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The impact of a structured life review process on people with memory problems living in care homes.

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The Impact Of A Structured Life Review Process On People With Memory Problems Living In Care Homes.

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The Impact Of A Structured Life Review Process On People With Memory Problems Living In Care Homes.

Summary.

The following study describes an investigation into the impact of a life review intervention on individuals experiencing cognitive impairment who were living in care homes. Previous research into the effect of life review and reminiscence has been inconclusive. Various studies have found improvements in depression, self-esteem, and life satisfaction in individuals without cognitive impairment who have participated in these activities. Relatively little research has been carried out with people with cognitive impairment.

Seventeen individuals took part in the study and were randomly allocated to one of two groups. Eight individuals entered the experimental group and participated in a structured, individual, life review intervention that culminated in the creation of a life story book. Nine individuals entered a no treatment control group and took part in the pre, post and follow up assessments only. Using four psychometric assessment scales, the two groups were compared on levels of depression, self-esteem, life satisfaction and autobiographical memory prior to, immediately after and at six weeks following completion of the life review. The quantitative results indicated a statistically significant improvement in the experimental group in depression and also in a particular aspect of autobiographical memory relating to the recall of personal factual information. Life satisfaction and self-esteem remained relatively stable throughout the study. Various limitations and strengths of the project and intervention model are discussed, as are a number of issues to consider when carrying out this form of intervention with this population.

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Abstract.

This study examined the impact of a structured, developmental, life review intervention on a sample of older adults with mild to moderate cognitive impairments associated with dementia. Seventeen individuals living in care homes took part in the project. Eight individuals were randomly allocated to a structured life review condition, which was based on Haight's (1979) life review and experiencing form, (LREF). This process culminated in the creation of a life story book reciting the person's life history that was discussed in the sessions. The nine other participants were allocated to a no treatment control group and participated in the pre, post and six week follow-up assessments only. Participants were tested on four main variables including, life satisfaction using the Life Satisfaction Index-Version A (LSI-A; Neugarten, Havighurst, & Tobin, 1961), self-esteem using the Rosenberg Self Esteem Inventory, (RSE, Rosenberg, 1989), depression using the Geriatric depression Scale-Short Form, (GDS-SF; Sheikh & Yesavage, 1986) and autobiographical memory using the Autobiographical Memory Interview, (AMI; Kopelman, Wilson & Baddeley, 1990). Analysis of variance demonstrated significant improvements in the life review group in depression ($F = 5.59$, (2), $p = 0.009$) and in the recall of personal semantic information; an aspect of autobiographical memory, ($F = 5.92$, (2), $p = 0.007$). Life satisfaction and self-esteem remained relatively stable throughout the study. Various limitations and strengths of the study and intervention model are discussed as are a number of issues to consider when carrying out this form of intervention with this population.

Introduction.

> "It has been hard to drag my memories back and I have been cross with myself and you for putting me in this position. I have been cross with myself for being in this situation and not being able to get out of it and not understanding where I have come from or where I have been and how I have come to be here".
>
> -John (pseudonym), Case 3.

This pilot study investigated the effect of structured life review, a particular type of reminiscence work, on older adults with dementia living in care homes. The intervention involved reviewing life experiences chronologically with the individual and culminated in the creation of a life story book. The life review intervention was based on Butler (1963) and Haight's (1979) life review models. These are described in more detail below. The introduction will initially consider the history, development and definitions of life review and reminiscence. This will be followed by a review of the literature and research on life review and reminiscence and their relationship to three of the variables focused on in this study, namely life-satisfaction, depression and self-esteem in people without cognitive impairment. This will be followed by some consideration of the research findings available regarding these approaches with older adults with cognitive impairment and with individuals living in care homes. Then the possible effect of the intervention on the fourth study variable, autobiographical memory will be considered. The introduction will conclude with a brief summary of the research evidence and a description of the study aims and hypotheses.

The Development Of Reminiscence Approaches With Older Adults.

In recent years there has been a growing enthusiasm for reminiscence work with older adults. In a newly developed journal of reminiscence, Haight (1999) even goes so far as to suggest that older adult services are bordering on "a reminiscence revolution". There appears to be a global assumption in services for older adults that reminiscence is a largely positive experience and has a positive impact on those who partake of it, (see for example, Kunz, 2000; Rasmussen, 1999). Various reminiscence activities are routinely applied in clinical and non-clinical settings by a variety of people including family members, volunteers, students, para-professionals and professionals in many fields, with a variety of older adult

populations, (Kunz, 2000). There is even a European Reminiscence network that was formed in 1994. Does this enthusiasm have a foundation in empirical research? There have been suggestions that it does not (for example, Burnside & Haight, 1992; Parker, 1995; Thornton & Brotchie, 1987). Some suggest that individuals are using these practices without fully understanding how the processes work and without the support of a theoretical framework, (Black & Haight, 1992). The research to date has been inconclusive and contradictory. Methodologies have been questionable and offer little insight into the properties of reminiscence. There are few clearly operationalised definitions of different types of reminiscence intervention, and the literature is often unclear in distinguishing between outcome studies and correlational research, (see Haight & Webster, 1995; Spector et al. 1998; Thornton & Brotchie, 1987, for reviews). There is a pressing need for sound empirical research into the effects of these interventions on different older adult populations. Furthermore, the research available to date has largely been conducted with older adults without cognitive impairment, (for example, Haight, 1988 1992a), consequently neglecting many individuals entering services with cognitive impairments associated with dementia. In light of the relatively global application of these techniques in older adult services and since there have now been some approaches to reminiscence with people with cognitive impairment, (Hirsch & Mouratoglou, 1999) and several chapters, articles (for example, Puentes, 1998; Stokes & Goudie, 1990) and books have been written providing guidance on the topic, (for example, Bender, Bauckham & Norris, 1999; Gibson, 1994; Haight & Webster, 1995; Schweitzer, 1998), the effect of the activity on these individuals needs to be evaluated.

What Is Life Review?: Differences Between Reminiscence And Life Review.

Many authors talk about life review and reminiscence interchangeably, Gibson (1994) notes that it is almost impossible to disentangle the two elements but some individuals argue that they should be considered individually, (Black & Haight, 1992; Burnside & Haight, 1992). Life review is a particular type of reminiscing and is a more complicated process than simple reminiscence, (Woods et al., 1992). It is distinct from approaches such as oral history, autobiography and simple reminiscence, and involves an in-depth self-evaluation of the entire life span. It is said to represent a developmental task in the last stage of life. Butler (1964) suggests that the goal of life review is to help the reviewer reach Erikson's (1950) final developmental stage of "integrity", (discussed below). It has been argued that older

adults need to share their life stories with somebody urgently and through this process they are able to reclaim their past and memory which allows them to hold onto their identity, to arrive at a complete sense of themselves, (Black & Haight, 1992) and to achieve peace and serenity, (Butler, 1974). The process is structured and preferably conducted on a one-to-one basis, (Haight & Dias, 1992; Parker, 1995). This process is quite distinct from other forms of reminiscence. For example, authors have defined general reminiscence in terms of reflection on more remote memories, this usually involves light-hearted unstructured discussion, entertainment and enjoyment of times gone by, often in groups of individuals (Gibson, 1994). Another form of reminiscence called oral history involves the collation and preservation of historical information presented by individuals through recording interviews about ways of life and past events, (Kunz, 2000).

Burnside and Haight (1992) indicate that there is much confusion regarding the similarities and differences between life review and reminiscence and clarified the two approaches in their paper. They concluded that life review is used to recall, examine and evaluate, in order to help prepare for the future. It must involve the entire life span, have an evaluative component, and take at least 4-6 weeks to complete, (Burnside & Haight, 1992). The approach is also often conceptualised from a psychodynamic perspective, (Hirsch & Mouratoglou, 1999; Knight, 1996). Weiss (1995) outlines several roles, and goals for the mental health professional using life review. She argues that the listener should help provide the individual with the structure to help recall their memories, and to provide a context in which the reviewer can focus on memories relevant to their present situation. The listener can confirm or challenge interpretations of life events, probe for deeper meaning or legitimise the reminiscence by listening, (Parker, 1995). In this way, it is said that they can facilitate the older adult through this process with the aim of achieving self-acceptance, Butler (1963). However, there are few descriptions in the literature of individual responses to this process or discussion about how this process of intervention could be tailored to the individual.

THEORETICAL MODELS.

Historical Foundations: The Origin Of The Life Review Concept.

In 1963, Butler was the first to describe the life review process which he saw as a universal experience in older adults. This encouraged the view that reminiscence and life review were normal healthy processes, and challenged previous beliefs which had seen reminiscence in older adults as pathological, (Butler, 1995). Butler (1963) argued that the process was in fact a necessary part of successful ageing and saw it as a method of gaining meaning from the past and resolving old conflicts.
Butler (1963) argued:

> "Life review is a naturally occurring, universal mental process characterised by the progressive return to consciousness of past experiences, and, particularly, the resurgence of unresolved conflicts; simultaneously, and normally, these revived experiences and conflicts can be surveyed and reintegrated. Presumably this process is prompted by the realisation of approaching dissolution and death, and the inability to maintain one's sense of personal invulnerability. It is further shaped by contemporaneous experiences and its nature and outcome are affected by the lifelong unfolding of character" (p. 66).

Butler (1963) proposed that as people approach the end of their lives it is natural to want to put life into perspective, resolve previous conflicts, grieve losses, forgive, celebrate success and feel a sense of completion. Consequently, the life review was seen to link closely to Erikson's final developmental stage of integrity vs. despair.

Erikson's Theory Of Development.

Erikson (1950) postulated that there were eight psychosocial developmental stages or crises individuals negotiated in life. The stages were said to span infancy to old age. The final stage was described as the crisis of integrity versus despair. Integrity is said to relate to the individual's acceptance of their life cycle and the people significant to it, from this comes an ability to face death, (Erikson, 1968). If the person is unable to achieve a sense of integrity then they are said to be in a state of despair, that time is running out and it is too late to make changes to their life.

Erikson's model became very influential, even though, there has been little research into its validity, (see Thornton & Brotchie, 1987).

Table 1: Erikson's Stages Of Psychosocial Development.

Developmental Stage.	Psychosocial Crisis.	Successful Resolution Involves.
First Year	Trust vs. Mistrust	Trust and optimism that environment will satisfy needs
Second Year	Autonomy vs. Doubt	Sense of self control and adequacy
Third to Fifth Years	Initiative vs. Guilt	Ability to initiate own activities with purpose and direction
Sixth Year to Puberty	Industry vs. Inferiority	Competence in intellectual, social and physical skills
Adolescence	Identity vs. Confusion	An integrated image of self as an unique person
Young Adulthood	Intimacy vs. Isolation	Ability to form close relationships
Middle Adulthood	Generativity vs. Self-stagnation	Concern for family, society, and future generations
Older Adulthood	Integrity vs. Despair	Sense of fulfilment and satisfaction with life

- Erikson, (1963).

Erikson (1980) argued that resolution of developmental stages enables the individual to face the next stage "with an increased sense of inner unity, with an increase of good judgement, and an increase in the capacity to do well" Erikson, (1980 p 52). The theory suggests the need for the therapist to look for unresolved developmental conflicts throughout the life span. Consequently, in the process of life review, it is also assumed that it is necessary to work through the stages in order, (Haight, 1992a). Erikson's theory extended the notion of development past childhood into the adult years and raised the possibility that there could be developmental conflicts in adulthood that could be the loci of unfinished business in late life, (Knight, 1996).

Others have agreed with Erikson that the final task of late life is to develop a sense of integrity, that is, to transcend life's experiences, find meaning and develop a personal sense of achievement, success, and life satisfaction, (Black and Haight, 1992; Haight, 1992) and have developed approaches to facilitate this process, (Haight, 1979).

The Development Of A Structured Life Review Approach.

Haight (1979) incorporated aspects of Erikson's and Butler's theories to develop a life review intervention to be carried out with older adults. The intervention was closely based on Erikson's concept of the eight developmental stages and Butler's (1963) conceptualisation of an evaluative life review to facilitate the person to achieve integrity. She developed a protocol or Life Review Experiencing Form (LREF) which was designed to facilitate the individual's life review by progressing through and resolving issues at each stage, (please refer to appendix A for LREF). She claimed that the process could be a very powerful means of facilitating the well-being of older adults.

Haight has carried out a number of studies developing and investigating the life review. In one study conducted in 1988, she used three groups of participants, (experimental, control and no treatment) to investigate the effect of a structured life review process on 60 homebound older adults. Using the LREF she found significant improvements in levels of life satisfaction as measured by the Life Satisfaction Index (LSI-A) and psychological well-being, operationalised by the Affect Balance Scale. It was assumed that high life satisfaction was indicative of integrity, (Haight, 1988). Furthermore, Haight found that her sample did not become depressed as a result of the life review process. She recommended the approach be used freely as a preventative or health maintenance measure, but also advised research with other ageing populations. However, Haight did not consider the effect of a confounding variable on the findings, the control and experimental groups were not equivalent in terms of amount of therapist contact received. The control group received one friendly visit compared to the treatment group who had eight hours of therapist time. Consequently, it could be considered premature to conclude that the positive changes observed were as a result of life review per se.

Haight (1992a) carried out another investigation into the long term effects of structured life review on a group of 52 house bound older adults. Participants were allocated to one of three groups including, the experimental group who received eight

sessions of life review, a control and no treatment group. Again the control group participants only had one friendly visit compared to the treatment group's eight visits. The no treatment group participated in the testing only. At immediate post test, Haight again found significant gains in life satisfaction and psychological well-being. There were no significant differences on measures of depression and activities of daily living. Furthermore, there was little significant change in the groups at a one year follow up assessment. However, there was an upward trend in the experimental group on the life satisfaction measure and a downward trend in all groups on the measures of depression and activities of daily living. Haight (1992a) also noted anecdotally that at the re-test, the life review participants had increased involvement in life, improved functional abilities, renewed relationships with old friends and general feelings of well-being. Haight (1992a) prematurely postulated that the effects of life review were lasting as measured by the LSI-A. Again, she concluded by recommending the continued use of structured life review with older adults.

The Essential Elements for "Successful" Life Review.

Haight continued to research and develop the model and in a methodologically stronger study, Haight and Dias (1992) aimed to identify the essential components that contributed to what they defined as "successful" life review. They evaluated the effect of life review on 240 participants living in retirement settings and nursing homes. The participants were randomly allocated to one of eight reminiscence groups or two current event groups. Haight and Dias (1992) examined five reminiscing processes to determine those that contributed to well-being. They found that evaluation, individuality and structure, contributed to a decrease in depression, and concluded that the life review should encompass the entire life span, evaluate, analyse and synthesise life events. The intervention should also be conducted individually with one other person acting as a "therapeutic listener". This study was conducted with individuals who were not cognitively impaired, consequently, the facilitative elements for this population remain unclear. Below is a summary of the literature and research for life review with individuals without cognitive impairment.

Life Review And Reminiscence With Older Adults Without Cognitive Impairment: Empirical Evidence And Assertions.

To date, empirical evidence for life review has been mixed, (Burnside & Haight, 1992; Thornton & Brotchie, 1987). Several assertions have been made and some research studies suggest that reminiscence and life review can result in improvements in older adult well-being, (Haight & Dias, 1992), self-esteem, (Lappe, 1987), life satisfaction, (Haight & Bahr, 1984), cognitive functioning, (Hughston & Merriam, 1982), integrity, (Carlson, 1984), and depression, (Parsons, 1986). Four supposed consequences of the life review process will be focused on in this study, namely; life satisfaction, depression, self esteem and also auto-biographical memory. It must be noted that the effect of the life review process on several other variables is discussed to a lesser extent in the literature, including, improved attitudes of younger adults towards older adults, increased sense of meaning in life, improved problem solving skills, (Kunz, 2000), reinforcement of self-identity, grief resolution, and the ability to cope with specific stressful experiences, (Pincus, 1970). However, for the purpose of this study the research is limited to the four variables above.

Reminiscence, Life Review, Integrity and Life Satisfaction.

Rationale and Assertions in the Literature.

There is no clear definition of the concept of integrity but several variables have been presumed to be indicative of it, including, sense of identity, morale, adaptation, self-acceptance, fear of death, coping with current difficulties and life satisfaction. Neugarten et al. (1961) define life satisfaction as the adaptation to the triumphs and disappointments of life and eventual peace with ones' self. Several assertions have been made relating to the life review process and its ability to facilitate the achievement of integrity, for example, Newman and Newman (1987) argue that integrity comes from the person's ability to "introspect about life experience and to evaluate the importance of various events in forming one's personality." It has also been argued that recalling experiences allow some older adults to better accept themselves and to achieve a sense of personal integration and integrity, (Lo Gerfo, 1980). It is assumed that through talking about the past people are able to put their lives into a meaningful order, (Parker, 1995). Consequently, the individual feels able to face the future with integrity. It has been said that life review enables the older

adult to reinforce their resources and strengths and maintain a sense of continuity in their identity (Black & Haight, 1992, Weiss, 1995).

Empirical Evidence.

Researchers have attempted to examine the relationship between reminiscence and life review with life satisfaction and other variables associated with integrity either by evaluating the effect of reminiscence interventions or by examining the correlation between these variables. The latter will initially be discussed here. Several studies have been conducted to examine the relationship between level of reminiscence partaken and its relationship with variables associated with integrity. For example, DeGenova, (1993) found that reminiscence, life review and regretfulness (measured by the life review index, Degenova, 1993) were all related to life satisfaction (measured by the LSI-A) in a sample of 122 retired older adults. However, life satisfaction and reminiscence were only positively correlated for those who did not have a spouse present. Therefore, reminiscence is seen by some to have an adaptive function and be related to life satisfaction for some individuals in particular circumstances. However, Lieberman and Falk, (1971) studied spontaneous reminiscence, and found it was unrelated to adaptation. Others have agreed, for example, Brennan & Steinberg, (1983) evaluated the relationship between the extent the person reminisced and the relationship to life satisfaction using the LSI, morale and level of social activity in 40 females. They found that high reminiscers were more active but did not necessarily have high morale.

Limited conclusions can be drawn from this correlational research it is difficult to ascertain whether it is reminiscence per se that has a causative impact on these variables and the results to date have also been contradictory. Intervention studies have also provided contradictory results. Some studies concluded that reminiscence and life review increase life satisfaction, (Haight, 1984; 1988; Haight & Bahr, 1992). Haight (1992b) summarised the results of three studies carried out over six years which found that structured life review was effective in improving life satisfaction (measured by the LSI-A) in older adults, compared to a control group. Alternatively, Cook (1991) examined the effect of reminiscence on ego integrity using the Life Satisfaction Index-version A, (LSI-A), depression using the Geriatric Depression Scale (GDS), and self esteem using the Rosenberg Self-Esteem (RSE) scales as pre and post-tests of the experimental and control groups. Cook found contradictory support for the use of reminiscence. Fifty-six nursing home residents

attended 16, 1 hour group reminiscence sessions. The control group also attended the same number of sessions but focused on current topics for discussion. She found no significant differences between the control and experimental groups, although Cook concluded that there was a trend towards ego integrity for the experimental group. This study was useful in that the amount of contact both groups received was equivalent, thus controlling for the effect of social or therapist contact. Similarly, Sherman, (1987) evaluated the effect of attendance at a reminiscence group on participants, in terms of their satisfaction and self-concept. He compared two different types of reminiscence group with a no treatment control group who met for assessment only. The reminiscence groups involved one general reminiscence and the other general reminiscence and a "focus on feelings" component. One-hundred and four people took part in the project which were split into groups of six to ten. There were no significant differences between the groups on a life satisfaction and self concept measure. In light of the findings above it remains inconclusive as to whether life review can facilitate the achievement of integrity or life satisfaction, as always there is a need for additional research. Several individuals have also examined the relationship between these approaches and depression.

Reminiscence, Life Review And Depression.

Depression is the most common mental health problem experienced by older adults, (Banjeree et al. 1996; Blazer, Hughes & George, 1987). Ames (1991) found that 40% of people living in residential homes had symptoms of depression.

Rationale and Assertions in the Literature.

It is commonly stated in the literature that the review process can decrease feelings of depression. For example, in the United States, the National Institute of Mental Health concluded that reminiscence was a potential intervention for depression, (NIMH, 1990). Within the life review literature various arguments have been proposed regarding the mechanisms involved in this, and the assertions made have parallels with psychodynamic, and cognitive therapeutic orientations. In parallel with psychodynamic theories, Butler (1974) asserted that depression is common when an individual becomes fixated at a particular point or stage in the past or when they cannot re-integrate an event. As outlined above, it has been argued that life review can facilitate the resolution of conflict and enable the individual to re-

integrate negative life experiences, draw on previous coping mechanisms and strengths, consequently, having an impact on current feelings of depression. Furthermore, it has also been argued that life review may enable the older adult to process issues of separation and loss.

Parker (1995) suggests that directing the person's attention onto more positive memories has a positive effect on mood. Further arguments have been developed that state that the life review process is useful for the individual who tends to view events in a global fashion, generalising the power of negative experiences to all aspects of their life, (Sukosky, 1994). For example, for the individual who may see their divorce as a total personal failure rather than seeing the experience as an episode within their whole life context. These arguments are similar to those presented from a cognitive therapy orientation, who have argued that depressed individuals take longer to remember positive events that happened in their lives compared with negative ones, but also that depressed individuals tend to be overgeneral in their memories (Moore et al., 1988; Williams & Scott, 1988). It is considered possible, by some that the life review process enables the individual to access more specific positive memories, consequently having an impact on depression.

Empirical Evidence.

The evidence available to evaluate the theories described above has again been inconclusive. In the studies already described, many found reminiscence or life review intervention not to have an impact on levels of depression, (see, Cook, 1991; Haight, 1988, 1992a); alternatively other studies have found life review to relieve depression, (Fallott, 1980; Fry, 1983; Haight & Dias, 1992; Magee, 1988; Parsons, 1986). Again the inconclusive results may be consequent to various methodological difficulties, for example, Bachar et al. (1991) found group reminiscing to be more efficient at lifting depressed mood than traditional reflective non-directive group psychotherapy in severely depressed hospitalised individuals. Twelve individuals participated in a "traditional" psychotherapy group which focused on the "here and now", and ten participants took part in a reminiscence group. However, Bachar et al. (1991) used participant self-report and therapist evaluation as outcome measures, before and after sessions. This subjective method of assessment is notoriously unreliable. Alternatively, using standardised assessment tools and controlling for amount of therapist contact, Youseff (1990) administered the Beck Depression

Inventory (Beck, 1978) to sixty women living in nursing homes, who had been allocated to a control or one of two unstructured, closed reminscence groups to examine the effect on levels of depression. Following intervention the analyses revealed no significant differences between the groups at post assessment. Hedgepeth and Hale (1983) assigned 60 women to three different groups, including, positive reminiscence, discussion of positive current experiences or a no treatment control group. They found no change in affect, performance or expectancy, consequently, they concluded that reminiscence may be no more beneficial than discussion of current experiences or even no intervention at all. However, the reminiscence only involved one hour of positive reminiscence. In a review of the reminscence literature, Thornton and Brotchie (1987) concluded that there were conflicting results regarding the efficacy of reminiscence in intervening with depression. Reminiscence models of intervention have not been adequately defined and the foci of the sessions have been unclear. Furthermore, the research findings in favour of these assertions do not seem as strong when the research conducted is more methodologically robust.

Reminiscence, Life Review And Self-Esteem.

Rationale and Assertions in the Literature.

During later life individuals are often faced with a number of different challenges including associated with the ageing process, including, loss, disease and disability. These factors can have an impact on the individual's self-esteem and their sense of identity, (Knight, 1996). Weiss (1995) suggests that one of the main challenges in older adulthood is that of dealing with issues of self-esteem associated with changing capabilities. Several authors have argued that reminiscence and life review can serve to maintain or in fact increase self-esteem, (Rasmussen, 1999). Yang and Rehm (1993) assert that "reminiscence can help create a sense of continuity with the past and re-define the current self in light of the past, thus maintaining self-esteem". Burnside et al. (1989) also agree that self esteem may have been buried by more recent unresolved negative experiences. When these negative events are faced and worked through then they are able to put them into a more manageable and realistic perspective. Then by reducing the power of these negative experiences they are able to empower themselves to grow in self worth and confidence. Similar to the arguments presented for the role of life review in improving depression, Carlson

(1984) argues that these approaches involve the processing of loss and mourning from one transition to the next and that reminiscence allows the individual to deal with issues of separation and loss and helps the person maintain a sense of self-esteem in face of the ageing process and imminent death. Similarly, it has also been argued that the life review may facilitate the person to identify positive experiences, to help reinforce a positive self-esteem, (Sukosky, 1994).

Empirical Evidence.

There is a limited amount of research related to this area. Again, some correlational research has found a relationship between reminiscence and self-esteem. For example, McMahon and Rhudick (1964) interviewed twenty-five non-institutionalised war veterans for an hour and concluded that reminiscence was related to the maintenance of self-esteem, reinforcement of identity, coping with personal loss, and the allayment of anxiety associated with signs of decline. Similarly, Carlson (1984) carried out eight one hour semi-structured interviews with older adults living in the community and concluded that reminiscence encouraged the maintenance of self-esteem and continuity of identity. However, Carlson (1984) did not use standardised tools to investigate these constructs. Again the limitations to these research studies are apparent.

Other studies that have evaluated the effect of reminiscence interventions have found improvements in self esteem as a consequence of the intervention, (for example, (Bergland, 1982; Buechel, 1986; Burnside et al., 1989; Perschbacher, 1984). Lappe (1987) carried out an evaluation of the effect of reminiscence group, compared to a group which discussed more current events with eighty-three participants living in long term care settings. The Rosenberg Self-esteem (RSE) inventory demonstrated significant increases in the self esteem of those that participated in the reminiscence groups. Alternatively, Cook (1991) (described above) found no effect on self esteem and ego integrity. Similarly, Stevens-Ratchford (1993) investigated the effect of life review on depression using the Beck depression inventory, (Beck, 1978) and self-esteem using the RSE measure, in twenty-four older adults living in a retirement community. He set up two groups, the experimental group had six sessions of structured life review, and the control group were tested only at pre and post stages. There were no significant differences between the two groups. Perrotta and Meacham (1981-82) also found no significant differences between three groups on self-esteem and depression measures.

Individuals had participated in a reminiscing intervention, a group which discussed current events and a no treatment control group. Again there is a need for additional research using clearly defined models of intervention, methodologically sound designs and adequate outcome measures.

Possible Harmful Effects of Life Review.

It must be noted that little consideration is given in the literature to the possible negative effects of conducting a life review. In the main, the literature on the positive effects of the approaches and has been based on clinical intuition, assertion and conflicting research findings. There have been few papers discussing possible harmful effects. The possibility that the person does not resolve the eighth developmental crisis and is resigned to despair instead of integrity has been neglected. This is surprising in light of the fact that Butler (1963) noted that the process could bring about depression, anxiety, guilt, and despair. He went so far as to suggest that the most tragic outcome can involve suicidal feelings that the person's life has been a total waste. Butler (1974) also acknowledged the idea that life review may contribute to psychiatric problems in later life, particularly depression. It seems that the body of reminiscence literature seems to have lost sight of this, apart from Butler again in 1974 who along with Lewis acknowledged that "the life review by its very nature evokes a sense of regret and sadness", (Lewis & Butler, 1974). However, they also argued that most people can reconcile their lives and are able to find meaning especially in the presence of accepting support from others (Lewis & Butler, 1974). Lewis and Butler, (1974) continued that the success of the process depends on the person's ability to resolve, resentment, guilt, bitterness, mistrust, dependence and nihilism. However, Kunz (2000) points out that "few studies have documented any harm in the use of these activities". These studies that have found increases in depression levels following reminiscence, (Hewett, Asamen, Hedgespeth & Dietch, 1991; Malde, 1988; Shute, 1986), have largely been disregarded.

Summary of Research Findings with Older Adults Without Cognitive Impairment.

The evidence presented above suggests that research into reminiscence and life review has provided inconclusive findings, as a result of a variety of factors including, poor operationalisation of types of reminiscence intervention, the use of small samples, unreliable measures, and inadequate consideration to confounding variables. General conclusions from various reviews of the research have suggested a need to examine the processes in different contexts, with different populations while clarifying the reminiscence therapeutic model to be adopted along with and longitudinal studies to examine the long term effects, (Molinari & Reichlin, 1984; Thornton & Brotchie; Merriam, 1980; Haight, 1991). The research literature to date does not provide a clear picture regarding the full impact of the life review on different populations.

LIFE REVIEW AND REMINISCENCE WITH PEOPLE WITH COGNITIVE IMPAIRMENT.

Definition and Prevalence of Dementia.

The WHO 1986 definition of dementia is as follows:

> "Dementia is the global impairment of higher cortical functions, including memory, the capacity to solve problems of day to day living, the performance of learned perceptuo-motor skills, the correct use of social skills and control of emotional reactions in the absence of gross clouding of consciousness. The condition is often irreversible and progressive."

Ashton and Keady (2000) state that the prevalence for dementia increases dramatically with age, being 0.1% (1 in 1000) in 40-65 year olds; 2% (1 in 50) in 65-70 year olds; 5% (1 in 20) in 70-80 year olds and 20% (1 in 5) in the 80 years and over age group.

Rationale and Assertions Regarding Life Review And People With Cognitive Impairment.

Very few studies have been conducted into the effect of life review on people with cognitive impairment, however, various assertions have been made. For example, Rasmussen (1999) summarised a European project entitled "Remembering Yesterday, Caring Today" which aimed to teach carers to use reminiscence to open up communication between carers and people with dementia. He concluded that reminiscence is valuable in promoting the value and worth of people with dementia. Haight (1999) also argues that people with dementia face a "mental death" and need to resolve issues while they still have the cognitive ability to do so. She suggests that agitated behaviour sometimes seen in people with dementia may be as a result of unresolved issues.

The Feasibility of a Life Review Approach With People with Mild-Moderate Dementia.

Woods et al. (1992) report a study into the feasibility of a life review approach with people with mild-moderate dementia. They evaluated the effect on 20 participants classified as having mild to moderate dementia on the Clinical Dementia Rating Scale (CDR) from two institutions They found that the participants enjoyed talking about their lives and wished that the interviews would continue. They indicated that they "could actually see images related to their memories in their 'mind's eye', when they thought of them. Woods et al. (1992) concluded that life review is a useful tool that can be used with people with dementia to assist with planned packages of care for them. Woods et al., (1992) acknowledged that life review requires more insight, cognitive effort and guidance than simple reminiscence but suggest that the process is not impossible with people with cognitive impairment. The research evidence to date is considered below.

Research Findings of Life Review With People With Cognitive Impairment.

The research on life review with people with cognitive impairment has been sparse, (see Spector et al., 1998 for review) with the majority of studies evaluating the effect of groups and reports of single cases. For example, a case-study reported by Hirsch and Mouratoglou (1999) concluded that life review can be useful for people with memory problems provided that the sessions are tailored to the individual's cognitive abilities. They reported on an 84 year old woman of high pre-morbid IQ, who experienced word finding, orientation, learning, verbal fluency and spatial construction difficulties as assessed by the Middlesex Elderly Assessment of Mental State, (MEAMS). Following a life review intervention, her GDS score moved from mild depression to outside of clinical levels and was maintained at this level at one month follow up but had returned to mild depression at the 6 month follow up stage. Life satisfaction and anxiety levels were both outside clinical levels and stable throughout. The ego integrity measure devised by Boylin et al. (1976) increased from pre to post assessment stages and also at the six month follow up assessment stage. Again, it is possible that the positive findings reported above could be as a result of therapist contact rather than life review per se. Another study subject to this confound was carried out by Haight (1992b) who concluded that structured life review increased life satisfaction in a group of cognitively impaired

older adults. The control group which received one friendly visit demonstrated a decrease in life satisfaction scores. There have also been suggestions that life review can facilitate adaptation and enable the individual to deal with current difficulties and stressors, such as a move into a care home.

Rationale For Life Review With People In Transitions: Cognitively Impaired Individuals And The Move Into A Care Home.

It has been suggested that a move to a long-term care setting can be "fraught with emotional and psychological turmoil", (Weiss, 1995). This includes the fear of losing identity, friends, possessions, lifestyle, history, and personal space. Individuals are also forced into close proximity with other people who may be suffering terminal illnesses which may reflect the individual's own destiny in time, (Weiss, 1995). Newly admitted care home residents are particularly vulnerable to depression, (Rosswum, 1983). Ryden et al., (1998) report a prevalence of major depression in nursing homes of 12-15% and from 18-30% of people with some depressive symptoms. Furthermore, depression had been found to be common among people with Alzheimer's disease and dementia (Cheston & Bender, 1999). Teri and Wagner (1991) found approximately 30% of people with Alzheimer's disease met DSM-III criteria for major depressive disorder. Cummings and Victoroff (1990) estimate the prevalence of depression in people with Alzheimer's disease as high as 87%. This evidence suggests that the individual with cognitive impairment who has moved into a care home is particularly at risk. Furthermore, the individual may not be as able to cope with the transition as well as they might have in the past making them more susceptible to depression, illness and suicide, (Weiss, 1995).

It has been claimed that life story work can relieve stress associated with a move into a new environment, and has been used by people working with people with learning disabilities to facilitate their move from long stay hospitals to community residential homes, (Hussein, 1997). There are parallels here with people with dementia moving into care homes. It is possible that life review can ease this transition and enable people to cope with the changes and the loss of their previous lifestyle and the people in it (Hussein, 1997). This is discussed in more detail below.

Research Evidence For Reminiscence and Life Review In Care Homes With Cognitively Impaired Individuals.

Limited attention has been given to reminiscence in individuals with cognitive impairment. Some positive outcomes have been reported from conducting reminiscence in institutions, (Ingersoll & Goodman, 1983; Lesser et al., 1981). These reports have often been anecdotal and have generally reported on the effect of general reminiscence on social interaction and behavioural indicators as opposed to more intrapsychic factors or from participant self-report. For example, Brody et al. (1971) reported that residents with cognitive impairment made significant improvements in the performance of daily living skills and in social and familial relationships when they participated in individualised activities which capitalised on their past histories, interests, experiences and strengths. Cook (1984) also found positive anecdotal effects associated with conducting reminiscence groups with this population. She evaluated a reminiscence group who met weekly for forty-five minutes at a time and observed changes in the general demeanour of group attendees including their energy level, extent of confusion, and willingness to participate. She claimed that the regular attendees seemed more alert, contributed more verbally and laughed more. She also claimed that there were more attempts at communication and listening and a gradual increase in time spent socialising especially prior to and after the sessions. Cook admits that the findings are exploratory and tentative, but concludes that reminiscence groups are an excellent vehicle for meeting a number of needs of confused isolated individuals.

A more methodologically robust study was conducted by Baines et al (1987). They examined the effect of reminiscence compared with reality orientation (RO) and a no treatment control group for 5 matched participants in each group. The participants were moderately and severely confused residents of a large residential home. Baines et al. (1987) used a crossover design which examined the effect of RO followed by reminiscence in one group and reminiscence followed by RO in the second group. The authors concluded that the largest improvements in cognitive and behavioural function were observed in the group that had RO followed by reminiscence and argued that it might be important for people to take part in RO prior to reminiscence. They also reported high morale associated with reminiscence sessions and low morale with the RO sessions. Baines et al. (1987) found that their participants seemed to enjoy the sessions and daily attendance rates were high. Baines et al. (1987) also observed that staff knew significantly more information

about the experimental group participants than the control group participants. They also found improvements in life satisfaction following the reminiscence. The authors concluded that both RO and reminiscence groups can be enjoyable and stimulating for both residents and staff and can lead to increased job satisfaction in staff and improved quality of life for residents.

Additional positive results have been reported by Tabourne, (1995) who investigated the effect of life review on disorientation, social interaction and self-esteem in 40 participants living in one of two nursing homes, with two life review and two control groups. Tabourne used the self-esteem questionnaire (SEQ-3), the other measures used observation techniques. They found a significant impact of the life review on levels of disorientation, and social interaction compared to controls. However, there was no difference between the two groups on the measure of self-esteem. Similarly, Kiernat (1979) evaluated the effect of group reminiscence on the behaviour of 23 nursing home residents experiencing dementia. Kiernat found that the individuals attending the reminiscence sessions demonstrated the greatest improvement on a behaviour rating scale.

Rationale And Assertions In The Literature Regarding The Use Of Life Story Books with This Population.

It has already been asserted that life review can facilitate the older person's adaptation to the ageing process and to transitions in older adulthood, consequently, it has been argued that the creation of life story books could be beneficial for people with dementia, (Parker, 1995). This could enable them to maintain internal and external continuity especially following a move into a care home and with the progressive effects of the dementia on the person's sense of self. It is possible that this in turn may facilitate the person's ability to cope with their difficulties and have an impact on depression, self-esteem and life satisfaction. Parker (1995) argues that in order for the person to maintain a sense of continuity the person must recall what has come before and a life story book for the person with deteriorating memory may provide them with a tangible reminder of their lives and personal history. Whitbourne (1985) also described the use of life stories to facilitate a sense of continuity.

There has been little research evaluating these assertions, although there have been several cases providing anecdotal evidence in the literature. For example, Jarvis (1998) described an intervention whereby she created a collage for the person with

dementia that acted as a visual reminder of the significant times in a person's life. She described a moving case study of a man with severe dementia living at home with his wife. The collage formed part of his main activities with his wife as part of his final days. His wife was then able to treasure it following his death and take comfort from it. Jarvis (1998) argued that the collage had become a source of comfort to the man with dementia and provided him with alternative images to the unpleasant ones he had in his mind.

It has also been suggested that the recording of an individual's life story has a positive impact on staff behaviour and consequently has an impact on the person with dementia's quality of life and well-being. There is some research evidence available to support these ideas, for example, Pietrukowicz and Johnson (1991) demonstrated that staff working in a nursing home were influenced by a chart with a resident's life history, staff rated the individual as more instrumental, autonomous and personally acceptable than staff who reviewed a medical chart of a resident without a life history. They concluded that the life history of individual residents protects their personal identity against depersonalising institutional routines (Pietrukowicz & Johnson, 1991). Bailey et al (1998) also described a case study regarding the effect of a person's life history on staff. The person was usually described as a "difficult" person. They found that, prior to the intervention, staff thought of the individual as "a job to be done", she was no longer thought of as a person. A psychologist visited the unit and established a "getting to know you" package and a life line showing milestones of the individual's journey through life, indicating her likes, dislikes, hobbies and interests, giving some insight into her personality. Towards the end of the assessment stage the authors reported that the staff were beginning to see the client as a valued person and began to recognise her individuality and personality as a person who had led a unique life. These anecdotal claims need to be evaluated further with larger samples and in terms of the direct effect on the individual concerned.

It has also been argued that life story books can help the person with dementia maintain some of the connections in their life and a sense of personal history, (Parker, 1995). However, again, little research has evaluated the effect of this intervention on the person's sense of autobiographical memory.

Reminiscence, Life Review Autobiographical Memory Rationale and Assertions in the Literature.

It has been noted that there is some debate regarding the issue of whether the remote memory of an older adult with dementia remains relatively intact. This store of personal information across the life-span is often referred to as autobiographical memory. Many have argued that remote memory for details of the person's childhood and early adulthood in dementia is a relative strength which needs to be capitalised on. For example, Parker (1995) argues that "naturally acquired" memories stored in remote memory are more resistant to loss in older people than information learnt in a laboratory setting. This remote memory could serve an adaptive function for older adults in the face of loss. It has also been argued that reminiscence work can help the person with dementia maintain a sense of identity by helping them to make connections across their life span in terms of their autobiographical memory. Important memories relating to the person's identity may be maintained, (Woods, 1999). The effect of life review on autobiographical memory and its relationship to other variables has not yet been investigated adequately by empirical research.

Empirical Evidence.

Studies of autobiographical memory in older adults with dementia have been scant, (Fromholt & Larsen, 1991) and the research that has been conducted has been contradictory, for example, Morris and Kopelman (1986) found that people with dementia have difficulty with almost every memory process but that remote memory appears to be more intact than recent memory. Similarly, it has also been demonstrated that individuals with dementia often remember little from their middle adult years, (Morris, 1994). However, more recent investigations have contradicted the idea that remote memories remain relatively intact in the early stages of the disease. Fromholt and Larsen (1991) studied the distribution of memories across the life span in thirty people at various stages of Alzheimer's type dementia and thirty individuals without this diagnosis. They found a peak in adolescence and early adulthood, a decrease in mid-life and another peak in recent years in people without dementia. The distribution of autobiographical memories in people with dementia was more flat, contradicting the idea that remote memories are relatively preserved, even in the earliest of dementia stages. The implications for this in terms of ability to retrieve memories for reminiscence and life review warrants further investigation.

Furthermore, Fromholt and Larsen (1991) also found that the memories recalled by people with Alzheimer' s disease were more negative in valence. This finding has profound implications for reminiscence activities that are routinely carried out with individuals with dementia in older adult services. There are no investigations into the effect of life review on autobiographical memory in particular, despite this being the primary cognitive process involved.

Summary Of Research Evidence With People With Cognitive Impairment.

Over thirty years have passed since Butler expounded the importance of life review. However, the research to date has been inconclusive, contradictory and unclear with regard to the functions, consequences or effects of reminiscence and life review interventions, (Haight, 1991; Merriam, 1993; Parker, 1995). Parker (1995) claims that studies lack a theoretical base and are generally fraught with methodological difficulties. Very few studies evaluating the effect of life review specifically, have been carried out with this group of individuals. Baines et al. (1987) indicated that until 1987 there had been no major studies into the effects of reminiscence with confused older adults. Furthermore, Spector et al (1999) concluded that there had still only been one trial (i.e. Baines et al., 1987) which had been conducted with any methodological quality. However, in their review, Thornton and Brotchie (1987) concluded that in both cognitively impaired and non-impaired individuals, there was some evidence of small improvements in some cognitive, behavioural and social functioning measures. The studies that have been conducted are those with individuals in groups using more general reminiscence approaches as opposed to life review. Often these interventions have aimed to encourage the individual to engage socially with their environment and have monitored degrees of social engagement and interaction as opposed to more intrapsychic factors. Furthermore, anecdotal findings have been reported as opposed to more reliable measures of change in these individuals.

Consequently, there is a pressing need for research into the impact of these approaches on this population of individuals. It has been argued that the desire to resolve issues and "put their affairs in order" before their cognitive ability deteriorates further may be urgent. Furthermore, the resolutions of old issues prior to the breakdown of their cognitive defences may be a useful preventative measure of difficulties which could arise as the disease progresses. The literature on life review assumes that the individual is able to secure some strength from previous

experiences in life and from previous episodes of successful coping, (see for example, Silver, 1995). This may enable them to deal somewhat with the progressive nature of the disease and the difficulties that it presents. However, these claims need to be evaluated.

Study Aims.

The aim of this study was to examine the effect of Haight's life review model involving the individual, structured evaluation of life experiences with people with cognitive impairment living in care homes. The effect of the intervention was quantitatively evaluated by examining levels of depression, auto-biographical memory, life satisfaction, and self-esteem in a group of individuals allocated to a control or experimental group. The study also aimed to explore the feasibility of carrying out this style of intervention with this population.

Hypotheses.

Hypothesis I.

There will be significant differences between the groups in life satisfaction scores measured by the LSI-A following intervention.

Hypothesis II.

There will be significant differences between the groups in depression scores measured by the GDS-SF following intervention.

Hypothesis III.

There will be significant differences between the groups in self-esteem measured by the RSE inventory following intervention.

Hypothesis IV.

There will be significant differences between the groups in autobiographical memory measured by the AMI following intervention, in; a) the personal semantic schedule and also in b) the autobiographical incident schedule.

METHOD.

Design.

The study used a pre, immediate post and six week follow up test design with 17 clients who were randomly allocated to one of two groups, the experimental group and a no treatment control group. The experimental group took part in a structured life review intervention as well as the pre and post assessments and the no treatment control group participants took part in the pre and post assessments only. It should be noted that in this pilot study, the groups were not balanced for amount of therapist contact. It was impossible within the time constraints of the study to have a control group receive contact comparable with the experimental group. This issue is discussed in more detail in the discussion. The study examined the impact of the intervention on four main dependent variables including, self-esteem, depression, life satisfaction and autobiographical memory. The measures used to evaluate these constructs are described below.

Participants.

Eligibility Criteria.

Participants were selected according to the following criteria. They were willing to take part. They had a carer or relative who also agreed to take part in the project, by supporting the intervention and providing additional life history information if necessary. Participants were eligible if they showed signs of dementia according to the CDR. They had to obtain a CDR of 1 or 2 which is said to be indicative of mild to moderate dementia. Participants had to have sufficient verbal abilities to be able to participate and not be demonstrating signs of florid psychosis. Furthermore, it was necessary that the care home sister and manager approved of their participation.

The researcher met with 40 potential participants to discuss the study and to assess their eligibility to participate. Of the 40 potential participants, 42.5 % (17 people) were eligible and consented to taking part, 25% (10 people) did not meet eligibility criteria, 27.5% (11 people) refused to give or withdrew consent, (the relative or the individual themselves), 5% (2 people) became terminally ill and died. Reasons for refusal will be considered in the discussion.

Procedure.

At the study design stage ethical approval was applied for and granted, see appendix B for application and approval forms.

Access To Participants.

Participants were accessed through two main routes:

1). Individual care homes in the area were approached by the researcher and asked if they would like to participate in the project and if they had any residents who fulfilled the eligibility criteria who would be interested in taking part. Prospective participants were then approached by the manager of the care home with an information sheet (see appendix C) describing the project and it was ascertained whether they would be interested in meeting the researcher to talk about the project. Carers were then either approached directly or telephoned by the care home manager or by the researcher (through permission of the individual or care home manager), to ascertain their opinion. If consent was obtained by both parties then the researcher proceeded to assess the individual to establish whether they would be eligible to participate according to the inclusion criteria.

2) The second route for accessing clients was through the local dementia assessment service. Members of the team were approached and asked if they had anyone on their caseload who might be appropriate for the study and may be interested in participating. The staff then either approached the individuals with the information sheet (appendix C) directly to ask their permission or gave the researcher the name and address of the individuals concerned for the researcher to approach the person directly. In this case it was made clear to the potential participant, the route by which the researcher came to be aware of them. The participant's carers were then approached according to the same principles outlined above.

Participants were able to give verbal or written consent that was witnessed by the carer or relative. Potential participants were given at least seven days to consider taking part in the project. It was emphasised that everything the participants reported would be treated with principles of confidentiality usually adhered to in the health service and that their anonymity was assured. Furthermore,

that a decision not to take part would not affect the future care they were to receive in any way. It was also emphasised that participants were free to withdraw from the study at ANY time, and if they did not wish to answer any questions to feel free not to do so. At the end of the study, control participants were given the option of participating in the life review as an aside to the project, nobody took up this opportunity.

Group Assignment.

The initial participants were randomly assigned alternately to the groups. Subsequent participants were allocated to the groups according to a procedure called randomisation by minimisation which took into account the participant's age and relationship to their caregiver. This is a randomisation method which seeks to minimise inter-group differences on key demographic variables, of especial importance with a small sample size. For details of participant's demographic details please refer to the results for a summary (Table 2) or to appendix G for individual details (Table 32).

Assessment Procedure.

At the pre and post assessment stages, the severity of the person's memory and other cognitive problems were classified according to the Clinical Dementia Rating Scale, (Hughes et al., 1982). The participants also completed the Short form of the Geriatric Depression Scale, (Sheikh & Yessavage et al., 1986), the Autobiographical Memory Interview, (Kopelman et al. 1990), Version-A of the Life Satisfaction index, (Neugarten et al, 1961) and Rosenberg's self-esteem scale (Rosenberg, 1989). All scales were administered in person with the researcher asking the questions directly. The order of presentation of the scales was random from participant to participant, to maximise co-operation. Furthermore, if possible, the researcher met in person with the individual's carer beforehand to gain some information about the person's life, and to corroborate information obtained from the AMI. The pre-intervention assessments were carried out by the researcher who also guided participants through the life review. Almost half of the follow-up assessments were carried out by an assistant psychologist who was blind to the allocation of participants to the groups. Fifty per cent of the assistant's assessment individuals were from the experimental group and fifty from the control group. The remaining

assessments were carried out by the primary researcher. Independent t-tests were carried out on the data collected by the primary researcher and those collated by the assistant psychologist. The tests revealed that there were no significant differences between the scores obtained by the two assessors on all of the primary and secondary dependent variables. This suggests that the primary researcher did not appear to bias responses provided by participants at the follow up assessment sittings, (see appendix I for results of analyses).

The Life Review Intervention.

The life review was closely based on Haight's Life Review model and in particular the Life Review Experiencing Form, (LREF, Haight, 1979). The form was designed to ensure consistency between participants, (Haight, 1988). It was devised from the basis of two doctoral dissertations and other suggested questions from former recipients of the life review intervention. Below are some sample questions included in the form:

- What was life like for you as a child?
- When you think about yourself and your life as a teenager, what is the first thing you can remember about that time?
- On the whole, what kind of life do you think you've had?

The LREF allows the therapist to gently guide the reviewer chronologically through their life stages and allows time to focus on each developmental life stage, including early childhood, teenage years, adulthood, and a summary section which aims to pull together the person's overall evaluation and sense of their life. This summary section is deemed to be the most important aspect to the whole process and provides the therapist with some probing questions which allows the reviewer to evaluate their life overall.

Haight's (1979) model for the life review consists of six one-hour sessions to work through the LREF. They recommended that the first two sessions are allocated to talking about childhood and adolescence, the next two sessions for family, home and adulthood and the final two for the summary section of the life review.
In this study approximately 12 or more sessions per individual reviewer were necessary to work through the form and create the life story book. Sessions were shorter and progress through the form was slower than anticipated. Furthermore,

some individuals preferred to spend longer discussing particular aspects of their lives either as a result of a need to resolve issues at that life stage or simply because they enjoyed relating information about that time.

At the beginning of each session the therapist/researcher would set the scene for the theme of the session, for example, "Today, I was hoping we might spend some time talking about your very early childhood, things like school, your home and family of origin". The topic would be introduced in a conversational manner not to put pressure on the individual to recall in detail, various aspects of their life. The area to be talked about was clearly defined but it was up to the person themselves to generate the material to be discussed. Various prompts of different topics were used if the individual seemed to be struggling to initiate conversation. Also, information from the participant's carers could be used as prompts. Some individuals found photographs and other materials helpful in retrieving information. The person with memory problems was far more able to retrieve information if allowed to talk in a free-flowing manner, with occasional help to organise the material and re-frame it from the researcher. Consequently, an open conversational approach was adopted and the LREF questions were gently weaved into the sessions.

Follow up sessions were organised and framed according to the previous session's content and the life story book was used and developed as the intervention proceeded. Following the session the researcher would take notes and compile the information in the Life Story Book. The life story book information was then taken to subsequent sessions for the reviewer to have the opportunity to state whether they would prefer certain details not to go in to the book, or if they wanted to add something else to a particular memory or section or to correct inaccuracies in recording information.

Measures.

Clinical Dementia Rating Scale, (CDR); (Hughes, Berg, Danziger, Coben, & Martin, 1982).

The CDR (see appendix D) is a global rating device which was developed for a prospective study of mild Alzheimer's type dementia. The CDR has been found to be able to distinguish unambigouously between older adults with a wide range of cognitive functioning, from healthy to severely impaired. It was developed using a sample of 117 individuals including, 58 healthy controls, 43 participants with mild dementia, 16 participants with questionable dementia, 18 participants with moderate dementia and 3 participants with severe dementia. All participants were aged between 65 to 80 years old. However, all were resident in the community. The scale is short, and has been used extensively by the Washington University Memory and Aging Project and in other work (Hughes and Gado, 1981).

Psychometric Properties.

Hughes et al (1982) reported good inter-rater reliability achieving Pearson correlations of ($r = 0.89$), and also demonstrated high concurrent validity with other tests. Furthermore, assessment at six months re-testing revealed that all healthy participants remained so, some originally classified with mild dementia remained at this stage, while others progressed to more severe stages. None were re-classified as CDR 0 or CDR 0.5. Some participants who were originally rated as "questionable dementia" (CDR - 0.5) progressed to definite dementia, one was rated as healthy, and most were unchanged. It is a useful measure as it is brief and allows the clinician to consider many characteristics of a given participant. It focuses on cognitive and behavioural function.

The Life Satisfaction Index - Version A, (LSI-A; Neugarten, Havighurst, & Tobin, 1961).

The LSI-A (see appendix E) was used to measure life satisfaction. The form was devised by Neugarten et al. in 1961, and was evaluated psychometrically by Adams in 1969 who recommended excluding two of the original items to improve the scale's psychometric properties. The scale has a correlation of 0.97 between test items and

the life satisfaction factor. This study will use the 18 item version of the scale suggested by Adams (1969) and will use Wood et al. (1969) scoring method.

The scale measures four components of life satisfaction (Adams, 1969) including, zest for life, fortitude and resolution, congruence between desired and achieved goals, and mood tone. The zest subtest assesses enthusiasm for various activities, people or ideas. Resolution and fortitude refers to the extent the person accepts personal responsibility for their life, the opposite of resignation or of passive acceptance. The congruence scale refers to the extent to which the person feels that they have achieved their goals, whether they have succeeded in what they believe to be important in life. Mood tone refers to the extent the individual expresses happy, optimistic attitudes, and the extent to which they take pleasure out of life.

The items relate to the individual's own evaluations of his/her present and past life. Consequently, value judgements of the investigator are minimised. Neugarten et al (1961) argue that it is a measure of successful ageing. Haight (1992; 1988) claims that it is a good assessment of the individual's sense of integrity. Adams (1969) concludes that the LSI-A provides a fair estimate of life satisfaction, and that the scoring method also adequate.

The Geriatric Depression Scale- Short Form, (GDS-SF; Sheikh & Yesavage, 1986).

The original version of the Geriatric Depression Scale, (GDS; Yesavage et al., 1983) has been shown to have high reliability and validity, (Spreen & Strauss, 1998) in the assessment of depression in older adults in a wide range of settings (Burke, et al., 1997). It is a quickly completed self-rating scale, and the GDS does appear to be a relatively good indicator of the level of depression experienced by an individual with dementia, (O'Riordan et al. 1990). Furthermore, mild to moderate dementia (MMSE>16, Folstein et al. 1975) does not appear to significantly affect the accuracy of the GDS as a screening tool (O'Riordan et al., 1990). The GDS has been found to be a useful screening tool for depressive illness in hospitalised subjects even in the presence of moderate dementia, (O'Riordan et al., 1990).

The fifteen item Geriatric Depression Scale (Sheikh & Yesavage, 1986) (see appendix F) was developed using the fifteen items which had the highest correlation with depressive symptoms in the original depression scale validation studies. The scale has recently been evaluated on community based older adults (N=414) (Steiner

et al., 1996) and demonstrated good range, high internal consistency, reasonable levels of construct validity, and good test-retest reliability. Steiner et al (1996) found that the scale was quick to complete and that even slight indications of depression on the GDS-SF should indicate more careful professional assessment.

The Autobiographical Memory Interview, (AMI; Kopelman, Wilson & Baddeley, 1990).

The AMI was developed by Kopelman et al. (1990) in order to provide an assessment of personal remote memory. The scale also assesses recall of more recent personal events and facts. It provides a framework from which to assess the intactness/impairment of an individual's autobiographical memory, including the pattern of any deficit and its temporal gradient (for example, relative sparing of early compared with more recent memories). The AMI consists of two subscales, the Personal Semantic Schedule, (PSS), and the Autobiographical Incident Schedule, (AIS).

Personal Semantic Schedule, (PSS).

The PSS requires participants to recall facts from their life span, relating to childhood (e.g. names of schools or teachers), early adult life (e.g. name of first employer, date and place of wedding), and more recent facts (e.g. holidays, journeys, and previous hospitalisations). The subscale is scored out of 63 points.

Autobiographical Incident Schedule, (AIS).

The AIS contains items assessing the same three time periods as the PSS. However, participants are required to recall three incidents from childhood, three from early adult life, and three recent events. Where a subject fails to produce any memory, some specific prompts may be used. Scoring is in terms of the descriptive richness of the account of an incident, and its specificity in time and place. The overall score for the whole life span on this subscale is out of 27 points.

Verification of recalled incidents and facts can be achieved to some extent by talking to relatives or friends, noting inconsistencies in the subjects' responses, checking hospital notes and talking to care staff. Kopelman et al. (1990) argue that results have shown that the majority of memories seem to be true. It is much more

common to find subjects failing to report memories rather than confabulating. When confabulations do occur, this tends to make little difference to the overall AIS and PSS scores except in a minority of cases with large frontal lesions (Baddeley & Wilson, 1986; Kopelman, Wilson & Baddeley, 1990). The authors of the test argue that the scoring appears to be sufficiently reliable for it to be based on a single rater.

Psychometric Properties.

Kopelman et al. (1990) reported inter-rater reliability correlations of, 0.83-0.86, between testers. Unfortunately there appears to be no data available yet regarding test-retest reliability or other psychometric factors.

Rosenberg's Self-Esteem Scale, (RSE; Rosenberg, M., (1989)

This scale is widely used as a measure of self-esteem in a variety of populations, however it was originally developed by Rosenberg in 1965 from work with adolescents and was re-published in 1989. The scale is short and consists of ten Likert style items. The individual is asked to classify the item concerned according to whether they strongly agree or strongly disagree with the item. Items are scored from 1 to 4 in the direction of negative self esteem, consequently there is a range of 10-40 and low scores indicate high self esteem.

Psychometric Properties.

Unfortunately there is little data available regarding the scale's reliability and validity for use with people with dementia, but it has been widely used by several researchers to evaluate the effect of life review or reminiscence on older adults, (see Haight & Dias, 1992; Stevens-Ratchford, 1993). The scale has been sensitive to changes in self-esteem in older adults following intervention. The RSE has also been used by Cook (1991) to evaluate the effect of reminiscence in older adults with cognitive impairment.

RESULTS.

The following section will present descriptive statistics for the groups with regard to demographic factors and outcome scores and also analyses to determine group equivalence at the pre-testing stage. These will be followed by analyses for the four main hypotheses, follow-up analyses for significant results and then secondary analyses of the data. The section will be concluded with sample case vignettes. Table 2 shows demographic details of the sample.

Table 2. Summary Of Demographic Details Of The Research Sample.

Variables.		**Experimental Group (n = 8)**	**Control Group (n = 9)**
Mean Age		80.5 years (s.d.= 5.75)	84.44 years (s.d.=7.81)
Gender (% in group)	Male Female	25.0 (n=2) 75.0 (n=6)	22.2 (n=2) 77.8 (n=7)
Severity of Dementia on CDR (% in Group)	Mild (CDR 1) Moderate (CDR 2)	62.5 (n=5) 37.5 (n=3)	55.6 (n=5) 44.4 (n=4)
Carer Who Participated (% in group)	Sons and Daughters Nieces and Nephews	62.5 (n=5) 37.5 (n = 3)	55.6 (n=5) 44.4 (n = 4)
Marital Status (% in group)	Single Widowed	25 (n=2) 75 (n=6)	22.2 (n=2) 77.8 (n=7)
Care home resident (% in group)	Nursing Residential	50.0 (n=4) 50.0 (n=4)	44.4 (n=4) 55.6 (n=5)
Mean Time Resident at Care Home		7 months (s.d.=6.48)	8.66 months (s.d.=5.22)

Please refer to appendix G for demographic details of individual participants.

Group Equivalence.

Independent t-tests were carried out on the data to determine whether the two groups were equivalent on possible confounding factors and on the dependent variables at the pre-testing stage.

Table 3. Means, Standard Deviations and Independent t-test analyses for differences between groups on dependent and confounding variables.

	Experimental Group (n= 8)	Control Group (n= 9)			
Factor	M (s.d.)	M (s.d)	t value	Degrees of Freedom (d.f.)	Significance (p)
Age .	80.5 years (5.75)	84.44 years (7.81)	-1.17	15	0.26
Time Resident at Care Home	7 months (6.48)	8.66 (5.22)	-0.59	15	0.56
CDR (1)	1.38 (0.52)	1.33 (0.5)	0.17	15	0.868
CDR (2)	1.63 (0.52)	1.33 (0.5)	1.18	15	0.256
CDR (3)	1.63 (0.52)	1.33 (0.5)	1.18	15	0.256
GDS-SF (1)	7.75 (3.06)	6.22 (2.49)	1.14	15	0.274
RSE (1)	20.75 (4.59)	23.88 (4.08)	-1.49	15	0.156
LSI-A (1)	15.75 (3.45)	15.88 (6.70)	-0.05	12.25	0.959
AIS1 (1)	11.38 (5.04)	6.22 (4.32)	2.27	15	0.038*
PSS (1)	25.00 (12.44)	24.83 (11.40)	0.03	15	0.977

Please Note.

- *=Significant at the 5% level / $p<0.05$.
- Numbers in brackets in Factor column denote assessment stage; i.e. 1 = Pre-test; 2 = Immediate Post-Test; 3 = Six Week Follow Up Test.
- Numbers in Brackets in Mean and Standard Deviation Columns denote standard deviation.

Table 3 indicates that, at the pre-test stage, the groups were equivalent on all of the variables apart from the AIS subscale of the AMI which was significant to a 5 % level; $t= 2.27$ (d.f. 15) $p=0.038$. Consequently, the groups were significantly different from each other in terms of the number of autobiographical incidents recalled prior to commencement of the life review. The control group participants were able to recall significantly fewer incidents than the experimental group. The table also shows that the groups remained matched on severity of dementia measured by the CDR throughout the study duration. There was no sudden decline in either group.

Hypothesis Testing.

In order to reduce the number of analyses undertaken only the LSI-A scale score as a whole was analysed a primary outcome measure rather than each individual subscale of the LSI-A. As there were five main outcome analyses carried out, the p value accepted for significance of the critical time x group interactions was adjusted using the Bonferroni correction to $p<0.01$. Although the use of non-parametric tests had been considered, inspection of the data did not reveal major deviations from normality and so the more powerful, and relatively robust, parametric analyses were reported. A two-way analysis of variance with repeated measures on one factor was carried out with each dependent variable. Follow up analyses were conducted using independent and paired t-tests to determine specific differences between the groups on the dependent variables which showed significance.

Hypothesis I: There will be significant differences between the groups in life satisfaction scores measured by the LSI-A following intervention.

Table 4 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the LSI-A. Please note that high scores indicate high life satisfaction.

TABLE 4: Means, standard deviations and changes made on the LSI-A for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	15.75	3.45			15.88	6.70		
Immediate Post Test	17.00	3.63	+1.25		16.33	6.75	+0.45	
Six Week Follow up	19.25	6.86	+2.25	+3.5	16.55	9.29	+0.22	+0.67

The table demonstrates that both group means increased only slightly in life satisfaction over the study period. This can also be observed in figure 1.

Figure 1: Mean Scores on LSI-A By Group Over Time

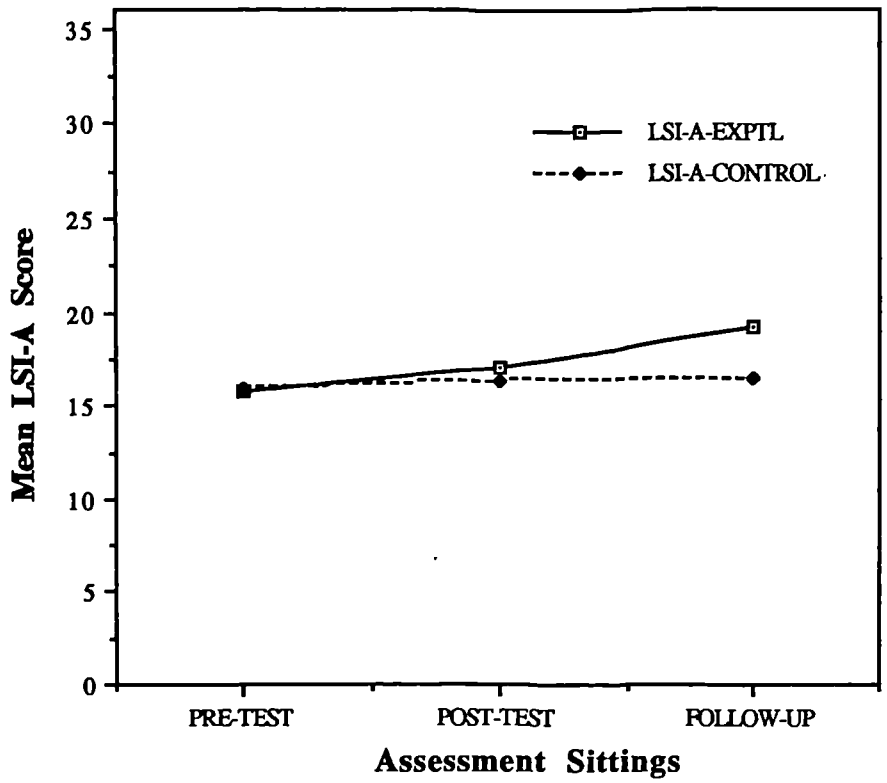


Figure 1 indicates that LSI-A mean scores remained relatively stable throughout the study for both groups. There was, however, a slight increase in LSI-A for the life review group following the immediate post intervention assessment stage. This increase was not statistically significant as indicated by the table below.

TABLE 5: ANOVA Table indicating significance of differences between the two groups on the LSI-A over time.

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	1631.19	15	108.75		
Group	14.66	1	14.66	0.13	0.719
		Within Subjects Effects			
Within and Residual	286.93	30	9.56		
Time	37.19	2	18.60	1.94	0.161
Treatment by Time	18.05	2	9.03	0.94	0.40

Hypothesis II: There will be significant differences between the groups in depression scores measured by the GDS-SF following intervention.

Table 6 indicates the means, standard deviations, and gains in scores made over the study period at the three assessment sittings for the GDS-SF. Please note that high scores indicate high levels of depression, a score above five indicates depression of clinical significance.

TABLE6: Means, standard deviations and changes made on the GDS-SF for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	**SD**	**Change**	**Overall Change**	**M**	**SD**	**Change**	**Overall Change**
Pre-Test	7.75	3.06			6.22	2.48		
Immediate Post Test	6.25	3.20	-1.5		6.00	2.74	-0.22	
Six Week Follow up	4.50	2.33	-1.75	-3.25	6.55	3.71	+0.55	+0.33

The table indicates that the life review group made an overall decrease in GDS-SF scores from 7.75 to 4.5. In comparison, the control group mean increased from 6.22 to 6.55, during the course of the study. This change is scores is more visible in figure 2 below.

Figure 2: Mean Scores On GDS-SF By Group Over Time.

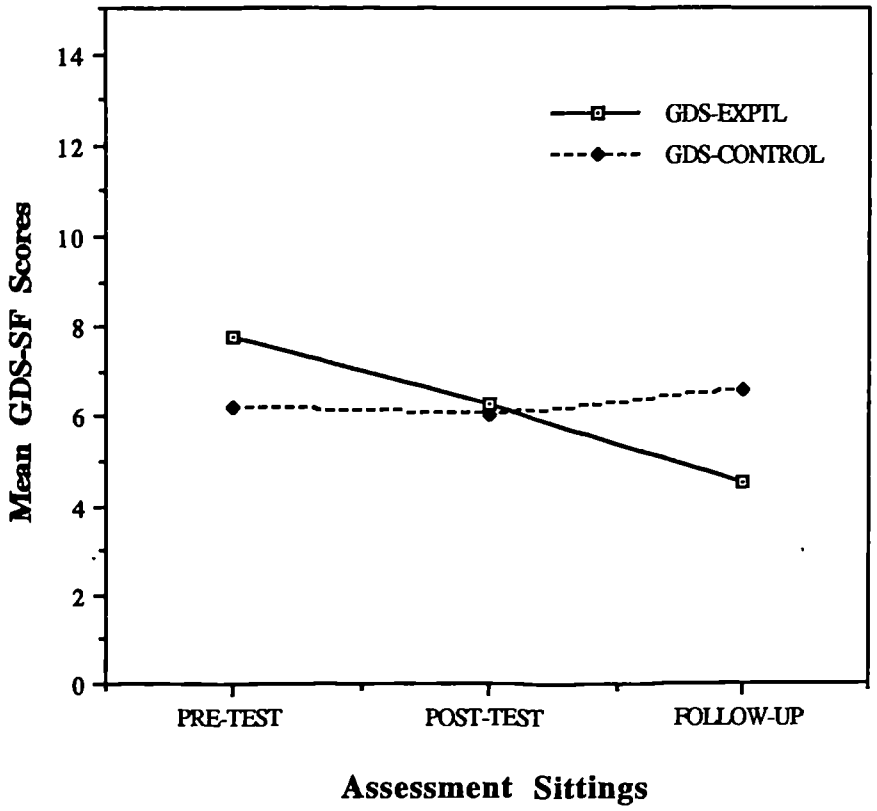


Figure 2 demonstrates that the treatment group scores on average decreased over the study period, to a level below the clinical cut-off of five points, whereas the control group scores appeared to remain quite stable even rising a little, within the clinically significant range of depression. These differences were statistically significant as indicated by table 7 below. Consequently, there was a significant effect for the interaction between treatment and time (i.e. the change between the pre and post intervention scores) for the GDS-SF.

TABLE 7: ANOVA Table indicating significance of differences between the groups on the GDS-SF over time

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	319.85	15	21.32		
Group	0.11	1	0.11	0.01	0.944
		Within Subjects Effects			
Within and Residual	74.93	30	2.50		
Time	18.21	2	9.11	3.65	0.038
Treatment by Time	27.94	2	13.97	5.59	0.009

Follow Up Tests.

Independent and paired t-tests were used to examine the significant difference described above. All follow up tests were tested at a 5% level; $p<0.05$
Independent t-test results demonstrated no significant differences between the two groups at the post assessment stage; (t=0.17; (d.f.15); p=0.86) and follow-up assessment stage; (t=-1.35; (d.f.15); p=0.2).

A related t-test was used to examine the difference between scores at each assessment, initially, for the experimental group. The analysis indicated no significant change in scores from pre to post testing, (t = 1.40, d.f. = 7, p = 0.20); a significant change in the scores during the follow-up period, (t = 2.35, d.f. = 7, p = 0.05), and a highly significant decline in the GDS-SF scores in this group overall, (t = 4.48, d.f. = 7, p = 0.00).

Similar analyses were conducted for the control group and indicated no significant changes in the GDS-SF scores from the pre to post assessment, (t = 0.51, df= 8; p = 0.622); during the follow up period, (t = -0.69, df = 8; p = 0.508); or overall, (t = -0.45, df = 8; p = 0.667).

Consequently, the follow-up analyses revealed significant improvements in depression for the experimental group overall and particularly during the follow-up period, compared to control group scores which remained relatively stable.

The decrease in GDS-SF scores in the experimental group resulted in a mean score below the clinical cut-off for depression. Table 8 demonstrates the number of participants above the clinical cut-off for the scale at each assessment point for both groups. Overall, three individuals in the experimental group produced scores outside the clinical range following intervention, compared to none in the control group.

TABLE 8: Number Of Participants Above GDS-SF Clinical Cut-Off For Depression At Each Assessment Sitting.

	Pre-Test	Post-Test	Follow-Up
Experimental n = 8	7	5	4
Control n = 9	7	5	7

Hypothesis III: There will be significant differences between the groups in self-esteem measured by the RSE inventory following intervention.

Table 9 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the RSE. Please note that high scores indicate low self-esteem.

TABLE 9: Mean, standard deviations and changes made on the RSE for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	20.75	4.59			23.88	4.08		
Immediate Post Test	21.00	3.82	+0.25		23.11	4.08	-0.77	
Six Week Follow up	19.25	4.23	-1.75	-1.5	23.66	4.74	+0.55	-0.22

Table 9 shows that both group means decreased slightly overall, indicating very small increases in self-esteem. This information is also presented in figure 3.

Figure 3:Mean Scores on RSE By Group Over Time.

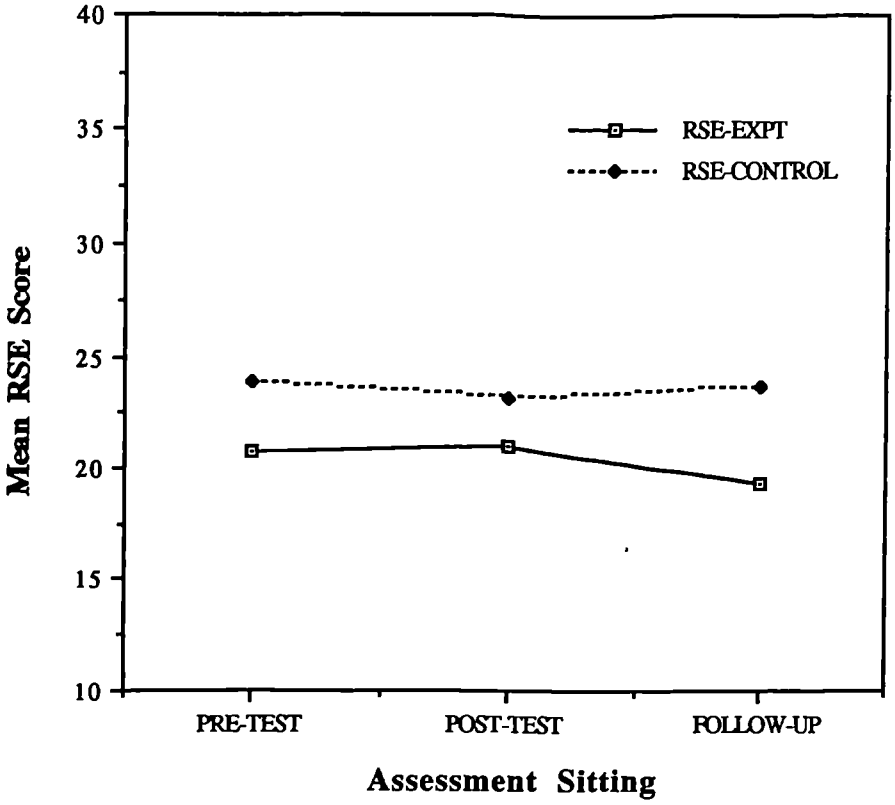


Table 9 and figure 3 demonstrate that overall RSE scores remained relatively stable throughout the study, although both means decreased slightly, the life review group mean making the larger decrease, this change did not achieve statistical significance as indicated in table 10.

TABLE10: ANOVA Table indicating significance of differences between the groups on the RSE over time

Source of Variation	SS	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	616.67	15	41.11		
Group	131.92	1	131.92	3.21	0.093
		Within Subjects Effects			
Within and Residual	204.11	30	6.80		
Time	6.59	2	3.30	0.48	0.621
Treatment by Time	11.30	2	5.65	0.83	0.446

Hypothesis IV: There will be significant differences between the groups in autobiographical memory measured by the AMI following intervention, in; a) the personal semantic schedule and also in b) the autobiographical incident schedule.

a) PSS Scores on the AMI.

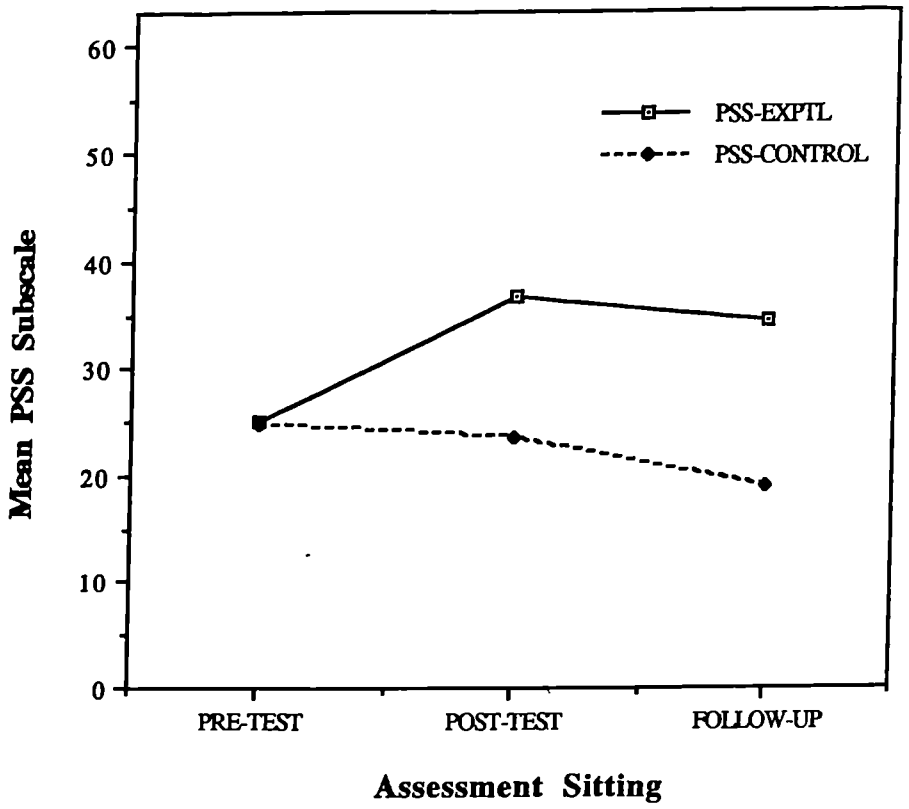
Table 11 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the PSS subscale of the AMI. High scores indicate the positive recall of facts from the life span.

TABLE 11: Means, standard deviations and changes made on the PSS subscale of the AMI for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	25.00	12.44			24.83	11.40		
Immediate Post-Test	36.69	13.10	+11.69		23.44	15.24	-1.39	
Six Week Follow-up	34.50	12.75	-2.19	+9.5	18.88	10.88	-4.56	-5.95

Table 11 indicates that the life review mean PSS score increased by 9.5 overall compared to a fall of 5.95 overall for the control group. The life review group made an initial gain of 11.6 points immediately following the intervention, this decreased by 2.19 points following the cessation of the review, whereas the control group demonstrated a steady decline in PSS over the course of the study, see figure 4.

Figure 4: Mean Scores On PSS Subscale By Group Over Time.



The statistical analysis indicated in table 12 show that the changes in mean scores were significant overall.

TABLE12: ANOVA Table indicating significance of differences between the groups on the PSS Subscale of the AMI over time.

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	5781.99	15	385.47		
Group	1189.00	1	1189.00	3.08	.099
		Within Subjects Effects			
Within and Residual	1484.59	30	49.49		
Time	231.77	2	115.89	2.34	.113
Treatment by Time	586.07	2	293.03	5.92	.007

Follow Up Tests.

Independent and paired t-tests were used to examine this significant finding. All follow up tests were tested at a 5% level; $p<0.05$

The analyses found that the PSS post assessment scores between the two groups were not significantly different from each other, (t=1.91, d.f.=15, p=0.076), whereas the PSS follow up assessment scores for the two groups were significantly different to each other, (t=2.72, d.f.=15, p=0.016), with the experimental group able to recall more personal facts about their life overall.

A related t-test was used to examine the difference between scores at each assessment for the experimental group. The results indicated a trend in favour of positive recall of facts from pre to post testing, (t = -2.23, d.f. = 7, p = 0.06); this trend did not continue following cessation of the intervention. The analysis revealed no significant change in the scores during the follow-up period, (t = 1.19, d.f. = 7, p

= 0.27). Furthermore, there was no significant change in overall PSS scores across the duration of the study, (t = -1.92, d.f. = 7, p = 0.1).

Similar analyses were conducted for the control group and indicated no significant changes in PSS scores from the pre to post assessment, (t = 0.49, df= 8; p = 0.64); or during the follow up period, (t = 1.44, df = 8; p = 0.19). However, the analysis revealed a highly significant decrease overall in the amount of factual information recalled by the control group over the course of the study, (t = 7.19, df = 8; p = 0.00).

Consequently, the follow-up analyses revealed that the experimental group demonstrate an initial trend in favour of increased recall of information during the life review, this trend tapers off after the cessation of the intervention resulting in no significant change in PSS scores overall, whereas the control group demonstrated a significant decrease in PSS scores over the course of the study duration, resulting in a significant difference in scores between the two groups at follow-up, with the control group recalling significantly less factual personal information than the experimental group.

b) Autobiographical Incident Schedule Scores on the AMI.

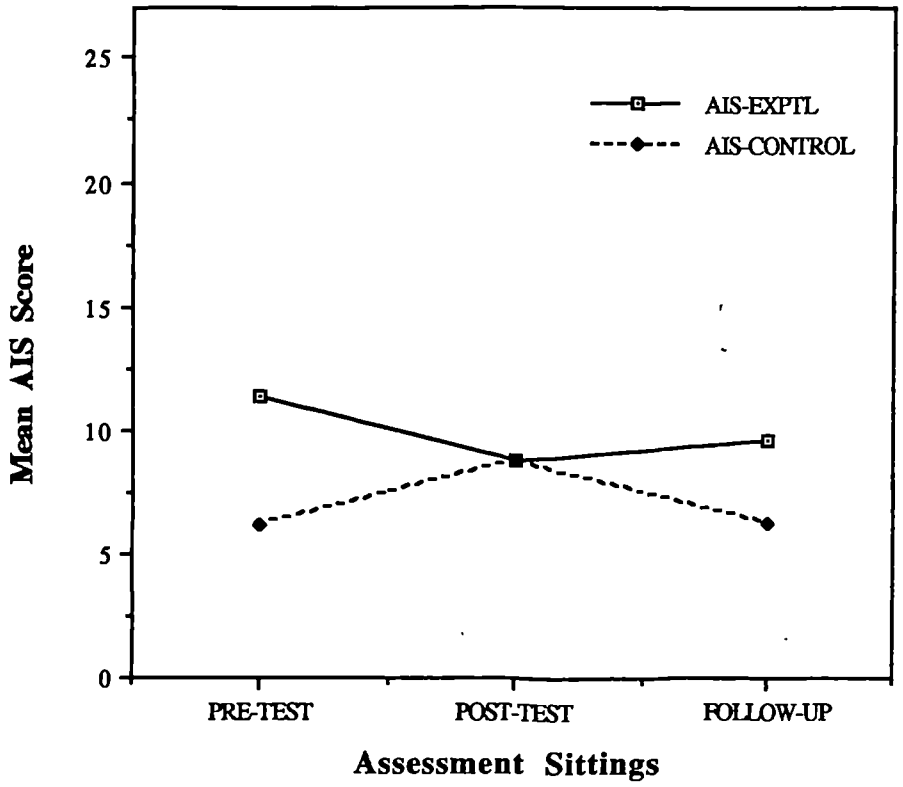
Table 13 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the AIS subscale of the AMI. High scores indicate the successful recall specific incidents from the life span.

Table 13: Means, Standard deviations and Changes Made on the AIS subscale of the AMI for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	11.38	5.04			6.22	4.32		
Immediate Post Test	8.75	5.99	-2.63		8.77	5.43	+2.55	
Six Week Follow up	9.69	7.96	+0.94	-1.69	6.33	5.10	-2.44	+0.11

It is interesting that at the pre intervention stage the life review group were able to recall significantly more incidents from their life-span than the control group and yet overall they made a fall of 1.69 points over the course of the intervention whereas the control group made a slight gain. See figure 5.

Figure 5: Mean Scores on AIS Subscale By Group Over Time



The analyses below indicate that the changes observed in table 13 and figure 5 were not statistically significant.

TABLE14: ANOVA Table indicating significance of differences between the groups on the AIS Subscale of the AMI over time.

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	772.16	15	51.48		
Group	101.50	1	101.50	1.97	.181
		Within Subjects Effects			
Within and Residual	694.3	30	23.14		
Time	6.72	2	3.36	0.15	.865
Treatment by Time	58.60	2	29.30	1.27	.297

Secondary Analyses.

Secondary analyses were performed on the LSI-A subscales. The results are presented below.

Table 15 demonstrates that according to an independent t-test, the groups were equivalent on each of the subscales prior to the commencement of the intervention.

Table 15: Means, standard deviations and differences between the groups on the LSI-A Subscales.

LSI-A Subscale	Experimental Group, n=8 M (s.d.)	Control Group, n=9 M (s.d)	t value	Degrees of Freedom d.f.	Significance (p)
Zest	4.38 (3.11)	5.00 (2.83)	-0.43	15	.671
Congruence	4.88 (1.25)	3.55 (1.94)	1.64	15	.122
Resolution	2.88 (3.13)	3.00 (1.41)	-0.19	15	.85
Mood Tone	3.63 (2.83)	4.33 (3.61)	-0.45	15	.662

Life Satisfaction Subscales.

Zest For Life.

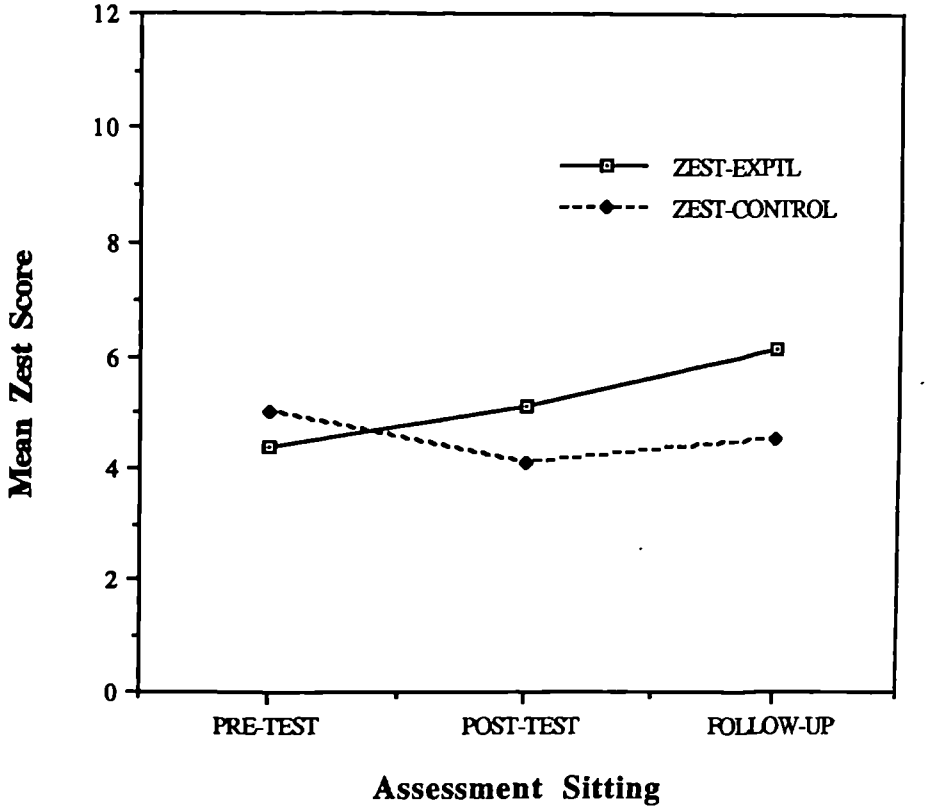
Table 16 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the zest subscale of the LSI-A. Please note that high scores indicate high zest for life.

TABLE. 16: Means, Standard deviations and Changes Made on the Zest subscale of the LSI-A for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	4.38	3.11			5.00	2.83		
Immediate Post Test	5.13	2.42	+0.75		4.11	2.80	-0.89	
Six Week Follow up	6.13	1.81	+1	+1.75	4.55	3.50	+0.44	-0.45

The table indicates that the life review group mean increased by 1.75 to 6.13 over the course of the study, whereas the control group mean decreased in zest by 0.45. See figure 6.

Figure 6: Mean Zest Subscale Scores By Group Over Time.



The graph demonstrates a small but steady increase in zest for life means in the life review group. However, table 17 indicates that the changes observed in table 16 and figure 6 were not significant.

TABLE17: ANOVA Table indicating significance of differences between the groups on the Zest Subscale of the LSI-A over time

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	231.96	15	15.46		
Group	5.41	1	5.41	0.35	.56
		Within Subjects Effects			
Within and Residual	124.78	30	4.16		
Time	5.38	2	2.69	0.65	.531
Treatment by Time	11.03	2	5.51	1.33	.281

Life Satisfaction Scale-A,
Resolution and Fortitude,

Table 18 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the Resolution and Fortitude Subscale of the LSI-A. Please note that high scores indicate high resolution and fortitude.

TABLE 18; Means, standard deviations and changes made on the Resolution and Fortitude Subscale of the LSI-A for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	**SD**	**Change**	**Overall Change**	**M**	**SD**	**Change**	**Overall Change**
Pre-Test	2.88	1.25			3.00	1.41		
Immediate Post Test	3.13	2.29	+0.25		3.55	1.59	+0.55	
Six Week Follow up	4.00	1.93	+0.87	+1.12	3.55	1.66	0	+0.55

Table 18 indicates that both group means increased very slightly overall, with the life review group making the larger gain, see figure 7.

Figure 7: Mean Scores On Resolution Subscale By Group Over Time.

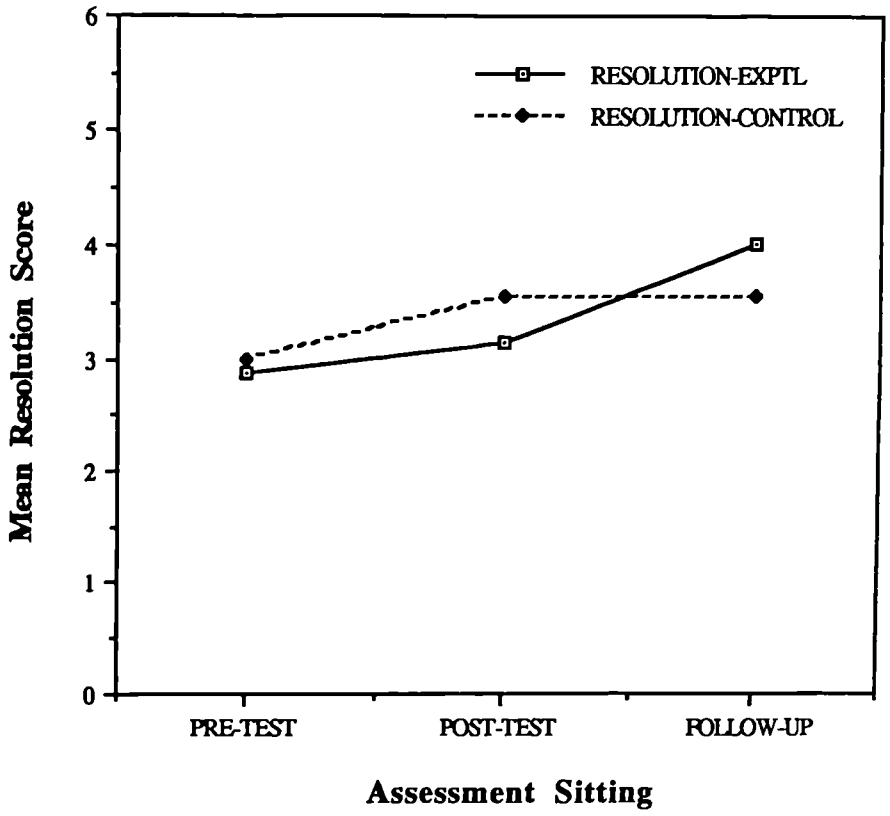


Figure 7 indicates more clearly that the life review group mean increased during the follow up period whereas the control group mean remained stable. However, table 19 indicates that these changes were not significant.

TABLE19: ANOVA Table indicating significance of differences between the groups on the Resolution and Fortitude Subscale of the LSI-A over time

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	80.30	15	5.35		
Group	0.02	1	0.02	0.00	.95
		Within Subjects Effects			
Within and Residual	51.9	30	1.73		
Time	5.98	2	2.99	1.73	.195
Treatment by Time	1.67	2	0.84	0.48	.622

Life Satisfaction Scale-A.
Congruence Between Desired And Achieved Goals.

Table 20 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the congruence subscale of the LSI-A. Please note that high scores indicate high levels of congruence between desired and achieved goals.

TABLE 20; Means, standard deviations and changes made on the Congruence Subscale of the LSI-A for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	4.88	1.25			3.55	1.94		
Immediate Post Test	3.62	1.85	-1.26		3.44	1.33	-0.11	
Six Week Follow up	4.62	1.51	+1	-0.26	3.66	1.94	+0.22	+0.11

Table 20 shows that the mean scores remained relatively stable throughout for the control group, but the life review group made an initial decrease of 1.26, most of which was re-gained at the post intervention stage, see figure 8.

Figure 8: Mean Scores On Congruence Subscale By Group Over Time

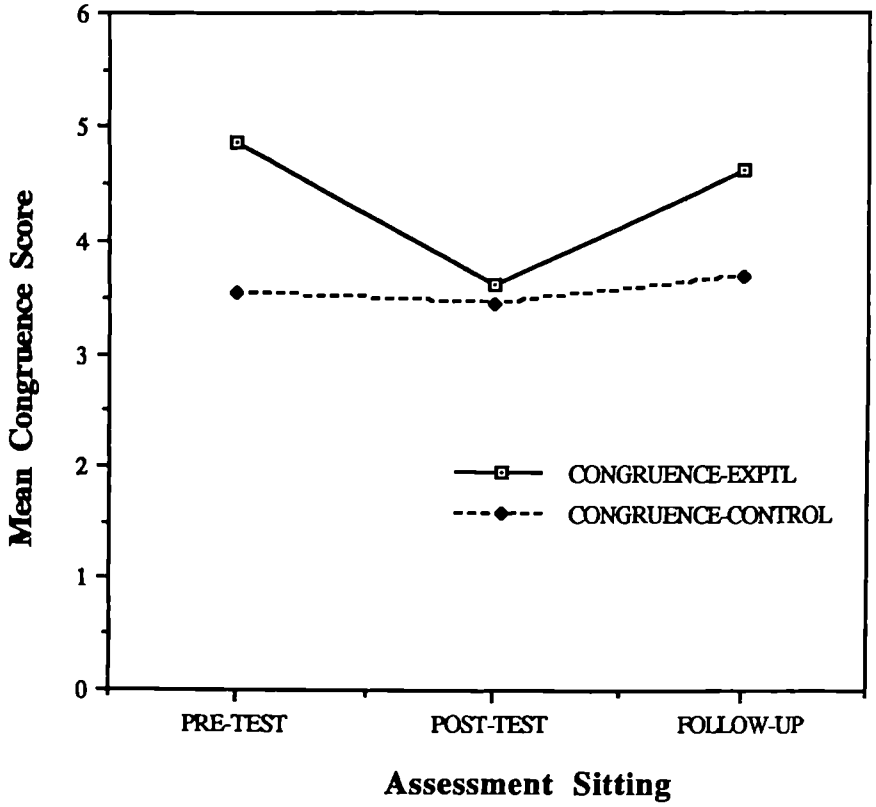


Table 21 indicates that the change in mean scores overall for the two groups on this variable was not significant.

TABLE21: ANOVA Table indicating significance of differences between the groups on the Congruence Subscale of the LSI-A over time

Source of Variation	SS	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	74.96	15	5.00		
Group	8.53	1	8.53	1.71	.21
		Within Subjects Effects			
Within and Residual	50.11	30	1.67		
Time	4.75	2	2.38	1.42	.257
Treatment by Time	2.87	2	1.43	0.86	.434

Life Satisfaction Scale-A.

Mood Tone.

Table 22 indicates the means, standard deviations, and changes in scores made over the study period at the three assessment sittings for the Mood Tone subscale of the LSI-A. Please note that high scores indicate positive mood tone.

TABLE 22: Means, standard deviations and changes made on the Mood Tone subscale of the LSI-A for the three assessment sittings.

	Experimental (n=8)				Control (n=9)			
	M	SD	Change	Overall Change	M	SD	Change	Overall Change
Pre-Test	3.63	2.83			4.33	3.61		
Immediate Post Test	5.12	2.64	+1.49		4.33	3.71	0	
Six Week Follow up	4.50	2.88	-0.62	+0.87	4.77	3.46	+0.44	+0.44

Table 22 indicates that small gains were made by both groups overall, see also figure 9.

Figure 9: Mean Scores On Mood Tone Subscale by Group Over Time.

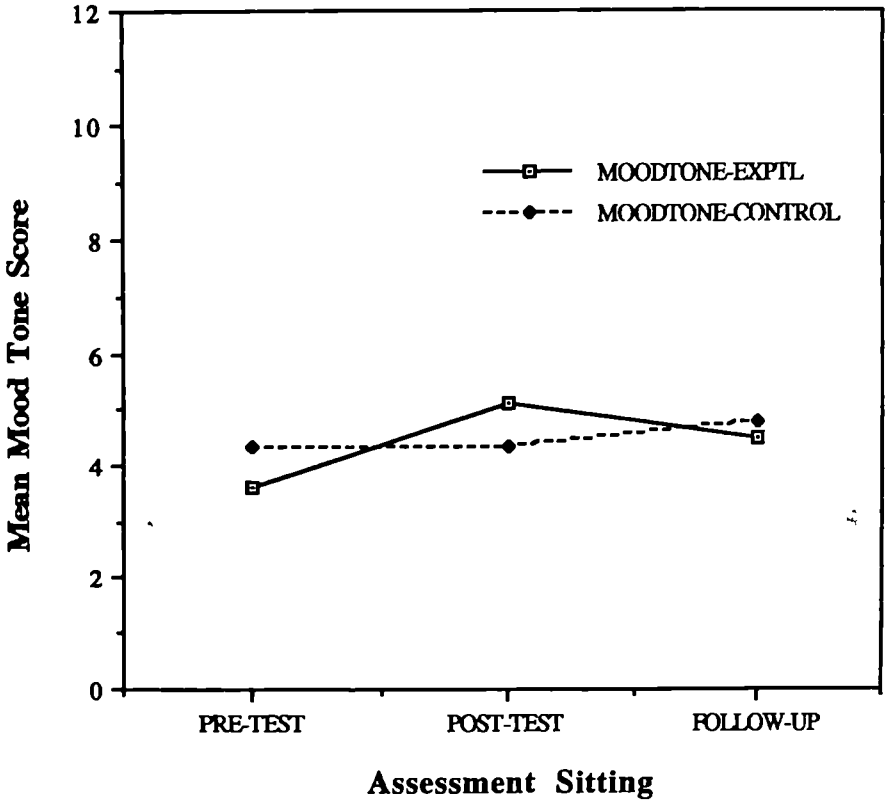


Table 23 indicates that changes in mood tone overall were not significant.

TABLE23: ANOVA Table indicating significance of differences between the groups on the Mood Tone Subscale of the LSI-A over time

Source of Variation	S S	df	MS	F	Sig of F
		Between Subject Effects			
Within and Residual	385.91	15	25.73		
Group	0.05	1	0.05	0.00	.96
		Within Subjects Effects			
Within and Residual	86.4	30	2.88		
Time	5.68	2	2.84	0.99	.385
Treatment by Time	5.05	2	2.53	0.88	.426

Correlational Analysis.

Additional correlations were carried out to examine whether the change in PSS scores on the AMI was correlated with change in depression scores for the whole research sample, (N=17). The Pearson Product Moment Correlation test found no significant relationship between change in the PSS subscale and GDS-SF overall, ($r = -.026$; $p = .92$). The changes between the GDS-SF and PSS pre and post testing ($r = .309$, $p = .23$) and post and follow-up ($r = -.24$, $p = .35$) were also analysed, these results were also not significant.

Summary of Quantitative Results.

The analyses performed on the data demonstrate a significant improvement overall in depression according to the GDS-SF for the life review group. This improvement was significant during the follow up phase.

The results also show a significant difference at follow-up between the two groups in the amount of factual information recalled with the control group recalling significantly less personal information than the experimental group. The control group demonstrated a significant decrease in the amount of personal information recalled over the course of the whole study period, whereas the experimental group demonstrated a trend in favour of the amount of personal information recalled during the intervention phase.

The self-esteem, life satisfaction and life-satisfaction subscales; as well as the autobiographical incident recall subscale scores remained relatively stable for both groups throughout.

CASE VIGNETTES.

Below are sample descriptions of five cases from the life review group, Case 1, 2, 3, 7 and 8.

Case 1. Sandra, (pseudonym).

Initial Assessment.

Sandra came to participate in the project following a recommendation from a nurse manager working at the nursing home where she was resident. Sandra was very keen to take part and was excited about putting her life history details into a book to keep. She explained that she enjoyed thinking about the past, especially her childhood.

Sandra was immobile, incontinent and totally dependent on nursing care. She had three sons, two of which lived away from the area, were in the forces and unable to visit frequently. Sandra saw her other son, who lived and worked nearby more frequently. He agreed to participate in the study with Sandra. She had been born and brought up in England and moved to Wales during the early years of her married life. She had lost her husband prior to being admitted to the residential home. He had previously cared for her at their home.

Sandra obtained initial scores of 12 on the GDS-short form; 26 on the RSE; 16 on the LSI-A and 2 on the CDR, suggesting moderate dementia and severe depression. Furthermore, high scores on the RSE are indicative of low self-esteem and low scores on the LSI-A of low life satisfaction. On the autobiographical memory interview she had scores of 48.5 on the PSS and 17 on the AIS, (see table 24). She was able to remember quite a lot of detail from her early years but not as much from later times.

LIFE REVIEW SESSIONS.

Sandra initially enjoyed the life review sessions, and took great delight in relating stories from her childhood and teenage years. She became very animated and cheerful during sessions and was keen to ensure that the researcher recorded every detail for the life story book. She also produced photographs to introduce the researcher to members of her family. As the intervention progressed, it was apparent that Sandra

did not enjoy talking about later years. She had experienced a particularly difficult marriage and ruminated for several sessions on negative incidents relating to her husband. Black and Haight (1992) argue that persistent reminiscence about distressing events may be as a result of unresolved conflict and life review can enable the older person re-integrate the conflict and find meaning in the experience. As time and discussion progressed it seemed that Sandra was able to put these instances into a life context and was able to focus on more positive aspects to emerge from her marriage, including her children and friends and how helpful they had been to her during these difficult times. During later sessions she reflected on the experience of being a grandparent but regretted the fact that she was not able to see her family as often as she would like. It was evident that Sandra valued the time devoted to her and would endeavour to prolong the session for as long as possible. On two occasions Sandra burst into tears when the session came to an end, explaining that she had very little social interaction with people or staff at the home and spent almost 100% of her time alone in her room. In order to facilitate the ending of the therapeutic relationship and to reduce Sandra's reliance on the researcher for social stimulation and time, a member of staff was introduced to the last two sessions, to discuss Sandra's life story and book, consequently, the researcher was then able to withdraw somewhat from the process.

OUTCOME.

At post test, Sandra's scores on the GDS-SF had fallen 4 points to 8, which was a reduction but still indicative of considerable feelings of depression. It was debated as to whether the development of the life review relationship would have been damaging to Sandra's self-concept and well-being in the long-run, had the staff member been unable to get involved in the process. Sandra may not have the cognitive ability to appreciate and remember, "end of life review" cues and may have developed fantasies of why the relationship had come to an end.

At post-test, Sandra's PSS score had decreased to 37 and her AIS score to 7, these are considerable drops and suggest that reviewing life experiences did not have a positive effect on Sandra's autobiographical memory, alternatively, there may have been other factors impinging on her performance on this test on that day in time. Sandra's score on the RSE showed a drop of 1 point indicating a small improvement in self-esteem. Her life satisfaction score remained the same as pre-test levels, (see table 24).

FOLLOW UP.

At follow up, table 24 shows that Sandra's GDS-SF score dropped one more point from the post test to 7, this score is still clinically significant. Her life satisfaction score increased by one point and self-esteem score remained the same from the immediate post test level. Sandra's CDR score remained the same throughout.

Table 24: Sandra's Overall Test Scores At Pre, Post and Follow Up Testing.

Measure	Pre-Test Score	Post-Test Score	Follow-Up Score
GDS-SF	12	8	7
RSE	26	25	24
LSI-A	16	16	17
AIS	17	7	8
PSS	48.5	37	31

CASE 2, Sian, (pseudonym).

Sian was a 79 year old woman who was referred to the project by the dementia team social worker. The social worker discussed the project with her and she agreed to meet with the researcher to talk about the project. Her son was also contacted on the telephone and agreed to facilitate the process as much as possible by supplying additional life history information. Sian had been assessed by the team's assistant psychologist using the MEAMS and passed 9/12 subtests. She also completed the Rivermead Behavioural Memory Test and her performance on this was found to lie at the 20th percentile. She had recently moved to live in a residential home following this period of multi-disciplinary assessment as an inpatient on the hospital assessment ward. Prior to this she had been living alone after having lost her husband several years before. She had been admitted to the unit as her son had become concerned about her confused behaviour and her ability to manage at home alone with everyday living tasks. She was also registered blind and had recently been complaining of seeing animals and people in her house. Sian had been born and brought up in the same area and had lived there for most of her life.

INITIAL ASSESSMENT.

At the first assessment meeting Sian was initially reluctant to take part but was willing to "have a go" at the life review. She was concerned about "telling lies" as she explained that she could not remember things as well as she used to and the doctor had told her that this was because she had something that began with a "D, and that is why I am here now because I can't manage on my own anymore". She also said that "I have nothing really special to talk about, my life has been quite ordinary, I don't know what I can tell you" and "All of that is in the past now, it has gone, there's no point in going over it now". Consequently, Sian might fall into Coleman's (1986) "see no point" in reminiscing category of attitudes to reminiscence.

It was explained that the researcher would initially ask lots of questions to get to know her and how she was feeling at the moment with all the changes that had been happening. Sian exclaimed, "Not more questions! People have been asking me lots of questions, when I was in hospital a lady like you came to see me and asked me lots of questions!". Nevertheless, Sian agreed to continue with the process.

Sian obtained pre-test scores of 9 on the GDS-SF; 23 on the RSE; 16 on the LSI-A and 1 on the CDR. These scores are indicative of mild dementia and moderate depression. On the autobiographical memory interview she had scores of 9 on the PSS and 16 on the AIS, (see table 25).

LIFE REVIEW SESSIONS.

Sian did not particularly enjoy the life review sessions. However, she used the time to talk about the losses she had experienced throughout her life. She spent a great deal of the time regretting the loss of her father who had died at sea when she was a teenager. She also talked a great deal about her mother who had struggled to bring her and her four brother and sisters up alone. She explained that she missed her parents a great deal and now her husband who had also died some years earlier.

At the sessions subsequent to the ones where the bereavements were discussed Sian said that she had been feeling particularly down and disheartened. She also thought some of the questions asked from the LREF were 'odd' and difficult to answer. During later sessions Sian was able to talk more of the fun times she had experienced in her life, including memories of her husband and son and also her grandchildren, and how good they had been to her. She was very proud of her son

and his caring attitudes. Subsequently, Sian was able to reflect on the good values that she and her husband had instilled in him. Her son ran his own business, been married for 16 years and had two "beautiful" grandchildren. She was also more able to recite positive childhood experiences that she had had with friends. At the post-test assessment Sian explained that she hadn't particularly enjoyed the life review and had found it difficult to remember the loved ones she had lost.

However, it was noted that Sian was more able to be positive about the here and now and joked that she could live for another 20 years now as she had friends in their 100's. She said that it wouldn't be so bad to live that long.

OUTCOME.

At post test, Sian's GDS-SF score had fallen from 9 to 7, which was still clinically significant. Her CDR had increased to 2, life satisfaction had increased by three points and self esteem had also increased by two points indicating a small drop in self-esteem. Interestingly, Sian's recall for personal semantic information on the AMI had increased dramatically from 16 initially to 36 at follow up, whereas her recall for autobiographical incidents had decreased by two points (see table 25).

FOLLOW UP.

At follow up Sian explained that everyone who had seen her book had loved it. She said that people had been coming in to her room to see it and her son thought that it was wonderful. She said that he had been so pleased with it that he wanted to keep it after she had died. Her son had also said that he was very proud of her and of the things that she had done with her life. She also explained that she had to keep a careful eye on it just in case somebody took it as she wanted her sister who hadn't been to visit for a while to look at it too. Sian is possibly an example of an individual changing their attitude to reminiscence and would have shifted between two of Coleman's (1986) categories described below.

Table 25 shows that Sian's depression score had continued to decrease to be within "normal" limits at 3 points. Her life satisfaction continued to rise to 23 points, and her self esteem score dropped to one point below the score obtained at pre-test indicating a small improvement of one point in self-esteem. Sian's PSS score dropped 5 points from the immediate follow up, but this score was still an improvement of 15 points from that obtained at the pre-test. It would be interesting

to re-assess this variable at a later point in time. Interestingly, her AIS score increased again from 7 the score obtained at immediate follow up, to 13 points.

Table 25: Sian's Overall Test Scores At Pre, Post and Follow Up Testing.

Measure	Pre-Test Score	Post-Test Score	Follow-Up Score
GDS-SF	9	7	3
RSE	23	25	22
LSI-A	16	19	23
AIS	9	7	13
PSS	16	36	31

CASE 3, (John, pseudonym).

John was a 83 year old man who was also referred to the project by the dementia team social worker. He had recently moved to live in a residential home following a period of multi-disciplinary assessment as an inpatient on the dementia assessment ward. Prior to this he had been living alone after having lost his wife some time before. He was admitted to the unit following a home visit from the team consultant psychiatrist who had found John sitting in darkness with no heating during a winter's night. There was no food in the fridge and the house was in a state of squalor. The psychiatrist had been asked to visit following concerns raised by John's neighbours.

John had two sons, one lived locally and the other away from the area. He had previously lived very independently and did not have regular visits from family. He had worked for 23 years in the forces. He agreed to participate and the researcher was able to speak with his son who lived locally, to inform him of the situation and the son was happy to provide any help over the phone.

John had been assessed as an inpatient on the dementia assessment unit and obtained a score of 16 on the MMSE, (Folstein et al. 1975). He had presented as uncooperative, sometimes aggressive and was very disoriented and confused.

INITIAL ASSESSMENT.

John initially agreed to participate and to answer the assessment questions. He found the AMI particularly difficult and became quite irritated at the questions. It appeared to dawn on him that he could not remember some personal information and this must have been difficult as he had previously stated on the GDS-SF that he had no difficulties with memory. John rationalised this difficulty in that the questions related to a long time ago. He explained that these times were in the past now and that he hadn't had to think about them for a long time. He also said "When I was there I never took much notice of these things, I just got on with it". He also reasoned, following the recent admission to hospital and the move to the home, that, "They keep on moving me around so I don't know where I am, they rush me from one place to the next, I was fine where I was". John was well defended against the realities of his situation and manipulated the reality of his situation to protect his self-concept, although his score on the GDS-SF was high at 11 points, (see table 26). John also obtained initial scores of 21 on the RSE; 13 on the LSI-A and 2 on the CDR. On the autobiographical memory interview he had scores of 11 on the PSS and 4 on the AIS.

LIFE REVIEW SESSIONS.

At the start of every session, John would begin by saying that he was not happy "being in a place like this, this isn't my home, I don't know who's it is". On one occasion he explained, "I know I have a home somewhere that belongs to me but I don't know where it is, I know that this isn't my home, this isn't my bed".

The initial few sessions of life were very difficult in that John could remember very little from his past and his son seemed to withdraw from the process and not be very forthcoming with details or information which would have enabled the review to progress. This came to a head at the fourth or fifth session where John became very angry and shouted "You come here and ask me these stupid questions and stare at me with your stupid blank face, leave me alone, don't come back, leave me in peace". It is possible that John was projecting how he felt onto the researcher. The process had felt very uncomfortable and inappropriate to continue with the LREF questions, prior to this confrontation. Following this confrontation, in respect of John's wishes, the researcher did not return to visit for about three weeks. This presented a difficult ethical situation in terms of leaving John in a state of anger and partial insight into his memory difficulties and neglecting the opportunity to work

though these issues with him. The researcher decided to re-visit John to ascertain how he was. The researcher also sought out some more tangible prompts for discussion, just in case. On the return visit, John was happy to see the researcher, on reflection, it seemed that the researcher had previously failed to "hold" John's anger at his predicament. It is possible that a failure to go back to salvage the situation would have been a threat to John's sense of personhood, (Kitwood, 1996). Subsequent sessions were easier, with the generation of the life story book, John was well travelled and sessions were geared towards finding out where he had travelled and issues that were around for him then, including marriage, the second world war and so forth. Consequently, rather than being a neat progression through the LREF, the sessions focused on specific aspects to John's life that were most easily accessed and which he wanted to focus on.

OUTCOME.

When the final life story book had been completed and John was able to keep it, he was very pleased with the end product. He said that he was very much looking forward to reading through the book in his own time.

Table 26 shows that John's GDS-SF score improved by three points but was still considerably high at 8 points, his self esteem remained at the same level, life satisfaction improved by 8 points, the AIS improved by 2 points and his PSS by 1 point.

FOLLOW UP.

At the follow up assessment John remembered a great deal more information not previously recited on the AMI. On remarking on this he said that, "Yes I have remembered a lot more today, but that's because, the book sets things off in my head, it helps me remember all sorts of things and reminds me of things I had forgotten".

John's depression score had continued to improve and had dropped another 2 points from the post assessment to 6, which was bordering on the clinically significant cut-off. John's LSI-A score also continued to improve by another 1 point, and his self-esteem improved by 3 points. John's AIS improved by another 1.5 points and his PSS score by 3.5 points, see table 26).

Table 26: John's Overall Test Scores At Pre, Post and Follow Up Testing.

Measure	Pre-Test Score	Post-Test Score	Follow-Up Score
GDS-SF	11	8	6
RSE	21	21	18
LSI-A	13	21	22
AIS	4	6	7.5
PSS	11	12	15.5

CASE 7, (Avril, Pseudonym).

INITIAL ASSESSMENT.

Avril was referred to the project by the assistant psychologist (under the supervision of the Consultant Clinical Psychologist) at the dementia assessment team. Avril had been referred to the service for a period of multi-disciplinary team assessment after falling at home and the fire service had been called to break into her house to rescue her. Her nieces and sisters had also become concerned about her memory and for her safety as she lived alone after having lost her husband some years previously.

Avril agreed to participate in the project and explained that it would be nice to talk about the past and her memories. However, at the end of the initial assessment sessions she said that she would be happy to meet again, but only if she was still resident at the home, she fully intended to go back to live at her old home and if that was the case then she would not be able to continue with the review, but she explained that the researcher was welcome to visit the home just in case she hadn't gone back to live at her previous home.

Table 27 shows that Avril obtained initial scores of 5 on the GDS-short form; 18 on the RSE; 18 on the LSI-A and 1 on the CDR. Avril was classified as having mild symptoms of dementia and her mood was within "normal" limits. On the autobiographical memory interview she had scores of 24 on the PSS and 15 on the AIS.

LIFE REVIEW SESSIONS.

During the intervention, Avril tended to continually relate details of the past to the present. For example, discussion of certain individuals from the past would then be directed to, "Now they are living in Aberystwyth" or "They are dead now", with no inappropriate affect. It was difficult to orient Avril to the past to participate in the life review. Sessions with Avril were also dominated by discussion of more current difficulties in her life including the process of settling into her new home and of settling unfinished business to do with her previous home.

Avril seemed to enjoy relating stories of her childhood but throughout the intervention seemed to feel that there "was no point in talking about the past as it had gone now". Indeed, it was hypothesised that Avril's score on the GDS-SF would seem to suggest that there were no or few unresolved issues in her past that warranted discussion. Avril had developed an effective coping strategy by being of the philosophy that "I take each day as it comes". This challenges Haight's assumption that life review should be used freely with people as a health maintenance measure and for the prevention of depression. Admittedly it is difficult to say whether the intervention had in fact prevented the onset of a depression in Avril's case, however, it seems that the global application of this intervention with all older adults would be over-inclusive. It seems that more research needs to be conducted to increase understanding of which individuals would particularly benefit from participating in this process and which would not and this might involve reviews and developments of research into protective factors.

OUTCOME.

At the initial assessment as described above, Avril was of the sentiment that she was not going to stay at the home and was fully intending to go back to her previous home to live. She initially saw the home as a prison where she was not allowed to do anything and had no freedom. However, at the post-assessment stage, Avril had reconciled herself to the fact that she was unable to go back to her old home and was making plans for her future at the care home. She was able to focus on the positive in that she no longer had to pay bills and maintain her home. She no longer had to make her own meals or wash her clothes and bedclothes. Now she considered that she could use the time to enjoy herself. Avril had begun to go out with her sister to

play bingo two nights a week and had regular outings with her family and friends. She also explained that she had begun to make friends at the home and the staff had been kind enough to take her to the home next door to visit her sister.

Table 27 shows that Avril's RSE and LSI-A scores remained relatively stable throughout, also her GDS-SF score remained outside clinical levels. Interestingly, Avril's PSS score increased dramatically from 24 to 49, whereas her AIS score decreased by four points.

FOLLOW UP.

At follow up, table 27 shows that Avril's LSI-A score had increased by 7 points during the follow-up period, and her depression score continued to decrease. Furthermore, her AIS and PSS scores also increased, whereas the RSE remained stable. Avril was hoping that her sister who lived at the home next-door would be able to move in to live with her and they would be able to share a room together. She was excited at this prospect and was actively making plans about what furniture and ornaments to bring from her old home to put in the larger room that they might have. She explained that this move would also put her mind at rest in that she would be able to look after her sister who had been unwell recently.

Table 27: Avril's Overall Test Scores At Pre, Post and Follow Up Testing.

Measure	Pre-Test Score	Post-Test Score	Follow-Up Score
GDS-SF	5	4	2
RSE	18	18	19
LSI-A	18	19	26
AIS	15	11	22
PSS	24	49	52

CASE 8. (Elsie. Pseudonym).

INITIAL ASSESSMENT.

Elsie came to the project through the recommendation of the care home sister where she was resident. The sister met with Elsie to describe the project and she was subsequently keen to meet with the researcher to take part. Elsie was very forthcoming with details about herself and life during the initial assessment and seemed glad to have the opportunity to talk to someone. Her niece also agreed to participate and said that she would support the intervention as much as possible over the phone as she worked away from the area a lot of the time.

Elsie had moved into the care home 2 months prior to the initial meeting. She had been admitted to hospital following a fall, also her relatives were concerned for her safety and ability to live home alone. Elsie had been taken directly to the home from hospital and had not had the opportunity of calling at her previous home first. She had been feeling very down since being admitted to the care home and had lost her appetite and was not sleeping well. Elsie also spent the majority of her day in her room, isolated from the other people at the home. She was tearful and demonstrated some word-finding and short term memory difficulties.

Elsie had previously lived alone in the family home since losing her father whom she had cared for in the years leading up to his death, some years ago. She had several brothers and sisters who had all left home to get married. She had never married.

Table 28 shows that Elsie obtained initial scores of 6 on the GDS-SF; 14 on the RSE; 13 on the LSI-A and 1 on the CDR. She was classified as having mild symptoms of dementia and her mood was just beyond the cut-off for clinical significance. On the AMI, Elsie had scores of 23 on the PSS and 9 on the AIS.

LIFE REVIEW SESSIONS.

During the initial life review session Elsie enjoyed relating stories about her family. She had had a very happy childhood, and came from a very close and loving family. As we progressed through the LREF Elsie became more and more tearful and it was apparent that there were a number of unresolved issues for her in relation to the untimely death of her older brother. Subsequent bereavements also caused a great

deal of pain for Elsie, out of twelve brothers and sisters she and one other brother were the only survivors, she had suffered multiple bereavements and this was particularly difficult for her as she explained that the family had been "everything" to her. Elsie defined her self concept in terms of how she cared for her family. During the course of her life she had consistently supported family members in need and had sacrificed a developing career to this purpose. She had been the family foundation based at the family of origin's home and was always available for relatives in need. Throughout her life she had spent most of her spare time visiting various relatives for long periods at a time. Over the years these individuals had passed away and her social circle and support had decreased insidiously, slowly her purpose in life was seen to be dwindling away. Furthermore, Elsie explained that the younger family members did not need her so much as they were more independent. During the sessions a great deal of time was devoted to discussing the numerous losses she had experienced and attempts to process these were made. It was apparent that Elsie found the sessions particularly painful and difficult. She seemed to become more despairing after the initial sessions and at about session five exclaimed that she no longer wished to talk about these matters and did not want to continue to pursue the LREF. It has been argued in the literature that the ability to tolerate sad affect may be necessary to work through the mourning process associated with the life review, (see for example, Silver, 1995). Time was also geared towards orienting Elsie towards the good things she had done for her family, the support and foundation she had been, the fun times they had experienced and the care and love she had given them.

OUTCOME.

At the end of the LREF intervention, it was apparent that there were many unresolved issues relating to Elsie's grief and multiple losses. However, it seemed that Elsie had done all of the work that she had needed or wanted to do at that moment in time. There may be numerous reasons for this. It is possible that the researcher did not adequately prepare Elsie for the negative affect she experienced during and after sessions and did not enable the development of coping mechanisms for the painful affect. It could be argued that the protective mechanisms previously utilised by Elsie had been eroded by the onset of disease process. It was perhaps a difficult time for her to work with these issues in that she had only recently moved into the care home environment and had to cope with the adjustment involved with

this, in terms of making new acquaintances, adjusting to new routines, processing the loss associated with losing her position in her family, and the physical loss of her family home. It is possible that the intervention was initiated at too early a time and that Elsie needed a period of natural grieving and assimilation alone following these recent changes. Consequently, at post test, there were several unresolved issues for Elsie in relation to loss. Elsie's GDS-SF score had increased to 10 following the intervention, but subsequently decreased to be outside the clinical range at follow-up, (see table 28). With Elsie it had been considered highly inappropriate to adhere rigidly to LREF and ignore the issues that Elsie brought to the sessions. The LREF seemed to overlook issues associated with the ageing process and the loss and relinquishment of roles.

FOLLOWUP.

At follow-up Elsie had begun to get her appetite back and to socialise more with the other individuals in the home. Her GDS-SF had decreased dramatically, therefore it is possible that Elsie needed a period of "natural" mourning alone, following the numerous changes she had had to endure. However, in resolving some of the loss issues Elsie's life satisfaction seemed to decrease from the post assessment point. It is also possible that her feelings of loss and depression were having an impact on her AIS and PSS scores at pre-test, as they subsequently made a dramatic improvement, (see table 28).

Table 28: Elsie's Overall Test Scores At Pre, Post and Follow Up Testing.

Measure	Pre-Test Score	Post-Test Score	Follow-Up Score
GDS-SF	6	10	5
RSE	14	14	16
LSI-A	13	17	13
AIS	9	20	20
PSS	23	52	51

DISCUSSION.

Summary Of Quantitative Results.

Review of Hypotheses.

The primary analyses revealed that there were significant differences in the PSS and GDS-SF scores during the course of the study. These findings support hypothesis II relating to depression and part A of hypothesis IV relating to the recall of personal semantic information from autobiographical memory. The other analyses relating to life-satisfaction and self-esteem, (hypotheses, 1 and 3) were not significant showing that the scores remained relatively stable throughout. However, the mean scores for the life review group did demonstrate slight positive gains in favour of the life review intervention on all analyses apart from the AIS variable. These gains were not statistically significant, but various factors and methodological difficulties impinging on the process may have had an impact on the scores. These issues will be discussed in more detail below along with suggestions for future research.

PSS Findings.

It was interesting that there were significant differences between the groups on the PSS of the AMI over the study period. The analysis revealed that the experimental group demonstrated an initial trend in favour of an increased ability to recall personal facts, however, this trend did not continue during the follow up period. In contrast, the control group scores decreased significantly over the course of the study and there were significant differences between the groups' personal semantic scores at follow up with the experimental group able to recall significantly more facts from their life-span. Consequently, it is possible that the life review process and the creation of the life story book contributed to the pattern observed in the experimental group scores. This is substantiated somewhat, by a comment made by John, described above, i.e. "Yes I have remembered a lot more today, but that's because, the book sets things off in my head, it helps me remember all sorts of things and reminds me of things I have forgotten". Consequently, the life review book may have been useful for the individuals in terms of acting as a tangible

reminder of their life story, this in combination with the life review sessions which involved discussion of this information and discussion with visitors or staff who happened to see the book, may have contributed to the pattern demonstrated in the results.

Following the initial trend in the increase in PSS scores at the post-intervention assessment, figure 4 demonstrates that the experimental group scores began to decline, but not to the pre-test level. It would have been useful to continue to monitor this effect with time and to compare this pattern with that of the control group. It would have also been interesting, if feasible, to compare the extent to which the individual read or discussed the book and their life story, in comparison to the intervention stage and compare this with the rate of decline.

It is interesting that the pattern in PSS scores was not paralleled by a similar pattern in the AIS scores. It must be noted that most of the information recorded in the life story books was factual in nature as opposed to records of specific incidents that occurred during the life-span. Alternatively, it is conceivable that different degrees of cognitive effort is required to recall or re-learn AIS as opposed to PSS information. However, these are factors to consider in future research.

Furthermore, the finding that the individuals in the life review condition were not more able to retrieve specific autobiographical incidents from their past, queries the assumption often made in the literature that life review enables the individual to draw on specific memories and instances from the past to enable them to cope more effectively with current difficulties, (Pincus, 1970). Again these findings provide some interesting questions that could be followed up with additional research into the use of this intervention with this population.

GDS-SF Findings.

The life review group GDS-SF scores decreased significantly overall, supporting the second hypothesis. It is possible that the intervention offered the possibility for some individuals to discuss and resolve old conflicts and issues which may have been re-awakened as a result of the disease process and their weakened ability to defend themselves successfully against them (e.g. Case 4). Furthermore, the review process might have allowed the person to focus on their strengths and achievements and the life story book in turn, served to attract more positive social interaction and contact with staff and family, who had since expressed that they were proud of the person's achievements and life (e.g. Cases 1 and 2). There may be numerous reasons

why the GDS-SF mean decreased. It is difficult to generalise across the whole group since individuals had different issues to resolve and differing needs which were tackled during the course of the intervention. Furthermore, the scores may have decreased simply as a result of therapist contact and the impact of the social interaction as opposed to the life review intervention per se. However it is important to note that the intervention did not lead to an increase in depression scores, which has been suggested in the past, (Lewis & Butler, 1974) as outlined above.

LSI-A and RSE Findings.

Both the LSI-A and RSE scores remained relatively stable throughout the study. This is in contrast to some research outlined in the introduction which found reminiscence and life review to have a significant positive impact on these factors, (see, Haight, 1988, 1992; Lappe, 1987). Similarly, the LSI-A subscale scores also remained stable throughout the intervention for both groups. There may be numerous reasons why these findings were observed in this study, some of which will transpire in the following sections.

Clinical Observations.

Several factors or issues emerged as a result of engaging in this study and will be discussed in more detail. These include issues associated with:

- The engagement of clients in the intervention and study and factors associated with drop-out.
- Difficulties with the assessment protocol.
- Review of the Haight (1979) Life Review Model And Reflection On The Life Review Process as a Therapeutic and Research Exercise.
- Difficulties with ending the life review.
- Methodological issues.

- Positive factors to emerge from conducting this project.

- Recommendations for future interventions: using life review with people with dementia.

Engaging Participants In The Life Review Process And Factors Associated with Drop Out.

There seemed to have been a general lack of interest on the part of many of the potential participants in taking part in a life review. Some explained that they never thought of the past and lived each day "as it comes", (for example, cases 2, 3, 5, & 7). Others said that they did not have much of a life to talk about, (cases 2 & 6) and others with some insight into their condition were concerned about telling the researcher "lies", (cases 2 & 6). These initial anxieties were discussed and attempts were made to reassure individuals. However, 27.5 per cent (n=11) of the total number of individuals met with, decided not to take part in the study. Wallace (1992) also described difficulties experienced in engaging cognitively able clients to talk about their experience of ageing and life, he cited statements such as "I don't know what to say", "I've never done anything like this before", and other self-effacing remarks including, "I'm not much good at storytelling", "I don't know if there's a story to tell", and "I don't talk about myself much" from potential participants. He also described others who said, "I don't live in the past", and "I haven't thought about that for ages". Wallace (1992) points out that he did not anticipate this difficulty assuming, according to Butler (1963), that older adults would be actively engaged in considering the past. Wallace (1992) found that older adults do not naturally "break-out" into talking about the past when offered the opportunity. He suggests that by asking older adults to talk about their pasts we may be reinforcing cultural stereotypes and consequently, the social rewards associated with this behaviour encourages the likelihood that the older adult will engage in this form of behaviour in the future. Other individuals have also questioned the universality of life review, (for example, Merriam, 1993). She found that nearly half of her sample of centenarians had not reviewed their lives and those that had related a number of reasons for doing so, none of which referred to impending death. Similarly, Lieberman and Tobin, (1983) found that less than half of their sample had or were reviewing their lives and those closest to death reminisced less frequently.

The difficulties in engaging reviewers may have also been associated with the effect of negative attitudes towards older adults in our society, which have often been described as, discriminating, rejecting and negative (Kitwood, 1997). Additionally, for the person with dementia, their deteriorating cognitive functioning can lead to a further devaluation of their views and opinions amongst those around them, (Kitwood, 1997). Kitwood, (1996) described this as a malignant social psychology which surrounds the individual with dementia. It is argued that this negative feedback may alter the individual's belief system and beliefs about their self-worth and personhood. Consequently when they are approached to talk about their life there is an automatic response in terms of "My life wasn't interesting, I have nothing to talk about".

Furthermore, Weiss (1994) suggested that for some individuals the residential home move involves the loss of physical boundaries, including private space and home and this may in turn foster more rigid psychosocial boundaries. Therefore this might lead to a reluctance to open and share their experience, as there is a danger of becoming too vulnerable. Additionally, the possibility of becoming closer to others may raise anxiety related to previous unresolved loss, (Weiss, 1994) and individuals may prefer not to develop relationships as a protective mechanism, (case 8). There may have also been some fear and anxiety associated with the threat of exposure of the individual to their memory problems, (case 3) or suspicions about the researcher, following a recent assessment by a psychologist who initially, also asked lots of questions, and their answers subsequently contributed to a move into a care home (case 2).

Coleman's (1986) work on attitudes to reminiscence may also provide some insight into why some individuals chose not to participate. Coleman (1986) examined people's attitudes towards reminiscing using a sample of 50 people living in sheltered housing schemes around London. His findings are summarised in table 29.

Table 29: Attitudes to Reminiscence, Coleman, (1986)

	Low Morale	High morale
Reminiscers	Troubled by memories of past (N=8)	Value Memories of past (N=21)
Non-Reminiscers	Have to avoid because of contrast between past and present (N=6)	See no point of reminiscing (N=15)

Coleman found that only 42% enjoyed reminiscing, 58% saw no point in it or actually found it painful. In this study, at the first assessment meeting it was possible to allocate the experimental group participants to some of Coleman's (1986) categories, (see table 30). However, during and following completion of the intervention it was apparent that some individuals changed attitudes and moved to a different category. Consequently, if an individual is at a point in time where they associate reminiscence with low morale or cannot see the value in the activity then it would obviously be difficult to engage them in this form of intervention. However, there is the possibility that the intervention allows the person to shift categories and possibly improve morale.

Table 30: Attitudes To Reminiscence In The Experimental Group at Pre and Post Intervention.

		Low Morale	High morale
		Troubled by memories of past	Value Memories of past
Reminiscers	Pre-Intervention	n=4 (Cases 1,2,4,8)	n = 1 (Case 6)
	Post-Intervention	n=1 (Case 8)	n = 5 (Cases 1, 2, 3, 4, 6)
		Have to avoid because of contrast between past and present	See no point of reminiscing
Non-Reminiscers	Pre-Intervention	n= 3 (Cases 1, 2, 8)	n= 3 (Cases 3, 5, 7)
	Post-Intervention	n= 1 (Case 8)	n= 2 (Cases 5, 7)

Review Of The Assessment Protocol.

Keady and Gilleard (1999) describe the transition into dementia as being a secretive process whereby the individual tries to continually cover their tracks to avoid the experience of loss being discovered. There have been recent accounts of suicide in people with dementia who have an awareness and knowledge of their diagnosis and prognosis, (Rohde et al., 1995). Consequently, the experience of administering the AMI to the research sample was an uncomfortable one, sometimes, it seemed as though the individual was forced to confront the extent of their memory loss, which, prior to the interview, they had been successfully defending themselves against. Consequently, there is a need to consider the negative impact of administering instruments such as these or of reminiscence interventions which challenge the individual to produce memories or information for discussion. There is a need to enable the person to access their defences and to make them feel safe and supported prior to and following sessions. In this study, as the questions on the AMI related to more personal factors it seemed to be all the more traumatising for the individual to realise that they had huge gaps in their memory. Indeed, there was one particular case who was not included in the overall results and was eventually excluded from the project, who had initially agreed to participate, but when faced with some of the questions in the assessment went quiet and failed to answer the initial questions and gazed out of the window, on further enquiry, the participant said "The questions that you're asking are difficult, it feels like a showdown". Consequently, it is necessary to proceed cautiously and sensitively when asking questions of this nature for assessment or in intervention.

The negative emotion sometimes aroused as a result of the assessment proved difficult to manage. The interview process seemed to hamper rapport, especially at such an early point in the developing relationship between the client and therapist and was possibly damaging to the participant by threatening their defences. Some chose not to continue at all, (3 individuals) whereas some took some time to work through the negative emotion associated with this sudden awareness (for example, case 3). Furthermore, the time pressures involved with the project proved to be an obstacle, in terms of developing a relationship with the person and in ending therapy, of which will be discussed in more detail below.

It was also found to be difficult to begin the life review process with someone newly admitted to residential or nursing care, especially if the individual was angry with being placed there, (for example, cases, 3, 7 & one individual who

dropped out). At the end of the meetings these individuals said that they would agree to participate or continue to participate if they were resident at the care home the following week, but would be trying to find a way out of there to go to their previous home if possible. It is also possible that some residual anger at being placed at the home was directed at the researcher. One individual in particular assumed that the researcher was part of a conspiracy to keep them at the home, the individual subsequently dropped out of the project. This could have been especially difficult if the researcher had developed a relationship with a relative who may have initiated the move to residential care for the person. Consequently, similar considerations to those made in family and couple therapeutic work could be important, that is, there is a need to be aware of the person's fantasies regarding the researcher's relationship with the relative or with staff and if possible then to hold all sessions with partners present. In reality this was not possible as relatives had other commitments.

Review of the Haight (1979) Life Review Model And Reflection On The Life Review Process as a Therapeutic and Research Exercise.

During the course of the study, various difficulties were encountered in terms of negotiating the research, therapeutic and LREF model demands. These issues will be discussed in more detail below.

It is important to note that the length of each session varied according to the individual reviewer and their preferences and cognitive abilities. Some sessions were 20 minutes long at a minimum and others sometimes continued for over an hour. Therefore, in this sense, and in many others, the intervention was not standard for all participants. It was also sometimes difficult to draw the session to a close with the richness of information that some individuals brought to the session. Furthermore, the sessions were often the only opportunity the reviewer had to interact in lengthy conversation with another person and it was apparent that some endeavoured to prolong this for as long as possible, (for example, cases 1, 6 & 8). Carlson (1984) reported similar difficulties in ending just a one hour interview session relating to reminiscence with all of the eight participants in her study.

Although the researcher was mindful of the need to try to maintain a standardised approach to life review for the participants in the project, the individuals were so different from each other and had different needs and preferences for what they wanted to discuss and focus on. The researcher was also aware that there was a need to be structured, but this was sometimes difficult if the person

wished to discuss one particular stage for longer than anticipated at the start of the intervention or longer than that suggested by Haight's (1979) model.

Some individuals were quite clearly struggling with issues of loss and grief which had to be discussed and processed in the sessions (cases 4 & 8). Case 4 in particular spent several of the sessions, talking about the loss of her parents, sometimes saying the same things over and over again at different sessions. Following extensive discussion, she was eventually able to move through this trauma and begin to talk about other details at later life stages and put the traumatic episode in the context of her whole life experience. There was also a danger of "losing the participant" at this stage, the possibility being that the negative affect experienced had become intolerable and the individual was unable to mobilise effective (those which had been effective prior to the disease process) coping strategies to process the affect. For example, one other participant talked of her unhappy marriage, she was unable to move on from this and subsequently refused any more input from the researcher. It was unfortunate, that there was an inability to work through this and the participant dropped out of the life review. It is possible that she had come to associate the researcher with negative affect precipitated by session material. This difficulty is compounded by the fact that these individuals may not have the cognitive capacity or skills in order to be able to process the affect following sessions and they may be left with an overwhelming feeling of confusion and sadness even despair and may not have the memory capacity to be able to appreciate from where the feeling arose and then how to resolve it. Consequently, it may be beneficial for the therapist to mobilise social support for the individual, prior to commencement of the life review. Other individuals were faced with current difficulties often associated with the move to the care home, which also warranted discussion, (cases 7 & 8) and it would seem unethical and detrimental to the therapist-reviewer relationship to dismiss these issues and guide the person back to the LREF.

O'Connor (1994) examined 134 interview transcripts with frail older adults and concluded that the most salient theme from the transcripts was that of loss. She indicated that older adults often experience loss after loss, including close relationships, their abilities, their independence, material resources, their ability to control events. She adopts a pessimistic viewpoint challenging the idea that these losses could ever be resolved and suggests that the best that these older adults can hope for is to share their pain with others and then that their wishes are met in the context in which they choose to live. Consequently, the power of any intervention

including life review is then called into question. This study demonstrated a fall in depression scores in the life review group challenging these pessimistic ideas. However, these factors might help to explain why the life-satisfaction scores remained stable in this sample, the individual might have dealt with the loss so that they are no longer in a state of depression, but this does not necessarily mean that they are able to increase their sense of satisfaction with life. It is crucial to be careful in selecting clients for life review in that they will not be broken in spirit by the harsh comparison of their previous self and situation with the reality of their current condition. The therapist has an ethical duty to enable the client to develop skills that will enable them to cope with the reality and the possible comparisons.

As noted above, if one was to adhere strictly to the guidelines and to the questions within the LREF, then the opportunity to explore, discuss and resolve issues which may be more pertinent to the individual is denied. Obviously, the model is not universally applicable to all older adults. It also seemed a gross underestimate for Haight (1979) to suggest that the intervention should be complete within 6 one hour sessions for non-cognitively impaired individuals. The individual may have numerous issues and areas for discussion and six sessions would not do justice to these issues. There were also several themes identified within this small sample, associated with the ageing process and older adulthood in particular, which the LREF had overlooked. The LREF did not seem to allow enough attention to the various stages within adult life. It would have been useful to divide adulthood as a whole into young, middle and late adulthood and then older adulthood and then to consider issues specific to each of these areas. The form gives no attention to grandchildren, extended family or career and working life. Furthermore, the model assumes that most people lead more "traditional" lives by getting married and having children. Additionally, other questions could have indicated a host of other issues to consider for possible discussion including, understanding family themes and cycles, becoming a grandparent, children leaving home, redefining a role for the self after children have left, the relationship afterwards, divorce, re-marriage, single parenthood, single lives, the war, there is an endless list of possibilities. It is recognised that the LREF was intended to be a guide. However, the aim was to standardise the intervention across participants, which was largely impossible and presents a methodological difficulty for this study. Understandably research needs to be standardised but equally clinical intervention needs to be tailored to the individual.

The LREF seemed to be most useful with individuals with a good sense of autobiographical memory or again, it was in danger of exposing the person's memory problems to an uncomfortable degree, (case 3). Again, there is the danger of "losing the client" at this point before being able to help them work through this insight and to develop new coping mechanisms or make current ones more robust in light of this awareness. Similarly, Cheston and Bender (1999) suggest that the neurological deterioration in dementia impacts on the person's psychological functioning, affecting the person's ability to defend themselves "against the mental trauma caused by this deterioration". Consequently, these individuals are extremely vulnerable in therapy. One must be careful not to break through the only defences that they have against the stark reality of this cruel disease and experience. Validation therapy coined by Feil (1989) suggested that severe disorientation involved a denial of an unbearable reality in which the ego was protected by fantasy. Consequently, it is important to consider whether it is better to be in denial of the past and of a deteriorating memory rather than risk a therapeutic intervention where there is the danger of "losing" the client who has developed some insight but then has difficulty developing coping with the affect that this precipitates. Some argue that you can never help the person adjust to the relentless onslaught of the disease and it's consequent losses, O'Connor (1994). Alternatively, it has been shown, that letting people with dementia continue believing that they are in a different place and time may not help them to adjust to previous losses or to the impairment in their abilities, (Baines et al., 1987). In this study, it would have been useful to follow-up those individuals who had dropped out of the intervention at this crucial point in time, however, one must obviously respect their decision for no further involvement. It also seems conceivable that the impact of the life review depends on pre morbid personality, mental health and life experiences. These factors need to be investigated further.

This study also posed difficulties associated with working with a non-referred population, who did not come to the service requesting help with their struggles to achieve ego integrity or the resolution of developmental challenges. It is possible that the life review process may only be appropriate if the individual requests it, if they are spontaneously reminiscing, this intervention must be client led and not be an attempt to fulfil other people's needs. The intervention may be deemed appropriate for use with people who ruminate on particularly distressing incidents (cases 1, 4 & 8) and with unresolved grief issues.

The Impact Of The Life Story Books.

The creation of the life story book was useful for gaining some sense of continuity between sessions. The information was organised into the book between sessions for the participant to edit at subsequent sessions. Overall, this seemed a useful procedure. Participants seemed to value going over the same enjoyable and sometimes sad information. This process also allowed them the opportunity to add new details to the book, most individuals also actively engaged in the process of correcting inaccuracies. Furthermore, some participants explained that they felt "listened to" (case 1 & 6) and some seemed to enjoy the opportunity of seeing their life story in print (case, 7 & 8). However, it is important to note that one individual was concerned at how much information the researcher knew about him and couldn't understand where the researcher had got it from, he couldn't remember talking about the information, (case 5). Furthermore, another person was confused by the details presented in the book and expressed frustration at herself for not being able to remember how it actually was, (case 6). It may have been more beneficial to engage relatives more actively in the process.

Many of the participants enjoyed and valued the books, for example, "Ha Ha! My life story. Da Da Da Da. This is your life, BBC 1." (Case 3) and "That says it all I couldn't have put it better myself. That's what my parents were like." (Case 1). For the following individual the life story book provided an important connection with his past and identity, and seemed to help him to carve out a new identity for himself in the care home, with things that he might not have been able to communicate to the staff. The book provided him with a talking point from which to share and develop relationships.

> "Now I am divorced. I feel divorced from my past, from my belongings which I have collected over the years and from my family and friends. I am isolated. I have been thrown into a place which isn't my home, I have a home somewhere. This isn't my bed. I live with people I know nothing about. People I don't know come to me and do things to me. I am confined, I would love to go out and enjoy this weather, I don't get to see it anymore...going out in a bus with strangers and driving around isn't my idea of going out. I would love to go out just for a little stroll but I would want company, I wouldn't want to go on my own. I have travelled well in my time, I have been to 21 different countries with the forces." (case 3).

Ending Life Review.

Haight et al., (1995) indicate the importance of the intervention as it provides the person with a confidante and intimacy for a short period of time. However, this could be considered damaging in the long run especially if a state of deprivation of social contact had existed prior to the intervention. The therapist enters the individual's life, develops a close relationship with them, withdraws, and the individual is left to continue as before with the loss of the therapeutic relationship to contend with in addition to the implications of their deteriorating cognitive capacity, (case 1). Furthermore, there is the possibility that they may develop negative fantasies as to why the therapeutic relationship has ended, "Maybe it was something awful I have revealed about myself and my life, maybe it's because I'm a bad person", as the natural end point in terms of chronological order for the life review may not be so obvious to the individual with cognitive impairment. It is essential for the therapist to make clear guidelines and reminders for the individual, regarding the end of the relationship. There is a need to use clear and overt cues with the client regarding length of involvement and therapeutic relationship. Alternatively, it may be more beneficial for the therapist to facilitate the development of new relationships within the home which can be maintained following the life review intervention or to engage a family member more actively in the process.

Similarly, Ellison (1981) who reported positive results following life review with nursing home residents, also stated that terminating the life review was difficult as her participants enjoyed the sessions so much. There seems to be a need to be extremely cautious in initiating and maintaining contact with the individuals described in this sample group. These individuals represent a group which is often isolated emotionally and psychological if not physically. They are extremely vulnerable and initiating and developing a positive safe relationship involving unconditional positive regard and regular contact for them to sometimes enjoy may be detrimental in the long run. Fading out meetings may prove difficult and the clinician must be aware of the possibility of developing dependency. For example case 1 explained:

> "The only good thing in my life is you coming to talk to me, I have nothing else. I am incontinent, I live in this room day in and out. People bring me meals which I don't like and nobody takes the time to sit and talk to me. I

can't walk like I used to. My family doesn't come to see me because they live away."

Several of the participants attempted to delay the inevitable ending of the therapy and visits, exclaiming that there was no hurry, that they weren't going anywhere, that the researcher could come back anytime, (cases 1, 5, 7, & 8). For example:

> "I don't go out into the common room anymore. There was this woman there when I used to go to sit there who was really noisy, a trouble-maker and she used to pick on me, so I started to stay in my room from then on, but its difficult because I don't really have anyone to sit down and talk to. I get lonely. You are the only person who comes to talk to me, apart from my son who visits at weekends."
>
> - Case 6.

Similarly, Cook (1984) states that:

> "among the most tragically neglected humans on earth are confused elderly residents of nursing care facilities. Their mental meanderings and chaotic conversations cause caretakers and more alert fellow residents to shun them and evoke a sense of futility in relatives who do not understand the symptoms of mental deterioration. They are fed, bathed, medicated and managed, but rarely engaged in conversation. The resulting absence of mental stimulation promotes and hastens their mental and social decline."p. 90.

Methodological Issues.

Admittedly the two groups were not equivalent in terms of the amount of therapist contact they received. Additional research would be necessary to determine the therapeutic components of the total "package". It was not feasible within the time constraints of this project, to conduct a study whereby both groups received equivalent amounts of therapist contact. Although, it would have been preferable for the control group participants to receive an equivalent amount of therapist time in terms of friendly visits to talk about more current events and experiences, or another form of intervention using another therapeutic modality. The study was simply a pilot investigation into the feasibility and impact of the assessment process and life review intervention with this sample. Factors to emerge from the project could be used to develop a more methodologically sound study into the effect of different aspects of the life review intervention on this population.

Furthermore, it is also possible that the dependent measures used in this study were not sensitive enough to record most of the changes whether positive or negative, observed in the participants. The measures also did not adequately reflect the individuals' personal opinion and experience of the life review process.

Additionally, it may have been more useful to extend the length of time in the follow up period to glean the full picture of the effects of the process particularly the trends noted in autobiographical memory. Woods et al (1992) argue that it is unrealistic to expect global improvements in people with dementia who participate in reminiscence, the positive effects may be more transient than long-term.

Finally, in light of the factors outlined above and considering the small sample size, it is difficult to make robust conclusions from this study.

Positive Factors To Emerge From Conducting This Project.

It is important not to lose sight of the fact that the GDS-SF recorded a drop in depression levels and the PSS subscale detected an increase in the amount of factual information recalled by the experimental group. However, in light of the methodological difficulties described above it is difficult to conclude whether the life review process was the crucial factor and additional research is required to evaluate this more rigorously. It is also important to note that there was not an increase in depression scores or a decrease in the other measures taken in the experimental group as a result of the life review.

Of the eight life review participants, most enjoyed the life story books, even if they found the process of creating the book and the life review itself difficult, (e.g. cases 2 & 8). People who were formally modest about their achievements were encouraged to show the book to members of the family and were surprised by the positive responses that they had. Interest in life story books from family members was largely positive. Furthermore, there were positive anecdotal reports from staff who explained that they were surprised at how much the individual could remember and how much the person had done in his or her life (e.g. case 6). These are factors which cannot be detected by the psychometric measures chosen.

Recommendations For Future Interventions For Conducting Life Review With People With Dementia.

Individuals must be adequately prepared in advance and fully informed of the nature of the intervention. They need to be informed that the intervention may raise feelings that they may have repressed, and issues which they may have successfully avoided through denial. It must be explained that they might experience strong negative affect during the course of the intervention, but that it could be beneficial in the long term that they persist with the intervention process in order to work through these feelings.

At the outset, it is essential to recognise the vulnerable position the potential participants are in. They are experiencing dementia and are dependent on care home staff and also, possibly not able to express their needs and opinions as well as they used to do. It is necessary to empower them with every point of contact and that also means respecting their decision not to participate in the intervention, especially when this is not said overtly by the individual. In this study it was often needed to interpret non-verbal behaviour and signals and then to check these factors out with them, giving them ample time and safety to refuse to take part. In light of the above it is also important to note the strong needs of these individuals in terms of social contact in an environment which often focuses primarily on physical need. Consequently, the therapist needs to be aware of the likelihood of them agreeing to take part in activities which they may not enjoy in order to have a need for social contact met. Again, the therapist needs to be acutely aware of issues of dependency and loss arising during the course and at the end of the therapy. It is important for the therapist to consider the impact of developing an intense therapeutic relationship with a person with dementia and then to disrupt it as the illness progresses and the individual becomes more vulnerable, the effect could be devastating for the isolated individual with little social support.

Alongside the above, there is also the need to be aware of the potential in colluding with the participant in denial (Weiss, 1994). There might be a tendency to seek quick solutions which overshadow long-term in-depth, problems and questions. Therapists can easily overlook the underlying, existential questions related to ageing with which residents wrestle and that are more difficult to discuss and resolve" (Weiss, 1994).

Furthermore, it is important to consider that the recall of memories involved in life review may be traumatic for the individual who had a difficult childhood.

McInnis-Dittrich (1996) stresses the need for caution regarding the pace with which to take the client.

Future Research Directions.

As the research to date has been sparse and is characterised with methodological difficulties, there are several avenues for the development of future research projects. In addition to the need to rigorously evaluate the effect of the process on autobiographical memory and also the other dependent variables examined in this study and outlined in the introduction. Other studies could examine, the effect of life review and resident life story books on staff attitudes and behaviour and qualitative research could focus on the personal experience of the life review process. Furthermore, the effect of a life review process on family members caring for relatives with dementia in the community could be evaluated. The process could also work on factors within the care giving relationship and how the nature of the relationship has changed over time, and especially with the advent of the disease. This process might enable the participants to grieve over the relationship that they had previously experienced and might ease a transition into a care home for the participants. Additionally, carers also have easier access to memorabilia for the individual concerned. This might also reduce the pressure on the person with dementia to come up with information from their past, and the relative could also facilitate the process by providing cues and prompts to the participant's memory.

Summary And Conclusions.

This study set out to explore the impact of a life review intervention with people with mild to moderate cognitive impairment living in care homes. Seventeen individuals took part in the project, eight people were allocated to the structured life review condition and nine to the no treatment control group. The intervention was carried out with people individually and culminated in the creation of a life story book detailing information from the reviewer's life. Measures of life-satisfaction, depression, self-esteem and autobiographical memory were taken for all participants at the pre, post and follow up assessment stages. Statistical analyses revealed significant improvements in depression in the life review participants. In comparison to the control group, the life review participants were also significantly more able to recall personal facts from their lives at follow up. The other variables

remained relatively stable throughout the study duration. It is possible that the life review process is beneficial in helping to reduce depression in these individuals if they are able to complete the whole review and work through unresolved issues and emotions, however, there is the danger of "losing" them before the intervention process is complete and the effect of that on the individual is unknown. Furthermore, the process of life review and the creation of a life story book might have contributed to the interesting pattern of PSS scores observed in the experimental group There is a need to carry out additional research to evaluate the questions raised in this study and to ascertain the effect of specific components of the life review intervention on different variables in this population of individuals.

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APPENDICES.

APPENDIX A.

The Life Review Experiencing Form, (Haight, 1979)

CHILDHOOD, FAMILY AND HOME.

1. What is the very first thing you can remember in your life? Go as far back as you can.

2. What other things can you remember about when you were very young?

3. What was life like for you as a child?

4. What were your parents like? What were their weaknesses, strengths?

5. Did you have any brothers or sisters? Tell me what each was like.

6. Did someone close to you die when you were growing up?

7. Did someone important to you go away?

8. Do you ever remember being very sick? **Do you remember feeling ashamed?**

9. Do you remember having an accident?

10. Do you remember being in a very dangerous situation? **Did you ever feel guilty as a child?**

11. Was there anything that was important to you that was lost or destroyed?

12. Was church a large part of your life?

13. Did you enjoy being a boy / girl? **Did you ever have an unhappy sexual experience?**

14. Did you enjoy starting projects as a child (with toys or in scouts)??

15. How did your parents get along?

16. How did other people in your home get along? **Did you feel that you were guided through childhood?**

17. What was the atmosphere in your home? **Did you always feel cared for?**

18. Were you punished as a child? For what? Who did the punishing? Who was the "boss"?

19. When you wanted something from your parents, how did you go about getting it?

20. What kind of person did your parents like most? the least?

21. Who were you closest to in your family?

22. Who in your family were you most like? In what way?

ADOLESCENCE.

1. When you think about yourself and your life as a teenager, what is the first thing you can remember about that time? **Did you feel good about yourself?**

2. What other things stand out in your memory about being a teenager?

3. Who were the important people for you? Tell me about them. Parents, brothers, sisters, friends, teachers, those you were especially close to, those you admired, those you wanted to be like.

4. Did you attend church and youth groups? **Did they have cliques in your day?**

5. Did you go to school? What was the meaning for you? **Were you a hard working student?**

6. Did you work at other jobs during these years? Did **you have a sense of belonging?**

7. Tell me of any hardships you experienced at this time.

8. Do you remember feeling that there wasn't enough food or necessities of life as a child or adolescent?

9. Do you remember feeling left alone, abandoned, not having enough love or care as a child or adolescent?

10. What were the pleasant things about your adolescence?

11. What was the most unpleasant thing about your adolescence?

12. All things considered, would you say you were happy or unhappy as a teenager?

13. Do you remember your first attraction to another person? **Did you establish a close relationship?**

14. How did you feel about sexual activities and your own sexual identity?

ADULTHOOD.

1. Did you do what you were supposed to do in life?

2. What place did religion take in your life?

3. Now I'd like to talk to you about your life as an adult, starting when you were in your twenties and up to today. Tell me of the most important events that happened in your adulthood.

4. What was life like for you in your twenties and thirties?

5. What kind of person were you? What did you enjoy? **Did you think of yourself as responsible?**

6. Tell me about your work. Did you enjoy your work? Did you earn an adequate living? Did you work hard during those years? Were you appreciated?

7. Did you form significant relationships with other people?

8. Did you marry?
   (Yes) What kind of person was your spouse?
   (No) Why not?
   Were you happy with your choice?

9. Do you think that marriages get better or worse over time? Were you married more than once?

10. On the whole, would you say you had a happy or unhappy marriage?

11. Was sexual intimacy important to you?

12. What were some of the main difficulties you encountered during your adult years?
   a) Did someone close to you die? Go away
   b) Were you ever sick? Have an accident?
   c) Did you move often? Change jobs?
   d) Did you ever feel alone? Abandoned?
   e) Did you ever feel need?

13. Do you think you've helped the next generation?

SUMMARY.

1. On the whole, what kind of life do you think you've had?

2. If everything were to be the same would you like to live your life over again?

3. If you were going to live your life over again, what would you change? Leave unchanged?

4. We've been talking about your life for some time now. Let's discuss you're overall feelings and ideas about your life. What would you say the main satisfactions in your life have been? **Try for three. Why were they satisfying?**

5. Everyone has had disappointments. What have been the main disappointments in your life?

6. What was the hardest thing you had to face in your life? Please describe it.

7. What was the happiest period of your life? What about it made it the happiest period? Why is your life less happy now?

8. What was the unhappiest period of your life? Why is your life more happy now?

9. What was the proudest moment in your life?

10. If you could stay the same age all your life, what age would you choose? Why?

11. How do you think you've made out in life? Better or worse than what you hoped for?

12. Let's talk a little about how you are now. What are the best things about the age you are now?

13. What are the worst things about being the age that you are now?

14. What are the most important things to you in your life today?

15. What do you hope will happen to you as you grow older?

16. What do you fear will happen to you as you grow older?

17. Have you enjoyed participating in this review of your life?

APPENDIX B.

Ethics Application Form and Letters of Approval.

FORM B (Form B Only to be used for Research Projects Using Questionnaires/Interviews Only For all other research projects please use Form A)
RESEARCH ETHICS COMMITTEE (WEST)
APPLICATION FORM FOR ETHICAL APPROVAL

All questions must be answered Answers should be Typewritten	**11 Copies of All Documents must be enclosed**

Please retain the order and form of all questions if a word processor is used. Copies of Questionnaires/Interview Schedule should be attached.

1 TITLE OF PROJECT

Adjustment following a move to a care home: can reminiscence help?

2 Name of Researcher(s):	Sarah Jayne Morgan
Appointment - NHS/University:	Trainee Clinical Psychologist
Address for Correspondence:	North Wales Clinical Psychology Course Psychology Department University of Wales Bangor.
Telephone Number:	

3 OBJECTIVES OF THE STUDY

The study aims to empirically investigate the effect of 10 sessions of life review with individuals with memory problems and their caregivers. The intervention will involve reviewing life experiences and the creation of a life story book. The study aims to be carried out with individuals who have recently been moved into a care home.

4 Outline of Study Design

The study will use a pre and post-test and 4 week follow up design with thirty clients and their caregivers. The dyads will be randomly assigned to a no treatment control group, and to a life review condition. There will be fifteen participants in each group.

The experimental group will participate in the life review as well as the pre, post and follow up assessments. The no treatment control group will participate in the pre, post and follow up testing only.

Life review involves the recall and evaluation of life experiences, (Woods, 1996), with the therapist present as an active listener. It might involve working through difficult and painful memories, as well as those which are happy and enjoyable.

At the pre and post intervention stages, the severity of the person's memory problems will be classified according to the Clinical Dementia Rating (Hughes et al, 1982), and the person will complete the Geriatric Depression Scale-short form, the Autobiographical Memory Interview, Kopelman et al (1990), the Life Satisfaction Index, Neugarten et al (1961) and Rosenberg's self esteem inventory.

At all three phases the caregiver will be requested to complete the Relatives Stress Scale and the Hospital Anxiety and Depression Scale. The relationship between the care giver and care recipient will also be examined using the Assessment of the relationship between carer and person with memory problems scale.

Staff working at the care homes of the participants will be asked to complete the Staff knowledge of patients questionnaire, Baines et al (1987), and the Behaviour Rating Scale of the Clifton Assessment Procedures for the Elderly, (Pattie & Gilleard, 1979).

5 Scientific Background to Study (give a brief account of relevant research in this area with references)
Please submit a full protocol in addition to the application form.

Reminiscence has been associated with a decrease in depression in some research samples, (Fallott, 1980; Parsons, 1986). Haight and Dias (1992) indicated that structured life review was the most effective method for decreasing depression. Life review may enable an older individual deal with issues of separation and loss following a move into a care home. Atchley (1989) argued that as individuals transfer from one life stage to the next and encounter changes in their lives they attempt to order and interpret changes by recalling their pasts. This provides an important sense of continuity and facilitates adaptation. He argued that reminiscence provides a mechanism by which individuals adapt to changes that occur throughout life. Others have mentioned the use of life stories to facilitate continuity and adaptation (Whitbourne, 1985).

Much of the research to date has been carried out with cognitively intact individuals. One study carried out with people with Alzheimer's disease, found reminiscence to enhance personal identity and help maintain self worth, (Gibson, 1989). Haight (1992) also reported improvements of life satisfaction in individuals with minor cognitive impairment following participation in a structured life review. However, individuals with dementia sometimes recall little from their middle years, (Morris, 1994) this must affect their ability to achieve continuity during transition periods. The effect of life review on autobiographical memory and the retrieval of these "middle year" memories has not been investigated.

The functions and usefulness of reminiscence and life review with people with dementia require clarification. Methodologies have been questionable and the research often makes no distinction between types of reminiscence. There is a need to make a clear distinction between different types of reminiscence and to investigate the effect of specific interventions on several variables, with people with dementia and their caregivers, in different contexts.

6 PREVIOUS RESEARCH EXPERIENCE (to include Curriculum Vitae)

In addition to my undergraduate psychology degree research, I have broadened my psychology research experience on the clinical training course. Recent small scale research projects have involved examination of mental health and coping strategies in Community Mental Health Team members, analysis of the proportion of referrals of Welsh speaking individuals to an older adult assessment service and obtaining normative data on observational measures of child behaviour problems.

7. COURSE BEING UNDERTAKEN AND EDUCATIONAL INSTITUTION (if applicable)

Doctoral Course in Clinical Psychology
North Wales Clinical Psychology Course
Psychology Department
University of Wales
Bangor.

---

8 ACADEMIC SUPERVISOR (if relevant)

Professor Robert T. Woods	IMSCAR University of Wales Bangor

---

9 CLINICAL SUPERVISOR (if relevant)

Name	Contract Address
Professor Robert T. Woods	IMSCAR University of Wales Bangor

---

10 STEERING/ADVISORY GROUP ARRANGEMENTS

Professor Woods will provide regular supervision of cases.

---

11 SAMPLE

a)

Please provide a detailed description of the study sample covering selection, number, age, stability viability if appropriate, inclusion and exclusion criteria.

Participants will be thirty older adults with dementia and will be included in the study if they obtain scores suggesting a mild to moderate stage of dementia on a Clinical Dementia Rating Scale (Hughes et al. (1982). Participants must have sufficient verbal abilities to be able to participate in the intervention, and must have a caregiver who is also willing to participate in the study.

---

b)

How are subjects selected?

Participants will be selected from those who have recently moved into a residential/nursing home. Access to potential participants will be achieved through local social services or residential homes.

They will be selected according to the following criteria:

1. Participants with a diagnosis of dementia.

2. Participant's willingness to take part in the study.

3. Caregiver's approval and willingness to personally take part in the study.

---

c) **What is the likely harm/benefit for the subjects?**

Discussion of difficult and sad life events may generate distress in some participants. Individuals will be provided with ample opportunity and support to facilitate the processing and discussion of distressing issues.
It is proposed that life review will enable the participant to adapt more successfully to life in general. The intervention may also

prevent the onset of a depressive episode, and might enable the person come to terms with loss experienced at the time of the move into a care home, and following a diagnosis of dementia. Consequently, the intervention may lead to a feeling of enhanced well-being, life satisfaction and self esteem, and to a maintenance of the individual's relationship with their caregiver.

---

d) **Do you anticipate using patients/clients, students or colleagues as controls? YES/NO**
If YES, please give details.

Thirty individuals with dementia and their caregivers will be selected to participate in the study according to the above criteria. Fifteen will be randomly allocated to the control or treatment group. All participants will be briefed regarding the nature of the study.

---

e) **Please give details of any pilot/exploratory study you intend to conduct:**

This piece of work is intended to be a pilot study.

---

f) **To your knowledge, are the subjects in this study involved in any other research investigation at the present time? If so, please give details.**

I am not aware of other research ongoing with the sample pool of individuals from which I intend to secure participants. Potential participants will be excluded from this study if they are already participating in another research study.

---

g) **If payments or rewards are to be made to subjects, give amount and details and indicate to which subjects payments apply.**

No payments will be made to participants.

---

12 DISCLOSURE OF PAYMENT/REWARD TO INVESTIGATORS

i **Is any payment being made, to investigator or department/unit, in respect of this project?** YES/NO

If NO.....go to question 13

If YES.....go to question 12.ii

ii **Is the payment?**

a) a block grant?
YES/NO

b) based on the number of subjects recruited?
YES/NO
If there is a block grant is the payment made in order to?
If YES state sum
a) pay a salary (-ies) YES/NO
£.....

b) fund equipment YES/NO
£.....

c) fund technical/laboratory YES/NO **£.....**

d) reward time/effort involved YES/NO
£.....

e) other reason: (state nature)? YES/NO

..... **£.....**

If payment is based on number of subjects recruited
(per capita/payment, state total sum payable for each subject completing the study
£.....

State number of subjects agreed .....

iii **Are the subjects informed, as part of the consent procedure?**

a) **the name of the sponsor?** **YES/NO**

b) **that the investigator/department will be receiving payment** **YES/NO**

iv **Does the investigator(s) have any personal involvement (e.g. financial, share-holding etc) in the sponsoring company?**

13 INFORMED CONSENT

a) **How will written consent be obtained?** **Written/Verbal**

A combined information sheet and consent form is essential and a copy should be attached. (A duplicate copy MUST be available for the subject).

The individuals with dementia may provide either written or verbal consent. Written consent will be obtained from the caregiver.

---

b) **In exceptional circumstances, if verbal consent only is to be obtained, state why.**

Verbal consent will be obtained from participants who have difficulty with reading and writing tasks due to disability.

i **How will this be recorded?**

Verbal consent will be audio taped in the presence of the caregiver.

ii **How will it be witnessed?**

This consent will be witnessed by the participant's caregiver.

---

c) **How will subjects be invited to participate?**

Individuals will be invited to participate by their social worker, by letter from Sarah Morgan. Additionally, individual care homes will be approached and the manager requested if residents and their families could be approached. Following this potential participants will be sent a letter or approached directly to request their participation.

---

d) **When the research has been explained to subjects, how much time will be allowed for them to consider and consult relatives and others before giving consent?**

At least seven days will be given.

---

e) **Is the ability to withdraw at any time without detrimental effect to subsequent treatment and care indicated?**

Yes.

---

14 CONFIDENTIALITY AND ANONYMITY

a) **How are confidentiality and anonymity to be ensured?**

All records will be subject to NHS procedures regarding client confidentiality.
All participants will be assigned a research number for research analyses and group results will be reported in the final report.

---

b) **Are you aware that you need to comply with the Data Protection Act?**

Yes.

---

c) **If audio/video taped recordings are made, what is going to happen to them when the research is complete?**

They will be erased following project completion.

---

d) **If relevant, how will consent for access to patients' records be obtained?**

Again, either recorded verbal or written informed consent will be obtained from the individual with dementia. This will be witnessed by the caregiver. Furthermore, written consent will be obtained from the participant's social worker.

---

e) **How is the research instrument to be administered and by whom?**

The pre-intervention phase research instruments will be administered by Sarah Morgan according to the protocol provided with these instruments.

---

f) **How is the research instrument to be collected and by whom?**

If possible, the post intervention measures will be administered by a psychology trainee or assistant who is independent from the study. Again, administration protocols will be adhered to.

---

15 ACCESS/CONSENT OF OTHERS CLINICALLY INVOLVED

a) **Has access been agreed?**
YES/NO
If YES, where, when and by whom?

Consent will be sought from the managers of care homes and social services for access to participants.

---

b) **Will the consent of clinical colleagues be obtained? YES/NO**
If YES, which?

Social Work Manager, Ysbyty Gwynedd.

Residential, Nursing, or Elderly Mentally Ill Home Care Manager of the respective residence of the participants.

---

c) **Is observation to be used as a method?**
Please describe how?
Has consent been obtained and from whom?

No.

---

16 **STATISTICAL ADVICE**

If appropriate, have you had statistical advice in preparing the protocol/questionnaire? If so, from whom?

Statistical advice is available from the clinical psychology course.

---

17 **MULTI-CENTRE STUDIES**

If this is a multi-centre study, have other Ethics Committees been approached?

Not at the time of writing this proposal.

---

18 **RAISED EXPECTATIONS**

Have you considered the possibility that you may be raising expectations or focusing attention of fears, worries, sensitive

areas, providing new knowledge or be in conflict with other advice?

Please describe what steps are being taken to meet any needs that may arise and describe any arrangements for post interview/questionnaire counselling/contact.

Yes, the researcher is aware that by the nature of the intervention, the focus on previous life events and experience may evoke feelings of sadness, or regret. Clients will be supported and provided with plenty of time and opportunity to discuss these issues during the therapy sessions.

Participants will also be provided with addresses and contact points for further assistance if requested.

---

19 What problems may hinder successful completion of the study?

The individual's needs regarding the management of dementia are paramount, the fulfilment of these needs will take priority over the study.

---

20 Anticipated timing and duration of study

The study will take 10 months to complete. Participant recruitment will begin in September/ October 1999, pre-intervention measures will then be administered, intervention and post intervention measures will be completed by February/March 1999. The study will be submitted to the North Wales Clinical Psychology Course by July, 2000.

21 The information supplied is to the best of my knowledge and belief accurate, I clearly understand my obligations and the rights of the subject, particularly concerning freely-given informed consent.

Date of Submission: **Signature of Research Applicant**

....

---

22 TO BE COMPLETED BY CONSULTANT IN CHARGE OR HEAD OF DEPARTMENT

I hereby endorse this research application with my approval

Signature .....

Name and Appointment .....

.....

.....

A REPORT/SUMMARY WILL BE REQUIRED BY THE GWYNEDD RESEARCH ETHICS COMMITTEE WITHIN THREE MONTHS OF COMPLETION OF THE RESEARCH

NORTH WALES HEALTH AUTHORITY
RESEARCH ETHICS COMMITTEE (WEST)

PWYLLGOR MOESEG YMCHWIL (GORLLEWINOL)
AWDURDOD IECHYD GOGLEDD CYMRU

Ffôn/Tel : (01248) 384877 (direct line)

Ffacs/Fax : (01248) 370629

Room 1/178
Ysbyty Gwynedd
Bangor
Gwynedd LL57 2PW

Certificate of Confirmation of Ethics Approval

Name of Lead Researcher : Ms S Morgan

Date of Ethics Review : 19.8.99

Title of Study : Adjustment following a move to a care home:can reminiscence help?

I confirm that all requirements have now been received for the study mentioned above. The research therefore has this Committee's full ethics approval.
Approval from the host institution must be sought separately.

If, during the course of the study, there are protocol changes, serious adverse events, or major subject recruitment problems, you are required to notify the Committee as soon as possible .

It is also requested that you provide an annual interim report on the conduct and progress of the study, plus a final report within three months of completion .

The Committee wishes you every success with your research.

Signed : .....

Dr.D.R.Prichard , Chairman .

Date : 5.10.99

S. J. Morgan,
North Wales Clinical Psychology Course,
43 College Road,
Bangor.

17th September 1999.

Chairman,
North Wales Health Authority Research Ethics Committee,
Room 1/178,
Ysbyty Gwynedd,
Bangor,
Gwynedd,
LL57 2PW.

Dear

Re: Adjustment following a move to a care home: can reminiscence help?

Thank-you for your time in considering this research project for ethical approval. I am very grateful for your approval of the project. I fully endorse the conditions that you have applied to the research described in your letter of the 20.8.99.

- Please find enclosed a typical letter of approach to social workers/care home managers.

- All potential participants will receive an explanation of the process by which they came to be identified for participation in the research.

- The project will only be carried out with people who have mild-moderate dementia who will only participate following both their and their carer's informed consent.

- Furthermore, it will be emphasised that the participants are free to withdraw from the research project or from particular interview sessions at any time. Every effort will be made to ensure that interviews will not prove burdensome or upsetting for participants.

- During initial stages of discussion, potential participants will be fully informed of the details of the study including the degree of their involvement, and session and study length.

Thank-you very much for you time and assistance.

Yours sincerely,

Dear ,

I am writing to you to request your assistance with a research project that I will be carrying out entitled "Adjustment following a move to a care home: can reminiscence help?". I will be conducting the research during my final year of the clinical psychology course at Bangor. I intend to carry out the research with people who have mild-moderate dementia who have been admitted into a care home within the previous 6 months. The study will also involve one of the person's carers/relatives.

The project aims to evaluate the effect of 10 sessions of life review on people with dementia and their carers. The study has been approved by the North Wales Health Authority Research Ethics Committee and the University of Wales Bangor, School of Psychology Ethics panel.

I am currently at the stage of looking for care homes willing to participate in the project, and I was hoping for your assistance in identifying people who have recently moved into care homes who might benefit from this intervention. Half of the potential participants will be allocated to one group who will receive the life review intervention carried out by myself and the other half will be allocated to a control group who will not participate in the life review. All participants will be assessed at the pre, post and follow up stages of the intervention to monitor changes that the intervention might produce. I have enclosed a consent and information sheet that is aimed towards potential participants for your information. The research will begin in early October 1999 and will be written up by July 2000.

If you have any queries please don't hesitate to contact me on 01248 351 064 to discuss them. Otherwise I will contact you on the phone in early October about whether you would like to participate in this research project. If yes and you had some potential participants in mind, we could then discuss how residents can best be approached to participate in the project
Thank-you very much for your time and assistance.

Yours sincerely,

APPENDIX C. WELSH PARTICIPANT INFORMATION SHEET AND CONSENT FORM.

TAFLEN WYBODAETH A FFURFLEN GYDSYNIO

Ymaddasu ar ôl symud i Gartref Gofal Preswyl: a all atgofion fod o gymorth?

Mae'r daflen wybodaeth hon yn cynnwys gwybodaeth am yr astudiaeth a ddisgrifir uchod. Mae'n bwysig eich bod yn ei darllen yn ofalus er mwyn i chi ddeall beth fydd yn digwydd pe baech yn penderfynu cymryd rhan yn yr astudiaeth ymchwil. Yr wyf i (Sarah Morgan) dan hyfforddiant fel Seicolegydd Clinigol ym Mhrifysgol Cymru, Bangor. Fel rhan o'r hyfforddiant 'rwyf yn gwneud astudiaeth ymchwil i weld sut mae pobl hŷn a'u gofalwyr yn ymaddasu ar ôl symud i gartref preswyl, ac a yw hel atgofion (siarad am hanes bywyd yr unigolyn) o gymorth.

Bydd pawb sy'n penderfynu cymryd rhan yn yr astudiaeth yn cael eu gweld deirgwaith i ateb rhai cwestiynau am eu hwyliau a'u boddhad â bywyd. Byddai'r cyfweliadau hyn yn cael eu cynnal dros gyfnod o dri mis. Gwelir rhai pobl ar 10 achlysur arall i archwilio hanes eu bywyd yn fwy manwl, gyda'r bwriad o helpu'r unigolyn i gynhyrchu llyfr am hanes ei fywyd/bywyd.

Byddwn hefyd yn gobeithio cyfarfod perthnasau'r unigolyn a'u tynnu hwy i mewn i'r broses. Bydd pawb sy'n penderfynu cymryd rhan yn cael cynnig rhywfaint o amser ar ôl cwblhau'r astudiaeth i siarad am y canlyniadau.

Cyfrinachedd

Bydd yr holl wybodaeth ynglŷn â'r cyfranogwyr yn ddi-enw. Ni chyfeirir at unigolion wrth eu henwau mewn unrhyw ddogfen lle disgrifir canlyniadau'r project. Ymdrinnir â'r wybodaeth o'r holiaduron a'r sesiynau adolygu bywyd â'r un rheolau cyfrinachedd ag a ddefnyddir fel rheol yn y GIG. Cedwir cyfrinachedd rhwng yr ymchwilydd, yr arolygydd a'r Hyfforddai neu'r Cynorthwy-ydd Seicoleg Glinigol sydd â rhan yn yr astudiaeth.

Mae cyfranogi o'r project hwn yn wirfoddol.
Mae gan unigolion yr hawl i wrthod cyfranogi ac maent yn rhydd i dynnu'n ôl <u>unrhyw</u> bryd.
<u>Ni</u> fydd penderfynu i dynnu'n ôl neu i gyfranogi yn effeithio ar unrhyw ofal y gall yr unigolyn ei dderbyn yn y dyfodol.

Mae croeso ichi ofyn unrhyw gwestiynau ynglŷn â'r astudiaeth i Sarah Morgan cyn penderfynu cyfranogi ai peidio.

Y cyfeiriad i gysylltu â hi yw:

Cwrs Seicoleg Glinigol Gogledd Cymru,
Adran Seicoleg,
43 Ffordd y Coleg,
Prifysgol Cymru, Bangor,
Bangor.

Cwynion.

Os byddwch yn teimlo'n anhapus ynglŷn ag unrhyw agwedd ar yr ymchwil hon, ac yn dymuno cwyno dylech ysgrifennu at:

Yr Athro C.F. Lowe,
Pennaeth yr Ysgol
Ysgol Seicoleg,
Prifysgol Cymru,
Bangor,
Gwynedd,
LL57 2DG.

Mr. K. Thomson,
Prif Weithredwr,
Ymddiriedolaeth GIG Gogledd Orllewin Cymru,
Penrhosgarnedd,
Bangor,
Gwynedd.

Cydsyniad.

'Rwyf yn cytuno i gymryd rhan yn yr astudiaeth hon. 'Rwyf yn deall beth mae'r astudiaeth yn ei olygu. Rhoddwyd y ffurflen hon i mi a chefais gyfle i'w darllen.

Llofnod: _____

Dyddiad: _____

Llofnod y Gofalwr: _____

Llofnod yr Ymchwilydd: _____

INFORMATION SHEET AND CONSENT FORM.

Adjustment Following a Move to a Residential Care Home: Can Reminiscence Help?

This information sheet contains information about the study described above. It is important that you read it carefully so that you will understand what will happen should you decide to take part in the research study.
I (Sarah Morgan) am training as a Clinical Psychologist at the University of Wales, Bangor. As part of this training I am carrying out a research study looking at how older people and their carers adjust after a move to a residential home, and whether reminiscing (talking about the person's life story) helps.

Everybody who decides to participate in the study will be seen three times to answer some questions about their mood and satisfaction with life. These interviews would take place over a three month period. Some people will be seen on a further 10 occasions to explore in more detail their life story, with a view to helping the person produce a life story book.

I would also hope to meet with the person's relatives and to involve them in the process. All individuals who decide to take part will be offered some time after completing the study to talk about the results.

Confidentiality.

All the information about participants will be anonymous. Individuals will not be referred to by name in any document in which the project results are described. The information from the questionnaires and life review sessions will be treated using the same confidentiality rules normally used in the NHS. Confidentiality will be maintained between the researcher, supervisor and other Clinical Psychology Trainee or Assistant involved in the study.

Participation in this project is voluntary.
Individuals have the right to refuse to participate and are free to withdraw at <u>any</u> stage.
The decision to withdraw or participate in the study will <u>not</u> affect any subsequent care that individuals may receive.

Please don't hesitate to ask Sarah Morgan any questions regarding the study before deciding whether to participate or not.

The address to contact her is:

North Wales Clinical Psychology Course,
Psychology Department,
43 College Road,
University of Wales Bangor,
Bangor.

Complaints.

If you feel unhappy about any aspect of this research and wish to complain, you should write to:

Professor C.F. Lowe,
Head of School,
School of Psychology,
University of Wales,
Bangor,
Gwynedd,
LL57 2DG.

Mr. K. Thomson,
Chief Executive,
North West Wales N.H.S. Trust,
Gwynedd Hospital,
Penrhosgarnedd,
Bangor,
Gwynedd.

Consent.

I agree to participate in this study. I understand what the study involves. I have been given this form and had a chance to read it.

Signature:_____

Date:_____

Signature of Carer:_____

Signature of Investigator:_____

Clinical Dementia Rating (CDR) - Hughes et al (1982)

	Healthy [CDR 0]	Questionable dementia [CDR 0.5]	Mild dementia [CDR 1]	Moderate dementia [CDR 2]	Severe dementia [CDR 3]
Memory	No memory loss or slight inconsistent forgetfulness	Mild consistent forgetfulness; partial recollection of events; benign forgetfulness	Moderate memory less, more marked for recent events; defect interferes with everyday activities	Severe memory loss; only highly learned material retained; new material rapidly lost	Severe memory loss; only fragments remain
Orientation	Fully oriented		Some difficulty with time relationships; oriented for place and person at examination but may have geographical disorientation	Usually disoriented in time, often to place	Orientation to person only
Judgement and problem solving	Solves everyday problems well; judgement good in relation to past performance	Only doubtful impairment in solving problems, similarities, differences	Moderate difficulty in handling complex problems; social judgement usually maintained	Severely impaired in handling problems, similarities, differences; social judgement usually impaired	Unable to make judgements or solve problems
Community affairs	Independent function at usual level in job, shopping, business and financial affairs, volunteer and social groups	Only doubtful or mild impairment, if any, in these activities	Unable to function independently at these activities though may still be engaged in some; may still appear normal to casual inspection	No pretence of independent function outside home	
Home and hobbies	Life at home, hobbies, intellectual interest well maintained	Life at home, hobbies, intellectual interest well maintained or only slightly impaired	Mild but definite impairment of function at home; more difficult chores abandoned; more complicated hobbies and interests abandoned	Only simple chores preserved; very restricted interests, poorly sustained	No significant function in home outside of own room
Personal care	Fully capable of self care		Needs occasional prompting	Requires assistance in dressing, hygiene, keeping of personal effects	Requires much help with personal care; often incontinent

Score as 0, 0.5, 1, 2, 3 only if impairment is due to cognitive loss

APPENDIX D. THE CLINICAL DEMENTIA RATING SCALE, (Hughes et al. 1982). See Hughes et al. (1982) for scoring method.

APPENDIXE.

The Life Satisfaction Index - Version A, (Neugarten, Havighurst, & Tobin, 1961). See Wood et al. (1969) for scoring method.

Measurement of Life Satisfaction

re are some statements about life in general that people feel differently about. Please read each statement on the list, and if you agree h it, put a cross in the space under "Agree". If you do not agree with the statement, put a cross under "Disagree". If you are not sure one or the other, put a cross under "Don't know".

IT IS VERY IMPORTANT THAT YOU ANSWER ALL QUESTIONS:

As I grow older, things seem better than I thought they would be.		
Agree ☐	Disagree ☐	Don't Know ☐
I have had more lucky breaks in life than most of the people I know.		
Agree ☐	Disagree ☐	Don't Know ☐
This is the most dreary time of my life.		
Agree ☐	Disagree ☐	Don't Know ☐
I am just as happy as when I was younger.		
Agree ☐	Disagree ☐	Don't Know ☐
My life could be happier than it is now.		
Agree ☐	Disagree ☐	Don't Know ☐
These are the best years of my life.		
Agree ☐	Disagree ☐	Don't Know ☐
Most of the things I do are boring or monotonous.		
Agree ☐	Disagree ☐	Don't Know ☐
I expect some interesting and pleasant things to happen to me in the future.		
Agree ☐	Disagree ☐	Don't Know ☐
The things I do are as interesting to me as they ever were.		
Agree ☐	Disagree ☐	Don't Know ☐
I feel old and somewhat tired.		
Agree ☐	Disagree ☐	Don't Know ☐
I feel my age, but it does not bother me.		
Agree ☐	Disagree ☐	Don't Know ☐
As I look back on my life, I am fairly satisfied.		
Agree ☐	Disagree ☐	Don't Know ☐
I would not change my past life, even if I could.		
Agree ☐	Disagree ☐	Don't Know ☐
Compared to other people my age, I have made a lot of foolish decisions in my life.		
Agree ☐	Disagree ☐	Don't Know ☐
Compared to other people my age, I have a good appearance.		
Agree ☐	Disagree ☐	Don't Know ☐

16. I have made plans for things I'll be doing a month or a year from now.

Agree	Disagree	Don't Know
☐	☐	☐

17. When I think back over my life, I haven't done most of the important things I wanted to do.

Agree	Disagree	Don't Know
☐	☐	☐

18. Compared to other people, I get down in the dumps too often.

Agree	Disagree	Don't Know
☐	☐	☐

19. I have got pretty much what I expected out of life.

Agree	Disagree	Don't Know
☐	☐	☐

20. In spite of what people say, the lot of the average man is getting worse, not better.

Agree	Disagree	Don't Know
☐	☐	☐

Thank you very much for taking the time and trouble to complete this questionnaire.

APPENDIXF

The Geriatric Depression Scale-SF And Scoring System, (Sheikh & Yesavage, 1986). Answers in capitals are given one point.

THE GERIATRIC DEPRESSION SCALE - SHORT FORM.

Are you basically satisfied with your life?	Yes	NO
Have you dropped many of your activities and interests?	YES	No
Do you feel that your life is empty?	YES	No
Do you often get bored?	YES	No
Are you in good spirits most of the time?	Yes	NO
Are you afraid that something bad is going to happen to you?	YES	No
Do you feel happy most of the time?	Yes	NO
Do you often feel helpless?	YES	No
Do you prefer to stay at home, rather than going out and doing new things?	YES	No
Do you feel that you have more problems with memory than most?	YES	No
Do you think it is wonderful to be alive now?	Yes	NO
Do you feel pretty worthless the way you are now?	YES	No
Do you feel full of energy?	Yes	NO
Do you fell that your situation is hopeless?	YES	No
Do you think that most people are better off than you are?	YES	No

Score 1 for answers in capitals.

0-4: Not depressed;

5 - 15 depressed.

APPENDIX G.

Demographic Details Of Individual Participants.

Table 31: Demographic Details At Point of Entry Into Project.

Case	Group	Age	Gender	Carer/ Relative	Marital Status	Home N= Nursing R- Residential	Time resident (months)	CDR
1	E	74	F	Son	Widow	N	12	2
2	E	79	F	Son	Widow	R	1	1
3	E	83	M	Son	Widow	R	1	2
4	E	73	F	Daughter	Widow	N	12	1
5	E	81	M	Niece	Single	R	18	1
6	E	84	F	Son	Widow	N	8	2
7	E	79	F	Niece	Widow	R	2	1
8	E	91	F	Niece	Single	N	2	1
9	C	95	F	Daughter	Widow	R	12	2
10	C	87	F	Daughter	Widow	R	12	1
11	C	84	F	Daughter	Widow	N	2	1
12	C	80	F	Son	Widow	N	5	2
13	C	87	M	Nephew	Widow	N	12	1
14	C	86	F	Niece	Single	R	18	2
15	C	69	M	Niece	Single	R	8	2
16	C	93	F	Niece	Widow	R	6	1
17	C	79	F	Daughter	Widow	N	3	1

APPENDIX H.

Individual Raw scores on all study measures at pre, post and follow-up assessment.

TABLE 32: Individual Participant Scores On The CDR.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	2	2	2
2	T	1	2	2
3	T	2	2	2
4	T	1	2	2
5	T	1	1	1
6	T	2	2	2
7	T	1	1	1
8	T	1	1	1
9	C	2	2	2
10	C	1	1	1
11	C	1	1	1
12	C	2	2	2
13	C	1	1	1
14	C	2	2	2
15	C	1	1	1
16	C	1	1	1
17	C	1	1	1

TABLE 33: Individual Participant Scores On The Geriatric Depression Scale-Short Form.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	12	8	7
2	T	9	7	3
3	T	11	8	6
4	T	7	1	3
5	T	3	3	2
6	T	9	9	8
7	T	5	4	2
8	T	6	10	5
9	C	4	3	1
10	C	8	9	9
11	C	10	10	12
12	C	6	8	7
13	C	6	5	11
14	C	6	4	5
15	C	9	8	8
16	C	2	3	2
17	C	5	4	5

TABLE 34: Individual Participant Scores On The Rosenberg Self-Esteem Measure.

Please note that low scores equal high self esteem.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	26	25	24
2	T	23	25	22
3	T	21	21	18
4	T	24	23	22
5	T	15	19	11
6	T	25	23	22
7	T	18	18	19
8	T	14	14	16
9	C	25	23	18
10	C	18	26	25
11	C	26	22	26
12	C	24	27	28
13	C	29	31	33
14	C	29	19	21
15	C	19	20	21
16	C	20	20	21
17	C	25	20	20

TABLE 35; Individual Participant Scores On The Life Satisfaction Scale-A.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	16	16	17
2	T	16	19	23
3	T	13	21	22
4	T	14	14	15
5	T	23	20	29
6	T	13	10	9
7	T	18	19	26
8	T	13	17	13
9	C	23	20	29
10	C	10	9	10
11	C	12	7	2
12	C	10	17	16
13	C	12	17	9
14	C	28	28	29
15	C	15	17	19
16	C	22	22	23
17	C	11	10	12

TABLE 36: Individual Participant Scores On The Personal Semantic Schedule of the AMI.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	48.5	37	39
2	T	16	36	31
3	T	11	12	15.5
4	T	32	27.5	26
5	T	13	33	25
6	T	32.5	47	36.5
7	T	24	49	52
8	T	23	52	51
9	C	5	2	0
10	C	41.5	35.5	34
11	C	32	52.5	23
12	C	15.5	12	10
13	C	20.5	13.5	12
14	C	23.5	18	16
15	C	22	23	20
16	C	39	35	33
17	C	24.5	19.5	22

TABLE 37: Individual Participant Scores On The Autobiographical Incident Schedule of the AMI.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	17	7	8
2	T	9	7	13
3	T	4	6	7.5
4	T	14	3	2
5	T	17	2	1
6	T	6	14	4
7	T	15	11	22
8	T	9	20	20
9	C	0	0	0
10	C	9	12	10
11	C	7	16	0
12	C	8	12	12
13	C	9	7.5	5
14	C	1	0.5	0
15	C	1	12	10
16	C	11	8	10
17	C	10	11	10

TABLE 38: Individual Participant Scores On The Zest vs. Apathy Life Satisfaction Subscale-A.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	6	9	8
2	T	4	4	7
3	T	1	8	7
4	T	0	4	4
5	T	8	5	7
6	T	6	6	4
7	T	8	3	8
8	T	2	2	4
9	C	10	6	10
10	C	2	2	2
11	C	6	0	0
12	C	2	1	2
13	C	2	6	2
14	C	4	7	8
15	C	6	7	8
16	C	8	6	6
17	C	5	2	3

TABLE 39: Individual Participant Scores On The Resolution and Fortitude Subscale of the Life Satisfaction Scale-A.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOWUP
1	T	4	2	3
2	T	2	2	4
3	T	4	6	6
4	T	4	1	4
5	T	1	3	6
6	T	2	0	1
7	T	2	6	6
8	T	4	5	2
9	C	3	3	5
10	C	2	3	3
11	C	2	4	2
12	C	2	1	2
13	C	4	5	2
14	C	6	5	6
15	C	2	3	3
16	C	4	6	6
17	C	2	2	3

TABLE 40: Individual Participant Scores On The Congruence between desired and achieved goals subscale on the Life Satisfaction Scale-A.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	4	2	3
2	T	6	6	5
3	T	6	5	6
4	T	6	2	4
5	T	4	4	6
6	T	4	2	2
7	T	6	2	6
8	T	3	6	5
9	C	6	2	6
10	C	2	4	3
11	C	0	3	0
12	C	4	4	6
13	C	4	4	4
14	C	6	6	5
15	C	4	4	4
16	C	2	2	3
17	C	4	2	2

TABLE 41: Individual Participant Scores On The Mood Tone Subscale of the Life Satisfaction Scale-A.

CASE	GROUP	PRE-TEST	POST-TEST	FOLLOW-UP
1	T	2	3	3
2	T	4	7	7
3	T	2	2	3
4	T	4	7	3
5	T	10	8	10
6	T	1	2	2
7	T	2	8	6
8	T	4	4	2
9	C	4	9	8
10	C	4	2	2
11	C	4	0	0
12	C	2	1	6
13	C	2	2	1
14	C	12	10	10
15	C	3	3	4
16	C	8	8	8
17	C	0	4	4

APPENDIX I:

Results Of Independent T-Tests On The Data Collected By The Assistant Psychologist And Primary Researcher At Post-Intervention And Follow Up.

Table 42: Means, Standard Deviations and Independent T-Test Results At Post-Intervention.

Measure	Primary Researcher (n=9) Mean	s.d.	Assistant Psychologist (n=8) Mean	s.d.	t value (df=15)	Significance
CDR	1.66	0.50	1.25	0.46	1.78	.10
GDS	6.33	3.16	5.88	2.70	0.32	.75
RSE	23.44	2.55	20.63	4.80	1.51	.15
LSI-A	15.88	5.01	17.50	5.93	-0.61	.55
PSS	27.50	15.86	32.13	15.58	-0.61	.55
AIS	7.22	5.26	10.50	5.61	-1.24	.23
Zest (LSI-A Subscale)	4.33	3.04	4.90	2.17	-0.42	.68
Resolution (LSI-A Subscale)	2.80	1.56	4.00	2.14	-1.36	.20
Congruence (LSI-A Subscale)	3.60	1.42	3.50	1.77	0.07	.90
Mood (LSI-A Subscale)	4.33	3.39	5.13	3.09	-0.50	.62

Table 43: Means, Standard Deviations and Independent T-Test Results At Follow-Up.

Measure	Primary Researcher (n=9) Mean	s.d.	Assistant Psychologist (n=8) Mean	s.d.	t value (df=15)	Significance
CDR	1.70	0.50	1.25	0.46	1.78	.10
GDS	5.44	3.50	5.75	3.11	-0.19	.85
RSE	21.60	5.19	21.63	5.00	-0.03	.97
LSI-A	18.11	8.78	17.5	7.90	0.15	.88
PSS	22.60	12.28	30.31	15.40	-1.15	.27
AIS	5.94	5.24	10.13	7.60	-1.33	.20
Zest (LSI-A Subscale)	5.22	3.35	5.40	2.44	10.11	.92
Resolution (LSI-A Subscale)	3.90	1.54	3.60	2.06	0.30	.77
Congruence (LSI-A Subscale)	4.33	2.06	3.90	1.50	0.52	.61
Mood (LSI-A Subscale)	4.70	3.24	4.63	3.20	0.03	.97