showed a significant increase over time on scores, \( F(2, 18) = 29.93, p < .001 \). Post-hoc contrasts showed a significant increase from baseline to three-weeks, \( t(9) = -3.5, p = .007 \), as well as a significant increase from three-weeks to six-weeks, \( t(9) = -4.18, p = .002 \). A repeated measures ANOVA on meaning in life showed a significant increase over time on scores, \( F(2, 18) = 14.44, p < .001 \). Post-hoc contrasts showed a significant increase from baseline to three-weeks, \( t(9) = -3.2, p = .011 \), and a significant increase from three-weeks to six-weeks, \( t(9) = -3.4, p = .008 \). A repeated measures ANOVA on optimism showed a significant increase over time on scores, \( F(2, 18) = 7.4, p = .005 \). Post-hoc contrasts, after accounting for Bonferroni corrections, showed no significant change from baseline to three-weeks, \( t(9) = -2.35, p = .043 \), or from three-weeks to six-weeks, \( t(9) = -2.13, p = .062 \), indicating that significant change from baseline to six-weeks was a cumulative effect over time-points. All effects from baseline to six-weeks were found to be of a large magnitude, except for optimism which was moderate-to-large (see Table 1).

After calculating the reliable change criterion (Jacobson & Traux, 1991) for clinically significant change on depressive symptoms, eight participants were found to have improved, one was unchanged, and one deteriorated. Prior to treatment, four participants were in the moderate range of symptoms, four were in the severe range, and two were in the extremely severe range. Following treatment, five participants were judged as recovered, one participant was in the mild range of symptoms, three participants were in the moderate range of symptoms, and one was in the extremely severe range. In regards to the percentile rank of the group mean of depressive symptoms, this reduced from the 91\(^{st}\) percentile at baseline to the 60\(^{th}\) percentile following treatment.
Table 1.  
*Range of Scores, Means, and Standard Deviations for Outcome Measures at all Time-Points, and Effect Sizes between Baseline and Six-Week Time-Points (N = 10)*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Range</th>
<th>Baseline Mean (SD)</th>
<th>Three-Week Mean (SD)</th>
<th>Six-Week Mean (SD)</th>
<th>Effect Size from Baseline to Six-Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>0-21</td>
<td>11.8 (3.61)</td>
<td>5.9 (4.98)</td>
<td>4.8 (4.92)</td>
<td><em>d</em> = 1.62</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>0-50</td>
<td>21.2 (8.16)</td>
<td>28.9 (8.17)</td>
<td>33.1 (5.9)</td>
<td><em>d</em> = 1.67</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0-80</td>
<td>38 (11.33)</td>
<td>46.5 (10.82)</td>
<td>53.8 (10.1)</td>
<td><em>d</em> = 1.47</td>
</tr>
<tr>
<td>Meaning in life</td>
<td>0-50</td>
<td>18 (10.42)</td>
<td>26.9 (9.45)</td>
<td>32.5 (8.42)</td>
<td><em>d</em> = 1.53</td>
</tr>
<tr>
<td>Optimism</td>
<td>0-30</td>
<td>11.2 (6.39)</td>
<td>14 (7.45)</td>
<td>16.6 (9.91)</td>
<td><em>d</em> = 0.65</td>
</tr>
</tbody>
</table>

Note. All changes in mean scores from baseline to six-week are significant at *p = or < .005*  

*Figure 1. Depression scores over time-points.*

**Discussion**

The aim of this study was to assess the effect of cognitive-reminiscence therapy on the primary outcome of depressive symptoms and secondary outcomes of
psychological wellbeing in a sample of young adults. The results provided support for the hypothesis that the intervention would lead to significant decreases in depressive symptoms and significant increases on secondary outcomes of self-esteem, self-efficacy, meaning in life, and optimism from baseline to post-intervention. Significant changes were found across all outcomes measures from pre to post-intervention, with large effect sizes for depressive symptoms, self-esteem, self-efficacy, and meaning in life, and a moderate-to-large effect size for optimism. Post-hoc contrasts between time-points indicated that for depressive symptoms and self-esteem, significant change occurred between baseline and three-weeks, but not between three-weeks and six-weeks. This suggests that the therapeutic effect of the therapy on depression and self-esteem occurred predominantly across the first three sessions, with only small, non-significant reductions following this. On the basis of categorical descriptors for the DASS-21 provided by Lovibond and Lovibond (1995), the sample mean of depressive symptoms reduced from the severe range to the mild range, only marginally failing to reach the normal range of scores (< 4.5). For self-efficacy and meaning in life, significant change occurred between baseline and three-weeks, and between three-weeks and six-weeks, indicating significant therapeutic effect on these variables had occurred across the duration of the treatment. For optimism, although significant change occurred from baseline to six-weeks, this change was cumulative across the sessions. These slower and gradual changes as a result of intervention might be expected, given that the measure used to assess optimism, the LOT-R, is considered to assess the relatively stable disposition of generalised favourable expectancies for the future, rather than a transitory belief (Carver, Scheier, & Segerstrom, 2010).

Findings utilising the reliable change index (Jacobson & Traux, 1991) showed that clinically significant change in depressive symptoms occurred for the majority of participants (80%), with 50% fully recovering. Despite these promising findings, one
participant did not report clinically significant change, and one participant’s depressive symptoms were found to deteriorate following treatment.

Overall, findings from this pilot data indicate that cognitive-reminiscence therapy was predominantly effective in reducing depressive symptoms and improving psychological wellbeing on the secondary outcome measures for young adults in this sample. The implications of these results will be discussed more fully in the general discussion of this thesis along with limitations, such as the lack of comparison group and small sample size, and suggestions for future research.
Chapter 6

Study 4: A Qualitative Study of Young Adults’ Perceptions of Reminiscence-based Therapy for Depression (Submitted to the Journal *Psychotherapy*)¹

Hallford, D. J., Mellor, D., & Burgat, M. E.

Abstract

Although reminiscence-based therapies appear to be an effective intervention for depression, to date there is a distinct lack of research evaluating this psychotherapeutic approach with young adults. Qualitative studies of reminiscence-based therapies are also scarce, with scope for further examination of individuals’ perceptions of this experience. This study aimed to investigate 10 young adults’ (mean age 20.6, $SD = 1.8$) perceptions of receiving a six-session course of cognitive-reminiscence therapy. Semi-structured interview schedules were used during individual interviews. The data were analysed using thematic analysis, with six main themes and associated sub-themes identified. The findings indicated that participants found the intervention helpful, and experienced positive outcomes and change associated with the processes of generating new perspectives, increasing awareness of a broader life story, learning from the past to feel more confident and able to cope, and having a stronger sense of self-worth and self-acceptance. These findings provided evidence for the positive effects of cognitive-reminiscence therapy with young adults and the processes through which these occur, and identify some potential avenues for refinement of this treatment. The findings are discussed in the context of previous research, and how they enrich the understanding of young adults’ experiences of cognitive-reminiscence therapy.

¹references are presented at the end of the chapter
In recent decades, reminiscence-based therapies have received increasingly more attention as a psychotherapeutic approach to the treatment of depression with older adults, with meta-analytic reviews showing large effects on depression symptoms (Bohlmeijer, Smit & Cuijpers, 2003; Pinquart & Forstmeier, 2012). Cognitive-reminiscence therapy (Cappeliez, 2002) has emerged as a particularly promising framework in which to use guided reminiscence to reduce depressive symptoms. Cognitive-reminiscence therapy adopts cognitive therapy (Beck, Rush, Shaw, & Emery, 1979) and stress and coping (Billings & Moos, 1982) conceptualisations of depressive psychopathology, and involves a therapist-assisted review of past experiences across a number of different domains (such as turning points, family life, and stressful events). As memories are reviewed, various therapeutic techniques are used to interpret them in more adaptive ways, and to assist individuals to draw on previous experiences to help them with current problems.

While investigations into the mechanisms of change underpinning reminiscence-based therapies have begun to emerge in the published research literature (e.g. Hallford, Mellor & Cummins, 2013; Korte, Westerhof, & Bohlmeijer, 2012), they have been predominantly quantitative in nature. Further understanding of the experience of individuals who receive this therapy would provide invaluable insights into how and why change occurs, and how acceptable and useful individuals find this process. No studies have specifically examined cognitive-reminiscence therapy in this manner, however, four studies have used qualitative research methods in relation to other reminiscence-based interventions. McDougall, Blixen and Suen (1997) performed content analysis on psychotherapy session notes to determine outcomes from a life-review intervention for older adults aged 65 years or more with depression. Their results showed significant reductions over time in regards to how frequently themes of disempowerment (anxiety, denial, despair, and isolation) were discussed, however, no further information was provided on participants’ experiences of receiving the intervention. Malette and Oliver
(2006) interviewed retirees (aged 65-75 years) to assess their perceptions of a six-session life-review intervention they received. Participants discussed recognising adaptive processes such as identifying strengths and values they possessed from facing past challenges, reframing past events and using instrumental reminiscence (reviewing past coping strategies) to discover new meaning, and reminiscing to compassionately redefine their view of themselves. Binder et al. (2009) reported findings from interviews with community home-dwelling female older adults aged 65 years and over who had engaged in a six-session (40 minutes each) life-review intervention with a home care worker. Questions were asked about the experience of sharing life stories, and the perceived or possible benefits of this in relation to depression or loneliness. Five themes were identified from the interview data: appreciation of having someone there to listen to stories, the positive experience of having a dedicated time to discuss their lives, valuing interaction with others and the opportunity to reflect on problems, meaning derived from revisiting experiences that were important in their lives, and the integration of lived experiences having a healing effect. Finally, Xiao, Kwong, Pang, and Mok (2012) conducted semi-structured interviews with Chinese patients (mean age 59 years, $SD = 12.7$) who had received a three-session life review programme as part of home-based palliative care for advanced cancer. Participants reported that the intervention had helped them to integrate and accept life experiences, find emotional relief (gained through reliving happy moments, the expression of feelings and thoughts, and reconciliation of negative experiences), bolster their sense of meaning in life (through review of contributions, achievements, positive personal qualities, and leaving a personal legacy), and prepare for death. Participants also reported some negative aspects of this intervention, such as being overwhelmed by negative feelings about events when they perceived that they could not be reconciled. Given the context of advanced cancer, some themes identified by Xiao et al. may not apply more generally to individuals receiving reminiscence-based therapy for depression.
These four studies point to commonalities across reminiscence-based therapies that contribute to positive outcomes, including identification of meaning in life, a focus on strengths and positive experiences, integration and continuity of experiences, and reflecting on and reconciling negatively-valenced memories. However, only one of these studies (McDougall et al., 1997) involved depressed participants, examining therapy notes rather than obtaining information directly from participants on their experiences. Further, it provides little information on important questions such as participants’ experience of the use of specific techniques in these therapies and their effects, whether or not there were components or processes that were difficult or unhelpful, and the desired length of intervention. Qualitative research that examines these aspects in the context of depression would be highly informative in terms of what works and how, and may assist in the subsequent refinement of therapies.

To date, reminiscence-based therapies have typically been used only with older adults. Recently, Hallford and Mellor (in press) have suggested that these interventions may be appropriate and useful for the treatment of depression in young adults, and have subsequently implemented a randomized controlled trial of cognitive-reminiscence therapy to assess this potential (Hallford & Mellor, 2013). Congruent with the paucity of studies examining the clinical effectiveness of reminiscence-based therapy with young adults, no studies have yet sought to understand their experience of receiving this type of intervention. Given the differing psychosocial goals (Arnett, 2004) and more future-oriented time perspective that younger adults possess relative to older adults (Carstensen, 2006), it is possible that they have unique experiences in reminiscence-based therapy, and may differentially perceive the processes involved and its appropriateness for them relative to older adults. Further, cognitive-reminiscence therapy incorporates therapeutic techniques whose effects have not been studied with this age group within this intervention framework. To address this research gap, the current study reports on findings from a series of interviews conducted with participants from a clinical trial of
cognitive-reminiscence therapy for young adults. The aim of this inquiry was to increase the understanding of young adults’ perceptions of a reminiscence-based approach to therapy for depression, the perceived effects or outcomes of receiving this treatment, the process through which any change occurred, and what they found helpful or unhelpful.

Methods

Participants

The sample comprised 10 young adults recruited as part of a larger clinical trial of cognitive-reminiscence therapy (see Hallford & Mellor, 2013 for a study protocol). Inclusion and exclusion criteria for these participants were: 18 or more years of age; at least moderate depressive symptoms (as indicated by a score of seven or higher on the Depression, Anxiety and Stress Scales-21 [DASS-21] depression subscale; Lovibond & Lovibond, 1995); the absence of any concurrent treatment for depression; physical causes for depression ruled out; absence of high risk of suicide or harm to others; and an absence of clinically significant or diagnosable mental disorder related to psychotic symptoms, disordered eating, manic symptoms, body image disturbance, anxiety, substance use, or sexual dysfunction that would trump depressive symptoms as the primary presenting problems.

Of these 10 participants, five were male and five were female. Their ages ranged from 18 to 23 years, with a mean of 20.6 (SD = 1.8). One participant had completed postgraduate studies, two had finished bachelor-level degrees, six had finished high school, and one had completed primary school. Four participants were studying at the time they entered the study: two a bachelor degree, one a diploma, and one their last year of high school. Three participants were in romantic relationships, while seven were not. Two participants had received previous treatment for issues related to mental health, one had received counselling and one received both antidepressant medication and psychotherapy.
Eight of the participants were currently employed: two in full-time work, and six in part-time.

**Materials**

A semi-structured interview schedule was used with the aim of exploring participants’ experiences in therapy in regards to: perceptions of a reminiscence-based approach to therapy for depression, the perceived effects or outcomes of receiving this treatment, the process through which any change occurred, and what they found helpful or unhelpful. The guiding interview questions were:

1. In general, how did you find your experience receiving the intervention?
2. In general, how did you find the overall approach?
3. How did you find the experience of talking over past events in your life?
4. Were there any aspects of the intervention that you found particularly beneficial/helpful?
5. Were there any aspects of the intervention that you found particularly unhelpful or difficult?
6. What did you think about the length of the intervention?
7. What would you like to have seen included that wasn’t?
8. Has anything changed for you since you started the intervention?
9. Have you experienced any changes in how you cope with adversity/understand yourself and your life?

The questions asked did not necessarily represent themes themselves, but were used broadly to understand individuals’ experiences. Follow-up questions were used to further explore different experiences that participants had and their perception of the intervention, whether change occurred for them, and the means through which this
happened. In particular, when interviewees reported positive effects or change as a result of CRT, the interviewer explored their beliefs about how and why these changes occurred for them.

**Procedure**

Prior to data collection ethics approval to conduct the study was obtained from the university ethics committee. Upon finishing their course of therapy, interviews were conducted with participants who were randomised to the cognitive-reminiscence intervention group as part of the clinical trial. Findings showed that clinically significant change in depressive symptoms occurred for the majority of participants from pre to post-intervention (80%). In this sample, six participants fully recovered, two showed clinically significant reductions in depressive symptoms, one participant did not show clinically significant change, and one participant’s depressive symptoms were found to deteriorate following treatment (Hallford, 2013).

Participants received six weekly, individual sessions of cognitive-reminiscence therapy. Each week a different topic was discussed (turning points; family life; significant/important activities in your life; loves and hates; stressful events; meaning in life), and memories were elicited and chosen for therapeutic work. These memories were then discussed in greater detail, and cognitive therapy (Beck et al., 1979) and stress and coping frameworks (Billings & Moos, 1982) were drawn upon to reflect on the positive aspects and what was learned, reappraise experiences and identify their relevance to the present, and view them more adaptively in the persons broader and ongoing life narrative. Problem-solving techniques (Nezu, 2004) were used briefly at the end of each session on current problems, and homework sheets with questions designed to elicit memories for discussion the following week were administered. For a more detailed description of the intervention protocol, see Hallford and Mellor (2013).
Participants were advised of the interviews at the time of providing informed consent, and then invited to take part in them prior to the last session. In total, the first 11 consecutive individuals who completed a course of therapy were invited to complete interviews. One participant was excluded after three failed attempts to conduct the interview at pre-arranged times. Interviews were conducted by the third author (M. E. B.), a provisionally registered psychologist, who was not involved in any other aspects of the clinical trial. This author was briefed on the content and process of cognitive-reminiscence, and the purpose of the interview questions. The interviewer attempted to retain a curious and flexible approach to interviewing, with the aim of drawing out interviewees’ perceptions of the intervention, its effects, and how any change occurred. Interviews were listened to by the first author (D. J. H.) as they were completed, and an ongoing dialogue was preserved with the interviewer (M. E. B.) to further refine the interview process to align with the aims of the study. The interviews took place between one day and one week of participants’ last session of therapy, with the exception of one interview which occurred two weeks afterwards. Interviews were conducted over the phone, a valid and effective medium for conducting semi-structured interviews of sensitive topics (Cachia & Millward, 2011; Novick, 2008), and recorded on a digital voice recording device. The length of interviews ranged between 11 and 38 minutes (mean = 24.11, SD = 7.5). Participants were not provided with any specific incentive to participate in the interviews.

**Data Analysis**

To identify, analyse and interpret patterns in the interview data, thematic analysis was performed utilising the protocol outlined by Braun and Clarke (2006). A primarily semantic approach was used to analyse the surface meaning of the entire data set to identify codes and then themes that were relevant to the research questions. An essentialist epistemology was adopted, assuming that individuals conveyed their personal
motivations, meanings, and experiences through the language they used. A primarily theoretically-driven, deductive analysis was used with guidance from themes identified in previous research on reminiscence-based therapies (discussed above), whilst also reflecting on unique themes that may be identified given the framework of cognitive-reminiscence therapy and its novel use with young adults.

Analysis progressed from the description of organised data and the semantic content, to interpretation of the significance of themes and their broader meaning and implications. Each interview was transcribed by the first author (D. J. H.), and then read through several times while patterns in the data and initial ideas for coding were noted. Following this, the interview data was systematically coded by organising data extracts into meaningful groups. The first author then further refined these codes, collapsing some into more inclusive codes, and removing some. These codes and their corresponding extracts were then reviewed independently by the first (D. J. H.) and third author (M.E.B), and analysed at a broader level to organise them into themes and sub-themes. These authors then reconvened to discuss and contrast their thematic groupings, a consensus was reached, and an initial thematic map was constructed. The collated coded extracts were then reviewed again independently by both of these authors for internal homogeneity and external heterogeneity in relation to the themes (Patton, 1990). The authors then reconvened to review and contrast their themes and collaboratively nominate finalised themes and their content. These were then considered in relation to the data set more broadly through re-reading of the interview transcripts. The themes were then defined and refined to generate a final thematic map (see Figure 1), and interpreted for the analysis.

**Results**

The analysis produced six themes, with associated sub-themes. One of these related to general perceptions of the intervention, four related to change processes during
therapy, and one related the use of homework sheets. The percentage of interviewees independently expressing these ideas is shown in Table 1. These themes will now be described along with related extracts from the data set that exemplify their content.

**General Perceptions of the Intervention**

All participants expressed finding their experience with cognitive-reminiscence therapy to be a positive and helpful one, with the majority finding no specific characteristics of the intervention to be unhelpful or difficult. The majority of participants also reported feeling better or less depressed as a result.

![Final thematic map depicting themes and sub-themes](image)

*Figure 1. Final thematic map depicting themes and sub-themes*
“Generally it was very positive. I think overall it was quite positive, the outcome of it, and I definitely feel like it has helped having it. I’m glad that I did it” – 20 year-old male

Interviewer: “Has anything changed for you since you started working with David?” Participant: “The way I think, and my moods, and just stuff like that. It’s good...just a lot more positive. That’s probably the general gist of it I think”. Interviewer: “What have you noticed in your mood that’s changed?” Participant: “Um. I don’t know, I just don’t really have as much of those negative thoughts going through my mind I guess” – 21 year-old male

In regards to the predominant focus on talking about the past in the intervention, participants typically found this to be a positive attribute. Many discussed how experiences from their past were relevant for them and problems they were facing, and that there was utility in exploring their life through reminiscence.

“\textit{I did like that approach, rather than just talking about stuff that is happening now. It did help}” – 21 year-old male

“It was a new technique that I’ve never actually thought about, that you can think about the past to fix your future kind of thing. \textit{I really liked it}” – 22 year-old female

“It was pretty relevant, in a surprising way, and I can see why it is a helpful method of counselling” – 23 year-old female
Despite the generally positive reception of reminiscence, concern was voiced by half of the participants in regards to a perceived need for more flexibility in the intervention. At times they felt that they were not able to talk about what they wanted to due to the structure of the therapy and the assigned topics each week. One participant suggested that having a week specifically on friend and romantic relationships could be helpful. One participant reported wanting to focus more on the present to create more of a balance in temporal focus, while two participants commented that some of the reminiscence content was not perceived as particularly relevant for them at that time.

“I think it would have been good to say that isn’t really relevant to now, so we can focus on what’s happening now instead of that” – 21 year-old male

“...on some weeks I definitely had, you know, issues regarding those things and so there was a lot to talk about. Other weeks there weren’t as many. So it kind of depended on the week” – 22 year-old male

The majority of the participants reported that having someone to listen and to share their thoughts, feelings, and memories with was beneficial. Some participants reported finding it difficult to remember and express how they had felt in the past, and at times found it confronting to discuss upsetting memories. However, these were typically not discussed as factors that impeded their ability to engage in reminiscence.

“[it was]... a little bit emotional just having to kind of go through them again. Like remember them and then talk through them. Some past experiences it was a bit hard to remember certain things, but talking
In relation to the length of the intervention, over half of participants reported that six sessions was the right amount of therapy for them with this approach, and adequate for their needs.

“It was good. It was a good amount....Yeah, definitely it was just the right amount” – 21 year-old female

Half of the participants, however, also believed that the option of more sessions would have been beneficial, should they have felt they needed them, and two participants suggested that a “check-in” or “catch-up” session at a later date following the end of the six weeks would have been useful.

“Yeah, I think that six is a good amount but maybe if there was a buffer zone, if you felt like you needed more then you have an option. Yeah, a check-in session would be good” – 23 year-old female

Change Processes

Generating new perspectives. Almost all the participants discussed how the intervention had helped them to generate new perspectives on things that had happened in their lives, and how it fostered a more adaptive interpretation of these experiences, and associated thoughts about themselves. The facilitation of reflecting on the past in greater detail, and having a context in which to put things into words and explore different perspectives was valued by the participants.
“Part of it was really good because there were a lot of things that we talked about that I never really thought about in the way that we ended up looking at them. And I think that was really helpful” – 20 year-old male

The participants reported being able to adopt a more balanced and helpful interpretation of past events and experiences through the processes of guided reminiscence. This involved taking a more even-handed and rational approach to understanding themselves and their lives with less focus on negatives, an increased saliency of positive experiences, and seeing useful or positive aspects in otherwise negative experiences.

“[I’m] definitely thinking about things differently, I’d say that after this six weeks, or however many its been, I definitely think differently about some past events and kind of have reframed them in my mind” – 19 year-old male

“Basically just every time we looked at kind of the aspects of myself or of my past that I wasn’t that happy with I would usually always come to the conclusion that I was being too hard on myself and that I’d actually been doing better with that kind of specific issue than I thought” – 22 year-old male.

Over half the participants also reported that this process had led to less ruminating on negative experiences, and that they were able to work through feelings of guilt, self-blame, regret, or failure, and make peace or gain closure with issues from their past that had been troubling them.
“Just talking about it kind of lifted a weight off my chest and he helped me to see that it wasn’t really a thing to feel guilty about and there’s other ways of looking at it” – 21 year-old female

“That helped me, encouraged me, to maybe get over some things and action some things that I’ve just been dwelling on” – 22 year-old female

Table 1.
Themes and Sub-themes Identified from the Interview Data Set and the Percentage of Individuals who Expressed These Ideas in Interviews

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>% of Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience of the Intervention</td>
<td></td>
</tr>
<tr>
<td>Positive experience overall</td>
<td>100</td>
</tr>
<tr>
<td>Feeling better and less depressed</td>
<td>70</td>
</tr>
<tr>
<td>Useful talking about the past</td>
<td>90</td>
</tr>
<tr>
<td>More flexibility needed in the approach</td>
<td>50</td>
</tr>
<tr>
<td>Good having someone to listen</td>
<td>80</td>
</tr>
<tr>
<td>Difficult or confronting to discuss some memories</td>
<td>60</td>
</tr>
<tr>
<td>Good length/option for more sessions if needed</td>
<td>60/50</td>
</tr>
<tr>
<td>Generating New Perspectives</td>
<td></td>
</tr>
<tr>
<td>Reflection and perspective</td>
<td>90</td>
</tr>
<tr>
<td>Having a more balanced and helpful interpretation of experiences</td>
<td>90</td>
</tr>
<tr>
<td>Less ruminating and gaining closure</td>
<td>70</td>
</tr>
<tr>
<td>Awareness of a Life Story</td>
<td></td>
</tr>
<tr>
<td>Continuity in the life narrative</td>
<td>80</td>
</tr>
<tr>
<td>Feeling hopeful about the future</td>
<td>80</td>
</tr>
<tr>
<td>Learning from the Past to Cope with Challenges</td>
<td></td>
</tr>
<tr>
<td>Feeling more confident</td>
<td>80</td>
</tr>
<tr>
<td>Gaining tools to help with coping</td>
<td>100</td>
</tr>
<tr>
<td>Self-Worth and Self-Acceptance</td>
<td>80</td>
</tr>
<tr>
<td>Worksheets</td>
<td></td>
</tr>
<tr>
<td>Good primer/springboard for reminiscence</td>
<td>70</td>
</tr>
<tr>
<td>Difficult to complete between sessions</td>
<td>60</td>
</tr>
</tbody>
</table>
Awareness of a life story. Becoming more aware of continuity and cohesion between experiences across the lifetime was a common theme among participants. Many referred to having an increased awareness and insight into the reasons why things had happened in their life and the effects of certain experiences on the course of their life. The participants also reported seeing connections between circumstances in the past and the present, and finding it a positive experience to observe a path in their life, or feel a sense of connection with an emerging narrative identity.

“...one of my positive things was that when we did look at the past experiences, talking to David about it, we could relate something that was happening now to that past experience” – 20 year-old male

“The reason I started was that I was kind of lost...after the sessions I reckon I’ve got a bit of guide now, and I’ve got a path that I’m following” – 22 year-old female

“It may not be that clear but I had taken a general direction [in life]. It was just really nice to see it that way” – 21 year-old male

In addition to becoming more aware of the interconnectedness of experiences across their lifetime, the majority of participants also reported feeling more hopeful about the future than they had been prior to the therapy. Some remarked that they now had a more positive outlook for their life, some stated feeling more optimistic, and others discussed more strongly identifying with directions to move forward in or having a heightened awareness that there were a range of possibilities.
“I’m pretty optimistic, I mean compared to before. … whereas before I was really scared by not knowing what I was going to do now it’s kind of being happy that there’s so many options open. And that’s the thing…that I didn’t think there was that many options before whereas there are. And yeah, I guess it’s good that I can see a kind of future, and I’m not upset” – 21 year-old female

“Especially then talking to David did help me look at different ways, and different opportunities that I do have in the future, and things that I can look forward to” – 18 year-old female

**Learning from the past to cope with challenges.** The majority of participants reported feeling more self-efficacious as a result of receiving the therapy. A generalised sense of confidence and capability was perceived as arising from discussion of previous successful coping experiences, exploring in what way they had managed to overcome adversity or face problems, and perceiving themselves as being able to face issues or challenges against a background of competence.

“So I’m looking at things, how I’m able to cope with situations or whether I’ve achieved things in life, yes, it’s made me look at myself in a way that I think “okay, I’m able to do that” – 18 year-old female

“I feel as if there’s a lot more things that I could do. I’m a lot more confident in my ability compared to what I was two months ago”– 21 year-old male
In addition to feeling more confident, all participants reported feeling as though they had gained tools for coping with challenges and overcoming adversity. Whilst some of these tools came directly from the structured problem-solving framework that was used, many were identified as methods or strategies from past instances of coping that could be drawn on again. Half of the participants commented explicitly that they felt they were now better equipped to deal with problems into the longer-term future.

“It made me realise that yes, in the past I have been able to deal with them, so I should use those same methods, those same things that I used then” – 18 year-old female

“I think I’m just better equipped to deal with things that happen in the future” – 21 year old female

Two participants reported that they felt generally better equipped to cope with stressors, but had not gained any further specific strategies for current problems.

**Self-worth and self-acceptance.** In addition to feeling more confident and equipped to meet challenges, most participants reported having a more positive evaluation of themselves in emotional and attitudinal terms, or a stronger feeling of self-worth following completion of therapy. This stronger self-esteem was related to having the chance to focus on achievements across their lifetime and experiences that had made them proud of themselves, having more trust in decisions they have made in the past, and believing in themselves. Some participants also referred to having more self-compassion, and being more reliant on an internally-derived standard of worth as opposed to perceived external standards.
“Um, my self-esteem has gone up a lot. I feel kind of much better about myself as a person now. That’s definitely an definite improvement that I’ve noticed since starting the intervention” – 22 year-old male

“I’m going to...really focus on all the good things that I’ve done and let them make me a more stronger person” – 23 year-old female

“I look at myself a lot differently. I’m kind of seeing myself more positively and [I’m] focussing on my positive attributes and not focussing on the negatives” – 19 year-old male

One participant reported that she had not changed in terms of her self-regard, while one conveyed that her self-esteem had not changed as a result of receiving the therapy. Despite this, both of these participants reported feeling more confident and dwelling less on negative events from their past.

Worksheets

The majority of participants reported finding the homework sheets with questions designed to stimulate reminiscence between sessions to be useful primers for discussion the following week, or springboards for discussion during sessions. The questions reportedly prompted participants to think about the topic to be discussed, and increased their awareness of related memories from their life.

“...there were different questions for different topics that we covered each week. They just kind of helped me to gather together my thoughts and stuff, and kind of prepare myself for what we were going to talk about and explore I guess” – 19 year-old male
“Oh, it just made me aware of what we’d be talking about that week, and it probably just saved me a bit of time that I did have with David, like him asking me the questions, cause I already had the answers at thought” – 21 year-old male

Ideas sparked by these worksheets were viewed as a starting point for conversation, and a way to begin exploration of the topic. However, over half of the participants found the worksheets difficult to complete between sessions, citing a range of reasons including forgetting, procrastinating, finding it hard to make the time, and being unable to think of answers. In a sense, it appeared that participants may have appreciated the role of the questions in stimulating reminiscence, but used them more informally rather than completing them as prescribed before sessions.

“I’d been real busy with work, but I did read over them. I knew I’d answer them through with David on the Monday anyway” - 21 year-old male

Discussion

This study represents the first qualitative research into young adults’ perceptions of reminiscence-based therapy for depression. The aim was to investigate their attitudes towards this approach to therapy, their perception of effects and the processes that they believed led to change, and whether any aspects were particularly helpful or unhelpful.

In general, participants reported finding cognitive-reminiscence therapy to be helpful and appropriate as an intervention for depression. As reminiscence-based therapies have rarely been evaluated with age groups outside of older adulthood (Pinquart & Forstmeier, 2012), it is noteworthy that these young adults tended to find the retrospective approach of reminiscence to be useful. Indeed, it is encouraging that
individuals of this age found it a positive experience, and lends credence to the notion that these types of therapeutic approach are valid for individuals across the adult lifespan (Hallford & Mellor, in press). Cognitive-reminiscence therapy does incorporate a component of problem-solving, albeit very brief, which may have helped to some degree to satiate the desire to work concertedly on current issues. Nonetheless, some participants did comment on the desirability of including more present-focussed discussion and a less restrictive structuring of topics. Offering participants’ choices in how reminiscence topics are covered may further increase its acceptability. However, it is difficult to conceive of how to incorporate more work on present issues without compromising the focus on reminiscence and narrative that typifies this intervention.

Having someone to talk to was a prevalent theme across interviews, and discussed as a positive aspect of the intervention. This factor might be considered to be common across psychotherapies. In regards to generating new perspectives, being reflective in this environment was likely to assist in having more rational and balanced interpretations of events and experiences and dwelling less on negatively-valenced memories. Although this intervention differed from the predominantly “here and now” focus of cognitive therapy in its application of therapeutic techniques (Beck et al., 1979), restructuring unhelpful beliefs and attenuating negativistic appraisals was identified as occurring by individuals when reviewing experiences and reconstructing their narratives in more helpful ways. The reflective aspect of the intervention referred to by participants might also reasonably be implicated as a causal factor in the themes of increasing awareness of achievements and positive experiences that fostered increased confidence and self-esteem, as well as learning from the past. Feeling better about the past, becoming aware of relatedness between occurrences in the past and present, and having these more cohesively integrated also appeared to have flow-on effects in terms of increased optimism and positive future-orientation. These findings are largely supportive of previous quantitative studies (e.g. Cappeliez & Robitaille, 2010; Hallford et al., 2013).
and theoretical propositions (Watt & Cappeliez, 1995) which suggest adaptive
reminiscence is associated with increased self-esteem, self-efficacy and perceived
control, and optimism. These findings, in addition to being discussed by participants as
positive outcomes in and of themselves, are likely to pertain to the processes through
which cognitive-reminiscence therapy works to decrease depressive symptoms.

That increases in the perception of meaning in life was not a theme explicitly
identified by participants is inconsistent with previous qualitative findings on experiences
of life-review interventions (e.g. Binder et al., 2009; Xiao et al., 2012), and quantitative
results showing meaning in life mediates effects on depressive symptoms in
reminiscence-based therapy (Westerhof, Bohlmeijer, van Beljouw, & Pot, 2010). Prior
studies, however, have been conducted with older adults who inherently have a vastly
larger number of years over which to identify substantial and meaningful experiences in
their life, and are more likely to have established fruitful work or other occupational
histories, longer-lasting relationships, and achieved or attempted important psychosocial
goals such as generativity. Further, older adults may be more inclined to utilise this
experience to establish a sense of their past as having been purposeful, given their
increased awareness of less time left ahead in life (Carstenson, 2006). In contrast, the
young adults did not explicitly refer to meaning in life, but instead spoke of an increased
awareness of emerging life narratives and connectedness between experiences. It has
been argued that this sense of narrative identity represents a component of extended
eudaimonic well-being, one which provides psychosocial integration of meaning and
frames transformative experiences as being purposeful (Bauer, McAdams, & Pals, 2008).
This may represent an alternative expression of the underlying concept of meaning in life.
Further, individuals in this stage of emerging adulthood may perceive purpose or
meaning in life in this therapy to be related to longer-term goals that are still being
formed, rather than the process of reviewing meaning as embedded in the past.
It appears that many, if not all, of these mechanisms of change are utilised in various other psychotherapeutic modalities (e.g. identifying strengths, having someone to reflect with, cognitive therapy’s focus on having balanced interpretations, and the utilisation of past coping experiences in solution-focussed therapy). However, the specific combination of change processes here, and the fact that they are embedded in life events occurring across a life story which is made more salient, may be considered to be somewhat distinction in this intervention.

Themes that were identified with regards to the length of therapy and homework are instructive. Participants’ comments on the desire for additional sessions or a booster session suggest some flexibility in delivery may be advantageous. In Watt and Cappeliez’s (2000) trial of their integrative and instrumental reminiscence-based interventions, on which this therapy was modelled, such a booster session was used. Offering this as an optional addition may be perceived as favourable by some individuals. Participants who commented on the homework sheets tended to find them useful to raise awareness of reminiscence topics to be discussed, however, half of the group considered them difficult to formally complete between sessions. Given the demonstrated effects of homework on outcomes in psychotherapy (Kazantzis, Whittington, & Dattilio, 2010), placing a strong emphasis on their function or a having more focused implementation, perhaps involving collaboratively nominating a time for completion during the week, may be useful.

Although the sample size in this study was small, it was homogenous in terms of age and presenting issue, as well as the fact that all individuals received and commented on the same manualised intervention. The high prevalence of many themes across the sample also supports their credibility as “common” perceptions, as well as lending credence to their importance. Given these considerations, the findings in this study may have some transferability to other young adults who receive cognitive-reminiscence therapy. A larger sample size would be of value in future studies of this nature though, to
confirm these themes, as well as exceptions to them and potential ways to refine and improve this therapy. Validity checks of the analysis by independent researchers may have been useful also, although the third author satisfied this role to some degree. Cognitive-reminiscence therapy can be viewed as a quite “active” form of reminiscence-based therapy, wherein, for example, the reinterpretation of events is encouraged and positive experiences are made more salient. Future research may seek to examine whether young adults’ perceptions differ in regards to reminiscence-based therapies that utilise a different framework for treatment, or adopt an informal, less structured or unguided approach to reminiscence.

**Conclusion**

This study provides insight into young adults’ perceptions of receiving a reminiscence-based intervention for alleviation of depression symptoms, and provides a rich, phenomenologically-informed understanding of their experience. Despite reminiscence-based therapy being somewhat novel in this age group, these findings indicate it was well-received. This study also provides evidence for its positive effect on young adults’ perceptions of their life, the process through which change occurs, and speaks more broadly of an adaptive and integrated sense of self as a result of receiving this therapy.
Reference


Chapter 7

Study 5: A Therapist’s Perception of Reminiscence-Based Therapy for Young Adults with Depressive Symptoms: Clinical Observations, Challenges, and Recommendations (Submitted to the Journal Clinical Psychology: Science and Practice)

Hallford, D. J. & Mellor, D.

Abstract

Currently, no specific clinical guidance exists for the use of reminiscence-based treatments for depression with young adults. The aim of this article is to disseminate our experiences in engaging in cognitive-reminiscence therapy, as part of a recent clinical trial, with young adults for the purpose of treating depressive symptoms. Discussion is presented in relation to clinical observations that were made during therapy, specific challenges that arose, and recommendations for implementing this therapy with young adults. Firstly, an outline of the treatment and a rationale for its use is provided. Then, a framework for undertaking therapeutic reminiscence work at different levels of analysis is presented, and comment is made on the rationale for, and the process of, eliciting specific memories. Common life events and issues that emerged as the foci of reminiscence with young adults in our trial are reviewed. Following this, the process of orienting to the mechanisms of change in cognitive-reminiscence therapy is discussed. Finally, several clinical issues and insights that emerged during the provision of this therapy are presented: contextualising emerging adulthood as a time of transition, creating continuity across individuals’ lives, the process of reflection on reminiscence, and homework adherence.

1 references are presented at the end of the chapter
Since Butler (1963) asserted that reminiscence may be an adaptive process in the context of mental health, the development and evaluation of reminiscence-based interventions for depression has increased exponentially. Recent meta-analytic evidence indicates these interventions, in general, are highly effective (Pinquart & Forstmeier, 2012), with structured and theoretically-guided interventions significantly more so.

Reminiscence-based intervention that strategically utilises two particular types of reminiscence, integrative (the use of memory to provide meaning and continuity of the self, and to reconcile past negative experiences; Wong, 1995) and instrumental (drawing on past experience in planning, coping, and solving problems; Wong, 1995), has proven particularly effective in reducing depressive symptoms. Referred to as cognitive-reminiscence therapy (Cappeliez, 2002), this intervention draws on cognitive models of depression and cognitive therapy techniques (Beck, Rush, Shaw, & Emery, 1979), as well as stress and coping models of depression (Billings & Moos, 1985) and problem-solving techniques (Nezu, 2004) for use within guided integrative and instrumental reminiscence. A series of clinical trials have demonstrated cognitive-reminiscence therapy to have large effects in ameliorating depressive symptoms in older adults (for a review of these studies see Hallford & Mellor, in press).

Consistent with the general paucity of research on reminiscence-based interventions with young adults, no clinical guidance currently exists on the use of cognitive-reminiscence therapy for depression with this age group. This is perhaps unsurprising given that reminiscence therapies have been historically conceptualised as relevant only to older adults. Recently, we argued that lines of developmental, cognitive, and clinical evidence converge to indicate that this form of intervention may well be appropriate and useful for younger adults (Hallford & Mellor, in press). Subsequent to this, we have conducted a trial of cognitive-reminiscence therapy aimed to investigate this potential (full trial results forthcoming; see Hallford & Mellor, 2013). Pilot data suggest that this intervention is effective (Hallford, 2013), with large effects with regards
to the reduction of depressive symptoms, and the majority of participants either recovering or reporting clinically significant reductions in symptoms. Further, cognitive-reminiscence treatment was perceived as acceptable and useful by young adults who undertook it (Hallford, Mellor, & Burgat, under review).

Given the novel use of reminiscence-based therapy in this demographic, our experience conducting the trial provided us with a unique opportunity to gain insights into the process of delivering this therapy with young adults. In this article, we draw on these experiences to disseminate clinical observations that were made, identify specific challenges that arose, and provide guidance in implementing this therapy with young adults.

Firstly, a framework for undertaking therapeutic reminiscence work at different levels of analysis will be presented, and comment made on the rationale for, and process of, eliciting specific memories. Common life events and issues that emerged as the focus of reminiscence with young adults in our trial will be reviewed. Following this, some discussion will be presented on the process of orienting to the mechanisms of change in cognitive-reminiscence therapy. Finally, several clinical issues and insights that emerged during the provision of this therapy will be then discussed: contextualising emerging adulthood as a time of transition, creating continuity across individuals’ lives, the process of reflection on reminiscence, and homework adherence. To provide a context for subsequent sections, a brief conceptualisation of cognitive-reminiscence therapy with young adults, and a description of the treatment protocol used in our trial will first be presented.

A Conceptualisation of Cognitive-Reminiscence Therapy with Young Adults

Reminiscence-based therapies have long been used with older adults in the context of successful ageing, death preparation, and the development of ego integrity (Butler, 1974). Indeed, older adults perspective of vastly less time in life ahead of them
than behind them (Carstensen, 2006) is likely to give rise to the psychosocial goals of achieving an integrated and positive sense of identity, and belief that one’s life has been significant and meaningful (Erikson, 1980). The notion of learning from one’s past, and revisiting or reappraising experiences to promote positive self-worth and self-confidence also emerge as central aims of this approach to therapy.

Although it has been argued in greater detail elsewhere (Hallford & Mellor, in press), the therapeutic aspects of this approach appear just as potentially useful for younger adults as for older adults. Young adults have many years of life behind them, and have amassed an extensive array of experiences as they developed through childhood, adolescence, and emerging adulthood. These experiences provide a wealth of content to draw on in reminiscence-based therapy, and with which to achieve the same therapeutic aims as with older adults (although typically not preparation for impending mortality). Young adults that are depressed, however, are unlikely to effectively utilise their past experiences, given their relatively maladaptive use of specific autobiographical memories (Williams et al., 2007) and construction of life narratives (Fromholt, Larsen & Larsen, 1995; Habermas, Ott, Schubert, Schneider, & Pate, 2008). Cognitive-reminiscence therapy provides the means to adaptively access and draw on personal resources they may not otherwise. Self-concept clarity and continuity is relatively important for adults of this age (Bluck & Alea, 2008, 2009), and this approach also aims to promote this, with the use of specific therapeutic techniques to combat depressogenic patterns of thinking, and negotiate a more positive and capable view of the self.

**Cognitive-Reminiscence Therapy**

The basic format and content of the cognitive-reminiscence intervention for young adults was adapted by Hallford and Mellor (2013) from a manual developed and evaluated by Watt and Cappeliez (1995, 2000) in their work with older adults. Hallford and Mellor made several key changes in adapting this therapeutic approach for use with
young adults: integrative and instrumental reminiscence were used in conjunction rather than in separate protocols (as per Cappeliez, 2002); therapy was individual rather than group-based; and adaptations were made to questions used in sessions and on homework sheets to be age-appropriate for young adults.

In total, six, 60-minute weekly sessions are provided. In the first session the individual’s current depression-related issues are briefly reviewed, psychoeducation is provided on cognitive and stress and coping models of depression, and autobiographical memory (specifically integrative and instrumental types of reminiscence), and the process and aims of the intervention discussed explicitly. A problem list is then generated for use in subsequent sessions. Memories related to the first reminiscence topic of turning points are elicited, and among these several are identified as being relevant to integrative and instrumental reminiscence, and to be discussed further. These memories are then elaborated on, with the therapist ensuring that sufficient details are elicited to promote memory specificity and inform therapeutic work. Cognitive therapy techniques (Beck et al., 1979) are used while engaging in integrative-type reminiscence to promote cognitive distancing and reattribution, emphasis positive and more balanced evaluations of experiences, reinterpret negative memories to be more rational and adaptive, appraise self-worth and meaning in life in accordance with internal standards, and foster a sense of continuity and a positive narrative identity. On engaging in instrumental-type reminiscence, a stress and coping framework (Billings & Moos, 1985) is used to conceptualise past experiences and promote the appraisal of stressors as challenges rather than threats, recognise and develop coping resources, and promote awareness of prior constructive problem-focussed coping. A summary of the reminiscence work is then provided and feedback is elicited from the participant on their impressions of what has been discussed, what they have learned, and any changes that may have occurred for them. Homework sheets containing information about problem-solving, and questions designed to elicit reminiscence related to the next week’s topic are provided. The
remaining sessions follow a procedure of reviewing homework for the week, identifying memories to elaborate on and engaging in therapeutic work with these memories, reflecting on this reminiscence, and then utilising a problem-solving framework to choose solutions to identified problems to implement over the next week. In the last session, an overview is provided by the therapist of the work completed over the intervention, and the participant is invited to provide feedback and reflect on their experience. Over the course of therapy, six different topics are used to stimulate memories as a basis for therapeutic work: turning points, family life, significant/important activities in your life, loves and hates, stressful experiences, and meaning in life.

As might be garnered from the above description, reminiscence work is likely to involve discussion of specific past experiences as well as broader personal narratives. On the basis of our experience delivering this intervention, we have formulated a heuristic for working with reminiscence at different levels of analysis. This will now be described.

Levels of Analysis in Therapeutic Reminiscence Work

Given that reminiscence work involves reviewing memories as well the integration of these, a three-level model of analysis may facilitate conceptualisation of this process for therapists’ wanting to use this approach (see Figure 1). The first level consists of the specific details, emotions, and thoughts that are associated with autobiographical memories. This level relates to the what, where, when, how, and why of memories, as well as how the person felt and what they thought during specific experiences - for example, whether the person perceived a specific stressor in their life as a threat or a challenge, whether they felt sad, happy, proud, guilty, and their beliefs about what was happening in that situation at the time. The second level relates to the general significance of the event or experience in an individuals’ life and how it defines the self - for example, whether the memory was an illustration of how they had overcome a challenge, whether it was a meaningful event for them and why, how they viewed the
overall outcome, and how it changed their life. The third, and most macro level, relates to sequences of events and experience in terms of a broader narrative. On this level, memories are integrated to form an overarching story of the self with unity, purpose, and an internally-derived standard of worth. As McAdams (2001) suggests, broader life narratives must integrate sometimes conflicting experiences, roles, and relationships across time, and go beyond biographical details to appropriate aspects of experiences, and imaginatively construct stories about the self that vivify and integrate life. These stories are used to define the self in a way that is rational, meaningful, and fosters positive self-esteem. For example, on reviewing work over the course of sessions, one individual in our trial construed their social life as involving a slow start, which included some bullying and anxiety about integrating into social groups. From this he learned better ways of relating to others, and what he did and did not value in friendships. These social learning experiences, involving both negative and positive circumstances over time, helped the individual to build stable and meaningful friendship groups over different circumstances, and he now possessed an understanding of how to do this more effectively in the present, and into the future.

Specific therapeutic techniques can be implemented at various levels. Examples of this are cognitive reappraisals of self-beliefs in a specified situation (first level) or across a range of experiences (third level), or identification of a useful problem-solving strategy used in a specific situation (first level; e.g. scheduling study time before exams) or a style of coping used across a series of experiences (third level; e.g. seeking support from others). Continuity is a core aim here (see section below), through weaving together patterns of first and second levels of analysis into a broader positive and cohesive life narrative. An example of this is provided in Figure 2 to illustrate how separate foci of reminiscence can be collated to form a superordinate narrative to reflect on (for further reading see Singer, Blagov, Berry, and Oost [2013] who provide a more detailed account of the components involved in a narrative identity). In the context of depression,
individuals’ beliefs about themselves and their life stories are likely to be biased by negative thinking styles. Through this therapeutic approach they are engaged in the process of collaboratively reviewing, evaluating, and integrating their life and experiences “from the ground up”. Issues that emerged in our trial relating to the elicitation of memories will now be discussed.

**Figure 1.** A three-level model of analysis in cognitive-reminiscence therapy.

**Challenges in Eliciting Memories, and Why this is Important**

It is well established that clinically depressed individuals report less specific and more overgeneral autobiographical memories (Liu, Li, Xiao, Yang, & Jiang, 2012), which has been associated with impaired problem-solving and a reduced ability to use past events and experiences to accurately predict future events (Williams et al., 2007). This overgeneral style of memory retrieval is likely to create potential barriers in the
context of reminiscence-based therapies. Further, it plays a small, but significant role in maintaining depression (Sumner, Griffith, & Mineka, 2010). Fortunately, the inverse relationship appears to hold. A growing research literature indicates that increasing memory specificity through simple practice in retrieving and elaborating on autobiographical memory, even without additional psychotherapeutic intention or guidance, can significantly reduce depressive symptoms (Neshat-Doost et al., 2013; Raes, Williams, & Hermans, 2009; Serrano, Latorre, Gatz, & Montanes, 2004; Serrano Selva et al., 2012), as well as increase problem-solving skills and reduce hopelessness and negative rumination (Raes et al., 2009). In one study with adolescents, memory specificity practice produced large reductions in depressive symptoms, with increases in memory specificity also predicting changes in depression at follow-up (Neshat-Doost et al., 2013). These recent findings show that the act of eliciting specific memories through reminiscence-based therapy is likely to be an intervention for depression itself, even before any further psychotherapeutic technique is utilised. Given that details of experiences are also needed to effectively review memories and use therapeutic techniques, the moral of the story is that specifics count.

It was our experience during our trial that young adults often failed to elaborate on autobiographical memories of their own volition, and found it challenging at times to remember details. Reasons stated for this included forgetting, trouble concentrating, and difficulty retrieving details that were deemed to be of significance. As might be predicted, overgeneralisation was also a common factor in this process. For example, individuals would construe high school as a single event instead of a long series of related but separate experiences over the course of many years. Similarly, they referred to a past relationship as being wholly negative on the basis of a hurtful ending. In the event that individuals were unable to initially identify memories to discuss, we found that assisting them in the task by suggesting possibilities based on common experiences in this stage of life (see below) was useful. Once memories are chosen individuals can be
probed for further factual details with focussed questions such as “Who was there?”
“What were the sights, sounds, and smells?” “What lead up to this?” “Do you remember what the weather was like?” “How long did that last?” “What happened next?” Being creative with this process, and explicit about the importance of it in the context of the therapeutic work, was found to be helpful.

Eliciting associated emotions and thoughts was an important next step, so as to draw out perceptions, attitudes, and personal meaning. Questions such as: “How did that make you feel?” “What was the impact of that on you?” “How important was that to you?” “What was your view of that?” “Can you remember what you were thinking at the time”, were found to be useful. This process helped to draw out feelings, beliefs and appraisals of the experience and the self that were either adaptive (and therefore fostered and reinforced) or negative (and therefore potential candidates for review and reinterpretation). Asking about factual details of memories prior to moving on to related emotions and thoughts was a useful sequence of questioning, so as to avoid appearing to trivialise feelings by reverting back to details that might be considered less meaningful to individuals.

As well as ensuring that reminiscence incorporated specific details of the event, experience, relationship etc. the quality of the autobiographical memories that were concentrated on were found to be of vital importance. The content, scope, and personal meaning of these memories, and how these aspects of the memory are elaborated on, are important factors in the effectiveness of subsequent psychotherapeutic work. A rule of thumb pertaining to memories being of integrative or instrumental relevance, and of moderate-to-high significance to individuals was found to be useful. Individuals may implicitly indicate that memories are of importance, or alternatively this can be explicitly asked. Further, matching reminiscence with the individuals’ presenting depressogenic beliefs is recommended. For example, individuals in our trial who felt pessimistic about their current abilities were guided to discuss past experiences of success, or where there
was a recurrent theme of feeling unworthy, an emphasis was put on times when individuals were valued by others and appreciated, or were recognised for an achievement. Although guiding questions on the homework sheets typically helped direct individuals to appropriate memories, they were not always a failsafe method for this purpose.

It should also be noted that on discussing meaning in life in the sixth and last session, we found a tendency for individuals to find this concept somewhat abstract. One method to facilitate this reminiscence effectively was by referring to personal values and ways in which individuals wanted their life to be (e.g. being a good friend or being artistically creative) and then using their responses to identify past experiences in which these values and ways of living were being realised (e.g. a time when they helped a friend with something important, or a memory of a project or performance they were proud of).

**Life Events and Common Developmental and Psychosocial Issues in Emerging Adulthood**

While we suggest that this type of intervention is likely to be appropriate for all adults, individuals who received cognitive-reminiscence therapy through our trial were between 18 and 25 years of age, and therefore some comment on reminiscence topics that emerged within this cohort is offered. Individuals referred predominantly to experiences in their life associated with adolescence and emerging adulthood, and less so to those associated with childhood. A selection of prominent themes that emerged is provided in Table 1. This is by no means an exhaustive list, but rather events and experiences that were commonly discussed, and were found to be useful for therapeutic purposes. The relationship between issues in columns can be seen, and how they might cohesively relate to one another. For example, moving out from the family home usually led to changing relationships with parents and siblings (or vice versa), and starting university was usually followed by challenges faced in completing assessment which resulted in growing
specialised knowledge. In most sessions, reminiscence would cover several of these interconnected issues and transverse different domains. Although each individual person has idiosyncratic positive and negative experiences in their development, it can be seen that each of these has the potential to be discussed as being meaningful, and contextualised as a growth experience, or a challenge that was overcome. Lessons learned in orienting to the proposed mechanisms of change in cognitive-reminiscence therapy while reviewing such memories will now be discussed.

**Therapist Orientation to the Underlying Mechanisms of Change**

An inherent risk in discussing a wide range of domains across the lifespan is that the aim of therapeutic work may become too diffuse, sessions may lose focus, and reminiscence might become more descriptive rather than purposefully analytical in nature. Fortunately, therapists can orient themselves towards specific psychological constructs related to change that are embedded in individuals’ memories, and manifest through the process of review. Theoretical formulations of cognitive-reminiscence therapy (Watt & Cappeliez, 1995, 2000) and the use of adaptive reminiscence (Wong, 1995), as well as empirical evidence from basic and clinical outcome research (Cappeliez & Robitaille, 2010; Hallford, Mellor, & Cummins, 2013; Korte, Cappeliez, Bohlmeijer, & Westerhof, 2012; Westerhof, Bohlmeijer, van Beljouw, & Pot, 2010) have provided signposts to psychological constructs implicated in reductions in depressive symptoms, with three garnering relatively more support: self-esteem, self-efficacy, and meaning in life.

At the core of cognitive-reminiscence therapy is the aim of promoting a personal sense of worth and competence throughout the lived life. Therefore, increasing self-esteem and self-efficacy through the discussion of experiences that promote positive self-evaluations in these terms is likely to be of benefit. In regards to self-esteem, experiences that promote a positive attitude towards the self, such as those related to feelings of pride,
worthiness, and self-respect are likely to be beneficial in balancing negative appraisals of the self that typically accompany depression. We found there were typically a range of memories of significant happenings, relationships, achievements etc. that could be retrieved and reviewed to contribute to a stronger sense of positive self-esteem.

Table 1.  
*Common Life Events and Issues that Emerged Through Reminiscence with Young Adults*

<table>
<thead>
<tr>
<th>Family</th>
<th>Social</th>
<th>Occupational</th>
<th>Educational</th>
<th>Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing relationships with parents</td>
<td>Learning how to make friends, and identifying valued traits in people</td>
<td>Hobbies and interests pursued in a club or group, or individually</td>
<td>Starting/finishing primary school, high school and university</td>
<td>Emerging worldviews and changes in thinking on socio-political issues</td>
</tr>
<tr>
<td>Growing apart or closer with siblings</td>
<td>Falling in and out of love for the first time</td>
<td>Winning or achieving in sports, artistic endeavours etc.</td>
<td>Studying for exams and completing tertiary-level assignments</td>
<td>Looking further into one’s future and what it might hold</td>
</tr>
<tr>
<td>Moving out of the family home</td>
<td>Reflecting on long-lasting, and “best-friend” relationships</td>
<td>Securing a first job</td>
<td>Developing specialised knowledge in an area</td>
<td>Consolidating interests over time, and integrating them into the self-concept</td>
</tr>
<tr>
<td>Desire to make parents proud, and fulfil their expectations</td>
<td>Changes in the social convoy</td>
<td>Gaining meaningful employment</td>
<td>Building professionalism through study</td>
<td>Gaining legal status and increased autonomy and responsibility</td>
</tr>
</tbody>
</table>
Therapists can try to ensure these types of memories are chosen for further discussion at the start of sessions, prompt individuals to focus on them if they are not retrieved as part of reminiscence homework, or find positive aspects of experiences that individuals initially perceive as wholly negative. For example, in our trial one individual lamented leaving a paid position in a professional sports team, and viewed this as a sign of personal failure. This experience was drawn out in more detail, with other moderating factors considered, such as his lacklustre view of the team overall, the drawbacks of having to move to be part of the team, and competing interests he held, such as returning to study at the time. The appraisal of “not being good enough” was contrasted with other ways of understanding these events, such as his achievement in getting into the team in the first place, and moments of pride he experienced during his time in the team. In general, past events do not lose their significance simply because things have changed, and positive experiences remain positive experiences, regardless of what subsequently occurs. We found that highlighting this helped individuals to identify and value the positive aspects of experiences. Clearly, not all negative experiences can be alternatively construed, but can typically be embedded in the broader, more balanced story of people’s lives, which can moderate their impact on self-esteem.

Self-efficacy was most clearly focused on during instrumental reminiscence. Discussing occasions when individuals overcame challenges, achieved important goals, and coped with stress provided excellent opportunities to bolster their sense of self-efficacy and approach-oriented coping in the present. Fostering the recognition of these experiences was central to avoiding them being marginalised and “swept under the carpet” in the context of depression. Further, identifying specific strategies that have been used to overcome previous challenges was found to help individuals’ to utilise them in the present. In our trial, one individual found himself needing to conduct research into organisations in which he had applied for jobs in a very short period of time. Drawing on discussion of coping with exam stress in high school in a previous session, he was able to
identify techniques (e.g. finding a quiet place he would not be interrupted, working in the mornings when he found he was most alert etc.) he could use in the present to maximise his productivity.

As a general observation, young adults in the trial took their recent experiences to be the most important predictor of their coping ability in the present and into the future. This neglect of prior coping experiences may well be a product of several factors, such as overgeneralised or negatively-valenced memory due to depression (Williams et al., 2007), or an age-related bias of present and future time-perspective (Lang & Carstensen, 2002; Webster & Ma, 2013). However, in light of discussing previous experiences that contradicted a global appraisal of low self-efficacy, individuals found themselves becoming more ambivalent, or optimistic about these predictions. For example, after reviewing and interpreting a string of challenging past circumstances, and her methods of coping in this situation that were adaptive, one individual remarked, “I can see now that sometimes I sell myself short”. This then opened up the opportunity to examine more experiences that contradicted her current negative view of herself, and became a useful anchor for further construction of a view of the self as being capable and competent.

The concept of personal meaning in life is explicitly addressed in the final session of cognitive-reminiscence intervention for young adults with depression; however, therapists can identify and discuss experiences that relate to meaning at any stage of the intervention. What constitutes meaning in life differs significantly for individuals, and may encompass living in a certain way, moving towards a particular goal, or having a sense of the interrelatedness of experiences. Amongst young adults in the trial, meaning in life was found to be predominantly goal-focussed, with examples such as getting into a university course or working in a helping profession. Anchoring this meaning to individuals’ sense of self and decision-making proved to be a valuable means by which to strengthen the perception of purpose in their life. Discussing the emergence of this meaning, how it had been fostered over time, and its significance in the present and for
their future helped to weave self-continuity and the sense of this meaning as providing
guidance and cohesion in their life. By increasing awareness of the interrelatedness of
experiences and their relevance as part of a life story, therapists can foster an implicit
sense of meaning and purpose. It is worth noting also, that meaning can be derived from
experiences that, in isolation, might otherwise be perceived as purely negative. In this
sense, the therapist assists the individual in transforming the meaning of memories. For
example, through guided reminiscence one individual established that a period of intense
conflict within his family during his adolescence provided insight into the problems at the
core of their inability to get along with each other. After hitting “rock bottom” with his
family, he had also learned to more strongly value the positive aspects of his relationships
with family members.

Delineating these psychological constructs may be, in part, an exercise in post-
hoc analysis. In reality, discussions of memories in session typically involved content
relevant to several of them. A brief outline of one part of a session may illustrate this.
One individual, who had previously expressed feeling inadequate in regards to his ability
to make friends, elected to review the process of leaving his family home to attend
university in a new city during a session initially focussed on family life. After discussing
the process of transitioning from dependency to autonomy, he reported how he had been
lonely on arrival in his new city home. His experiences in facing this challenge were
discussed, and he reported how he had spent a couple of years establishing a friendship
network through university, becoming involved in several hobby clubs related to his
interest in performing arts, and eventually developing close relationships from
acquaintanceships. By reviewing these efforts, he was able to identify evidence of his
competence in becoming independent and making new friends, increase his self-worth
through the interest that others had taken in him and the social connectedness he had
built, and reinforce the growing meaning and centrality of being artistically creative in his
life.
Explicitly orienting individuals to the aims of the reminiscence work from the outset was useful, and there was no obviously apparent gain in keeping the objectives implicit or indirectly communicated. Typically, individuals were motivated to discuss positive experiences, as well as to reinterpret those that had been plaguing them and maintaining depressive symptoms. Given the inherently personalised work of reminiscence therapy, the content that is discussed is highly relevant for individuals.

It is likely that therapists will find themselves steering off-course at some point during sessions. We found that a quick evaluation of whether or not the discussion is focussed on any of the aforementioned constructs was a useful heuristic. Additional questions that therapists might ask themselves could be, ‘Would discussing this memory be likely to highlight a positive experience or attribute of this individual?, “Will it have a positive effect in some way?”, “What might this person be able to learn from this?”, “Is there any way this memory could be adaptively reappraised?”, and “Is this person overlooking certain parts of this experience that might be beneficial for them to discuss?”

Emerging Adulthood as a Time of Change

Emerging adulthood marks a critical period of psychosocial development in life (Arnett, 2000). The transition from adolescence to adulthood is accompanied by increased vulnerability to depressogenic psychosocial stressors (Hammen, 2005), at a time when individuals are only beginning to become self-sufficient, develop their social-cognitive maturity, and understand themselves and others in more sophisticated ways. Given this, it is perhaps unsurprising that the total number of significant life events, and specifically those that are negative, uncontrollable, and occurring in social role areas of school, education, family, work, and living conditions, predicts the onset of depression in young adults (Friis, Wittchen, Pfister, & Leib, 2002). Unfulfilled expectations regarding markers of adulthood, and unattained goals during this transition to adulthood can have negative social and psychological consequences, and accordingly, are risk factors for
depression (Hammen, 2005; Mossakowski, 2011). This can result in young adults feeling a sense of inferiority, perceived distance between the self and goals at this stage of life, and subsequent concerns about meeting expectations of themselves now and in the future (Kuwabara, Van Voorhees, Gollan, & Alexander, 2007). Congruent with this, many of the individuals who undertook cognitive-reminiscence therapy in our trial expressed depressogenic beliefs relating to having failed at effectively launching their next stage of life in adulthood, making poor choices during or following high school, and feeling “lost” and without purpose.

Framing the young person’s stage of life as one of beginnings, explorations, learning, and change was found to be a useful method in creating flexibility around the narrative of their life, and the context in which perceived disappointments or “wrong turns” occurred. For example, several individuals perceived leaving university as a failure on their behalf, even in instances where they had not failed in terms of their academic results. Framing their time at university as a means of exploring avenues of interest, one that has helped them clarify what it is that they are or aren’t interested in pursuing, was found to be a useful approach to take. Indeed, individuals cannot expect to be certain about how things will turn out, or even whether they will enjoy the pathways that they set off on in young adulthood. Stating this explicitly, framing it as a learning experience, and gently challenging the young adults’ ability to have reliable preconceptions or expectations of these experiences (e.g. “was it possible for you to know exactly what it would be like?”) were useful strategies to reduce their perception of guilt and failure. In addition, it can be noted that they are now better informed to make future choices. Assisting in reaffirming or reappraising decisions as intentioned choices rather than failures was found to bolster individuals’ perceptions of an internal locus of control, and help them rely more on an internally-derived standard of worth. In several instances, broader challenges were used to frame their stage of life, such as “maybe this is a time when you are still working these things out and still finding out who you are, and what
you want. Can that be an okay place to be?” Arnett (2004) proposes that emerging adulthood is a distinctive time in life due to it being the age of identity explorations, age of instability, the self-focussed age, the age of feeling in-between, and the age of possibilities. The adoption of this view by therapist and client alike proved to be a useful lens through which to construe individuals’ choices and the narrative of their life to date. Several individuals achieved “sudden gains” of clinically significant reductions in depression through this method, signalling the centrality of this in their life narrative, and their experience of depression.

Creating Continuity between Past, Present, and Future

Continuity was perceived as a major factor in individuals’ depression at this life stage, and concerns about “where my life is headed” were particularly common from the outset of intervention. Fostering this continuity involved temporally linking experiences across the young adults’ life to identify progression, change, and the influence that earlier experiences have subsequently had. Further, the significance of this story to the individual can be discussed and elaborated on, with events and experiences integrated to form a more cohesive and meaningful story. Noting that some things stay the same, while other things change was a useful way to frame these discussions when collaboratively constructing sequences of events over time. This helped individuals to recognise that “who they are” and “what their life story is”, is a fluid concept that they have the capacity to create, change, and revise over time. In regards to the individual discussed above who had lost his position in a professional sports team, this event had the subsequent effect of pushing him to explore other interests and talents that he had, opening up other further possibilities for him and eventually leading to an interest in studying social sciences. Whilst the initial loss had some inherently negative emotion attached to it, it also served to open up new doors in his life.
It was common for individuals in our trial to be surprised at what they learnt from their past and the relevance of past experiences to current circumstances. Typical comments on this were “I had completely forgot about that!”, and “I guess I do have some examples of my ability to do that”. In addition to fostering continuity in the integrative sense, part of the cognitive-reminiscence approach involves a drawing on previous coping to inform a brief but concerted focus on present difficulties with problem-solving techniques. Creating continuity between past, present, and future, and fostering a “you have coped then during adversity, which hints that you are perhaps equipped to cope now” attitude was useful and tended to promote engagement and optimism towards problem-solving. Discussion of memories that related to competence and approach-coping behaviour served as good tools to broadly promote individuals’ self-efficacy and, in turn, their perceived control and willingness to attempt to solve current issues. These memories provide “hard evidence” for individuals that they are active and capable agents. Further, specific coping strategies that have been discussed in session were typically drawn on to assist in the problem-solving work in the present. One individual discussed her passion for playing the flute when she was younger and how this was an outlet for personal expression, as well as it bringing structure to her life through regular rehearsal sessions. On discussing solutions to one of her current problems, which was feeling aimless, re-engaging with playing the flute, with all the goodwill and meaning it had garnered in prior discussions of it, was identified as a possible course of action.

Reflecting on Reminiscence and Gaining Feedback

The importance of reflective discussion is made explicit at the beginning of the first session. However, promoting this throughout sessions and encouraging individuals’ to explore the meaning of experiences or ways of viewing them was important, as was the meta-cognitive awareness of the process of reflection. For example, one individual
discussed the transition from primary school to high school as being difficult, recalling the anxiety she experienced around starting at a new school and feelings of vulnerability and isolation. Through a process of reflection, and questions such as “What did you have to do to meet that challenge?”, and “What did you learn from that?”, she was able to identify and incorporate other aspects of this experience that involved taking risks in approaching others, overcoming her anxiety, and developing her social skills. This process imbued the otherwise negative memories with a sense of having overcome adversity and the development of personal coping resources, both of which were linked with an eventual outcome of social connectedness. On reviewing this discussion at the end of the session, she was able to recognise the positive elements of this experience (reflection), and when prompted for feedback made brief comment on the helpful process of “seeing things in a broader context” (meta-cognitive awareness of the process of reflection). Likewise, during the overview of therapeutic work in the last session of therapy, making explicit the changes in perspective over sessions is likely to promote individuals’ future ability to reflect, and to consider more helpful ways in which they might view themselves and their lives.

**Homework Adherence**

While not all reminiscence-based therapies involve between-session tasks, in cognitive-reminiscence therapy individuals are asked to complete homework sheets designed to elicit memories and associated details on the topic to be discussed in the following week. These homework sheets are beneficial as they promote adaptive reminiscence between sessions, increase memory specificity (see above), and save time within sessions. In our trial, a significant proportion of individuals neglected to complete these sheets between sessions (Hallford et al., under review). Non-compliance with this homework made eliciting and drawing out significant memories much more difficult and compromised individuals’ ability to reflect. In these cases, the initial autobiographical
memories that were elicited sometimes lacked significant personal meaning. Also, individuals tended to draw from current events that had strong and recent emotional resonance, which somewhat compromised the opportunity for cognitive distancing and balanced reappraisal. Given this, it is suggested that the importance of setting aside time to complete these questions (which individuals reported as not taking very long) be communicated very clearly from the outset, and in the event of non-compliance be reiterated along with the rationale for completing them.

Concluding Remarks

Therapists may note the various frameworks that cognitive-reminiscence therapy explicitly (cognitive therapy, problem-solving therapy) and implicitly (solution-focussed, and strengths-based approaches) draws from, as well as the kinship with narrative approaches to therapy which explore alternative life stories (White & Epston, 1990), minus the emphasis on social constructionism. One way of conceptualising this approach may be a method of therapeutic reminiscence that draws on individuals’ personal resources through their historical experience, assists in reconstructing or reappraising experiences otherwise viewed as negative, and adaptively constructs their broader life narratives with the flexible use of therapeutic techniques.

It might be hypothesised that particular presenting issues within the context of depression might lend themselves to the use of cognitive-reminiscence, such as issues with identity moratorium, transitioning into different roles or circumstances, or feeling a lack of meaning or purpose in life. Young adults who signal the desire for self-reflection might also be a “good fit” for this approach. These speculations require further clinical investigation. We found that regardless of the perceived aetiological or maintaining factors of depression, individuals possessed a wealth of useful personal resources in the memories of their previous experience, and what they had learned about themselves and the world. Through the process of recalling and reviewing memories, personal meaning
and internal standards of worth could be derived, challenges that had been faced and overcome could be identified and drawn on for self-confidence and inspiration, and a cohesive and integrated understanding of the self could be formed on the basis of significant events and experiences.

Overall, we found cognitive-reminiscence therapy to be a mode of treatment that was useful for young adults with depressive symptoms. It is hoped that the preceding discussion helps to illuminate the use of cognitive-reminiscence therapy, both in general and with younger adults, and highlights its merit as an intervention approach for depression.
**Figure 2.** An example of a three-level model of analysis in cognitive-reminiscence therapy drawing on several specific autobiographical memories.
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Chapter 8

General Discussion

The life stages of emerging and young adulthood involve traversing through critical periods of psychosocial development across a range of domains, including occupational, social, educational, and that of the self-concept. Given the range of areas in which growth and change occur as individual’s transition from adolescence into adulthood, there exists a strong potential for stressors or maladaptive development to adversely impact on mental health and cause clinical depression (Friis, Wittchen, Pfister, & Leib, 2002). Perhaps unsurprisingly, the prevalence of clinical depression is found to be relatively higher in young adulthood (Kessler et al., 2003, 2005), with more recent findings indicating the onset of depression at this age is also associated with greater severity, chronicity, and psychosocial impairment relative to later onset (Korten et al., 2012; Zisook et al., 2007). Given the lack of treatments specifically evaluated for this age group, and that not all individuals respond to treatments that are currently available, further research into alternative therapeutic methods appears to be warranted.

Against this background, the aim of this thesis was to explore the feasibility and utility of reminiscence-based therapy for the treatment of adult early-onset depression, and the process through which it might produce therapeutic change. In order to achieve this, a series of studies using quantitative and qualitative research methods were carried out examining the theoretical basis for reminiscence-based therapy with this age group, the mediating variables that underpin cognitive-reminiscence therapy, the effects of this therapy on young adults with clinically significant depressive symptoms, and young adults’ and therapist perceptions of this intervention. This chapter will provide a review and summary of the findings from these studies. This will be followed by an integrated discussion of the results and implications related to the use of reminiscence-based therapies with young adults, and reminiscence research and clinical psychology more
broadly. The limitations of this research programme will then be discussed, along with comment on potential future directions.

Summary of Findings

The first study of this thesis involved a review of literature on reminiscence and reminiscence-based therapy, with a focus on whether this type of treatment may be effective for adult early-onset of depression. The adaptive functions of integrative and instrumental reminiscence were highlighted, along with their implementation within established psychotherapeutic frameworks for depression. The robust effects of reminiscence-based therapies on depression were noted, with cognitive-reminiscence therapy put forth as a particularly promising approach for further investigation in regards to adult early-onset depression. Drawing on clinical, developmental, and cognitive research, it was argued that the exclusive use of these therapies with older adults is fallacious, and that the therapeutic aspects of this approach appear just as potentially useful for younger adults. Treatment for depression incorporating guided and structured reminiscence was proposed to be appropriate for young and middle-aged adults, given its utility in developing a positive and cohesive self-concept, drawing on past events and experiences to learn and bolster self-confidence, constructing meaning in life, preserving identity and self-efficacy during transition, and gathering insights from the past to use in the present, and to prepare for the future.

The second study utilised a large community sample to examine the proposed associations between adaptive reminiscence functions and depressive symptoms that may explain, in part, the therapeutic effects of cognitive-reminiscence therapy (Watt & Cappeliez, 1995). The results supported the hypotheses that integrative and instrumental reminiscence are not directly associated with changes in depressive symptoms, but are indirectly associated through changes in psychological well-being variables. More
frequent integrative reminiscence was found to be associated with lower depressive symptoms through increases in self-esteem, meaning in life, and optimism. More frequent instrumental reminiscence was found to be associated with lower depressive symptoms through increases in self-efficacy and perceived control. These findings, although cross-sectional in nature, support the notion that adaptively reviewing and drawing on past experiences is related to individuals’ view of themselves and their capabilities, which in turn is associated with symptoms of clinical depression. They give credence to the proposed mechanisms of change underpinning cognitive-reminiscence therapy (Watt & Cappeliez, 1995), increasing confidence in the understanding of how and why this therapy is effective. Further to this, age was examined as a moderator of these mediating pathways, with no differences found between younger and older adults. Although the “younger” adult group was more representative of middle-aged adults rather than young adults, the invariance of mediation effects across age groups suggests that using adaptive integrative and instrumental reminiscence as a means of reducing depressive symptoms might be generalisable to age groups other than older adults. It is noteworthy that the older adult group reported more frequently reminiscing for these adaptive purposes relative to the middle-aged adult group, a finding consistent with previous research (e.g. Webster 1994, 1997). This suggests that older adults, relative to middle-aged, more frequently affect their self-concept through these means, and indirectly influence depressive symptoms. However, given that the invariance of mediation effects, the guided-use of reminiscence for these functions should produce similar strength of effects (at least while in the therapeutic context) according to the proposed mechanisms of change.

The third study presented pilot data taken from a larger, ongoing clinical trial of cognitive-reminiscence therapy (Hallford & Mellor, 2013) that aimed to investigate whether this treatment may be effective in reducing depressive symptoms in young adults. Young adults presenting to a community youth mental health service with
clinically significant depressive symptoms were recruited and provided with six, weekly sessions of manualised cognitive-reminiscence therapy. It was hypothesised that this treatment would result in significant reductions in depressive symptoms and significant increases on secondary outcomes of psychological well-being (self-esteem, self-efficacy, meaning in life, and optimism). As predicted, the results showed large, significant reductions in depressive symptoms from baseline to post-intervention. This represents the first empirical evidence of the utility of cognitive-reminiscence therapy, and reminiscence-based therapies in general, for depression in young adults. In addition to effects on depressive symptoms, the analyses showed that significant increases occurred on all secondary outcomes from baseline to six-weeks. Changes in these variables provide further tentative support for the pathways through which cognitive-reminiscence therapy effects depression. However, due to the small sample size, formal mediation analyses could not be conducted, and therefore whether or not changes in depression caused changes in these mediators or vice versa could not be clearly established. Despite this, and within the limitations discussed below, these findings support the notion that decreases in depressive symptoms, and increases in these psychological well-being constructs, occur for young adults as a result of receiving cognitive-reminiscence therapy.

The fourth study presented findings from a qualitative investigation of young adults’ experiences receiving cognitive-reminiscence therapy. Using thematic analysis on individual interview data, six themes were identified. The findings indicated that young adults found the intervention acceptable and useful, with some commenting on a need for more flexibility in the approach, and the option for more sessions if wanted. The participants reported on a range of positive effects that may also be construed as mechanisms of change that relate to reductions in depressive symptoms: such as generating new perspectives on issues, having an increased awareness of their broader life story, learning from the past to cope with challenges, and a stronger sense of self-worth and self-acceptance. Worksheets were discussed as being useful, but somewhat
difficult for many to use as intended between sessions. In addition to richer, phenomenological data on young adults’ experiences of receiving this therapy, these findings provided further support for the suitability of this therapy for young adults, and for the proposed mechanisms of change in cognitive-reminiscence therapy. With the exception of an explicit focus on meaning in life, which may be have been represented in part by an increased awareness of a broader life narrative, these findings were largely congruent with quantitative findings from the previous study which found increases on self-esteem, self-efficacy, and optimism from pre to post-intervention.

The fifth and last study provided feedback on the clinical experience of delivering cognitive-reminiscence therapy to young adults. These experiences were used to develop and present a framework for conducting reminiscence work on different levels of analysis, and guidance on orienting to the mechanisms of change. Challenges in eliciting memories, and the common life events and issues that emerged during reminiscence with young adults were identified. Several clinical issues and insights that emerged during the provision of this therapy were also presented. The first was the utility of contextualising emerging adulthood as a time of transition in life, and fostering less emphasis on mistakes or failures and a more hopeful and fluid conceptualisation of life and the future. The effect of creating continuity across individuals’ lives on their sense of understanding and perceiving an integrated and cohesive life story was also noted. Finally, the process of meta-awareness of adaptive reflection through reminiscence, and maintaining adherence to homework tasks was discussed.

Collectively, the findings from these studies support the initial premise that reminiscence-based therapy may be a potentially suitable and effective treatment for adult early-onset depression. They also serve to increase confidence in the proposed mechanism through which these changes, and the particular aspects of the intervention that young adults found useful and challenging. The implications of these findings will now be discussed.
Implications

A broad implication that can be drawn from the findings of the preceding studies is that cognitive-reminiscence therapy may be a suitable form of psychotherapy for young adults with depression. The pilot data reported in this thesis provides preliminary evidence that receiving this treatment can lead to significant reductions in depressive symptomatology. Pending further evaluation of this intervention, cognitive-reminiscence therapy may represent a further treatment option for adult early-onset depression. This is a significant implication, given that a substantial minority of individuals do not respond to current treatments for depression (Hollon, Thase, & Markowitz, 2002; Warden, Rush, Trivedi, Fava, Wisniewski, 2007), and few psychotherapeutic treatments for depression have been evaluated specifically for use with young adults. In addition to a decrease in depressive symptoms, significant increases were found on all secondary outcomes. Higher self-esteem (Orth & Robins, 2013), self-efficacy (Kavanagh, 1992), meaning in life (Pinquart, 2002; Steger, Oishi, & Kashdan, 2009), and dispositional optimism (Andersson, 1996) have all been evidenced to decrease vulnerability to depressive symptoms, and thereby prevent or reduce the likelihood of future episodes of depression. Therefore, these findings suggest outcomes of receiving cognitive-reminiscence therapy also pertained to a more broadly improved sense of psychological well-being, and a strengthening of protective factors against depression.

In addition to significant changes on outcomes measures that were observed, participants reported finding the intervention acceptable, appropriate, and useful. That young adults’ personal experience of receiving cognitive-reminiscence therapy was positive is an important factor, given that confidence in treatment models (Van Voorhees, Houston, Cooper, & Ford, 2006) and preferences for treatment (Swift & Callahan, 2006) can affect their engagement in therapy and treatment outcomes.

These findings have some relevance for the implementation of this therapy in “real-world” settings, given that the inclusion and exclusion criteria used did not rule out...
individuals on the basis of co-morbid issues, but rather only required that depressive symptoms be the primary reason for the young person’s help-seeking and presentation to the service. In the absence of tightly controlled criteria for participation, these effects might reasonably be expected to be found in other community mental health settings when similar criteria for suitability are used. However, validation of this awaits further investigation.

The intervention itself has been manualised (see Appendix E), and therefore could potentially be implemented by other health professionals on this basis. In this study, cognitive-reminiscence therapy was delivered by the thesis author (D. J. Hallford), a provisionally registered psychologist at the time of writing. It must be noted that broader training in psychotherapy was provided to the author as part of a post-graduate clinical psychology degree, and that specialised training in psychotherapy is likely to moderate clinicians’ ability to implement the therapy. While it is unknown whether or not outcomes would be consistent among other health professionals, the manualised format of the therapy lends itself readily to the testing of this question.

Participants did not require a diagnosis of a depressive disorder to participate in the trial, but nonetheless the sample mean of depression scores was in the severe range on the DASS-21 at the baseline measurement (Lovibond & Lovibond, 1995), and at the 91st percentile relative to age-related peers (18-24 year olds) in the Australian general population (Crawford, Cayley, Wilson, Lovibond, & Hartley, 2011). This suggests that the intervention may be valid for symptom severity of a moderate to severe level, and not restricted to only mildly depressed individuals. Further, the brevity of this intervention (six sessions) is beneficial in terms of the resources needed to provide the treatment, and that significant therapeutic effects for the majority of individuals can be delivered in a short time-frame. In Australia, the Medicare Better Access scheme (Australian Government Department of Health, 2013) provides substantial financial rebate for up to 10 sessions of psychotherapeutic intervention in private practice settings. Given this,
cognitive-reminiscence therapy may well be an affordable intervention for young adults in this context.

Evaluations of reminiscence-based therapies have predominantly utilised a group-based format for intervention (Bohlmeijer et al., 2003; Chin, 2007). Consistent with this, cognitive-reminiscence therapy has been previously delivered in small groups of two-to-four participants (Cappeliez, 2002; Karimi et al., 2010; Watt & Cappeliez, 2000) with the exception of one study which used an individual therapy format and reported relatively attenuated effect sizes (Shellman, Moke, & Hewitt, 2009). In the current study, an individual format for treatment was used, with outcomes found to be consistent with the larger effect sizes of group-based implementation. This provides evidence that an individual format can be highly effective. It also implies that the vicarious learning and perception of others’ self-reflection that occurs in a group-based format, although likely to be useful, may not be a necessary factor in producing changes in depressive symptoms for young adults. An individual format for treatment conceivably affords the therapist and client additional time within sessions to more fully examine, reinterpret, or reconstruct events and experiences from the past. However, whether or not incremental changes in effects do occur as a result of this additional time remain unknown, given there was no group-based format to directly compare with. It appears that both formats offer potential advantages, with comparative studies necessary to assess any differences in outcomes.

A further implication of findings from these empirical studies is support for the hypothesised mechanisms of change in cognitive-reminiscence therapy that produce reductions in depressive symptoms. The adaptive use of memory and the process of recalling and reconstructing past events and experiences in a guided, and therapeutic manner appears to facilitate increase in individuals’ perceived self-confidence, self-esteem, meaning in life, and optimism. The opportunity to integrate experiences, and form a cohesive and meaningful story of a purpose-driven life that relies on internally-derived standards also appears to increase individuals’ sense of eudaimonic well-being.
These factors are likely to act to attenuate depressogenic beliefs of self-inadequacy, pessimism about the future, and negativistic and self-defeating views of the self and world. These findings increase confidence in the ability to achieve these effects through reminiscence-based therapy with young adults, and treat depressive symptoms as a consequence. More broadly, these findings support the use of depression treatments for young adults that incorporate life narratives, and supplement more recent empirical support for the effectiveness of narrative therapies (Vromans & Schweitzer, 2011).

Although these findings provide some support for cognitive-reminiscence therapy as a standalone psychotherapeutic approach, it may also serve as a useful adjunct or addition to other forms of cognitive-behavioural therapies. For example, augmenting cognitive therapy (Beck, Rush, Shaw, & Emery, 1979) in the treatment of depression with components of purposeful and structured integrative and instrumental reminiscence would assist in further nesting it in the context of individuals’ lived lives. The addition of a structured, concerted focus on individuals’ past may assist in strengthening cognitive therapy by incorporating a narrative-style approach in addition to a focus on the here-and-now. In conjunction with structured reminiscence, the mechanisms of change sought through cognitive therapy can be more comprehensively applied across individuals’ phenomenological account of their life. Incorporating several sessions of structured cognitive-reminiscence that focus on past events or experiences identified by clients as important may be one way to do this. It may also serve as a useful adjunct to psychopharmacological treatment, whereby cognitive-reminiscence therapy can act on psychosocial components that medication can not.
Limitations and Future Directions

A range of limitations relating to the studies reported in this thesis and the generalisability of findings, have not yet been discussed in preceding chapters. They will now be addressed along with accompanying suggestions for future research.

First and foremost, the pilot data presented in chapter five can provide only preliminary evidence that this treatment approach is effective in reducing depressive symptoms in young adults. Larger samples would provide findings that would be more reliably generalisable to the broader population of young adults with clinical depression. As noted above, due to the fact that a larger clinical trial was expected to take far longer to complete than the time permitted for submission of this thesis, data from only the first 10 participants were analysed. Results based on a larger sample may well vary, although the reported analyses showed an extremely low probability that effects on depression occurred by chance, given the $p$ values of $< 0.001$. A similar trend of highly significant $p$ values was found for secondary outcomes also.

The lack of a comparison group in the pilot study analyses limits the interpretability of the results, due to the potential for confounding factors to account for changes in depressive symptoms, such as regression to the mean or spontaneous remission of depressive symptoms. However, given that the effects were quite large it is proposed that they are unlikely to be attributable to an unexplained, sudden reduction in depressive symptoms over the course of three, and then six weeks following baseline data collection. Regardless, the inclusion of a comparison group, either a wait-list control group or another evidence-based treatment for depression, would improve the internal validity of the findings, and provide stronger evidence of the relative effectiveness of cognitive-reminiscence therapy.

Concerns relating to treatment fidelity are also pertinent in determining the cause of the observed effects of treatment. Given that there was no measures of treatment fidelity used, adherence to the treatment protocol was based purely on the treating
therapist’s assurances. With respect to the treating therapist’s honesty in these accounts, tools to ensure treatment fidelity (such as audio recording’s of session checked by an individual external to the study) would provide stronger evidence for the relationship between factors specific to cognitive-reminiscence therapy and the positive changes that were witnessed in the pilot data.

The small sample size precluded the use of formal tests of mediation using quantitative data, due to low statistical power. It is hypothesised that increases in self-esteem, self-efficacy, meaning in life, and optimism as a result of the intervention produce subsequent reductions in depressive symptoms. However, this causal association was not able to be directly tested. Results from mediation tests would help to further establish the casual direction of change between depressive symptoms and the proposed mediating variables underpinning cognitive-reminiscence therapy. In the second study presented as part of this thesis, a large sample was used to assess associations between adaptive functions of reminiscence used in cognitive-reminiscence therapy and depressive symptoms, however, the cross-sectional nature of this rules out causal inferences. Findings from prior outcomes trials of other reminiscence-based therapies (Korte, Westerhof, & Bohlmeijer, 2012; Westerhof, Bohlmeijer, van Beljouw, & Pot, 2010) support the notion that these causal mediation processes occur, however, clear and direct evidence of this in the context of cognitive-reminiscence therapy with young adults is still awaited. Additional longitudinal studies examining the causal effects of reminiscence on psychological well-being variables and depressive symptoms over time (e.g. Cappeliez & Robitaille, 2010) might help to provide stronger empirical evidence of these relationships without necessitating resource-intensive clinical trials.

Utilising additional time-points with longer follow-up would also have been advantageous for the purpose of testing mediation, and to assess whether the observed effects were lasting in nature. One prior evaluation of reminiscence-based therapy, wherein participants received therapy based on either integrative or instrumental
reminiscence, showed that effects on depressive symptoms were maintained at a three-month follow-up (Watt & Cappeliez, 2000). Future research might wish to assess whether this maintenance of outcomes also holds for young adults when the psychotherapy is individually delivered, and incorporates integrative and instrumental reminiscence together in therapy.

Further examination of the moderating factors related to cognitive-reminiscence therapy outcomes would be fruitful, so as to establish which variables might influence its effectiveness, and for whom this treatment may be particularly indicated or contraindicated. For example, whether or not gender, ethnic background, or treatment preferences affect outcomes are questions worthy of investigation. Prior meta-analyses have identified very few moderating variables for reminiscence-based therapies as a treatment approach in general (Pinquart & Fortsmeier, 2012), although no research has been conducted specifically with cognitive-reminiscence therapy for depression in young adults.

It must be acknowledged that in relation to depressive symptoms, one participant did not improve in a clinically significant manner, while another deteriorated. It is difficult to establish the exact reasoning for this, although qualitative data indicated associations between these participants’ outcomes and the desire for more flexibility in the delivery of this therapy, and a stronger focus on current issues.

As discussed previously, not all therapies are effective for all individuals. Continued research to examine why cognitive-reminiscence therapy may not be effective for some individuals, and methods of identifying this prior to commencement of therapy would be advantageous. It has been suggested above that individuals with depressive symptoms related to identity moratorium, transitioning into different roles or circumstances, or feeling a lack of meaning or purpose in life may be particularly suitable candidates for cognitive-reminiscence therapy. Indeed, some studies have indicated that reminiscence increases during times of transitions in life (Melia, 1999), and is used more
by young adults during these transitions relative to older adults (Parker, 1999).

Ascertaining whether there are differential effects of this treatment on the basis of the presence or absence of such psychosocial challenges may shed light on this matter.

A further consideration here may be of therapist allegiance effects. This refers to the relationship between the enthusiasm, commitment, training and competence that therapists have in relation to a particular therapeutic approach, and how these factors might subsequently affect treatment outcomes in trials. Previous meta-analyses have shown therapist allegiance to explain significant amounts of variance, and to be related to better outcomes in evaluations of treatments (e.g. Luborsky et al., 1999; Munder, Flückiger, Gerger, Wampold, & Barth, 2012). Given this, replications of this trial in independent research groups, utilising therapists who are perhaps initially less acquainted or invested in the study of this therapeutic approach, may provide more ecologically valid findings.

Separating out the “active” components of cognitive-reminiscence therapy was not attempted in the current study. Given that the approach incorporates techniques, or draws inspiration from, cognitive, problem-solving, strengths-based, and narrative forms of therapy, this is likely to be a difficult task. For example, although a problem-solving framework was employed at the end of each session to generate targeted and solution-focused tasks for between sessions, this was implemented variably across participants, and the variance which this accounted for in changes in depressive symptoms cannot be easily assessed. It may be that the strength of this approach lies in its integration of different methodologies, in the context of a review of individuals’ lives. Notwithstanding this consideration, assessing whether cognitive-reminiscence therapy increases memory specificity, and whether this predicts subsequent reductions in depressive symptoms, may be a reasonably achievable goal that is and worthy of future attention. Given that interventions designed to increase individuals’ memory specificity have been shown to result in decreases in depressive symptoms (Neshat-Doost et al., 2013; Raes et al., 2009;
Serrano et al., 2004, 2012) the concurrent measurement of memory specificity at various
time-points before, during and following cognitive-reminiscence therapy would help
support or refute this as a possible factor in therapeutic outcomes.

**Conclusion**

Whilst the research field of autobiographical memory has examined age-
generalisable functions and processes of memory use and their relationship with mental
health, the more treatment-oriented field of reminiscence research has examined the
utility of using memory in treatment but historically focussed more on older adults
(Westerhof, Bohlmeijer, & Webster, 2010). The result of this has been an understanding
that the adaptive use of memory is a lifespan phenomenon, yet the potential for using
reminiscence-based approaches with adults other than those in old age has been largely
neglected. Young adults possess a wealth of personal resources contained in the
memories of their previous experiences, and what they have learned about themselves
and the world. Reminiscence-based treatments provide the means to access and
adaptively utilise these experiences. As a product of recalling and reviewing memories,
personal meaning and internal standards of worth can be derived, challenges that have
been faced and overcome can be identified and drawn on for self-confidence and
inspiration, and a cohesive and integrated understanding of the self can be formed on the
basis of significant events and experiences. Further, alternative and more adaptive ways
of thinking about past conflicts or negative experiences can be engineered. This thesis,
and the findings herein, has provided some promising evidence that depressed young
adults may have much to gain from receiving guided reminiscence-based therapy, and are
suggestive of a fruitful avenue of clinical research for the future.
References


Angst, J. (1986). The course of major depression, atypical bipolar disorder, and bipolar disorder. In H. Hippius, G. L. Klerman & N. Matussek (Eds.), *New results in depression research* (pp. 26-35). Berlin/Heidelberg: Springer-Verlag.


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Appendix A – Letter of Support

Deakin University
School of Psychology
221 Burwood Highway
Burwood

11 September 2012

Re: Support for the project: Autobiographical memory-based therapy for the treatment of depressive symptomatology in young adults

This letter is to affirm that headspace supports the above project, which is to be conducted by David Halflord as part of his requirements for the Ph.D. in clinical psychology.

headspace is committed to supporting high-quality student research that accords with headspace’s central mission to improve the mental health and wellbeing of young people in Australia. The knowledge gained from this research project will aid headspace centres in providing current, evidence-based clinical services to the young people they assist.

Subject to the project being approved by the Ethics Committee, headspace agrees to:

- serve as a conduit to headspace Collingwood, whose staff and clients will be participating in the project, and
- provide additional support for the project as needed to support the involvement of the Collingwood centre, staff and clients.

We look forward to supporting David on this important project.

Yours sincerely,

Signature Redacted by Library

Professor Debra Rickwood
Head of Research and Clinical Quality Improvement, headspace
Appendix B – Human Ethics Research Approval

Memorandum

To: Prof David Mellor
    School of Psychology

B

cc: Mr David Halford

From: Deakin University Human Research Ethics Committee (DUHREC)

Date: 05 December, 2012

Subject: 2012-278

Cognitive-reminiscence intervention for the alleviation of depressive symptomatology in young adults

Please quote this project number in all future communications

The application for this project was considered at the DUHREC meeting held on 12/11/2012.

Approval has been given for Mr David Halford, under the supervision of Prof David Mellor, School of Psychology, to undertake this project from 5/12/2012 to 5/12/2016.

The approval given by the Deakin University Human Research Ethics Committee is given only for the project and for the period as stated in the approval. It is your responsibility to contact the Human Research Ethics Unit immediately should any of the following occur:

- Serious or unexpected adverse effects on the participants
- Any proposed changes in the protocol, including extensions of time.
- Any events which might affect the continuing ethical acceptability of the project.
- The project is discontinued before the expected date of completion.
- Modifications are requested by other HREC’s.

In addition you will be required to report on the progress of your project at least once every year and at the conclusion of the project. Failure to report as required will result in suspension of your approval to proceed with the project.

DUHREC may need to audit this project as part of the requirements for monitoring set out in the National Statement on Ethical Conduct in Human Research (2007).

Human Research Ethics Unit
research-ethics@deakin.edu.au
Telephone: 03 9251 7123
PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Participants

Plain Language Statement

Date: September 2012

Full Project Title: Cognitive-reminiscence therapy for the alleviation of depressive symptomatology in young adults

Principal Researcher: Professor David Mellor

Student Researcher: Mr David Hallford

1. Introduction

You are invited to take part in this research project. The research project aims to evaluate an intervention to alleviate symptoms of depression.

Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, or friend.

Participation in this research is voluntary. If you don’t wish to take part, you don’t have to.

If you decide you want to take part in the research project, you may be asked to sign the consent section. By signing it you are telling us that you:

- understand what you have read;
- consent to take part in the research project;
- consent to be involved in the procedures described;
- consent to the use of your personal and health information as described.

You will be given a copy of this Participant Information and Consent Form to keep.

2. What is the purpose of the research project?
The purpose of our project is to evaluate a brief intervention to alleviate depressive symptoms in young adults, and to compare the effectiveness of this intervention to that which individuals would ordinarily receive. This intervention involves six 60-minute sessions of individual counselling, and is aimed at building skills in better understanding the self, others, and the world, and to improve problem-solving when faced with challenges. This intervention has been shown to be highly effective in reducing symptoms of depression in older adults, but to date has not been evaluated in groups in younger adults.

3. What does participation in the research project involve?

Individuals who agree to participate will first be allocated to one of two groups: the intervention group or treatment-as-usual group. Neither the researchers, nor Headspace staff, will have influence over this.

In the intervention group, participants will take part in six 60-minute sessions of intervention at Headspace Collingwood, delivered weekly over the course of six weeks. To assess the effectiveness of the intervention, a series of questions around psychological well-being, accessed via a link to a website, will be completed prior to the beginning of the intervention, after the third session, immediately following the last session of treatment, and one and three-month time-points after the last session. Following completion of the intervention, individuals in the intervention group will be invited to participate in an interview to discuss their experiences of the intervention and provide feedback. Participants in the intervention group will also be able to access further services as per usual from Headspace Collingwood following the last session of the intervention.

In the treatment-as-usual group, participants will receive intervention services as per usual at the Headspace youth service to which they presented, and will complete the same questions around psychological well-being at the same time-points as those in the intervention group. Following the completion of data collection, participants in the treatment-as-usual group will be offered the opportunity to receive the intervention, should they want it.

4. What are the possible benefits?

Based on past evaluations of this brief intervention, it is predicted that the intervention will lead to the reduction of depressive symptoms for participants in the intervention group. This will provide evidence that it is an effective brief intervention for young adults suffering from the symptoms of depression. We expect that those in the treatment-as-usual group will benefit in the usual way that they would from the Headspace service, plus following the completion of data collection they will be offered the opportunity to receive the intervention, should they want it.

5. What are the possible risks?

It is not believed that this intervention will cause any particular risk to participants but should any stress be experienced as part of the project then counselling or other appropriate support will be provided. This project will be conducted with the support and guidance of Headspace.
6. Do I have to take part in this research project?

Participation in any research project is voluntary. **If you do not wish to take part you are not obliged to.** If you decide to take part and later change your mind, you are free to withdraw at any time during the study in which event your participation in the research study will immediately cease and any information obtained from you will not be used. Please note that as information will be de-identified following the end of data collection, or in case of recorded interviews, soon afterwards, withdrawal of information after this time will not be possible.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect future services you receive at Headspace, nor your relationship with Headspace or Deakin University.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Sign the Consent Form only after you have had a chance to ask your questions and have received satisfactory answers.

If you decide to withdraw from this project, please notify a member of the research team.

7. How will I be informed of the final results of this research project?

Once the project has been completed, a summary of findings will be distributed through the managers of Headspace Collingwood, and participants will have access to the results by requesting a copy. Alternatively, the researchers listed at the bottom of this plain language statement may be contacted to obtain the results of this project, or participants may provide the researchers with a contact email and results can be sent to them when finalised. Final results are expected to be available by the end of 2013.

8. What will happen to information about me?

Your information will remain confidential and will only be used for the purpose of this current research project. Audio files will be transcribed and then destroyed. The transcription of the interview will not be labelled with your name. Your information will only be disclosed with your permission, except as required by law. If you give us your permission by signing the Consent Form, we plan to publish the results in a scientific journal. In any publication, information will be provided in such a way that you cannot be identified.

Any data you supply will be stored on DVDs and locked in a cabinet at Deakin University for a minimum of five years from the date of research publication. These DVDs will then be destroyed and paper copies of information will be shredded. Only the research team will have access to the information.

9. Can I access information about me?

In accordance with relevant Australian and/or Victorian privacy and other relevant laws, you have the right to access the information collected and stored by the researchers.
about you. If we are holding any identifiable information about you, you may view it or listen to your interview. However please note that most information will be de-identified following the end of data collection, or in case of recorded interviews, soon afterwards. Accessibility of information after this time will not be possible. Information collected in this project will be kept for at least five years from the date of publication, which is expected to occur in 2014.

10. Is this research project approved?

The ethical aspects of this research project have been approved by the Human Research Ethics Committee of Deakin University in accordance with the principles of the National Statement on Ethical Conduct in Human Research (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

11. Who can I contact?

The person you may need to contact will depend on the nature of your query. Therefore, please note the following:

**For further information:**

If you want any further information concerning this project or if you have any problems which may be related to your involvement in the project (for example, feelings of distress), you can contact the principal researcher David Mellor on 9244 3742 or any of the following people:

Name: David Hallford  
Role: Deakin University – Student Researcher  
Telephone: 9244 3042

**For complaints:**

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Research Integrity, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: 9251 7129, Facsimile: 9244 6581; research-ethics@deakin.edu.au

Please quote project number [2012-278].
PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Participants

Consent Form

Date: September 2013

Full Project Title: Cognitive-reminiscence therapy for the alleviation of depressive symptomatology in young adults

Reference Number: 2012-278

I have read and I understand the attached Plain Language Statement.

I freely agree to participate in this project according to the conditions in the Plain Language Statement.

I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant’s Name (printed) ..............................................................................................................

Signature .................................................. Date ...........................................
**Well-being**

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

*The rating scale is as follows:*

- 0 - Did not apply to me at all
- 1 - Applied to me to some degree, or some of the time
- 2 - Applied to me to a considerable degree, or a good part of time
- 3 - Applied to me very much, or most of the time

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<tr>
<td>I was unable to become enthusiastic about anything</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I felt I wasn't worth much as a person</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>I felt that I was rather touchy</td>
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<tr>
<td>I was aware of the action of my heart in the absence of physical</td>
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</tr>
<tr>
<td>exertion (eg, sense of heart rate increase, heart missing a beat)</td>
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<td></td>
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<tr>
<td>I felt scared without any good reason</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt that life was meaningless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How you feel about yourself

How much do you agree with the following statements? Please circle one of these numbers to indicate your level of agreement

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree at all</th>
<th>Agree Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the whole, I am satisfied with myself</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I am able to do things as well as most other people</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I feel that I’m a person of worth, at least on an equal plane with others</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I take a positive attitude towards myself</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I will be able to achieve most of the goals that I have set for myself</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>When facing difficult tasks, I am certain that I will accomplish them</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>In general, I think that I can obtain outcomes that are important to me</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I believe I can succeed at most any endeavour to which I set my mind</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I will be able to successfully overcome many challenges</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>I am confident that I can perform effectively on many different tasks</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>Compared to other people, I can do most tasks very well</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
<tr>
<td>Even when things are tough, I can perform quite well</td>
<td>0 1 2 3 4 5 6 7 8</td>
<td>9 10</td>
</tr>
</tbody>
</table>
**Your life and the future**

Please take a moment to think about what makes your life important to you and circle one of these numbers to indicate how true each of the following statements are for you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Absolutely Untrue</th>
<th>Absolutely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand my life's meaning</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>My life has a clear sense of purpose</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>I have a good sense of what makes my life meaningful</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>I have discovered a satisfying life purpose</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>My life has no clear purpose</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>In uncertain times, I usually expect the best</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>I’m always optimistic about the future</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Overall, I expect more good things to happen to me than bad</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>
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Prelude

The life stages of emerging and young adulthood involve traversing through critical periods of psychosocial development across a range of domains, including occupational, social, educational, and that of the developing self-concept. Given the range of areas in which growth and change occur as individual’s transition from adolescence into adulthood, there exists a strong potential for stressors or maladaptive development to adversely impact on mental health and result in clinical depression. Perhaps unsurprisingly then, the prevalence of clinical depression is found to be higher in young adulthood relative to other age groups, with more recent findings indicating the onset of depression at this age is also associated with greater severity, chronicity, and psychosocial impairment relative to onset later in adulthood.

General Overview of Cognitive-Reminiscence Therapy

Reminiscence-based therapies have been shown to be an effective psychotherapeutic intervention for reducing depressive symptoms. This manual describes one particular, highly effective form of reminiscence-based therapy referred to as cognitive-reminiscence therapy. Cognitive-reminiscence therapy adopts cognitive therapy and stress and coping conceptualisations of depressive psychopathology, and involves a therapist-guided review of past experiences across a number of different domains. Recent research findings in a youth community mental health setting have provided evidence that cognitive-reminiscence therapy is both effective in reducing depressive symptoms and acceptable for young adults.

Cognitive-reminiscence therapy utilises a structured approach in order to facilitate achievement of the therapeutic objectives, with elements that are common to all sessions. In total, six, 60-minute weekly sessions are provided. In the first session the individual’s current depression-related issues are briefly reviewed, psychoeducation is provided on cognitive and stress and coping models of depression, and autobiographical memory (specifically integrative and instrumental types of reminiscence), and the process and aims of the intervention
discussed explicitly. A problem list is then generated for use in subsequent sessions. Memories related to the first reminiscence topic of turning points are elicited, and among these several are identified as being relevant to integrative and instrumental reminiscence, and to be discussed further. These memories are then elaborated on, with the therapist ensuring that sufficient details are elicited to promote memory specificity and inform therapeutic work. Cognitive therapy techniques are used while engaging in integrative-type reminiscence to promote cognitive distancing and reattribution, emphasis positive and more balanced evaluations of experiences, reinterpret negative memories to be more rational and adaptive, appraise self-worth and meaning in life in accordance with internal standards, and foster a sense of continuity and a positive narrative identity. On engaging in instrumental-type reminiscence, a stress and coping framework is used to conceptualise past experiences and promote the appraisal of stressors as challenges rather than threats, recognise and develop coping resources, and promote awareness of prior constructive problem-focused coping. A summary of the reminiscence work is then provided and feedback is elicited from the participant on their impressions of what has been discussed, what they have learned, and any changes that may have occurred for them. Homework sheets containing information about problem-solving, and questions designed to elicit reminiscence related to the next week’s topic are provided. The remaining sessions follow a procedure of reviewing homework for the week, identifying memories to elaborate on and engaging in therapeutic work with these memories, reflecting on this reminiscence, and then utilising a problem-solving framework to choose solutions to identified problems to implement over the next week. In the last session, an overview is provided by the therapist of the work completed over the intervention, and the participant is invited to provide feedback and reflect on their experience. Over the course of therapy, six different topics are used to stimulate memories as a basis for therapeutic work: turning points, family life, significant/important activities in your life, loves and hates, stressful experiences, and meaning in life.
Outline of the Manual

This manual begins by presenting the structure of cognitive-reminiscence therapy, and breaking each session into its constituent components. This includes instructions for the content of session one, and then the contents of session two through to session six (which are consistent in nature), as well as specific content relating to the summary of therapy in session six. Following this, information is provided on the specific processes of therapeutic reminiscence work, including eliciting memories, working on different levels of analysis, using cognitive and stress and coping approaches, and problem-solving techniques. The worksheets that clients complete between sessions are then provided at the end of the manual.
Instructions for Session One

The schedule for the first session is as follows:

1) Introduction and rapport building 5 minutes
2) Psychoeducation and problem list 5 minutes
3) Rationale for reminiscence therapy 5 minutes
4) Session process and expectations of clients 5 minutes
5) Therapeutic reminiscence work: Turning points 30 minutes
6) Reflection on reminiscence work 5 minutes
7) Assignment of homework/feedback 5 minutes

1. Introduction and Rapport Building
   The session begins with an introduction and rapport building. The introduction provides the opportunity to create a warm and friendly environment in which to later discuss personal and potentially challenging content. First, the therapist will introduce herself/himself and build rapport with the client. Questions to stimulate rapport with clients might include asking about their interests, how they spend their time recreationally, where they grew up, etc. The therapist also offers information and answer questions about his/her qualifications and professional work. Clients are advised that this session will be somewhat different from the next five sessions, as more emphasis will be placed on describing and learning the processes of the therapy.

2. Psychoeducation and Problem List
   Following rapport building, clients are provided with psychoeducation regarding depression. This begins with a brief description of the symptoms and common subjective experience of depression, including low mood, loss of interest and pleasure in activities, feelings of worthlessness and guilt etc. The client should also be made aware that depression can be associated with many
physical symptoms such as lethargy and fatigue which have a significant impact on motivation, and memory loss. Clients are then asked what depressive symptoms they have experienced and how these might be affecting them.

Clients are then presented with two models of how depression is maintained:

**The negative cognitive triad.** The therapist explains how depression can be maintained by negative thoughts about the self (e.g. the self is worthless or not good enough), the world (e.g. the world being unfair or one's life experiences being generally negative) and the future (e.g. the future is hopeless and nothing good will happen). Clients are then asked whether they have experienced any of these recurring negative thoughts and to provide examples.

**A stress and coping model.** The therapist explains that depression can be seen as the result of difficulty engaging helpful coping responses when faced with stressors and challenges in the environment. If individuals feel incapable of dealing with stressors, or if they use unhelpful strategies for dealing with these problems, the stressors may build up and contribute further to negative thoughts of the past, present, and future, as well as a feeling of hopelessness. When personal resources are overwhelmed by stress, this is often the result. However, if individuals are able to perceive stressors as challenges rather than threats, feel capable of working through problems, and are able to initiate adaptive coping measures, this will help to reduce their depressive symptoms. Clients are then asked if they have noticed whether or not they have been viewing stressors and coping in a helpful or perhaps unhelpful way.

Therapists are encouraged to take note of depressogenic beliefs or maladaptive coping that become apparent during this initial stage of psychoeducation. This information can then inform subsequent therapeutic reminiscence work. For example, clients' may discuss feeling incapable in relation to particular tasks, or as if their life lacks meaning in some regard. These
sentiments may inform the therapist of the need to focus on memories of past coping in a certain context, or certain types of purposeful and meaningful activities the client has previously engaged in. Further, there may be specific events or experiences that the client dwells on from their past. If these are elicited during this process they may act as signposts for reminiscence work to resolve or reconcile particular losses or regrets.

**Problem List**

At this point, the therapist seeks to elicit a problem list from the client. This list should contain all the identifiable stressors or problems they are having at the moment. Examples of this might include a problematic relationship, difficulty completing a task at work or school, feeling isolated etc. The therapist should convey that they will attempt to relate reminiscence work to these problems, as well as allocating specific time at the end of sessions to work on solving them. Eliciting some information about these problems is important so as to understand what clients’ mean, but at this point it is acceptable if they are broad in nature and not too detailed.

**3. Rationale for Reminiscence Therapy**

Therapists then provide the rationale for reminiscence therapy. Firstly, the expectations for therapeutic improvement based on prior evidence are stated. This is to be explicitly conveyed, given the demonstrated positive effect on outcomes that expectancies towards therapy have been shown to have.

The therapist then discusses the role of reminiscence in combating the symptoms of depression. Reminiscence is defined as an activity that is common to people of all ages, and that it is something with which we have all had experience. Specifically, it involves autobiographical recollections, in which the person reminiscing was either the main person involved in the story, or was an interested observer of others' behaviour. Reminiscence also involves the recall of emotions and thoughts that were associated with events and experiences that occurred in an individual’s life, and is more of a reflective process than simply
remembering a fact about something that happened. An example should be given to clarify the difference between reminiscence and recollections of historical facts (e.g. an historical account of the global financial crisis vs. the impact of the global financial crisis on one’s personal life and how they felt or what they thought in relation to it).

The therapist briefly describes how all individuals have a rich history of positive and negative experiences in their lifetime, and personal resources that have been built up as a result of these experiences. This intervention seeks to draw on those resources, as well assist individuals to generate more helpful and positive ways of understanding themselves and how events have influenced their life.

The therapist then explains that there are many different types of reminiscence, and that each can serve a different purpose. The therapist advises that the focus will be on two specific types, and then provides a description of integrative and instrumental forms of reminiscence. Alternate names for these types of reminiscence may be more appropriate in this context such as “memories that help explain your life story”, and “memories of coping with challenges”.

Memories that help explain your life story (i.e. integrative reminiscence):
The therapist explains that the integrative type of reminiscence offers individuals the opportunity to review and integrate their diverse and sometimes seemingly disconnected life experience. This process requires the recall of past wrongdoing, failures, and losses, as well as successes, moments of happiness, and growth experiences. By adopting a flexible, non-judgemental position in which these events are re-evaluated within the context of the whole lifetime, individuals can gain: perspective on the failures and losses in their life; a sense of self-acceptance and self-esteem; and, a sense of meaning and purpose/direction in life. These gains, in turn, offer protection against the feelings of hopelessness and negative view of the past, present, and future, which typify depression.
Memories of coping with challenges (i.e. instrumental reminiscence):

Instrumental reminiscence can assist people to adaptively cope with stressors in their environment by focusing on the recall of past problem-solving episodes, including memories of making plans, activities designed to achieve their goals, and the attainment of goals either for oneself or when helping others. This type of reminiscence involves drawing upon past experience to solve present problems. This process is useful to combat depression because it highlights the successful coping strategies that individuals have been used in the past, providing useful models to use in the present. As well, these past coping attempts can provide individuals with the self-confidence and feeling of control needed to both protect against the onset of stress and to deal effectively with it when it appears. This approach provides them with concrete skill to be used in the solution of present-day problems, which if left unattended, may contribute to the onset and maintenance of depression.

4. Session Processes and Expectations of Clients

The therapist then discusses how therapy will proceed. Each week they will discuss a different topic, and will together draw out related memories that help explain their life story and how they coped with challenges in the past. The client is told that the therapist will help them use their memories in specific ways that are helpful. Rather than reviewing memories in a rote manner, the therapist and client will actively work to highlight positives and strengths, reinterpret experiences in a more helpful way, and draw out coping experiences to learn from them. Information gleaned from reminiscence work will be related to current problems that the client faces, as well as any unhelpful, negative beliefs that the client currently holds. The therapist then comments on how the client is expected to make a commitment to change, demonstrated by attempting to engage in their reminiscence in the manner suggested by the therapist, rather than simply recalling the facts of the past without evaluation, synthesis, or connection to current problems.
Clients are also reminded that they are expected to attend every session, even if they do not feel like making the effort, unless attendance is absolutely unavoidable due to circumstance, such as illness. The role of depression in reducing motivation and activity can be emphasized here. At this point, an opportunity can be given for clients to ask questions to clarify their understanding of any previous discussion and information that has been provided.

5. Therapeutic Reminiscence Work

Information regarding specific therapeutic reminiscence work that is common to all sessions is provided in this manual following the outline of session’s two to six.

Given that clients have not had the opportunity to complete homework prior to the first session, questions related to the first topic ‘Major Turning Points In Your Life’ should be used within the session to guide the initial reminiscence. Clinicians may introduce the topic with the following script:

“Take a few minutes to relax, and empty your mind of current worries and thoughts. A turning point is an experience you have had that involves an important change in your life. When we make a major decision to follow a certain path, or we become involved in an experience, we might see this later as a turning point in our lives. Turning points may be big events (e.g., moving out of home, starting university, getting a new job) or they may seem small and apparently inconsequential (e.g., reading a certain book, meeting a new friend)”

A worksheet containing questions relating to turning points is then provided to clients’ and they are given a few minutes to think about their answers before the therapist engages with them to facilitate reminiscence.
6. Reflection on Reminiscence Work

After discussion of each autobiographical experience the client is asked to share their understanding of what has been discussed and its possible application to their lives in the present. The purpose of this task is to provide the client with positive feedback about their participation and to promote the idea that the client can use these understandings in their current life.

The importance of reflection is made explicit during prior discussion of session processes and expectations of clients. However, promoting this throughout sessions and encouraging clients’ to explore the meaning of experiences or ways of viewing them is important, as is the meta-cognitive awareness of the process of reflection. Providing a review of what has been discussed through reminiscence work at the end of each session, and inviting clients to give their feedback and express what might have changed for them is pivotal to reinforce changes in thinking. This is likely to promote clients’ future ability to reflect and consider more helpful ways in which they might view themselves and their lives. Asking clients questions such as “how did you find discussing those experiences today?”, “has anything changed about how you view those memories?”, “how might this relate to your life at the moment?”, or “is there anything you might take away from this conversation?” can help facilitate this process. Although clients are encouraged to reflect on adaptive reminiscence by their own accord and using their own words, therapist’s may find it useful to provide summaries that draw together what has been discussed and what they observed, should this be deemed to be a useful means of prompting clients or fostering gains. If these interpretations are offered to the client, then eliciting feedback from them on their accuracy is vital.

7. Discussion of Homework Practice and Feedback

Following reflection in the first session, clients are provided with a worksheet containing questions related to the topic of the following week, and an outline of the problem-solving framework to be used in subsequent sessions. The rationale for homework should also be explained to the client. Reminiscence therapy
Cognitive-Reminiscence Therapy involves learning new skills. In order to master these skills, they need to practice them, both inside sessions, and outside sessions. It is useful for them to practice these processes before coming to a session so that time in sessions can be spent dealing with problems they are having, rather than on trying to recall memories. Each week, a worksheet with a different theme will be provided with accompanying sensitizing questions to help the client identify appropriate memories. Clients will be asked to fill in and bring this worksheet to the meeting and this material will be the focus of the in-session work. Clients should be encouraged not to focus on the style of writing, but rather on the content.

The inertia and the negative cognitions of depression can sometimes reduce compliance with homework. Clients should be warned ahead of time that although they may not feel like completing the homework as a result of their depression, it is crucial for them to at least try to engage in the task. It may be useful here to comment on how engaging in tasks such as these between sessions has been shown to improve outcomes in therapy. Clients can be encouraged to spend a bit of time each week practicing with memories other than the ones they bring to the session, so as to use the skills they have gained or positive feelings they have discovered to combat depressive feelings during the week.

In regards to the problem-solving information sheets, clients are asked to read this carefully, in preparation for utilising this framework in the sessions that follow. Clients are advised that this framework, although seemingly quite simple, is a result of much research into the area of problem-solving and, when used as indicated, has been shown to be effective in helping people solve problems they face, and alleviate their depressive symptoms. Clients do not need to begin applying this framework before the next session, but are expected to have an understanding of how it will be used.

Following discussion about homework, the therapist will ask for feedback from the client about the session, as well as provide them the chance to ask any questions they might have.
Instructions for Sessions Two to Six

In sessions two through six, sessions will follow the same format outlined below (with the addition of a summary of work in session six – discussed in more detail below). The topics to be discussed are family life (session two), significant/important activities in your life (session three), loves and hates (session four), stressful experiences (session five), and meaning in life (session six). If there is some specific reason to alter the order of these topics, then this may be done. However, presenting meaning in life as the last topic is recommended, so as to end therapy by tying together life narratives from early sessions and establishing a sense of purpose and direction.

Agenda for Sessions 2-6

1) Homework Review 5 minutes
2) Therapeutic Reminiscence Work 35 minutes
3) Reflection on Reminiscence Work 5 minutes
4) Problem-solving and Assignment of Next Week’s Topic 15 minutes

1. Homework Review

The first task of therapists in the session is to review the client’s experience with the week’s homework. The review is designed to provide clarification about concepts, initiate feedback from the client on difficulties they experienced in carrying out the task, and provide positive reinforcement from the therapist for any success in completing the homework. If the client has had difficulty in completing the homework task, the therapist will spend some time identifying the difficulty and soliciting feedback on how to solve the problem. Individualized homework exercises may be prescribed for clients who need more detailed instructions and more graduated practice. Specific times can be scheduled for completion between sessions if indicated. In cognitive-reminiscence therapy there is two types of homework that are reviewed: The
outcomes of solutions generated through problem-solving methods, and completion of worksheets of reminiscence topics.

Problem-solving related homework is discussed first, to emphasise the importance of these tasks. Therapists should discuss the outcomes of solutions that the clients attempt between sessions, assessing what they did and what the effect of this was. In the event that the solution resulted in positive outcomes, the therapist should aim to encourage a detailed explication of what the client did and the effect it had, and then highlight the connection between their action and the outcome and provide positive reinforcement for the clients’ efforts. In the event that the solution was either not successful or only partially successful, a similar method of review can be used, with the addition of troubleshooting the difficulties that arose, and the barriers to implementation of the solution. This information can then be utilised at the end of the session when returning to problem-solving strategies to reattempt the solution or choose a different one.

The completion of worksheets should then be assessed. Reminiscence therapy teaches clients to use memories in specific ways in order to promote adaptation. Homework plays an integral role in helping clients access these memories, and in assisting them to transfer in-session learning to in vivo practice. Further, this material is the focus of the reminiscence in sessions. In the event that these worksheets are not completed, therapists should reiterate the rationale for completing the worksheets, and implement strategies to increase the likelihood of completion (e.g. troubleshoot any barriers, agree on a predetermined time to complete it during the week etc.).

2. Therapeutic Reminiscence Work

Using the answers from the homework sheets, the therapist and client then collaboratively choose memories to be discussed further. The therapist must ensure that help at least one of integrative and one of instrumental types of reminiscence are chosen to work therapeutically with. Although an attempt should be made to elaborate on memories that were elicited through the homework questions, alternative memories that are more suitable for therapeutic
work might also arise in a less formal way. Decisions made about which memories to discuss further should be based on the significance of the events/experiences to the client, and the therapists perception of their use in therapeutic tasks. The client provides the details of the reminiscence, then with the help of the therapist the memories are discussed and, dependent on whether the memory is integrative or instrumental in nature (or both), therapeutic methods are used to review them.

3. Reflection on Reminiscence Work

As with the first session, clients are asked to reflect on reminiscence, share their understanding, discuss its application to their lives, and engage in a brief review and summary at the end of each session. As therapy progresses, therapists might wish to incorporate elements of previous sessions’ reminiscence into their reflections or summaries if they appear relevant and are likely to foster the sense of continuity in clients’ life, and more cohesive and positive view of the self. Further, abstracting several experiences into a superordinate narrative may be a useful method, and is discussed in more detail below in the section relating to different levels of analysis in reminiscence.

4. Problem-Solving and Assignment of Next Week’s Topic

Following reminiscence work, the therapist and client turn their attention to current problems and problem-solving skills. This process is discussed in more detail below. Following this, the therapist provides a description of the next topic along with a homework sheet with questions designed to elicit reminiscence in the week before the next session. The therapist should ask the client if they perceive any possible problems in fulfilling the homework, and troubleshoot if any arise (e.g. misunderstanding of the task, being unable to see the utility of it etc.)
Additional Instructions for Session Six

In the sixth and final session of therapy, the therapist provides a summary of what has been discussed across previous sessions. Given that a range of topics are covered, therapists may need to make a specific time before this session to prepare this summary. Typically the summary incorporates an overview of what has been discussed, understanding that has been fostered from reminiscence, what has changed for the client, and what the person has gained in general from this process. Therapists should be mindful of emphasising positive aspects of the client’s life, such as achievements, successful coping experiences, purpose and meaning that emerged from discussion, and events and experiences related to self-worth and self-regard.

Broader narratives of the client’s life should emerge through reminiscence work over the six sessions, and these can be highlighted in this review. Therapists can link together various memories and content of reminiscence work to develop these narratives further. For example, narratives such as the client’s progression through schooling, and the associated emergence and consolidation of specific academic or creative interests over this period could be summarised, and then linked with current occupational or vocational pursuits.

Therapists should attempt to emphasise reminiscence as having been a learning process, and make explicit what has been gained over time in therapy. Further, therapists can highlight changes in how clients have interpreted their life or specific experiences, such as regrets that clients have resolved, or events that are now perceived in a more balanced or positive light. Although the therapist initiates this review, the client’s perceptions and feedback are incorporated, with the process akin to a dialogue about what has been discussed and achieved in therapy, using the summary as a guide.
Eliciting Memories for Reminiscence

Integrative and Instrumental Reminiscence

The kind of memories that are the focus of each of the weekly themes should be related to two broad types of reminiscence: integrative reminiscence – in which experiences associated with personal meaning, values, and life objectives are reviewed to clarify their meaning and cohesively integrate them, develop continuity of the self, perceive one’s past as worthwhile, and accept or reconcile negative life events such as loss, conflict, or failure to meet one’s own or others expectations; and instrumental reminiscence - recollections of past problem-solving, including memories of making plans to solve a problem, or achieving a goal either for oneself or when helping others. With regards to integrative reminiscence, therapists should attempt to strike a balance between identifying positive memories to reinforce and reflect on, and negative-valenced memories to reinterpret.

During the process of eliciting memories (in the first session) and deciding on which memories to elaborate on from the worksheets (in session’s two to six), the therapist must take care to ensure that memories that are selected to be discussed represent a combination of integrative and instrumental reminiscence. The worksheets separate these two streams of reminiscence, with the first set of questions aimed towards integrative reminiscence, and the second explicitly relating to memories of problems or challenges that were solved (i.e. instrumental reminiscence). Although some memories will incorporate both, or therapeutic work may uncover elements of both, the therapist should be mindful of ensuring that both integrative and instrumental types of reminiscence are engaged in.

Memory Specificity

Clinically-depressed individuals exhibit an overgeneral style of autobiographical memory retrieval. This overgeneral memory not only serves to maintain depressive symptoms, but is also likely to create potential barriers in
elicitation of memories. As well as the act of eliciting specific memories being an evidenced intervention for depression, details of experiences are needed to effectively review memories and use therapeutic techniques. However, clients may struggle to elaborate on autobiographical memories of their own volition for many reasons, for example, forgetting, trouble concentrating, and difficulty retrieving details deemed to be of significance, and the aforementioned overgeneralisation.

In the event that clients are unable to initially identify memories to discuss, therapists may assist them in the task by suggesting possibilities based on common experiences in this stage of life. Once memories are chosen individuals can be probed for further factual details with focussed questions such as “Who was there?” “What were the sights, sounds, and smells?” “What lead up to this?” “Do you remember what the weather was like?” “How long did that last?” “What happened next?” Being creative with this process, and explicit about the importance of it in the context of the therapeutic work, is likely to be useful.

Eliciting associated emotions and thoughts is an important next step, so as to draw out perceptions, attitudes, and the personal meaning of memories. Questions such as: “How did that make you feel?” “What was the impact of that on you?” “How important was that to you?” “What was your view of that?” “Can you remember what you were thinking at the time” may be useful. This process assists therapists to draw out feelings, beliefs and appraisals of the experience and the self that are either adaptive (and therefore fostered and reinforced) or negative (and therefore potential candidates for review and reinterpretation). Asking about factual details of memories prior to moving on to related emotions and thoughts is a useful sequence of questioning, so as to avoid appearing to trivialise feelings by reverting back to details that might be considered less meaningful to clients.

As well as ensuring that reminiscence incorporates specific details of events, experiences, relationships etc., the quality of the autobiographical memories that are concentrated on are of vital importance. The content, scope, and personal meaning of these memories, and how they are elaborated on, are
important factors in the effectiveness of subsequent psychotherapeutic work. A rule of thumb pertaining to memories being of integrative or instrumental relevance, and of moderate-to-high significance to individuals may be of assistance. Clients may implicitly indicate that memories are of importance, or alternatively this can be explicitly asked by the therapist. Further, matching the focus of reminiscence with the clients presenting depressogenic beliefs is recommended. For example, a client who conveys pessimism in relation to their current abilities may be guided to discuss more past experiences of success, or if there is a recurrent theme of feeling unworthy then an emphasis may be put on times when clients were valued by others and appreciated, or were recognised for an achievement.
Guide to Therapeutic Reminiscence Work

First and foremost, the initial role of the therapist during discussion of specific past experiences involves empathic listening to the events and experiences that clients wish to discuss. It is imperative that the therapist maintains a stance of respect, empathy, and unconditional positive regard in relation to whatever is discussed. The therapist should aim to understand the factual details, and the underlying meaning of what the client reports. The liberal use of empathic responding and summarising is recommended throughout this process.

Following this, two sets of therapeutic techniques are used, dependent on the type of reminiscence, integrative and instrumental, being discussed. Although some memories may incorporate elements of both, the therapist should avoid switching rapidly between these two, and spend enough consecutive time in each so as to complete therapeutic tasks.

Integrative Reminiscence

Integrative reminiscence work involves an evaluative review of past experiences designed to help the individual come to terms with negative or unresolved events, to identify meaning in past experiences, and to integrate this information with the current self-concept. This review leads individuals to re-examine, from their current perspective, positive experiences as well as problematic experiences from the past such as difficult relationships, past conflicts, experiences of loss, or instances in which one failed to live up to one’s own or others expectations. Given the context of depression, integrative recollections may often relate to negative thoughts about the self, world, and the future which perpetuate depressive symptoms. As a result of a successful cognitive-reminiscence therapy, individuals are able to re-interpret their attitudes and beliefs about their past in a positive fashion. In turn, these adaptive thoughts about the past yield positive feelings about the self in the present, and optimism about the future.

The therapist has three main aims when working with integrative reminiscence: 1) ensure positively-valenced and adaptive memories are
discussed to foster more balanced evaluations and self-worth; 2) reinterpret negative memories to be more rationale, adaptive, and positive; and 3) draw out the sense of continuity in clients’ lives and foster a positive narrative identity. These approaches to working with integrative reminiscence can be used in a flexible manner, and therapists are likely to have the opportunity to utilise them all during therapeutic reminiscence work.

**Emphasising Positive Memories, Balanced Evaluations and Self-Worth**

Engaging in integrative reminiscence provides individuals with the opportunity to examine evidence that may disconfirm global negative self-evaluations associated with depression. To counteract the tendency of many depressed persons to ignore or marginalise positive information and focus on that which supports their dysfunctional views, clients are led to seek fuller, more detailed accounts of their life story, and correspondingly more balanced interpretations of past events.

Therapists should work with clients to identify positive autobiographical memories, and positive elements of otherwise neutral or negative memories. These positively-valenced memories may be identified when choosing which memories to discuss further at the start of sessions. Alternatively, positive memories or positive aspects of memories may be identified in the process of therapeutic reminiscence work and subsequently elaborated on. Once these memories are identified, therapists can encourage clients’ to elaborate on them, how they made them feel, what they meant to them, and what the impact was on their life. Rather than simply stating that events or experiences, or aspects thereof, are positive, therapists use an exploratory and curious approach, engaging in Socratic-style questioning with clients to assist them to recognise and integrate them as part of their life story or self-concept. Although associating positive events or experiences with the self-concept or broader life narrative may be a somewhat implicit outcome, therapists encourage the client to actively review them and can elicit responses from clients by asking what they think of it, or what it might mean to them. Therapists can also suggest how an event or
experience in a clients' life could be perceived as rewarding, an achievement, of value etc., and elicit feedback on this from the client. Given that clients with depression are likely to minimise positive aspects of memories, or omit them from recall, therapists must be somewhat vigilant to identify and overt them. This might be achieved when therapists are initially probing to elicit details, feelings, and thoughts associated with memories.

A further task is to assist clients to build a sense of self-worth, and internal standards for evaluation of self-worth. Idiosyncratic personal interests, values, and motivations are elicited and positively reinforced by the therapist. For example, if clients have invested time in particular activities or pursuits, then the importance of this to them may be emphasised, as well as the significant role it played in their life. Reinforcing the value of personal meaning may be useful for clients, as well as their right to self-affirm the value of events and experiences. Achievements and efforts can be recognised and reinforced on the basis that they reflect clients' interests. When engaging in guided integrative reminiscence, therapists may be mindful that drawing out and interpreting the meaning of experiences for clients' is one way achieve this. This process can serve to renew previous sources of self-worth, or identify other sources that client had not yet fully realised.

As clients review both good and bad experiences within the context of their life, the negative impact of any particular hardship, failure to act at an optimal level or negative comparison with others may be balanced by recognition of positive action that has been taken and events or experiences that made them happy. Failures or disappointments in one domain may be offset by achievements in another, and help to develop a more realistic, and adaptive view of the self and one’s life.

**Negotiating New Interpretations**

As well as identifying and emphasising positive and adaptive memories, clients can be assisted to reinterpret memories and associated beliefs. In this procedure therapists and clients follow five general steps:
1. Identify a recalled situation that is associated with dysphoric mood;
2. Identify the specific feelings associated with this situation
3. Identify depressogenic beliefs and attitudes related to this situation
4. Generate alternative interpretations for the event.
5. Provide feedback about how their beliefs may have changed.

1. Identify Recalled Memories Associated with Dysphoric Mood. The process of identifying memories that are associated with dysphoric mood is achieved through the process of reviewing worksheets, choosing memories to discuss in session, and elaborating on these memories. The therapist should attempt to identify negatively-valenced or unresolved events/experiences that the client raises (e.g. perceived failures, regrets, losses etc.), and which may be amenable to re-interpretation.

2. and 3. Identify Emotions and Related Depressogenic Beliefs and Attitudes Related to this Situation. Clients are then asked how they felt about the situation and encouraged to elaborate on this. Depressogenic beliefs and attitudes related to the dysphoric situation may be elicited by asking the client to: 1) replay the distressing situation aloud; 2) imagine or create thoughts and images that will bring on or intensify the feeling; or 3) identify the conclusions he or she would draw from the event (e.g., the therapist may ask “And what does that prove?” “How do you interpret that?” “What does it mean when?” “How did you feel about that?”). In addition, therapist might guess at possible expectations, fears, worries, or other cognitive responses to the situation that could have produced the feeling. The primary aim here is to identify how the client emotionally identifies with the event, and elicit the corresponding cognitive appraisal.

At this point, discussion of internal and external factors which might moderate the client’s feelings and thoughts about the experience can be useful. This is designed to identify reasons for the clients’ feelings and thoughts, contextualise experiences and indicate certain factors that might have accounted
for outcomes, set the stage for distancing themselves from these reactions, and ultimately re-evaluating them.

Examples of external factors are:
- the social and economic context
- thoughts and feelings of significant others
- environmental restrictions or opportunities
- timing of the event in the life span

Examples of internal factors are:
- the individual’s values and moral system
- personality variables
- intellectual and social resources

4. Generate Alternative Beliefs About the Past and Examine Their Impact on Self-Definition. After the client has identified maladaptive thoughts about past events which may be contributing to depression, the fourth stage involves generating alternative thoughts which will dispel depressive emotions attached to the event. This process typically involves questioning the veracity of the client's thoughts and beliefs about past negative events. The intervention is undertaken in a questioning stance, allowing and encouraging the client to derive their own conclusions about the nature of the belief and its veracity. The following questions are helpful in directing the exploration of the accuracy of a belief:

1) Reviewing that event, do you agree with your first impression and emotional reaction you had at that time?
2) How else can you view or interpret the situation or how would others view it?
3) Were the consequences of the event as bad as they seemed at the time?
4) Is there some other explanation of the situation or ways of looking at it?
5) How much importance do you want this event to have in your life?
6) Is your standard too high?
7) How much are you really to blame for the situation?
8) What is your evidence for this belief?

Each of these questions is directed at a different type of negative cognition, as such, the questions will most appropriately be used in specific situations – not all questions should be used at all times.

The process of helping clients distance themselves from negative cognitions by actively questioning former interpretations of past events can be facilitated by encouraging them to recognize that they are evaluating their past from a different perspective than when they first experienced the event. Clearly, certain contextual factors such as the social climate or significant others influenced the development of attitudes and beliefs toward a situation. By helping the client to examine the influence of these contextual factors on their interpretation of an event, the client is afforded the opportunity to evaluate whether they continue to interpret an event in the same fashion. The awareness of the influence of contextual factors on ones interpretation of events may assist the client in the formation of alternative interpretations of past events.

It may be useful also to consider the short-term and long-term consequences of the recalled event or set of events. This step is designed to assist the client to re-evaluate the meaning of certain memories by contrasting the effect of short-term consequences on thoughts and feelings, with the effect that long-term consequences have on thoughts and feelings. It is hoped that this process will convey to the client the idea that many different factors influence how we think and feel about an event, and we are free to re-interpret the meaning of an event as these factors change or become more or less important.

Examples of this kind of questioning are:

1) In what way has your life changed because of taking this event/experience?
2) What are some of the things you have learned from this event/experience?

5. **Elicit feedback about how their beliefs may have changed.**
Following the identification of alternative cognitions, the client is asked to provide feedback about how their belief systems have changed, and what the impact of this might be. The process of giving feedback can be facilitated by having the client rate on a scale of 100 their belief in a particular interpretation of a past event before they begin to generate alternative beliefs. After new interpretations have been considered the client can re-evaluate the old belief and compare it with the rating they have given the new belief. Regardless of whether this rating system is used, clients should be asked to discuss the impact of this process on their view of themselves, their experiences, their outlook, their place in the world etc. This feedback may be elicited during the feedback time at the end of sessions too.

**Emphasising Continuity in Life and a Narrative Identity**
In addition to helping foster positive, and adaptively reinterpret negative, memories, therapists assist clients’ to build a sense of continuity and connectedness between experiences in their life. This may be achieved by asking clients’ about the associations between difference experiences, and working to link them together and construct a broader narrative. This process involves temporally linking experiences to identify progression, change, and causal relationships across a clients’ life. Further, the significance of this story to the client can be discussed and elaborated on, with events and experiences integrated to form a more cohesive and meaningful story. For example, in the case of clients’ who are currently engaged in some form of work or study, therapists can initiate reminiscence on the origin of their interest in the area/role, how it developed, the steps taken over time to achieve this, and significant experiences that lead to their current situation. Therapists might also explicitly
link together these experiences in a summary, noting the significance of this in a client’s life and eliciting feedback about it.

**Conclusion**

In summary, the therapist’s role in regards to integrative reminiscence involves, ensuring positive and adaptive memories are discussed, memories are reinterpreted to be more rationale, adaptive, and positive, and a sense of continuity and a life narrative in clients’ lives is fostered. The therapist’s role is also to help the client examine the impact of these processes on their current evaluations of themselves, the world, and their life.
**Instrumental Reminiscence**

Instrumental reminiscence work involves examining experiences of past coping and problem-solving in order to identify past achievements, promoting confidence in clients’ ability to solve current difficulties, and identifying examples of successful coping processes which may be useful in current problem solving. The therapist has four aims when working with instrumental reminiscence: 1) normalising stress and coping; 2) fostering adaptive appraisals of stressors; 3) reinforcing coping resources of self-efficacy and perceived control; and 4) identifying what was or could have been done about challenges.

As with approaches to working with integrative reminiscence, therapists may incorporate these in a flexible manner; although most instances of previous coping that are discussed during reminiscence work will facilitate all four.

**Normalizing Stress and Coping**

The first task of the therapist is to normalise the experience of stress and coping. This includes using instrumental reminiscence to illustrate the idea that problems are a normal part of life that the client has been successfully dealing with throughout their lifetime. While this is likely to be implicit through identification of past coping, it can be overtly verbalised by the therapist, and should help the client to normalise problems currently existing in their life. The therapist can also use recalled instances of stress and coping to demonstrate to the client that there are a wide range of causes for problems in an individuals’ life. The point of this exercise is to demonstrate that problems do not arise solely because of personality defects on the part of the individual. As such, when the client considers current problems, they should feel a reduction in the dysphoria that can result from unrealistic attribution of the causes of negative events to personal failings.

**Fostering Adaptive Appraisals of Stressors**

When life stressors are encountered, individuals use appraisals to assess both their relevance (and thus whether to pursue or relegate to the periphery
their roles and commitments) and their potential as either being harmful and threatening or as a challenge with which to cope. Individuals’ coping becomes more adaptive in nature when they are able to identify which stressors are relevant and meaningful, and when they view them as challenges which can be worked on rather than threats.

Defining the aspects of prior stressful situations and their relevance or importance in a structured manner can assist in promoting skills in adaptively appraising current and future stressors. When clients identify past stressors, therapists and clients’ can collaboratively review why and how they were relevant to clients. Therapists can highlight and positively reinforce examples where stressors were relevant, and clients mobilised coping resources in response. Conversely, stressors that were not directly relevant to a client can be identified and labelled as such. These less relevant stressors can then be retrospectively devalued in terms of importance to the client. The overarching aim is to build clients capacity to make useful distinctions between stressors and their personal relevance.

Further, by drawing on clients’ past experiences of when relevant personal goals and needs have changed, clients can be provided with examples of re-prioritisation and compromise in their life, and can reinterpret these experiences as part of a process of change. Observation of the change and development of goals and needs over time can help the client to see this as a normal growing process, rather than a threat to the self. Through these constructive reappraisals, clients’ can learn that changes in life circumstances will often necessitate the shifting of priorities and pursuit of goals, so that effort is not expended on aspects of situations that cannot be changed (and in which the pursuit of may lead to a reduction in morale and adaptation).

Where stressors are deemed relevant, clients can also be encouraged to make distinctions between appraising them as challenges or threats. If individuals construe a problem as a challenge and something they are able to do something about, they are most likely to cope actively and effectively with the difficulty than if the problem is seen as a threat (which may evoke maladaptive
anxiety or fear). Therapists may make the relationship between these appraisals and effective coping more explicit by exploring with clients the type of appraisals they made when dealing successfully with a past difficulty.

**Building Self-Efficacy and Perceived Control**

When individuals believe they are able to manage stressful or negative events in their lives they are less likely to perceive them as threatening and distressing, and more likely to view them as challenges that can be coped with. Remembering past examples of when challenging and difficult situations were successfully coped with may help individuals to increase their sense of self-efficacy, perceived control, and foster a problem-solving orientation to stressors rather than one of threat, avoidance, and helplessness. This process involves reviewing a number of successful problem-solving incidents in the past while highlighting the client’s ability to act effectively to resolve a problematic situation. The clients’ competence and capacity to cope can be emphasised by positively reinforcing their efforts, posing questions to them about how and why the outcome was a success, and asking clients’ to elaborate on their demonstrated skills, coping, and the positive outcomes of these efforts. The therapist also seeks to identify and discuss with the client factors that contextualise the stressor. For example, there may be something particularly difficult or unique about a stressor they coped with, and their efforts could be reinforced on this basis.

In the event that successful coping resulted in a new ability or understanding that increased the client’s specific or general self-efficacy, therapists can provide positive reinforcement and assist clients to internalise this as part of their self-concept (i.e. you have coped with X, which has built your coping skills, therefore as a result you are a more competent and capable person).
Identifying What Was or Could Have Been done About Challenges

To attenuate cognitive and emotional barriers to coping where the client is at a loss to develop a specific coping strategy, or could be using a more effective form of coping, the process of problem-solving and implementing specific coping strategies can be identified through memories. This process allows the therapist to explore with the client different approaches that may have been successful and identify concrete strategies that can be drawn on from the past for use in the present. The therapist guides the client through four components of successful problem-solving when discussing the memory being used for instrumental reminiscence: defining and formulating the problem, generation of solutions, evaluating the possibilities and choosing a solution, and implementation and verification of a solution.

Definition and formulating the problem involves assessing the nature of the problem situation and what the realistic goals were for problem-solving. Together, the therapist and client explore how the client gathered information for this task, how s/he differentiated relevant from irrelevant information and conjecture from fact, and how s/he pinpointed the key components of the difficulty that needed to be addressed.

In identifying the generation of solutions, the therapist and the client can explore the process through which the client generated alternative approaches to coping with the problem at the time. The focus should be on identifying the adaptive aspects of this brainstorming process that were used by the client. Examples of adaptive strategies include generating a large number of alternatives, looking at alternatives with an open mind and not rejected them out of hand, and specification of concrete strategies to enact general goals (e.g., the writing of resumes is a specific task identified to achieve the goal of obtaining a job). In the event that client did not actually generate different solutions at the time, the therapist and client can collaboratively generate alternative solutions that might have been used. This can help orient clients to the process of creative problem-solving and perceiving that typically there are a range of possibilities when coping with stressors.
The therapist and client then evaluate the possibilities for solutions and reflect on why the choice was made to implement that particular solution. The major focus of this process is the evaluation of a given alternative with regard to its consequences. Thus, therapist and client may explore processes the client used to choose the solution they implemented. During this process of evaluation, the therapist may attempt to emphasise the validity of reasoning behind why specific solutions were selected, while devaluing alternatives that were not. Emphasis should also be placed on the client’s recognition of both positive and negative, and short-and-long-term results of the decision, as well as the effect of the decision on the self as well as others.

Lastly, the therapist and client review how the solution was implemented, and the outcomes and consequences of it. The therapist and the client work together to identify which components of previous problem-solving experiences were effective in resolving the difficulty, and which components were less effective. Casual associations between the solutions initiated by clients and positive outcomes that occurred as a result are made explicit, so as to highlight the positive effect of an active problem-solving approach and reinforce these behaviours. This process should also provide the client with some concrete strategies to use in current problem-solving.
Brief Problem-Solving Framework
At the end of session’s two to five, a brief problem-solving framework is used with clients to solve current problems they are facing. If instrumental reminiscence work has progressed effectively, clients should enter into this process with a stronger sense of self-efficacy and perceived control, and potentially some relevant specific coping strategies identified from past coping experiences.

When problem-solving begins in session two, therapists may wish to review the problem-list that was elicited in the first session to assess if any changes need to be made. Following this, the therapist and client collaboratively identify a problem to work on. This choice should be based on two factors: Which problems are more significant to the client, and the likelihood of success in trying to solve the problem. The therapist should consider both of these factors in conjunction when selecting problems to work on. Following identification of the problem to be worked on, the therapist provides brief psychoeducation on the problem-solving framework.

1) **Defining the problem and generating goals:** This involves eliciting the information needed to address the challenge – i.e. the how, when, why, what, and who. This is to gain clarity on the problem itself and the key issues that need to be solved. Following a definition of the problem, clear and specific goals are identified.

2) **Generating solutions:** Once the problem has been clarified and goals have been established, possible solutions are then generated. A large number of alternatives should be brainstormed, with an attempt made to keep an open mind and not reject alternatives them out of hand. Specific solutions should be matched to goals (e.g., the writing of resumes is a specific task identified to achieve the goal of obtaining a job).

3) **Choosing amongst alternatives:** Following generation of a list of possible solutions, the available possibilities are evaluated and the most effect alternative(s) is identified. The major focus of this process is to evaluate a given alternative with regard to its consequences. This involves
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recognizing both positive and negative, and short-and-long-term results of the decision, as well as the effect of the decision on the self as well as others. In addition, at this stage the type of coping strategy used should be evaluated. The effectiveness of a particular coping strategy depends upon the situation in which it is enacted. For example, if you are realistically unable to alter a situation, the most effective coping strategy may involve trying to come to terms with the problem. On the other hand, if you have the resources to change a situation, the most effective coping strategies may involve active attempts to amend the problem.

4) **Implementing the solution and verifying outcomes**: This involves putting into action the chosen solution and comparing the obtained result with the solution that was expected. It is important to discuss details of the implementation, such as how and when the solution will be implemented, and what resources will be needed. At this point, potential barriers to successful implementation of the solution are anticipated and discussed. It is also important to establish a method of assessing effectiveness or a benchmark for success, so that solutions can be clearly evaluated as being helpful or not.

A shorthand explanation for clients may be more suitable: 1) Defining the problem and the related goals; 2) brainstorming solutions 3) choosing a solution; and 4) planning how to implement it and assessing the outcome.

The therapist and client then progress through these four steps to identify and plan a solution to implement before the next session.
An Introduction to a Problem-Solving Framework

Coping with difficult or challenging experiences and situations can help protect us from developing feelings of depression. Coping, however, is not always easy. Sometimes we feel overwhelmed and unable to cope with situations because we do not see an effective way to handle the demands placed upon us.

Many of the demands that you experience can be dealt with effectively by using problem-solving strategies that you have developed throughout your life. In fact, your previous experiences of coping with life situations are one of the best sources of ideas and strategies that you can use to deal with current demands.

Please think of a problem that is currently occurring in your life. As the first step in dealing with this problem, please consider the following:

1) You are a competent individual who has dealt effectively with problems and challenges in many areas of life such as family relationships, education, and work. YOU CAN COPE EFFECTIVELY WITH PROBLEMS.

2) IF YOU HAVE A PROBLEM YOU’RE NORMAL.

3) The problems you face now are just more of a series of challenging experiences that you have dealt with effectively in your life. In the past you have had experiences that you may have considered disastrous or overwhelming at the time. IT IS NOT A CATASTROPHE IF SITUATIONS OR EXPERIENCES DO NOT GO RIGHT -- YOU HAVE COPED BEFORE.

4) There is no perfect solution to a particular problem. Therefore, don’t use your energy worrying about finding THE solution, rather, use your energy to enact a solution that is reasonable for you. THERE IS NO PERFECT SOLUTION TO A PROBLEM, THERE IS ONLY THE BEST SOLUTION FOR YOU IN THE CURRENT SITUATION.

5) In the past you have coped, and attempted to find a solution to problems, even if you did feel anxious or doubtful about the outcome. DON’T AVOID PROBLEMS.

The next page outlines four simple problem-solving steps that are useful and effective in helping people to cope with problems they are facing.
Steps Involved in Effective Problem-Solving

1) Defining the Problem and Generating a Related Goal

The first step in effectively dealing with challenges involves identifying the information needed to address the challenge. This relates to the who, what, where, when, how, and why of the problem. What information is relevant to understanding the problem, what are the circumstances in which it is occurring, and what are the key issues that need to be solved? Once the problem itself is understood, it is important to assess what the specific goals of problem-solving are (i.e. what do you want to achieve, how do you want things to be different?). Goals must be reasonable and within reason. For example, although someone might want to spend more time with friends and feel more socially connected, it’s difficult to be surrounded by friends at all times!

2) Generating Solutions

The second step is the generation of possible solutions. Successful problem-solving involves generating a large number of alternatives, looking at alternatives with an open mind, and working out which concrete strategies would be useful to achieve the goals of problem-solving (e.g., the writing of resumes is a specific task identified to achieve the goal of obtaining a job).

3) Choosing the Best Solution(s)

The third step is decision making, which involves the evaluation of available possibilities and selection of the most effective solution(s). The major focus of this process is to evaluate solutions in terms of how useful they will be in solving a problem and achieving a goal. This involves recognizing both positive and negative, and short-and-long-term results of the decision, as well as the effect of the decision on the self as well as others. Of course, the solution must be realistic, and it should be directly related to the goal. In some cases people may have the ability to “solve” a problem, but in other cases learning to live with or accept a problem may be a more realistic strategy.

4) Choosing a Solution and Assessing the Outcome

The fourth step involves putting into action the chosen solution and comparing the outcome with what was expected. In this step, you need to work out in detail how the solution will be put into action and how you will know that it worked. Once you have a tried a solution, the next step is to identify which parts of the problem-solving approach were useful and which parts were less useful. This process provides you with concrete information regarding strategies that will be successful in future problem-solving. It also allows you to appreciate the strengths and resources you have brought to the task, and to acknowledge the successes you have achieved.
**Week One: Turning Points**

Turning points are times in your life when certain events or experiences occurred and made a major impact on your life changed its direction. For some people this might be finishing primary or high-school, starting a new job or hobby, moving house, or even something like reading a book or going on a holiday that changed the way you looked at life.

1) What was an important turning point in your life?

2) How did this turning point affect your life, or the way you looked at life?

3) Did other people play a major role in this turning point, or was it something you experienced on your own?

**Challenges**

Can you recall a problem or challenge you experienced at one of these turning points? The challenge may have involved the decision to take a certain pathway, or it may have been a challenge that resulted from choosing a new life course.

4) Was there a particular challenge/s that you experienced at this turning point?

5) How did you feel about the challenge at the time? Did you see it as a challenge or a threat? Were you confident in your ability to solve the challenge?

6) What plans and actions did you take to solve the challenge?

7) Did another person or persons play an important role in this challenge?
**Week Two: Family Life**

Take a few minutes to relax, and empty your mind of current worries and thoughts. Who were the family members who were important in shaping your life in a positive or negative way?

1) In a few brief sentences, how would you describe your life with your parents and siblings?

2) Who were the important people in your life during adolescence?

3) What types of activities did you and your family engage in?

4) Which family member did you feel closest to? Which family member did you know the least, or feel the least close to?

**Challenges**

Can you recall a problem or challenge that you were able to solve that relates in some way to your family? It could be a challenge you had with another family member, it could be a challenge that you and your family had to face together, or it could be a challenge that you helped another family member solve.

1) What was the challenge you experienced?

2) Did another person or persons play an important role in this challenge?

3) How did you feel about the challenge at the time? Did you see it as a challenge or a threat? Were you confident in your ability to solve the challenge?

4) What plans and actions did you take to solve the challenge?
**Week Three: Significant/Important Activities in Your Life**

Take a few minutes to relax, and empty your mind of current worries or thoughts. Can you think of significant/important activities in your life? These refer to things that you have done in your life (and might still be doing) that have stood out for you in terms of their importance and/or the effort they have required. They might involve schooling, work, travel experiences, caring for someone who is ill, religious devotion, athletics, artistic work, or community service.

1) What do you feel have been significant/important activities in your life?

2) What did these activities involve?

3) Who were some of the people you become involved with because of them?

4) What was one of the highlights of these significant/important activities in your life?

**Challenges**

Can you recall a problem or challenge that you successfully resolved that relates to significant/important activities in your life?

1) What was the challenge you faced with regard to your significant/important activities in your life?

2) How did you feel about the challenge at the time? Did you see it as a challenge or a threat? Were you confident in your ability to solve the challenge?

3) What plans and actions did you take to solve the challenge?
**Week Four: Your Loves and Hates**

Take a few minutes to relax, and empty your mind of current worries and thoughts. Love is a strong emotional attachment to a particular person, place, or thing. What have been the major loves of your life? Hate is a strong feeling of dislike or ill will toward some person, place, or thing. What have been the hates or strong aversions in your life?

1) Can you think of a person, place, or thing that you have really loved in your life?

2) How did you first encounter this person, place or thing?

3) What type of activities did you do with this person, place, or thing?

4) What was something or someone that you really hated or disliked?

5) How did you encounter this person or thing?

**Challenges**

Can you recall a problem or challenge you solved regarding someone or something that you either loved or hated?

1) What challenge did you face with this person, place, or thing?

2) How did you feel about the challenge at the time? Did you see it as a challenge or a threat? Were you confident in your ability to solve the challenge?

3) What plans and actions did you take to solve the challenge?
**Week Five: Stress Experiences**

Take a few minutes to relax, and empty your mind of current worries and thoughts. All of us encounter stressful experiences in our life. These are times in which we must use our wits and our strengths to overcome or come to terms with a problem. They may involve a short-term crisis such as losing a job, or it may involve a stressful situation that occurred over a long period of time such as schoolwork or caring for an ill member of the family. Can you think of some stressful times in the past and how you dealt with it then?

1) Have you experienced a stressful time in your life?

2) Who was involved in this situation?

3) What caused this stressful situation?

4) How did you go about resolving this situation? Did you do it alone, or obtain someone else’s help?

**Challenges**

Can you recall situations in which you successfully solved a problem or challenge that occurred during a stressful situation or crisis?

5) How did you feel about the challenge at the time? Did you see it as a challenge or a threat? Were you confident in your ability to solve the challenge?

6) What plans and actions did you take to solve the challenge?
Week Six: The Meaning of Your Life

Take a few minutes to relax, and empty your mind of current worries and thoughts. During our life, each of us develops goals, which give us a sense of purpose or direction. Some goals, such as finishing school, are fulfilled and lead to new goals. Other goals, such as being a good friend or developing as an artist, are never completely fulfilled. Think about some of the goals you have had in life.

1) What are your major life goals, or what makes life meaningful for you?

2) How did these goals or meaning develop? What experiences, people, and thoughts contributed to the development of them?

3) Do you have particular values or ways of living your life, which reflect your goals?

4) What have you learned in life that you would like to tell others who are important to you?

Challenges

Can you recall a problem or challenge you resolved that relates to the achievement of a life goal?

1) Describe a major life goal that you experienced as challenging but fulfilling.

2) What was the challenge you experienced in trying to achieve this goal?

3) How did you feel about the challenge at the time? Did you see it as a challenge or a threat? Were you confident in your ability to solve the challenge?

4) What plans and actions did you take to solve the challenge?