REMINISCENCE GROUP THERAPY WITH ELDERLY INSTITUTIONALIZED CLIENTS

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by

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ABSTRACT

A controlled pre-post research design was used to test whether reminiscence group therapy had unique effects which were particularly beneficial to the psychological well-being of elderly institutionalized adults (the reminiscence model) or whether the social interactions of a discussion group was the factor responsible for any benefits observed in psychological well-being (the social interaction model). Also investigated was the question of whether improved psychological well-being generalized to better mood, higher activity level and more positive activity on the ward. Finally, the question of whether greater participation in the therapy group led to greater improvement in psychological well-being was studied. Twenty-four subjects were selected from St. Luke's Home in St. John's Nfld. and were randomly assigned to one of three groups: a reminiscence treatment group; a treatment control group focussing on current topics; and a no-treatment control group. Eight 30-minute therapy sessions were held for subjects in groups one and two at the rate of two sessions per week. Results showed a significant improvement in psychological well-being in both treatment groups whereas there was no improvement for the control group. Mood was also significantly improved in both treatment groups. Higher activity levels and improved ward behavior were not found as a result of either intervention. A significant correlation was found between greater group participation and greater psychological well-being. Results were interpreted as supporting the social interaction model. Reminiscence group therapy was not found to have uniquely beneficial effects; rather, a discussion group of either format was found to be an effective method of increasing psychological well-being in elderly institutionalized adults.

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INTRODUCTION

Over the past few decades, the question of how elderly people successfully adapt to and cope with old age has been the focus of a great deal of speculation, theory and research. Investigators and practitioners in gerontology aim to incorporate such information into programs and strategies designed to assist the older individual who may be suffering from such problems as diminished self-esteem, feelings of loneliness, uselessness and dissatisfaction with life. It has been suggested that reminiscence, the practice of recalling past events and experiences, serves a positive adaptive function in the aging process (Butler, 1963; Erikson, 1950; Lewis, 1971; Lewis and Butler, 1974; McMahon and Rhudick, 1964). Also, recent evidence has suggested that reminiscence may serve as an effective component of therapy (Greene, 1983; Szapocznick, Kurtines, Santiseban and Perez-Vidal, 1981; 1982) or may be a valuable therapeutic technique in itself in the psychological treatment of the elderly. Researchers have reported that reminiscence therapy serves to increase social interactions between elderly clients within group sessions (Baker, 1985; Hala, 1975; Kiernat, 1979; Lesser, Lawrence, Lazarus, Frankel and Havasy, 1981; Matteson and Munsat, 1982; Norris and Eileh, 1982; Parsons, 1986) and may alleviate depression and improve the psychological well-being of clients (Lewis and Butler, 1974; Matteson and Munsat, 1982; Parsons, 1986).

To date, the study of reminiscence has been conducted primarily in an exploratory rather that rigorous and systematic fashion. The few empirical studies available in this area have been criticized for serious methodological problems the most notable of which are a lack of adequate dependent measures and controls (Merriam, 1980; Romaniuk, 1981) consequently, findings with regard to the effectiveness of reminiscence as a therapeutic technique are inconclusive.

The purpose of this study was to test whether reminiscence group therapy had unique effects which were particularly beneficial to the psychological well-being of elderly institutionalized adults (the "reminiscence model") or whether the social interactions of a discussion group was the factor responsible for any benefits observed in psychological well-being (the "social interaction model"). Also investigated was the range of benefits which resulted from improved psychological well-being. To this end, subjects' mood and activity level were measured over the course of therapy. The question of whether the effect on psychological well-being generalized to increased positive behavior on the ward was studied. Finally, the question of whether greater participation in the therapy group led to greater improvement in psychological well-being was investigated.

Reminiscing is defined in the dictionary as "the process or practice of thinking or telling about past experiences" (Webster's Third International Dictionary). In the literature, reminiscence is defined in a number of ways. In his 1971 investigation, Lewis conceptualized reminiscence as "involving the process of memory, with the added action property of reaching out to infuse others with these memories" (p. 240). Havinghurst and Glasser (1972) refered to it as "day dreaming about the past" and also as "retrospection, both purposive and spontaneous" (p. 245). Reminiscing can be oral or silent, goal-directed or directionless, broad or narrowly focussed, entertaining or serious. Although the definitions differ somewhat across the studies, reminiscence is typically viewed as a "general concept referring to any mental and verbal activity involving the recall of past events and experiences" (Romaniuk, 1981; p. 316).

The following review of the reminiscence literature is divided into three major categories: (i) theoretical literature, (ii) empirical research into reminiscing and adaptation to aging, and (iii) reminiscence as a therapeutic technique.

THEORETICAL LITERATURE

Recent interest in reminiscence can be attributed to Robert Butler (1963; 1974). Although people of all ages after middle childhood seem to reminisce (Giambra, 1974), Butler and other theorists, such as Erikson (1950) have attributed special significance to its occurrence later in adulthood. For Butler, reminiscence is not synonoymous with life review; rather, life review includes reminiscing. From his clinical observations and work experience with elderly clients, Butler postulated that, prompted by biological decline and the awareness of approaching death, older people experience the need to review their life (1963). The life review is not merely a passive recollection of past experiences; rather, it is an active evaluation process which is defined by Butler as, "a naturally occurring, universal mental process characterized by the progressive return to consciousness of past experience, and particularly, the resurgence of unresolved conflicts; simultaneously and normally, these revived experiences and conflicts can be surveyed and reintegrated" (Butler, 1963; p. 66).

Butler states that the life review may have a positive or negative outcome. Through the review, previous experiences and unresolved conflicts are subject to reintegration which may serve to strengthen the ego and reorganize the personality. In this way, the life review process may have a positive, adaptive value. Reevaluating past experiences and their meaning may result in acceptance if one is generally satisfied with one's past.

Depending upon the individual's life-long character and the events in his/her past, the life review may result in a negative outcome. Butler and his colleague Myrna Lewis write, "the life review, by its very nature, evokes a sense of sadness at the brevity of life and regret, plus possibly guilt and depression, over missed opportunities, mistakes and wrong doings" (Lewis and Butler, 1974; p. 169). For some, reevaluating their past may be particularly damaging. A person may become panicked, terror-stricken or possibly suicidal if he/she has decided

irrevocably that life was a complete waste. Butler's statement that the life review may have a negative outcome is in accord with Erikson (1950) who maintains that if a review of the past indicates that one's life was not, on the whole, a successful one and the individual desires to change it or re-live it, then acceptance is not achieved and despair, rather than integrity, will result. Despair in later life may be marked by a fear of death or the experience of time being too short. Butler and Lewis argue that a negative outcome to the life review is only likely to happen when an individual makes judgements about his experiences on his own, without testing or sharing them (1974).

Butler first advanced life review therapy as a way for the clinician to help the elderly person who may be having difficulty adapting to old age (Butler, 1963; Lewis and Butler, 1974). Reminiscence is the key component of life review therapy. The therapist does not initiate the life review process; rather, he or she "taps into" the ongoing selfanalysis and "participates in it" with the goal of enhancing the review, making it more conscious, deliberate and efficient (Lewis and Butler, 1974; p. 166). According to Butler, by encouraging the client to reminisce about his/her past, the therapist provides the clients' ego with the opportunity to reorganize past experiences in such a way as to come to terms with past conflicts and relationships and thereby the client may come to acquire new meaning and satisfaction with their life (Butler, 1963).

Lewis and Butler (1974) suggest several methods to encourage reminiscing such as: having the client write or tape an autobiography, construct their family tree, go on a pilgrimage back to the location of their childhood, youth and/or young adult life (in person if possible, or through correspondence), engage in a reunion (school, family, church etc.), or simply go over any scrap books, photo albums, old letters and other memorabilia the client may have. As the past is recalled, the therapist looks for the emotional impact of memories and the emphasis, de-emphasis or omission of crucial areas of memory.

Lewis and Butler (1974) state that clinicians may hesitate to make use of life

review therapy (or psychotherapy in general) out of the concern that old people are psychologically fragile people, especially if they look physically fragile. They remind us that the elderly client is not inexperienced in dealing with stressful or painful events; rather, they are "master survivors" as compared to the young. These investigators argue that most elderly individuals are able to struggle to resolve old issues of guilt, bitterness etc. and have the capacity to find meaning and reconcile their lives, especially in the presence of acceptance and support from others.

Like Butler, Ebersole (1978) maintains that the tendency to reminisce is a means of accomplishing the major developmental tasks of the aged namely "the development of wisdom and psychological integrity and a personal resolution of finitude" (p. 150-151). From her review of the literature, Ebersole identifies 13 functions of reminiscence in late adulthood. Reminiscing: (1) expands one's concept of time; (2) transcends the material world and physical limitations; (3) aids in the development of a philosophy of life; (4) keeps the totality of a person ever present; (5) provides a legacy; (6) preserves culture; (7) establishes the continuity of human experience; (8) allows for self-actualization through creative expression of the individual's experience; (9) promotes self-understanding; (10) expands consciousness; (11) reinforces coping mechanisms; (12) preserves personal and collective history; and (13) allows for identification of universal themes of humanity.

The conceptual framework for life review therapy is not empirically based, rather it is derived principally from speculation and clinical observations which have not been rigorously tested and validated. Romaniuk (1981) notes that many of the key components (such as "ego integrity" and "meaning in life") are vague or non-observable and have not been operationally defined or tested. A few studies have attempted to determine empirically what function, if any, reminiscence serves in adaptation to aging.

REMINISCENCE AND ADAPTATION TO AGING

EMPIRICAL RESEARCH

As stated above, Butler explicitly distinguishes life review from reminiscence. He regards reminiscence to be a part of the life-review process--a mechanism that assists one in recalling one's life. Other authors categorize life review as a type of reminiscence. One such author is Coleman, who in 1974 undertook to describe the content and function of reminiscence. After stating to subjects his interest in the way older people view the past and present, he recorded their subsequent conversations during social visits at the subject's home. Coleman identified three different types of reminiscence. The first is simple reminiscing. Defined as recalling the past, simple reminiscence is used in most of the research attempting to investigate the role or function of reminiscence in old age. Informative reminiscing, likened to story telling (McMahon and Rhudick, 1967), is the second type of reminiscence. The function of informative reminiscing is to bring forth a variety of interesting experiences for the purpose of entertainment or, as Coleman states, "to use the past to teach others the lessons of experience" (p. 289). The third type of reminiscence is the life review. It is an evaluative process which serves the purpose of bringing some cognitive and emotional clarification to life experiences and includes the dimension of analysis; in looking back over one's life, one not only remembers but also evaluates experiences while trying to come to terms with past guilts and regrets.

LoGerfo (1980) proposes three slightly different types of reminiscence: informative, evaluative and obsessive. Informative reminiscence focuses on factual or mythicized material which is recalled for the pleasure of reliving and retelling and can serve the purpose of enhancing self-esteem. Evaluative reminiscence is based on Butler's concept of life review as outlined above. This type of reminiscence may help an individual attain the ego integrity as postulated by Erikson (1950). The third type is obsessional reminiscence, or preoccupation with the past. It may be indicative of a person's inability to accept their past because

of overwhelming guilt or grief. Obsessional reminiscence may be precipitated by a stressful present experience and may allow the individual to withdraw into the past, thus preventing mobilization of energy toward new activities.

LoGerfo argues that an understanding of the basic types of reminiscence and their implications would be a great advantage in helping people to use their memories of the past to aid them in the present; however, little systematic research has been directed to the study of the content and function of reminiscence behavior. Also, the studies that have been done suffer methodological problems. Romaniuk (1981) maintains that a critical problem is the inadequacy of the definition and measurement of reminiscence. For example, the approach used by Coleman (1974) to operationally define reminiscence as references to the past made during "non-directive" interviews presents several problems. Subject's knowledge that their conversation is being recorded and scrutinized may bias the findings plus there is a potential bias of the experimenter's influence on the course and content of the conversation. Furthermore, reminiscence revealed in conversation cannot be assumed to be a valid index of general reminiscence activity because reminiscence is also a private, non-verbal activity and such private thoughts may serve different functions than public recollections of the past (Romaniuk, 1981). Finally, the context (setting, instructions) in which data were collected may not be an adequate representation of the "natural" circumstances surrounding conversational reminiscence. These problems must be considered in evaluating the external validity of the findings.

In addition to the question of types of reminiscence, there is also the question of the effect reminiscence has on the individual. Some investigators, such as Butler (1963), propose that reminiscence aids in adjustment or adaptation to late adulthood. A few individuals have attempted empirical study of this issue, however, research in this area has been primarily exploratory in nature and findings remain controversial.

In a 1964 study, McMahon and Rhudick focused on the adaptive value of

reminiscence in late adulthood. These investigators studied a group of 25 Spanish-American war veterans between the ages of 78 and 90 (mean age = 84 years). Most of these men were found to be above average in health and intelligence. It was also noted that in informal interviews, much of the content of their conversations consisted of reminiscing. McMahon and Rhudick attempted to determine if an increase of reminiscence in the aged signified a coping behavior and, if so, did it facilitate adaptation to aging. They used the criterion of absense of depression as a measure of successful adaptation and attempted to relate it to the amount of reminiscence in their subjects. A "non-directive" interview was conducted with the subject being instructed to talk about whatever he wished. References to the past were recorded from the taped conversations.

Reminiscence in the subjects was not correlated to level of intellectual competence (as measured by the Weschler-Bellevue Intelligence Test, 1944) or to the decline of intellectual abilities with age. Results showed that non-depressed subjects reminisced more than those who were depressed; however, the differences in frequency of reminiscence was just short of statistical significance. A relationship between depression and mortality was found after a one-year followup; to be exact, seven of nine subjects rated as depressed as compared to one of 16 nondepressed subjects died within one year of the study. Unfortunately, the relationship between survival and reminiscence was not examined at the time of followup.

Of the non-depressed subjects, three characteristic types of reminiscers were distinguished. The first type talked of "the good old days", deprecating the present and glorifying the past. McMahon and Rhudick noted that this type of reminiscence involved a lot of personal fantasy and they believed it to have positive adaptive elements. The second type of reminiscer was the life reviewer (Butler, 1963). He reviewed, evaluated and was seen as coming to terms with life as it was lived. The third type were storytellers and seemed to derive pleasure from being both entertaining and informative. A fourth group were depressed

and had difficulty in reminiscing plus they tended to reminisce less than the non-depressed groups. When they did reminisce, their reminiscence was repeatedly interrupted by anxiety about their physical well-being, failing memory, personal losses and a sense of inadequacy. The types of reminiscence found by McMahon and Rhudick are not unlike those later reported by Coleman (1974) and LoGerfo (1980), as outlined earlier.

McMahon and Rhudick concluded that reminiscence was positively related to successful adaptation to old age as measured by absense of depression. They regarded reminiscence to be a means of maintaining self-esteem, reaffirming a sense of identity, and a means of coping with depression in the face of declining physical capacities and personal losses. However, as noted by Priefer and Gambert (1984), these results must be interpreted with caution as it is unclear whether frequent reminiscence leads to less depression or whether people who are not depressed have more mental energy to reminisce.

Costa and Kastenbaum (1967) explored the relationship between remembering the past and one's future outlook. They asked 267 centenarians to identify their earliest memory and the most exciting event and most salient historical event in their lives and then correlated these items with items related to their future ambitions. Costa and Kastenbaum proposed that remembering the past offers a means for creating a perspective on one's present and future. They reported that centenarians who were able to offer responses for all memory items more frequently stated future ambitions than did their peers who had less command over their past. Still, a causal relationship cannot, of course, be inferred from such correlational data.

In another exploratory study, Havinghurst and Glasser (1972) attempted to study the frequency, affective quality, content and function of reminiscence through self reports on a questionnaire. Data were obtained from 204 men and 324 women who were well educated, middle class community residents (all over age 62, most between ages 70-75). After separating and comparing the high

frequency reminiscers with low frequency reminiscers, they found an association between high frequency of reminiscence, positive affect of reminiscence and personal-social adjustment; however, relationships were weak and no conclusion could be reached as to causation. Havinghurst and Glasser also reported that a majority of the respondents engaged in both oral and silent reminiscence. No differences were found between men and women in either the frequency or affective quality (positive or negative) of reminiscence. The authors concluded that the phenomenon of reminiscence is "caused by a multiplicity of factors in the personality and the life experience of a person, therefore, no single variable can be highly correlated with either the frequency or affective quality of reminiscence" (Havinghurst and Glasser, 1972; p. 253).

Another study to investigate the relationship between reminiscence and adaptation was conducted by Liberman and Falk in 1971. Liberman and Falk explored specifically the role of reminiscence in adapting to stress. They examined reminiscence in elderly people who were living in the community and did not anticipate institutionalization, those who were waiting to enter nursing homes, and those who were long term residents of institutions. It was found that the group who were waiting to go into an institution and were thereby in the most unstable life situation and facing imminent change, were considerably more involved with reminiscence that either of the other two groups. However, a subsequent investigation of the role of reminiscence in adapting to the stress of moving into an institution revealed no relationship between these variables. On the basis of these results, the authors concluded that "the adaptive function of reminiscence activity is questionable" (Liberman and Falk, 1971; p. 141).

Another study to explore the role of reminiscence in adapting to stress was conducted by Lewis (1971). He hypothesized that reminiscence could be considered adaptive if its presence would promote consistency in an individual's self-concept. That is, since old age is often considered to be a time when one's self-esteem is lowered, identification with the past through reminiscing may be a

coping strategy employed by an elderly person to counteract current threats to their self-concept. Consistency in self-concept was operationalized by the degree to which a subject's conception of how they used to be correlated with how they perceived themselves to be in the present. Subjects were 24 community residents (average age was 73 years).

In the first of two sessions, two Q sorts were administered to determine present self-concept and past self-concept, respectively. Then, a "non-directive" interview was conducted from which subjects were designated as reminiscers or non-reminiscers depending on whether 40% or more of their sentence units referred to events over five years in the past. During the second session, subjects were placed in the socially stressful situation of having their expressed opinions threatened. Finally, the Q sorts and the reminiscence interview were conducted again. Lewis predicted: (i) the reminiscers would show greater consistency between how they perceive themselves in the present and their conception of how they used to be; (ii) when faced with an experimental social threat, reminiscers should further reduce the discrepency between their past and present self-concepts compared to non-reminiscers; and (iii) if a allowed to reminisce following the threat, reminiscence should reduce the discrepency even further.

The first hypothesis was not supported: reminiscers did not show a greater consistency between past and present self-concepts than non-reminiscers. Support for the second hypothesis was found: when their expressed opinions were threatened, reminiscers showed a significant increase in the correlation between their past and present self-concepts as compared to non-reminiscers. The third hypothesis was not supported. Lewis interpreted the suppport of the second hypothesis to mean that by going over past experiences the group of reminiscers were able to "identify with their pasts and avoid the full impact of present ego stresses that inevitably accompany old age" (1971; p. 242). He argued that reminiscing may be a way of maintaining the self-esteem. However, because Lewis utilized "non-directive" interviews to identify reminiscers, his findings, like

those of Coleman (1974), must be interpreted with caution. As reported earlier, this procedure may be biased by the subject's knowledge that his/her conversation is being recorded or by the experimenter's influence on the course and content of the conversation.

Summary

From the preceding studies exploring the possible adaptive function of reminiscence in late adulthood, only the most tentative conclusions can be drawn. Studies suffer from procedural differences and methodological problems that make clear comparisons and the drawing of reliable conclusions difficult (Merriam, 1980; Romaniuk, 1981). Studies have typically used non-random samples and have employed subjects varying in age, educational and health status and living situations, limiting the direct comparison of findings (Romaniuk, 1981). Another problem, the implications of which are outlined earlier, concerns the measurement of reminiscence as being references to the past that the subject makes during "non-directive" interviews (Coleman, 1974; Lewis, 1971; McMahon and Rhudick, 1964). However, a better method by which to measure reminiscence has not yet been proposed.

Some findings appear to suggest that reminiscence serves an adaptive function and contributes to the psychological well-being of the elderly, thereby supporting the theoretical view of Butler (1963). On the other hand, some studies found little, if any, relationship between adaptation and reminiscence. Also, the correlational nature of many designs precludes the conclusion of a causal relationship between the variables. The only study to include an experimental component was that by Lewis (1971) who found some evidence to suggest that reminiscing may be a strategy employed by some elderly people to maintain self-esteem. Clearly, more research is needed before definitive statements can be made about the function of reminiscence in relation to adaptation to aging.

REMINISCENCE AS A THERAPEUTIC TECHNIQUE

The literature contains several studies in which reminiscence group therapy has been utilized with elderly clients. In the majority of these studies, subjects were residents in institutional settings. A few studies were conducted with subjects recruited from the community. For the most part, research in this area has been conducted informally by staff professionals of institutions whose primary goal was to improve the quality of life for their patients, not to produce good research. Their goal is an important one and their efforts have served to generate a great deal of interest in what could be an effective therapy. However, because projects have not been undertaken as controlled scientific studies, findings must be considered tentative and subject to confirmation by formal study.

The following is a review of the studies utilizing the process of reminiscence in group therapy with elderly clients. The studies have been placed into two broad categories: (i) those which are very informal and exploratory, having no controls or dependent measures and; (ii) those which have utilized some type of dependent measure.

(i) Exploratory Studies

The informal studies are similar in design. Subjects were usually residents of institutions for the elderly who were approached individually and asked to participate in the group. They varied in terms of diagnosis including those who are described as confused, depressed or psychotic. Generally, the only criteria for subjects was that they were capable of hearing, speaking and were willing to participate in a group. Sessions were usually conducted with approximately 6-8 members per group. They were typically 30-45 minutes in length and were held once or twice a week. The total number of sessions varied among studies, however, most investigators chose to use between five to ten sessions for therapy.

Group procedure was generally the same, that is, in each session a new topic was presented for discussion and each group member was given the opportunity to share some experience or memory pertaining to that topic. Topics were presented in chronological order progressing from childhood to topics in adulthood (such as work experience, marriage, child rearing etc.). Reported findings from these studies were all positive. Specifically, group members were reported to socialize more as a result of the therapy.

Owing to the major limitations of their design, little information can be gained from these exploratory studies. First of all, these studies failed to use any empirical measures of dependent variables, without which definitive statements about the effects of reminiscence therapy cannot be made. Secondly, as no control groups were used, researchers cannot conclude that any resulting benefits of reminiscence therapy are not due simply to the passing of time. Finally, as none of these studies utilized a treatment control group, it cannot be ascertained whether reminiscence tharapy has unique effects of particular benefit to the psychological well-being of the subject or whether the mere social interactions of a discussion group is the factor responsible for any benefits observed in psychological well-being. Having outlined their major shortcomings, the following is a review of exploratory studies in reminiscence group therapy.

In 1975, Hala reported on the use of reminiscence group therapy as a nursing intervention to increase self-esteem and social interaction of 16 residents in a long-term geriatric facility. A heterogeneous group of subjects was selected for therapy. Some were included because they socialized well and could encourage interaction among group members. Others were identified because they lacked social skills. Some were too shy to talk initially, but they enjoyed hearing about the past. Of the 16 subjects who attended the first meeting, 14 attended the group regularly. Two individuals expressed no interest in the sessions. No details were provided as to the specific topics discussed. Empirical measures were not used. Hala did provide a description of behavior for the 8 subjects who were

involved in therapy over the longest period of time. Observations were reported both prior to the reminiscence therapy and after the group had been in progress over the period of one year.

In general, Hala observed an increased desire to participate in group sessions. Sessions frequently lasted longer than planned scince members wanted to continue talking. They learned that they had many common areas of interest and shared similar opinions and feelings. The staff reported social interactions taking place between sessions. Socialization and participation in other kinds of activities was also noted to have increased. However, while it seems that there were beneficial effects as a result of reminicence therapy, such claims need to be substantiated through the use of empirical measures and controls.

A 1982 study by Norris and Eileh involved six male patients from a psychogeriatric ward. The goal of these investigators was to create a situation in which the elderly patients felt they had something useful to offer from the resources they themselves possessed. It was hoped that reminiscing about important aspects of their lives to others would help their sense of personal identity. The subjects were characterized by a wide degree of functioning and their diagnoses ranged from depression to senile dementia. Group sessions were conducted twice a week for five weeks. A session length of 30 minutes was chosen based on the shorter attention span demonstrated by elderly clients. The group leader began the sessions by asking each member in turn something about the topic of the day. Topics such as family, places where members has lived, jobs, hobbies and war-time memories proved to be easy for most to talk about on the basis of personal experience.

Norris and Eileh claimed the group was successful, despite the absence of any empirical measures or controls. Subjects were reported to have showed an increase in social interactions and were said to have enjoyed the group experience. They "participated enthusiastically" in sessions and "talked about it afterwards with other nurses in the ward" and their contributions became more "animate

and spontaneous" (p. 1369). However, without direct assessment of valid dependent measures, it cannot be concluded that subjects in fact engaged in an increased number of social interactions, nor that the group experience contributed to their happiness and well-being. Furthermore, without adequate controls (such as a non-reminiscence therapy group and a no-treatment control group) the efficacy of reminiscence therapy cannot be evaluated in the absence of alternate explanations of the results.

Matteson and Munsat (1982) conducted reminiscence group therapy with seven intermediate-care institutionalized elderly clients, six of whom were diagnosed as mildly to severely depressed (the basis for diagnosis was not stated). Eight weekly sessions were held. Each session was 30 minutes in duration. The topics planned for discussion included childhood, marriage, World War I, child rearing, work experience, the Depression, World War II, and the advent of television. Co-leaders of the group worked initially to promote group cohesiveness and to deliniate the basic norms of the group. Desirable group norms which were encouraged included confidentiality, interest in each one of the members and a nonjudgemental attitude. To promote cohesiveness, the leaders emphasized similarities between members, such as commenting on similar backgrounds and shared childhood interests. At the beginning of each session, the leaders introduced the topic, directed discussion and summarized thoughts and feelings at the end. As sessions continued, summary statements of the previous meeting were made at the outset in order to refresh memories and to provide continuity from one session to another.

Matteson and Munsat concluded that by the end of the sessions the social and emotional isolation of the group members was decreased and from comments from group members and staff, they report that there were increased social interactions between members outside of group time. However, no empirical data were provided to verify these claims. The authors also maintained that those members who were diagnosed as depressed prior to therapy showed a significant

improvement. Again, the absence of any objective measures precludes this conclusion.

Reminiscence group therapy was compared to a traditional therapy approach with elderly psychotic inpatients in a 1981 study by Lesser, Lawrence, Lazarus, Frankel and Havasy. Six subjects were involved in the study, three of whom were diagnosed as having a major depressive disorder, two were diagnosed as having psychotic organic brain syndrom and one was a chronic schizophrenic. These investigators first conducted a supportive type of group for 11 weekly sessions but failed to achieve any group cohesiveness. They encountered such problems as silence, apathy, passivity and discussion of nongroup issues (such as inquiries about a physical problem or medication change (etc.). They then switched to a reminiscence group which met twice weekly for 45 minutes. A reminiscent topic was introduced at the beginning of each meeting. Topics were chosen to reflect a particular stage of the life cycle such as the first day of school, dating and work experiences etc. The authors report that after the adoption of a reminiscent format, the group underwent noticeable changes. The previous tone of apathy and passivity was replaced by considerable "animation.". Group silences were less common, as well, group members who rarely spoke during the traditional group therapy now talked spontaneously. Discussion of nongroup issues decreased. Also, as the reminicscence group progressed,there was more communication between members and a reduction of patient-therapist interactions (that is, patient-patient interactions increased).

The authors speculated that the success of the reminiscence group was due to the fact that "the patients perceived the act of reminiscing as a comfortable and familiar one, and as an activity for which they possess both competence and control" (Lesser et al, 1981; p. 295). While the overall results of the study are clearly positive, it remains an unsystematic, exploratory study, with no empirical measurement of dependent variables. Also, the question remains as to whether or not any beneficial effects observed during the reminiscence group would be found to generalize outside of the group.

(ii) Research Studies

The second group of studies included some type of dependent measure. Group therapy sessions were conducted largely in the same manner and for the same duration as in the exploratory studies. In most cases, investigators have used a simple pre-post research design, measuring the dependent variable(s) at the beginning and end of therapy. As is the case of the exploratory studies, this design is limited by the lack of a separate control group. Without a suitable control, it can be argued that the passing of time is the factor responsible for the change in the dependent variable(s). Also, the majority of research studies have failed to use a treatment control group. As outlined previously, without a treatment control, it cannot be known whether there is a beneficial effect on psychological well-being unique to reminiscence or whether the social interactions of a discussion group is the factor responsible for improvements in psychological well-being. The following is a review of research studies in reminiscence therapy.

Kiernat (1979) used reminiscence therapy with 23 elderly nursing home residents who were described as confused. Subjects were divided into three groups, each meeting twice a week for ten weeks. Topics for reminiscence were presented in a chronological order beginning with childhood experiences and ending with recent experiences. Multisensory materials were used to stimulate the reminiscence process such as: printed pictures, slides, period clothing and old catalogues. In addition, corn popping added sound and smell to a circus discussion and pumpkin pie strengthened the Thanksgiving Day discussion. Group members were rated on their behavior both in the group (Group Behavior Scale - GBS) and on the ward (Ward Behavior Scale - WBS). Ratings were made at the outset of the therapy, midway and at the end of therapy.

The nursing home staff selected five observable behaviors which they agreed would be indicators of improvement in the confused patients selected for therapy.

Items to be rated (on both the GBS, WBS) were: facial expression, extent of conversation, attentiveness to group, presence of nonpurposeful behavior and attendance. One rater determined whether the subject fell within the group norm, or above or below the norm for these behaviors as compared to their reference group. The reference group for the ward ratings was the total resident group in the subject's living unit. Group behavior ratings compared the individual participant's behavior with the reminiscence therapy group as a whole. After deciding in which of the three categories a specific behavior fell (below, at, or higher than the reference group norm) the behavior was rated on a nine-point scale as follows: a behavior rated as "low or less than group" was further rated as either one, two or three; a behavior rated as "norm" was further rated as either four, five or six; a behavior rated as "higher or greater than group" was further rated as seven, eight or nine. The author claimed to have demonstrated test-retest reliability for the ratings of both ward behaviors and group therapy behaviors; however, no reliability coefficients were reported.

Kiernat concluded that those subjects who attended group sessions most frequently showed the greatest improvement in ward behavior as shown by change on the WBS. The GBS rating method proved to be unsatisfactory as the group norm changed over the ten week period. Consequently, behavior scores within the group were later disgarded. Despite methodological problems in measurement, group members were said to have enjoyed the meetings showing increased attentiveness and participation. Even the most confused participants were able to respond to familiar objects and events. But clearly, empirical measures of greater precision were necessary. Kiernat noted that "difficulties with the measurement tools indicate that more sensitive instruments are needed to document the very small degress of change seen in this severely disabled population" (1979; p.310).

Baker (1985) used reminiscence group therapy with eight mentally impaired geriatric subjects who were members of a day care center (most were unable to

remember more than their names on a Mental Status Examination). The group met once a week for a total of six weeks. A new topic was presented for reminiscence sessions each week (no details are given with regards to the specific topics used). Group format also included the singing of songs and reading of poetry which was related to the weekly topic.

Group participants were rated on seven behaviors at the end of each session. Rated behaviors included verbal interaction, eye contact, touch, smiles, leadership, activity participation and hostility. Behaviors were scored on a six-point scale (zero to five) where the score of zero represented no responses; one represented one to three responses; two equalled three to five responses; three equalled five to seven responses; four equalled seven to ten responses and; five equalled more than ten responses. Scoring was completed immediately following the session. No baseline measures were taken. Scoring required the agreement of each of the two group leaders.

Following the six therapy sessions, Baker reports "evidence of improvement" on all behaviors measured for each group member (resulting data were not reported). It is not known if the behavior changes of individuals were statistically significant. Also, no control group was provided for comparison with the behavior of other day care members across time. Despite these methodological problems, Baker claimed improvements were obtained in group cohesiveness and the empathy demonstrated by members to others who were experiencing crisis situations. As the group developed, communication became open and supportive.

In 1986, Parsons conducted a study to ascertain the effects of reminiscence group therapy on depression in six elderly subjects (mean age = 76.8) who were recruited from a nursing clinic in a government funded housing facility. Using a pre-and post-test research design, subjects who were identified as moderately depressed served as participants (of the initial eight subjects, two were excluded from the study as they failed to attend any sessions). Evidence of depression was determined by the Geriatric Depression Scale (GDS) (Brink et al, 1982)

administered one week prior to therapy. The GDS was again administered one week after the last therapy session. Six weekly sessions were held in total. Topics for discussion were suggested by both the group leader and by the members themselves. Scents, foods, music and pictures were used to encourage and stimulate reminiscence.

Results showed a significant decrease in level of depression following reminiscence therapy (mean GDS score before treatment was 14; mean GDS score after treatment was 10.17). The two subjects excluded from the study due to failure to attend any sessions also took the GDS again at the same time as the other subjects. Although they did not constitute a control group, their scores showed no change over the eight week period (mean GDS score before and after eight weeks was 16).

Ingersoll and Silverman (1978) utilized reminiscence in their comparative study of group psychotherapy for the noninstitutionalized elderly. The authors recruited subjects through the use of media and fliers announcing a "well-being" group for older adults experiencing anxiety and depression resulting from age-related losses. Seventeen adults (mean age approximately 70 years) were randomly assigned to a "Here and Now group" or a "There and Then group". Data were gathered from subjects in both groups by means of pre- and post-tests, and a debriefing interview. The testing consisted of self-esteem questions (Rosenberg, 1965) and anxiety and somatic behavior questions (Derogatis, Lipman, and Covi, 1973). A debriefing telephone interview was conducted one week after sessions terminated during which participants were asked if and how their feelings about themselves had changed as a result of attending the group.

The Here and Now group focused on helping clients cope with anxiety resulting from recent life changes. This approach included relaxation training, memory and communication training. Anxieties about aging and ways to increase satisfying activities were discussed as a group. The There and Then group focused on helping clients establish a bridge between the past and present. The emphasis

was on reminiscing and the life review process. Participants were encouraged to keep autobiographical journals and make genograms. They were also encouraged to share from their journals--discussing regrets about past experiences and significant losses. They discussed good memories and various coping strategies to deal with loss. Each group met for eight two-hour sessions.

Both groups suffered from inconsistent attendance and attrition: three out of nine clients dropped out of the Here and Now Group; 4 out of 8 clients left the There and Then group. Two clients left the There and Then group and one client left the Here and Now group due to feelings that the treatment modality was inappropriate for their needs. Both groups lost one client because of physical illness. Finally, 2 were lost because of a schedule conflict, one from each group. Among those who remained, most participants of both groups changed in the desired direction from pre-test to post-test on measures of self-esteem, anxiety and somatic complaints. The only significant improvement however, was a decrease on the somatization measure for the There and Then group. Some members of the Here and Now group were actually found to increase in anxiety and somatization. The authors note that due to the time limited nature of the group, some clients may have been sensitized to the tension in their body but did not have sufficient time to learn to relax.

Ingersoll and Silverman concluded that the efficacy of the two groups remains questionable as the study did not employ a control group and only one statistically significant result was obtained. Although a greater percentage from the There and Then group showed improvement on measures of anxiety and somatic behavior, this evidence is not sufficient for rejecting the Here and Now model. Also, there was no research into the question of whether any beneficial effects resulting from reminiscence group therapy would be apparent in settings outside of the group.

In 1983, Hedgepeth and Hale conducted a study to examine the effects of a reminiscence intervention on the affect, expectancy and performance of 60 females

ranging in age from 60 to 98 years. Subjects were recruited from various community settings including congregate living facilities, church and community groups. Participants were randomly assigned to one of three treatment groups. This was not a group therapy project however; subjects were seen individually for a single hour-long interview.

In the first treatment group, subjects received a positive reminiscence intervention, then were tested for changes on the dependent measures. The subjects in the second group were encouraged to talk about pleasant present experiences, then were given the same dependent measures. The third group of subjects served as a control. They were given the dependent measures first, then they were asked to talk about either past or present experiences.

Affect was assessed by both the anxiety scale and the short-form depression scale from the Multiple Affect Adjective Checklist (Zuckerman and Lubin, 1965). A measure of expectancy was obtained by asking each subject to predict how well she expected to perform compared to 100 other individuals her age. Estimates were made on a 19-point ladder ranging from "better that 5%" to "better than 95%". This measure was chosen because in a study by Hale (1976), the measure reflected changes in expectancies after experimental manipulation. The third dependent measure was psychomotor performance and it was measured with a digit symbol test similar to the one used in the Wechsler Adult Intelligence Scale. This test was chosen because performance on it has been influenced by relatively brief psychological interventions (Hale and Strickland, 1976).

No significant differences were found between groups on any measure. The authors concluded that a brief positive reminiscing intervention may be no more beneficial to elderly women than discussion of positive present events or no intervention at all. The absence of differences on the measures of affect might be explained by the relatively low levels of anxiety and depression in this nonclinical sample. Subjects recruited from active church groups who are living independently in the community (as was the case in this study), are not likely to

be representative of the sample of subjects who are confined to the wards of an institution for the aged. It is possible that the latter group would benefit from a reminiscence intervention whereas the former would not. The authors argued that a similar explanation is unlikely to account for the lack of differences on the measures of expectancy and performance since both measures have been demonstrated to be sensivitive to relatively brief psychological interventions with nonclinical samples.

In reviewing the literature concerning the theoretical nature of the reminiscence process as it is related to the life review (Butler, 1963), there is little to support the hypothesis that such a brief period of intervention (one hour of reminiscing) would result in decreased anxiety and depression as measured in this study. The therapeutic value of reminiscence is considered by some to be a result of the larger and evaluative process of life review. It is postulated that through the review, previous experiences and unresolved conflicts are reintegrated which serves to strengthen the ego and reorganize the personality (Butler, 1963; Lewis and Butler, 1974). Presumably, this therapuetic process of reintegration of memories and experiences takes time and, in keeping with this view, it is therefore not surprising that no changes in the dependent measures were observed as a result of such a brief intervention.

In contrast to the positive findings reported by Parsons (1986), a carefully controlled study by Perrotta and Meacham (1981) failed to provide any support for the claim that reminiscing can be an effective therapeutic intervention for depression in the aged. They investigated the effect of reminiscence on self-esteem and depression in 21 community residents whose average age was approximately 77 years. Subjects were randomly assigned to one of three groups: (1) a treatment group that received a reminiscence intervention; (2) a control group that received a current life events intervention and; (3) a no-treatment control group. The treatment control group (group two) was included in order to be able to test whether changes in the dependent variables in the reminiscence

therapy group were due to the reminiscence intervention and not to other factors such as the social interactions of a discussion group. Seven subjects were assigned to each of the three groups. Each treatment group met for a weekly 45 minute session for a total of five weeks. All subjects were tested pre- and post-treatment on measures of self-esteem (a ten-item scale by Rosenberg, 1965) and depression (a modified version of Zung's scale, 1965). No differences between groups were noted on these variables prior to treatment. It was hypothesized that a structured reminiscence intervention would decrease depression and increase self-esteem in the participants of group one, the reminiscence therapy group.

A conditions(three) X time(pretest/posttest) analysis of variance was carried out separately for the depression and the self-esteem scores. Neither of the condition by time interactions were significant, nor were there changes for the participants as a whole in depression or self-esteem. In short, no support was found for the hypothesis. It should be noted that in this study, therapy spanned only five sessions as compared to the eight to ten sessions utilized in many studies. The possibility remains that an additional three or more sessions may have altered the results. Also, the authors questioned whether the elderly subjects in this study, although presumably depressed, were those who could best benefit from the reminiscing intervention. Such intervention may benefit a more severly depressed group. For example, it is possible that an institutionalized group may be more severly depressed than the subjects used in this study (community residents who were attending a senior citizens center) and may thereby benefit from such therapy. It is also possible that the positive effects of reminiscence may lie in areas other than depression and self-esteem, such as ego integrity (Boylin, Gordon, and Nehrke, 1976) and adjustment to aging (Butler, 1963; Lewis and Butler, 1974).

Summary

A number of researchers have explored the potential value of reminiscence as a psychotherapeutic technique. It is clear that the majority of the studies in this

area suffer from many inadequacies and limitations; however, the number of positive findings reported cannot be ignored and prove reminiscence to be, at the very least, a topic worthy of further research. Current findings suggest that reminiscence may serve a number of important functions for an individual such as promoting increased socialization (Baker, 1985; Hala, 1975; Kiernat, 1979; Lesser, Lawrence, Lazarus, Frankel and Havasy, 1981; Matteson and Munsat, 1982; Norris and Eileh, 1982; and Parsons, 1986) and increasing psychological well-being (Matteson and Munsat, 1982; and Parsons, 1986). It may therefore be a valuable therapeutic tool to the clinician seeking to help elderly people (Butler, 1963, 1974; Lesser et al, 1981). After reviewing the experimental literature, Ebersole (1978) notes some of the most common reasons for initiating reminiscence groups. They include: (1) development of affiliations with cohorts; (2) increased opportunitites for socialization; (3) meaningful exchange of ideas; (4) a component of recreation, reality orientation, and remotivation; and (6) therapeutic life review.

It is important to determine empirically if the use of reminiscence can be therapeutic as it has a number of potential advantages over other traditional approaches to counseling the aged. One advantage is that reminiscence therapy is simple and inexpensive to conduct. Another advantage is that it can be used with individuals, groups, or with psychotic patients and its use involves little disruption of the daily routine on an institutional ward. Also, not only is reminiscence therapy non-threatening, it is a way for the clinician to offer help by virtue of a means that offers respect for the clients' accomplishments, wisdom, maturity and resilience.

PURPOSE OF THIS RESEARCH PROJECT AND HYPOTHESES

The purpose of this research project was to investigate the effects of reminiscence group therapy on psychological well-being using an improved methodology. Unlike most other studies, this study utilized a controlled pre-post

research design. It included subjects selected from a nursing home and randomly assigned to one of the following three groups: a reminiscence treatment group (group one); a treatment control group focussing on current topics (group two); and a no-treatment control group (group three). A control group was included so that any change in the dependent measures could be attributed to the intervention rather than simply to the passing of time. In addition, a treatment control group was utilized in order to test whether reminiscence group therapy had unique effects particularly beneficial to the psychological well-being of elderly institutionalized adults (the reminiscence model) or if the social interactions of a discussion group (the social interaction model) was the factor responsible for any benefits observed.

The evaluation of the therapeutic success of this study was obtained from the use of reliable and valid instruments. The use of psychometrically sound instruments is an improvement over previous studies which used no empirical measures (e.g. Hala, 1975 and Lesser et al, 1981) and those studies which used imprecise measures (e.g. Kiernat, 1979). Another fault of prior studies is that they may have utilized inappropriate measures when attempting to determine the beneficial effects of reminiscence therapy (e.g. Perrotta and Meacham, 1981). The justification of this statement requires a brief discussion of the model of happiness.

First, it should be noted that researchers in the area of happiness often use the terms psychological well-being and happiness synonymously. In a 1984 study of well-being, Kammann, Farry and Herbison concluded that scales that measure neuroticism (including items which measure a variety of negative feelings such as worrying a lot, being nervous, lacking self-esteem, and having bodily signs of stress), and scales that measure anxiety and depression are actually measuring subjective ill-being or recurring unhappiness. Stated in another way, scales measuring these factors are in fact measuring the "negative region" or only half of "an overall well-being spectrum" (p.112). This construct of well-being or happiness is viewed as being hierarchical in nature (Diener, 1984). Diener likens

happiness to a central core to which lower order variables are directly related by causal linkages. In this proposed hierarchical model of happiness, happiness is a propensity variable that is a source of influence on lower order variables (Stones and Kozma, 1980; 1986b). Examples of correlates of happiness are given by Stones and Kozma in their 1986b paper. They are such attitudinal and behavioral variables as: (i) specific satisfactions with personal circumstances (e.g. housing and financial satisfaction, perceived health etc.); (ii) generalized beliefs about self-efficacy (e.g. locus of control); and (iii) behavioral styles that are more or less likely to evoke positive outcomes from the environment (e.g. activity level).

The 1986b study by Stones and Kozma supported this model of happiness and refuted a second, more traditional model which states that levels of happiness are determined by environmental events. The finding that happiness is a hierarchical construct and that scales that measure neuroticism, depression and anxiety are only measuring the "bottom half" of this construct may have important ramifications for the research in reminiscence therapy. Research studies examining the beneficial effect of reminiscence therapy have typically looked for improvements in the areas of self-esteem and depression. While some studies have found improvements on these variables (e.g. Matteson and Munsat, 1986 and Parsons, 1986) others have not (e.g. Perrotta and Meacham, 1981). The failure of some researchers to find beneficial effects of reminiscence therapy may be the result of their having selected scales which only partially measured the well-being or happiness construct. It is possible that if they had selected a scale which measured happiness as opposed to depression, for example (as in the case of the Perrotta and Meacham study), benefits of reminiscence therapy may have been detected. In the present study, happiness levels of subjects were measured in the pre- and post-treatment assessments.

The Memorial University Scale of Happiness (MUNSH) developed by Kozma and Stones (1980) was considered an appropriate measure of happiness (see methods

section) and was therefore selected for use in this study. It was hypothesized that subjects in the reminscence group would show significant improvement in happiness levels whereas subjects in the control group would not. Support for the reminiscence model would be obtained if post-treatment happiness (MUNSH) scores for the reminiscence group were found to be significantly higher than the post-treatment scores of the current topics group. On the other hand, support for the social interaction model would be found if there was no significant difference in happiness levels between the two treatment groups.

Also investigated was the range of benefits which resulted from improved psychological well-being. To this end, subjects' mood and activity levels were be measured. Activity is one of the lower order variables believed to be directly influenced by happiness and has been found consistently to be among the strongest correlates of happiness in gerontological research (Kozma and Stones, 1983a; Stones and Kozma, 1986b). The Memorial University of Newfoundland Activities Inventory (MUNAI) (Stones and Kozma, 1986a) was chosen for use in this study in order to measure subjects' activity levels. It was hypothesized that subjects in the reminiscence group would show a significant increase in activity level whereas subjects in the control group would not. Support for the reminiscence model would be found if post-treatment activity level (MUNAI scores) for the reminiscence group was significantly higher than the post-treatment activity level for the current topics group. Alternatively, the social interaction model would be supported if there was no significant difference in post-treatment MUNAI scores for the reminiscence and current topics groups.

Subjects' mood was also measured in order to investigate change in this variable as a result of increased trait happiness. Mood was measured by the Memorial University Mood Scale (MUMS) (McNeil, 1986). It was hypothesized that subjects in the reminiscence group would have better MUMS scores than subjects in the control group. The reminiscence model would be supported if mood for subjects in the reminiscence group was better than the mood of subjects in the current

topics group. Support for the social interaction model would be obtained if there was no significant difference in mood between the two treatment groups.

Also examined was whether the effect on psychological well-being will generalize to increased positive behavior on the ward. The Stockton Geriatric Rating Scale (SGRS) (Meer and Baker, 1966) was used to measure ward behavior. It was hypothesized that subjects in the reminscence group would show significant improvement in the SGRS at post-treatment assessment whereas subjects in the control group would not. Support for the reminiscence model would be obtained if SGRS scores were significantly higher for subjects in the reminiscence group at post-treatment than for subjects in the current topics group. On the other hand, suport for the social interaction model would be found if there was no significant difference in SGRS scores between these groups.

Finally to be investigated was the question of whether greater participation in the therapy group led to greater improvement in psychological well-being. Group participation was measured by a time-sampling procedure whereby the frequency of talking was recorded. Support for the reminiscence model would be found if there was no relationship between group participation (ie. talking) and improved psychological well-being (as measured by the MUNSH). Support for the social interaction model would be found if there was a relationship between group participation and psychological well-being in either of the two therapy groups.

METHODS

SUBJECTS

Subjects were selected from the population of residents at St. Luke's Home in St. John's, Newfoundland. Twenty-four people were involved in this study, eight in each of the three experimental groups. Subjects were recruited on a volunteer basis, the only criteria being that they were capable of hearing, speaking and passing a simple mental status examination. The social worker at the home assisted in subject selection by providing a list of possible candidates who met the criteria. Distribution of the subjects by sex was as follows: the reminiscence treatment group consisted of three men and five women; the current topics treatment group involved two men and six women; and two men and six women made up the control group. The average ages of participants in each of the groups were 85, 83, and 87 respectively; these differences are not statistically significant,($F(2,23) = 1.27$, $p > .01$).

During the first week of study, one subject from each of the two treatment groups elected not to participate further for reasons of disinterest. Also, one subject from the control group discontinued participation in the first week of this study due to illness. Consequently, data from these three subjects were neither included in the analysis, nor in the information given above.

MATERIALS

Four main questionnaires were used to assess subjects in this study. They are as follows: (i) The Stockton Geriatric Rating Stale (SGRS) (Meer and Baker, 1966),

together with a simple behavior questionnaire, (ii) The Memorial University of Newfoundland Scale of Happiness (MUNSH) (Kozma and Stones, 1980), (iii) The Memorial University of Newfoundland Activities Inventory (MUNAI) (Stones and Kozma, 1986a), and (iv) The Memorial University Mood Scale (MUMS) (McNeil, 1986). Copies of the questionnaires are contained in Appendices A through E.

(i) SGRS

The SGRS was used to measure subjects behavior on the ward and the amount of social interactions subjects engaged in. The development of the SGRS was based on the observation of geriatric patients in their daily behavior in a hospital setting. The authors' purpose was to construct a behavior rating scale which would be useful in assessing the level of impairment of such patients. The 33 item questionnaire includes all behavior of patients that was deemed relevant to their leaving the hospital "improved" and at the same time are amenable to objective recording by outside observers. Each item is rated on a three-point scale (0, 1, 2), zero indicating the healthy end of the scale. Two independent ratings are required in evaluating the patients. The average of these two ratings is the score assigned to each patient. This procedure was always followed in the present study.

Meer and Baker found two independent factor analyses to reveal four stable factors, which although intercorrelated, tap somewhat different facets of geriatric patients' daily behavior in a mental hospital setting. The four factors are:

(i) Physical Disability: the ten items within this factor are concerned with the ability of the patient to take care of his or her daily physical needs. A high score indicates that the patient is very dependent on others and a low score indicates that he is independent of others in meeting his physical needs.

(ii) Apathy: this factor contains ten items which are concerned with the patient's

involvement in his ward environment. A high score is indicative of a patient who is best described as apathetic toward people and the activities on the ward, whereas a low score describes a patient who is engaged in and aware of what is going on around him.

(iii) Communication Failure: The underlying dimension of the four items in this factor is communication, and, while the communication was not restricted to any particular medium, patients who did not communicate verbally were severely handicapped and likely to receive high scores on this factor.

(iv) Socially Irritating Behavior: This factor contains nine items which tap a dimension related to socially undesirable behavior. The higher the patient's score, the more socially undesirable behavior he or she engages in.

The internal consistency and inter-rater reliability of the factor scores was considered adequate by the authors for both research and clinical uses, particularly if two independent ratings are made for each patient. The validity of the factor scores was tested by relating them to three separate follow-up studies and by noting the changes in factor scores (pre- and post-shock) of patients who responded exceptionally well to EST. The results of this procedure verified repeatedly the validity of the factor scores in predicting outcome and in being sensitive to changes in the patient's level of impairment.

Behavior Questionnaire

In addition to the SGRS, nurses on the ward were asked to complete a simple six-item questionnaire after the second week of therapy, after the fourth week and again two weeks after completion of therapy for subjects in all groups. This questionnaire asked specifically about the change in social interactions (i.e. frequency of direct conversations or phone calls with friends, family and staff, and frequency of participation in social activities) engaged in by subjects as observed

by the nurses over the course of this study. Nurses were asked to rate the degree of change on these issues as being either a "large decrease", "slight decrease", "no change", "slight increase" or "large increase". The nurses were also asked to indicate if, in their opinion, any noted change may have been due to illness or a change in medication. As a measure of this nature suffers from many inadequacies (i.e. questionnable reliability, for example), it was included only to provide additional information on social interactions.

(ii) MUNSH

Kozma and Stones (1980) developed the MUNSH, for the purpose of measuring psychological well-being (i.e. happiness) in elderly adults. The 24 items of the scale are divided into two general components: the first ten items are concerned with specific affective experiences and contain five positive affect type items and five of the negative affect type; items 11 through 24 deal with more general emotive experiences, where seven of these items are concerned with general postive experiences and seven items are of general negative experience. Scores of two, one or zero are assigned for responses of "yes", "don't know", and "no" respectively. Points for negative affect and experience items are subtracted from positive scores such that the higher the total MUNSH score (to a maximum of 24 points) the higher the individual's happiness rating.

The MUNSH was selected as the best measure of psychological well-being for use in this study owing to its superior psychometric properties. As reported by Kozma and Stones (1980), in comparison with other commonly used scales, the MUNSH has greater reliability, is the only scale with an acceptable internal consistency coefficient and is the best predictor of the criterion measure. Moreover, the MUNSH has good temporal stability (Kozma and Stones, 1983a) and has proven its validity across a wide variety of settings and populations (Kozma and Stones, 1980; Kozma and Stones, 1983b).

(iii) MUNAI

The MUNAI is a comprehensive activities inventory designed by Stones and Kozma (1986a) to reflect recurrent themes derived from descriptions of their activities by elderly adults themselves. The MUNAI consists of 37 activity items. Items are rated on a three-point scale (0,1,2) or a two point scale (0,1) where the higher number indicates maximum participation in a given activity.

Factor analysis yielded five factors reflecting different dimensions of elderly subjects' activity. They are as follows: (i) Household Independence, (ii) Family Involvement, (iii) Solitary Activity, (iv) Homemaker Activity and (v) Community Involvement. Four of these had high test-retest reliability. Community Involvement did not because of seasonal limitations in the opportuntity for community involvement.

Four items tapping the dimension of Household Independence were omitted from the questionnaire as they were inappropriate for permanent residents of an institution. This left a total of 33 activity items which were administered to subjects in this study.

(iv) MUMS

The MUMS, a mood adjective checklist, was developed by McNeil (1986) for the purpose of measuring mood in adults of all ages and used to compare diurnal mood in both the young and old. In their research, these authors found a two component structure of mood: one component was labelled as vigor, the other affect. Both vigor and affect were found to be significant predictors of overall mood. These two components were developed into highly reliable subscales of the MUMS. The questionnaire consists of nine adjectives representing the vigor component (such as enthusiastic, vigorous, lively and activated), four adjectives describing positive affect (happy and contented, for example) and four adjectives

describing negative affect (such as downhearted, and lonely). Subjects are asked to indicate how they are feeling at that exact moment by responding either "yes", "no", or "not sure" to each adjective. The MUMS was experimentally validated on elderly subjects.

PROCEDURE

Subjects were randomly assigned to one of the three experimental groups. Potential subjects for the two treatment groups were approached individually and asked if they would like to participate in a group discussion of either "old times" or "current topics". Volunteer subjects serving as controls were told at the outset that they would be asked to answer questions about themselves periodically over the next several weeks. They were informed that by participating in this study they would be assisting the experimenter to discover more about the residents in the home in the hopes that helpful programs could be devised for the potential benefit of senior citizens.

A pre-post research design was used spanning a total of eight weeks. The three experimental groups were conducted over the same eight week period. Using the four questionnaires outlined above, a pre-treatment assessment was completed for each of the 24 subjects at the beginning of the first week of study. The same questionnaires were repeated to all subjects at the end of the eighth week of study.

In weeks three through six, eight therapy sessions were held for both the reminiscence and the current topics groups at the rate of two sessions per week. Sessions were 30 minutes in duration. To monitor possible changes in mood, the MUMS was administered to subjects immediately before and after each of the eight sessions. To monitor mood for individuals in the control group, the MUMS was administered to subjects once a week in each of weeks three through six. In addition to the pre- and post-treatment administrations of the SGRS, this scale

was completed for all 24 subjects at the end of weeks three through six by the members of the nursing staff most familiar with the patient.

In order to provide a comfortable, nonthreatening atmosphere for discussion, it was considered desirable to keep the number of individuals per therapy group at a minimum. A small group size would also facilitate the monitoring of the frequency of individual group member's conversations. To this end, each treatment group was divided in half yielding four members per subgroup. The two reminiscence groups were conducted in identical fashion having similar group membership, the same day of meeting and the same topics for discussion. The two current topics groups were also conducted in an identical manner. As there were no differences between treatment subgroups, data resulting from each subgroup is combined.

A time sampling procedure was utilized in order to record frequency of conversations in both treatment groups. This procedure was carried out by a paid research assistant who was present, together with the experimenter, at every group session. Her presence was well accepted by members of both treatment groups. The assistant was a female registered nurse who had considerable experience in working with the elderly both in and out of nursing homes. Her task was to record, at 15 second intervals, all individuals who were talking throughout the 30 minute session. This was necessary so that any change could be noted in the extent to which individuals actively participated in the discussions over the four week period.

The format of the eight sessions for both treatment groups was similar. All sessions were held in a fairly small, quiet room with subjects seated closely together in a circle. A different topic for discussion was introduced at the outset of every meeting. Topics for the treatment groups were as follows:

REMINISCENCE GROUP

Session 1...childhood experiences (including elementary school)
Session 2...memories of adolescence (including dating)
Session 3...work experience
Session 4...memories of World War II
Session 5...the Depression
Session 6...advent of T.V. and other technological advances
Session 7...marriage (including child rearing)
Session 8...late adulthood memories

CURRENT TOPICS GROUP

Session 1...current fashions (including recent trends in clothing, jewelry and hairstyles)
Session 2...marriage and family (today's weddings, working mothers and single parent families)
Session 3...participants' own families (including their role as grandparents and their living relatives, where they are located and their occupation)
Session 4...favorite activities and crafts.
Session 5...today's media (radio and T.V. programs and the issue of violence on T.V.)
Session 6...arms race and nuclear weapons
Session 7...opinions on the current government (Federal and Provincial)
Session 8...Christmas today (celebrations, favorite foods and Christmas crafts)

To ensure that everyone in the groups had an opportunity to participate, the experimenter started the session by asking each member in turn something about the topic of the day. During each reminiscence session, the experimenter worked to have participants recall good feelings about past events and accomplishments. Efforts were made to help subjects use these memories to improve their self-concepts. They were encouraged to evaluate and to reinterpret, if necessary, their

past actions and experiences so to promote acceptance of the past and reduce guilts and regrets. It was also the task of the experimenter to redirect conversation to focus on the past on the rare occasion that participants began discussing current issues and perspectives.

Subjects in the current affairs group were asked to discuss each topic as they viewed it today, avoiding reference to the past. On the occassion that members of this group talked about their pasts, the experimenter shifted the conversation back to the present by asking them to talk about things as they are now.

RESULTS

Before discussing the analysis of pre-treatment scores, modifications to the item content scored for the MUNAI should be noted. On the MUNAI, only selected items (items 9-11, 14, 17-18, 25, 27-29) were considered in the final analysis of this questionnaire. Unpublished analyses by Stones and Kozma (1986) on the data base from which the MUNAI was developed showed the internal consistency coefficient alpha of this shortened version to exceed 0.80 and its correlation with the long inventory to exceed 0.90. In the case of the SGRS, item 21 was dropped before the questionnaire was scored. This item asked about the subject's desire to "go home or leave the hospital" and was considered inappropriate for participants in this study as they were all permanent residents of an institution.

ANALYSIS OF PRE-TEST SCORES

The means and standard deviations of all dependent measures at pre-assessment are reported in Table One. The initial equivalence of the three groups through random assignment of the participants was confirmed by five one-way ANOVAS. A series of ANOVAS were used in preference to the MANOVA because of the small sample size. Having a small N strains the credibility of the assumptions of multivariate analysis. Source of variance tables are reported in Appendix F. ANOVAS computed on the pre-scores from the SGRS, the MUNSH and the MUNAI showed that the three groups did not differ on any of these dependent measures. Also, no differences were found on the pre-scores from the vigor and affect subscales of the MUMS.

	SGR		MUNSH		MUNAI		VIGOR		AFFECT	
	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.
Group 1	11.38	5.93	11.38	7.54	8.38	2.07	6.25	2.92	3.50	0.76
Group 2	10.63	6.23	11.88	8.90	8.63	4.37	5.25	3.11	3.63	0.74
Group 3	10.88	5.11	11.00	4.87	7.50	2.98	4.75	3.28	3.25	0.89
Entire Sample	10.96	5.53	11.42	6.98	8.17	3.17	5.42	3.04	3.46	0.78

Table 1. Means And Standard Deviations For All Groups For All Dependent Variables At Pre-Assessment

ANALYSIS OF PRE-POST CHANGES

Table Two shows the means and standard deviations of the change scores (pre minus post) on the SGRS, MUNSH, MUNAI and MUMS subscales. To investigate change in the dependent variables as a result of therapy, five one-way ANOVAS were computed on the change scores of the dependent variables. No significant differences were found on the SGRS, MUNAI and MUMS scores between the 3 experimental groups. There was a significant difference between groups on the change scores of the MUNSH, ($F(2,21) = 5.27$, $p < .014$). Subjects in both treatment groups showed significant improvement on the measure of happiness after therapy. Subjects in the control group showed no such improvement. A posteriori comparison of the MUNSH change scores between groups using the Newman-Keuls test revealled that groups one and two were significantly different from group three ($p < .05$). The means of the two treatment groups were not significantly different.

ANALYSIS OF MOOD

(i) Reminiscence And Current Topics Groups Only

As reported earlier, two treatment sessions were conducted in each of the four weeks of therapy for subjects in the reminiscence and current topics groups. It was the case, however, that some subjects missed one or two sessions: in the reminiscence group, three subjects missed one session each and in the current topics group, two subjects missed one session each and one subject missed two sessions. To eliminate circumstances of missing data, pre-session and post-session scores were averaged within weeks for affect and vigor, respectively. This procedure yielded, for each subject, one pre- and one post-session score for both components of mood for each of the four weeks. Group means and standard deviations of weekly pre- and post-session vigor and affect scores are contained in

	SGR		MUNSH		MUNAI		VIGOR		AFFECT	
	Diff. score	s.d.	Diff. score	s.d.	Diff. Score	s.d.	Diff. score	s.d.	Diff. score	s.d.
Group 1	0.13	0.64	-3.50	2.56	-1.25	1.91	-1.38	3.93	-0.50	0.76
Group 2	0.00	0.54	-3.50	2.88	-0.88	1.55	-1.38	1.51	-0.13	0.35
Group 3	0.00	0.54	0.25	2.55	0.13	0.64	0.38	1.77	0.00	1.07
Entire Sample	0.04	0.55	-2.25	3.12	-0.67	1.52	-1.04	2.56	-0.21	0.78

Table 2. Change Scores (Pre minus Post) And Standard Deviations For All Groups For All Dependent Variables

	VIGOR--WEEK 1				VIGOR--WEEK 2			
	PRE		POST		PRE		POST	
	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.
GROUP 1	6.13	2.03	7.25	1.65	5.81	2.46	7.63	1.94
GROUP 2	5.19	2.99	5.63	2.80	5.75	1.63	7.31	1.16
	VIGOR--WEEK3				VIGOR--WEEK4			
GROUP 1	5.38	1.96	7.38	1.28	6.19	2.22	8.13	0.79
GROUP 2	5.69	1.87	6.94	2.04	6.44	2.16	7.31	1.91

Table 3. Means And Standard Deviations Of The Weekly Pre- And Post-Session Vigor Scores For The Reminiscence And The Current Topics Groups

	AFFECT--WEEK 1				AFFECT--WEEK 2			
	PRE		POST		PRE		POST	
	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.
GROUP 1	3.56	0.42	3.81	0.26	3.69	0.46	4.00	0.00
GROUP 2	3.19	0.75	3.44	0.56	3.13	0.58	3.56	0.50
	AFFECT--WEEK3				AFFECT--WEEK4			
GROUP 1	3.81	0.26	3.94	0.18	4.00	0.00	4.00	0.00
GROUP 2	3.56	0.62	3.75	0.38	3.56	0.62	3.69	0.46

Table 4. Means And Standard Deviations Of The Weekly Pre- And Post-Session Affect Scores For The Reminiscence And The Current Topics Groups

Tables Three and Four respectively. To investigate change in mood as a result of therapy, groups(two) by weeks (four) by time(pre-session/post-session) ANOVAS were computed on the vigor and affect scores, respectively. The only significant effect in the analysis of vigor was a main effect of time, that is, pre-session/post-session vigor scores were significantly different ($F(1,14) = 45.55$, $p<.0001$). In the anlysis of affect, pre-session/post-session scores were significantly different, ($F(1,14) = 6.94$, $p<.02$); a significant main effect of weeks was found, ($F(3,42) = 5.57$, $p<.003$); plus, a significant groups main effect was found, ($F(1,14) = 5.53$, $p<.034$).

(ii) All Three Experimental Groups

Further analyses were conducted in order to compare the pre-session mood of subjects in the reminiscence and current topics groups with the mood of control subjects. Mean vigor and affect scores and standard deviations for the control group are reported in Table Five. Groups(three) by weeks(four) ANOVAS were performed on scores for vigor and affect, respectively. No significant effects were obtained. However, on the measure of affect, the within-subjects effect of weeks approached significance, ($F(3,63) = 2.66$, $p<.056$) as did the groups by weeks interaction, ($F(6,63) = 2.08$, $p<.068$).

ANALYSIS OF SOCIAL INTERACTIONS

As reported in the methods section, in addition to the SGRS, two measures were used in order to gain more information concerning the amount of social interactions engaged in by subjects. These were (i) a brief behavior questionnaire to be completed by the nursing staff for all subjects and (ii) a time sampling analysis of conversations during the eight sessions for all subjects participating in the reminiscence and current topics groups.

WEEK 1				WEEK 2			
VIGOR		AFFECT		VIGOR		AFFECT	
$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.
5.25	1.91	3.50	0.76	5.38	1.92	3.50	0.76
WEEK 3				WEEK 4			
5.00	2.56	3.38	0.74	4.75	2.49	3.38	0.92

Table 5. Means And Standard Deviations Of The Weekly Vigor And Affect Scores For The Control Group

(i) Behavior Questionnaire

To reiterate, the behavior questionnaire was administered after the second and fourth week of therapy and again two weeks after completion of therapy. The following is an account of the changes in social interactions as reported by the nurses. Included for comparison is the subjects' difference scores on the MUNSH, the MUNAI and the SGRS.

In the case of the reminiscence group, three subjects were identified by the nurses as having increased their social interactions. The first was reported to have shown a "slight increase" in interactions with family, staff and other residents in organized events two weeks after therapy. This subject showed a seven point improvement on the MUNSH at post-therapy assessment. There was no change in either the SGRS or MUNAI scores.

The second subject showed a slight increase in interctions with family, staff and other residents after the fourth week of therapy. This subject improved by four points on the MUNSH and four points on the MUNAI. There was no change on the SGRS.

The third subject was reported as showing a slight increase in interactions with family, staff, and other residents after the second and fourth week. This subject's MUNSH score improved by seven points, the MUNAI by four points and the SGRS by one point at post-treatment assessment.

For the current topics group, two subjects were considered by the nurses as having shown a greater frequency of social interactions. One subject showed a decrease on this measure.

The first subject was reported after the fourth week of therapy to have slightly decreased in the area of participation in organized events with other residents. The nurse completing this questionnaire indicated that this decrease was most

likely due to a change in medication. This subject's MUNSH score did not change pre- to post-therapy. The MUNAI score decreased by one point and the SGRS increased by one point.

The second subject showed an increase in social interactions with family, staff and other residents after the second and fourth week of treatment. This subject's MUNSH score improved by seven points, the MUNAI by four and there was no change on the SGRS.

The third subject was reported to have shown improvement after the fourth week of theray in social interactions with family, staff, and other residents. This subject's MUNSH score improved by six points and their was a one point improvement on both the MUNAI and SGRS.

One subject in the control group showed increases in social interactions with family, staff and other residents after the fourth week administration of the behavioral questionnaire. This subject's MUNSH score improved by four points, the SGRS by one point, and on the MUNAI there was no change.

(ii) Time Sampling Analysis

The frequency of verbal interactions that subjects engaged in during each 30 minute tharapy session was calculated by totalling all 15-second intervals that the subject was heard talking as recorded by the research assistant. As in the case of the scores of vigor and affect, these verbal frequencies had to be averaged across sessions for each of the four therapy weeks as some subjects did not attend all sessions. This yielded one so-called "talking" score per subject per week. These weekly talking scores are reported in Table Six together with the means and standard deviations of talking scores for each therapy group. An ANOVA was computed to investigate change in talking scores across weeks and between groups. A significant within-subjects effect of weeks was found, ($F(3,42) = 6.87$,

	WEEK 1		WEEK 2		WEEK 3		WEEK 4	
	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.
Group 1	36.38	12.59	44.13	19.35	43.75	20.70	51.63	20.06
Group 2	27.75	13.19	37.13	14.02	36.06	14.71	38.25	16.49

Table 6. Means And Standard Deviations Of Weekly Talking Scores For Subjects In The Reminiscence And Current Topics Groups

$p<.001$), that is, the mean talking scores for both therapy groups increased as the weeks progressed. The groups by weeks interaction was insignificant. A Newman-Keuls test performed on the mean talking scores showed that talking scores for weeks one and four were significantly different ($p<.01$).

Correlations were computed in order to investigate the relationship between the amount of talking a subject did and their improvement on the dependent measures. Talking scores for every session attended were averaged to yield one average talking score per subject. Then Pearson Product Moment Correlations were computed on the pre-test post-test change scores of all dependent measures with the average talking scores. The results revealed a significant correlation between change scores on the MUNSH and talking, ($r = -.62$, $p<.005$), indicating that subjects who talked more gained the most in happiness. A significant correlation was also found between change scores on the SGRS and talking, ($r = .52$, $p<.02$), indicating that subjects who talked more had greater improvement on the SGRS.

DISCUSSION

Unlike the majority of previous studies, this study utilized valid and reliable empirical measures and a controlled pre-post research design to assess the therapetic success of reminiscence group therapy. The improved methodology of this study corroborates the validity of the findings.

The results of this study provide evidence to suggest that participation in a small discussion group over a four week period is beneficial to elderly institutionalized adults. Psychological well-being, as measured by the MUNSH, improved significantly as a direct result from participating in either a reminiscence or current topics group. This improvement was not evident in the control group which indicated that the passing of time was not responsible for the change in subjects. Thus, the hypothesis that a reminiscence group would produce significant improvements in the well-being of elderly people was supported.

Through the use of a treatment control, the current topics group, it was possible to determine whether reminiscence group therapy had unique effects of particular benefit to the psychological well-being of elderly adults (reminiscence model) or if the social interactions of a discussion group (the social interaction model) was the factor reponsible for the benefits observed. As there were no significant differences in MUNSH change scores between treatment groups, the specific format of the group, reminiscence or current topics, was not the factor facilitating change. Rather, both types of formats were equally effective in promoting increased well-being so only factors common to both types of intervention produced the measured improvement. Probable reason for the change in subjects' well-being will be explored in relation to the social interaction model, in addition to discussing the other specific findings from this study.

The finding that subjects' psychological well-being improved as a result of participating in either the reminiscence or current topics group supported the the social interaction model and refuted the reminiscence model: reminiscence group therapy did not have a uniquely beneficial effect on psychological well-being. It must be noted that although this experiment avoided the methodological problems cited earlier, there was still the potential problem of experimenter bias. As this was not a double blind study, it remains a possibility that the staff, the experimenter and the assistant may have subtly altered their interaction with subjects in the direction of the desired results. Consequently, alternate hypotheses may be proposed to explain the finding that both treatment groups were equally effective. However, the most likely conclusion is that the factor common to both groups, social interaction, was the key factor responsible for the benefits observed. This hypothesis will be applied to the findings from this study.

THE SOCIAL INTERACTION MODEL

(i) Psychological Well-Being

A number of studies have found evidence to support that psychological well-being is strongly related to degree of social interaction (Larson, 1978). For example, a few early studies have found that elderly adults with high personal adjustment tended to spend more time in social activities (Burgess, 1954 and Lebo, 1953). Two other studies showed that those who engaged in more social interaction had higher morale (Kutner, 1956 and Reichard et al, 1962). More recently, Markides and Martin (1979) and Palmore and Luikart (1972) reported that social interaction had a positive effect on life satisfaction. The Duke Longitudinal Studies of Aging, as reported by Palmore (1981), examined three possible consequences of social interaction: health, happiness and longevity. Palmore reports that while previous studies have found correlations between social activity and health, they had not been able to show causality. From the

longitudinal studies it was found that various forms of social activity was indeed predictive of better happiness as well as other factors such as health and longevity. These findings are in support of the activity theory proposed by Havinghurst (1963). The consequences of social activity are related to a large body of theory and research known as the disengagement vs activity controversy.

Disengagement theory states that aging inevitably results in physical, psychological and social disengagement (Cumming and Henry, 1961). A major hypothesis of this theory states that disengagement is good for both the aged and society, as disengagement from social activity in old age tends to result in the maintenance or reestablishment of higher moral. In direct contrast to this theory is the activity theory (Havinghurst, 1963). Activity theory states that disengagement is not inevitable. It states also that social activity, rather than disengagement, is good for the individual as it maintains happiness and health while the reduction of social activity tends to reduce morale. Studies attempting to test these hypotheses tend to agree that higher social activity tends to be associated with morale, thus supporting activity/theory rather than disengagement theory (Palmore, 1981).

Obviously, social interaction is not the sole predictor of psychological well-being, however, based on the reseach to date, it seems to be an important contributor. The present study yields evidence to suggest that providing institutionalized adults with a regular opportunity to socially interact with their peers is beneficial to their psychological well-being. Palmore (1981) states that greater social interaction probably tends to maintain mental health by stimulating mental activity and by maintaining a sense of self-esteem and social worth. Both the reminiscence and current topics groups may have stimulated mental activity by providing participants with interesting topics of conversation and interested people with which to talk. Both intervention groups afforded subjects with the opportunity to get to know a few people better, to discuss their opinions, and receive feedback and support from others, all of which may have helped to

maintain a sense of self-esteem and social worth thus contributing to the subjects' overall happiness.

It is interesting to note the MUNSH items which subjects improved on. First of all, improvement on the MUNSH was equally evident on the affective component (items one to ten) as on the general life experience component (items 11-24). On the affective component, subjects in both treatment groups showed particular improvement on items two, five and seven, that is, at post-treatment assessment, they felt in higher spirits, less lonely and less bored than they had indicated at pre-treatment. It could be argued that improvement on these items was the result of an increase in positive social interaction. From the experience component, subjects improved most notably on items 12, 14, 17, 20 and 21, indicating that, as a result of treatment, they felt: as happy now as when they were younger (items 12 and 21); the things they do now are as interesting to them as they ever were (item 14); they do not often feel lonely (item17) and life is worth living (item 20). Again, improvement on items 14 and 17 would be expected according to the social interaction model.

(ii) Mood

The hypothesis that mood would improve as a result of increased happiness level was supported. A significant increase in vigor, one of the two components of mood, was found for subjects participating in discussion sessions of both the reminiscence and current topics format. It should be noted that this improvement in mood was not detected in the initial analysis of MUMS change scores as mood is a state variable and improvements were of short temporal duration only. The fact that vigor increased for subjects in both treatment groups supports the social interaction model and refutes the reminiscence model. As indicated on the MUMS, after a discussion group, subjects described themselves as feeling one or more of the following: peppy, strong, refreshed, enthusiastic, vigorous, lively, activated, active or energetic.

Also, both interventions produced a significant increase in affect from pre-session to post-session. At post-session completion of the MUMS, subjects described themselves as feeling more: happy, pleasant and contented, and less downhearted, blue, lonely and worried. A groups main effect showed that the level of affect differed between the treatment groups; however, there was no evidence to suggest that this difference could be attributed to the type of treatment received. As there were no interactions involving groups and temporal effect, the effect of treatment was not stronger in one group than another. This finding is in support of the social interaction model. Affect scores increased significantly across the weeks for subjects in both treatment groups, in fact, some subjects reached and maintained the maximum affect score early in therapy. The full extent of the treatment effect on subjects' level of affect may not have been realized owing to the ceiling effect on this measure. Future studies should use a more sensitive measure of affect.

(iii) Group Participation

Further support for the social interaction model was obtained by the time sampling analysis of the frequency of talking in the two intervention groups. First, the frequency of talking in both therapy groups increased as the weeks progressed. The increase in group participation may be indicative of the subjects' increasing familiarity with group members and increasing desire to share their thoughts, experiences and opinions with them. The significant correlation between talking and change scores on the MUNSH revealed that subjects who participated more in the group gained the most in happiness. This finding is in direct support of the social interaction model and is in keeping with the research findings previously reported which state that increased social interaction is associated with better happiness.

(iv) Ward Behavior

The failure to find a significant difference in SGRS change scores after therapy suggests that the beneficial effect on psychological well-being did not generalize to increased positive behavior on the ward as hypothesized. However, for some subjects, the beneficial effects from the therapy experience did seem to generalize to increased social behavior on the ward as increases in social activity with family, staff and other residents were noted by the nurses on the simple behavior questionnaire for three subjects in the reminiscence group and two subjects in the current topics group. Also, a significant correlation was found between talking and change scores on the SGRS indicating that subjects who participated more in the group showed more positive behavior on the ward. The apparent discrepency between the nurses reports on the SGRS (showing no change in ward behavior) and their reports on the behavioral questionnaire (showing improvement for some subjects in social behavior on the ward) may be due to the relative insensitivity of the SGRS to social behaviors. While the SGRS includes some items to measure the frequency of social behaviors, its primary focus is on such basic functions as eating, sleeping, bathing etc. It is possible that had this study used an inventory which was more sensitive to social behavior in particular, the nurses reports may have revealed a significant increase in social behavior on the ward.

(v) Activity Level

The hypothesis that activity levels of subjects in the reminiscence group would increase as a result of increased psychological well-being was not supported. MUNAI change scores for both treatment groups were not significantly different from the control group. However, although insignificant, there was an increase in activity levels from pre-treatment to post-treatment for both the reminiscence and current topics groups. A slight decrease in activity levels was evident for the control group. This provides some evidence, albeit weak, to suggest that increases

in psychological well-being may result in increased levels of activity, in keeping with the model of happiness outlined earlier (Stones and Kozma, 1986b) and in keeping with the social interaction model. The noted increase in MUNAI scores for groups one and two resulted from improvement primarily on items 10, 11, 18, and 25. After therapy, subjects reported getting more phone calls (item 10) and visits (item 11) from family, were more involved in church related events (item 18) and more frequently read newspapers and magazines (item 25). It is possible that with a larger sample, a significant improvement in activity levels may have been detected.

SUMMARY

The present study provides evidence to suggest that the efficacy of reminiscence group therapy lies in the fact that it promotes positive social interactions between participants. This is in support of a social interaction model which maintains that increasing social interactions of elderly adults via a small discussion group has beneficial effects on their psychological well-being. The findings of this study refute the notion that reminiscence group therapy has uniquely beneficial effects on elderly institutionalized adults. Through a well-controlled pre-post design, it was demonstrated that a simple discussion group following a current topics format was equally as effective as the reminiscence group in promoting psychological well-being. This is not to say that conducting a reminiscence group is not worthwhile. The fact remains that it is a simple program to implement in an institution plus it is undisruptive of daily activity on the ward. The format of a reminiscence group lends itself to the use of such additional things as old photographs, slides, films, museum trips etc. which may be particularly interesting to group members. Also, those people not following current events may be encouraged to join a reminiscence group whereas they may hesitate to get involved in a group of a current topics format.

The possibility remains that reminiscence group therapy may indeed have

uniquely beneficial effects for mentally impaired subjects, especially if such subjects do not follow current happenings and are in touch only with some past memories. It remains the task of future studies to investigate this using the improved methodology demonstrated by this study (i.e. a well-controlled research design and valid and reliable empirical measures). Also, future research could improve upon this study by using a larger sample size and including more sensitive measures of social activity and affect.

In conclusion, this study provides evidence to suggest that conducting a small discussion group for elderly institutionalized adults is a simple yet extremely effective means of improving their psychological well-being. This is a finding which should not be ignored by those staff members in institutions for the elderly who are in a position to implement such a benefical program.

REFERENCES

Baker, N. (1985). Reminiscing in group therapy for self-worth. Journal of Gerontological Nursing, 11(7), 21-24.

Boylin, W., Gordon, S. and Nehrke, M. (1976). Reminiscing and ego integrity in institutionalized males. Gerontologist, 16, 118-124.

Brink, L., Yesavage, J., Lum, O., Heersema, P., Adey, M. and Rose, T. (1982). Screening tests for geriatric depression. Clinical Gerontologist, 1, 37-43.

Burgess, E. (1954). Social relations, activities and personal adjustment. American Journal of Sociology, 59, 352-360.

Butler, R. (1963). The life review. An interpretation of reminiscence in the aged. Psychiatry, 26, 65-76.

Coleman, P. (1974). Measuring reminiscence characteristics from conversation as adaptive features of old age. International Journal of Aging and Human Development, 5(3), 281-294.

Cumming, E. and Henry, W. (1961). Growing old. New York: Basic Books.

Derogatis, L., Lipman, R. and Covi, L. (1973). An outpatient psychiatric rating scale: Preliminary report. Psychopharmacology Bulletin, 9, 13-28.

Diener, E. (1984). Subjective well-being. Psychological Bulletin, 85, 542-575.

Ebersole, P. (1978). A theoretical approach to the use of reminiscence. In I. M. Burnside (Ed.). Working with the elderly: Group process and techniques. Massachusetts: Duxbury Press.

Erikson, E. (1950). Childhood and society. N.Y.: Norton.

Greene, R. (1983). Life review: A technique for clarifying family roles in adulthood. Clinical Gerontologist, 1(2), 59-67.

Hala, M. (1975). Reminiscence group therapy project. Journal of Geriatric Nursing. 1(3), 34-41.

Hale, W. (1976). A social learning analysis of depression. (Doctoral dissertation, University of Massachusetts). Dissertation Abstracts International, 37, 1900B.

Hale, W. and Strickland, B. (1976). Induction of mood states and their effect on cognitive and social behaviors. Journal of Consulting and Clinical Psychology, 44, 155.

Havinghurst, R. (1963). Successful aging. In R. Williams, C. Tibbitts and W. Donahue (Eds.), Processes of aging. N.Y.: Atherton Press.

Havinghurst, R. and Glasser, R. (1972). An exploratory study of reminiscence. Journal of Gerontology, 27(2), 245-253.

Hedgepeth, B. and Hale, E. (1983). Effect of a positive reminiscing intervention on affect, expectancy and performance. Psychological Reports, 53, 876-870.

Ingersoll, B. and Silverman, A. (1978). Comparative group psychotherapy for the aged. The Gerontologist, 18(2), 201-206.

Kammann, R., Farry, M. and Herbison, P. The analysis and measurement of happiness as a sense of well-being. Social Indicators Research, 15, 91-115.

Kiernat, J. (1979). The use of life review activity with confused nursing home residents. American Journal of Occupational Therapy, 33(5), 306-310.

Kozma, A. and Stones, M.J. (1980). The measurement of happiness: Development of the Memorial University of Newfoundland Scale of Happiness (MUNSH). Journal of Gerontology, 35(6), 906-912.

Kozma, A. and Stones, M.J. (1983a). Predictors of happiness. Journal of Gerontology, 38, 626-628.

Kozma, A. and Stones, M.J. (1983b). Re-validation of the Memorial University of Newfoundland Scale of Happiness. Canadian Journal on Aging, 2, 27-29.

Kutner, B. (1956). Five hundred overy sixty. N.Y.: Russell Sage Foundation.

Larson, R. (1978). Thirty years of research on the subjective well-being of older Americans. Journal of Gerontology, 33(1), 109-125.

Lebo, D. (1953). Some factors said to make for happiness in old age. Journal of Clinical Psychology, 9, 384-390.

Lesser, J., Lazarus, L., Frankel, R. and Havasy, S. (1981). Reminiscence group therapy with psychotic geriatric inpatients. The Gerontologist, 21(3), 291-296.

Lewis C. (1971). Reminiscing and self-concept in old age. Journal of Gerontology, 26(2), 240-243.

Lewis, M. and Butler, R. (1974). Life review therapy: Putting memories to work in individual and group psychotherapy. Geriatrics, 29, 165-173.

LoGerfo, M. (1980). Three ways of reminiscence in theory and practice. International Journal of Aging and Human Development, 12(1), 39-46.

Markides, K. and Martin, H. (1979). A causal model of life satisfaction among the elderly. Journal of Gerontology, 34, 86-93.

Matteson, M. and Munsat, E. (1982). Group reminiscing therapy with elderly clients. Issues in Mental Health Nursing, 4(3), 177-189.

McNeil, K. (1986). Mood: Measurement, diurnal variation and age effects. Unpublished doctoral dissertation, Memorial University of Newfoundland, NFLD, Canada.

McMahon, A. and Rhudick, P. (1964). Reminiscing in the aged: An adaptational response. In S. Levin and R. Kahana (Eds.). (1967). Psychodynamic studies on aging: Creativity, reminiscence and dying. N.Y.: International Universities' Press.

Meer, B. and Baker, J. (1966). The Stockton Geriatric Rating Scale. Journal of Gerontology, 41(1), 85-90.

Merriam, S. (1980). The concept and function of reminiscence: A review of the research. The Gerontologist, 20(5), 604-609.

Norris, A. and Eileh, A. (1982). Reminiscence groups. Nursing Times, August 11, 1368-1369.

Palmore, E. (1981). Social patterns in normal aging: Findings from the Duke Longitudinal Study. North Carolina: Duke University Press.

Palmore, E. and Luikart, C. (1972). Health and social factors related to life satisfaction. Journal of Health and Social Behavior, 13, 68-80.

Parsons, C. (1986). Group therapy and levels of depression in the elderly. Nurse Practioner, 11(3), 68-76.

Perrota, P. and Meacham, J. (1981). Can a reminiscing intervention alter depression and self-esteem? International Journal of Aging and Human Development, 14(1), 23-30.

Priefer, B. and Gambert, S. (1984). Reminiscence and life review in the elderly. Psychiatric Medicine, 2(1), 91-100.

Reichard, S., Livson, F. and Peterson, P. (1962). Aging and personality. N.Y.: Johen Wiley.

Romaniuk, M. (1981). Reminiscing and the second half of life. Experimental Aging Research, 7(3), 315-336.

Rosenberg, M. (1965). Society and the adolescent self-image. New Jersey: Princeton University Press.

Stones, M. J. and Kozma, A. (1980). Issues relating to the usage and concepualization of mental health constructs employed by gerontlogists. International Journal of Aging and Human Development, 11, 269-282.

Stones, M. J. and Kozma, A. (1986a). Happiness and activities as propensities. Journal of Gerontology, 41(1), 85-90.

Stones, M. J. and Kozma, A. (1986b). "Happy are they who are happy...": A test between two causal models of relationships between happiness and its correlates. Experimental Aging Research, 12(1), 23-29.

Szapocznick, J., Kurtines, W., Santisteban, D. and Perez-Vidal, A. (1981). Treatment of depression among Cuban American elders: Some validational evidence for a life enhancement counseling approach. Journal of Consulting and Clinical Psychology, 49(5), 752-754.

Szapocznick, J., Kurtines, W., Santisteban, D. and Perez-Vidal, A. (1982). Ethnic and cultural variations in the care of the aged: New directions in the treatment of depression in the elderly: A life enhancement counseling approach. Journal of Geriatric Psychiatry, 15(2), 257-281.

Zuckerman, M. and Lubin, B. (1965). Mannual for the Multiple Affect Adjective Checklist. San Diego: Educational and Industrial Testing Service.

Zung, W. (1965). A self-rating depression scale. Archives of General Psychiatry. 12, 63-70.

APPENDIX A

STOCKTON GERIATRIC RATING SCALE

1. When eating, the patient requires: 0 - no assistance (feeds himself); 1 - a little assistance (needs encouragement); 2 - considerable assistance (spoon feeding, etc.).

2. The patient is incontinent of urine and/or feces (day or night): 0 - never; 1 - sometimes (once or twice per week); 2 - frequently (three times per week or more).

3. When bathing or dressing, the patient requires: 0 - no assistance; 1 - some assistance; 2 - maximum assistance.

4. The patient will fall from his bed or chair unless protected by side rails or soft ties (day or night): 0 - never; 1 - sometimes; 2 - frequently.

5. The patient is objectionable to other patients during the day (loud or constant talking, pilfering, soiling furniture, interfering in affairs of others): 0 - rarely or never; 1 - sometimes; 2 - frequently.

6. The patient is objectionable to other patients during the night (loud or constant talking, pilfering, soiling furniture, interfering in affairs of others, wandering about, getting into some other patient's bed, etc.): 0 - rarely or never; 1 - sometimes; 2 - frequently.

7. Close supervision is necessary to protect the patient, due to feebleness, from other patients: 0 - rarely or never; 1 - sometimes needs protection; 2 - frequently needs protection.

8. With regard to walking, the patient: 0 - shows no sign of weakness; 1 - walks slowly without aid, or uses cane; 2 - is unable to walk, or, if able to walk, needs walker,

crutches, or someone by his side.

9. The patient's meals consist of; 0 - regular solid diet, no limitaions; 1 - a normal diet with modifications (extra milk, soft or ground food) or limitations (no added salt or bread); 2 - a special diet (diabetic, low salt, pureed, etc.).

10. The patient communicates in any manner (by speaking, writing or gesturing): 0 - well enough to make himself easily understood at all times; 1 - can be understood sometimes or with some difficulty; 2 - can rarely or never be understood for whatever reason.

11. The patient is in bed during the day (bed does not include couch, settee, etc.): 0 - never; 1 - sometimes; 2 - almost always.

12. If patient were allowed the freedom of the grounds alone, he would be able to protect himself from the weather (come in out of the rain or sun) or from getting lost: 0 - would never need supervision outdoors; 1 - would sometimes need supervision outdoors; 2 - would always need supervision outdoors.

13. The patient is confused (unable to find his way around the ward, loses his possessions, etc.): 0 - almost never confused; 1 - sometimes confused; 2 - almost always confused.

14. When left to his own devices, the patient's appearance (clothes and/or hair, including beard for males) is: 0 - almost never disorderly; 1 - sometimes disorderly; 2 - almost always disorderly.

15. The patient knows the personnel by name: 0 - knows names of more than one member of the personnel; 1 - knows name of only one member of the personnel; 2 - knows name of none of the personnel.

16. The patient understands what you communicate to him (you may use speaking, writing, or gesturing): 0 - understands almost everything you communicate; 1 - understands some of what you communicate;

2 - understands almost nothing you communicate.

17. The patient helps out on the ward (other than a regular work assignment): 0 - often helps out; 1 - sometimes helps out; 2 - never helps out.

18. The patient has a regular work assignment; 0 - away form the ward; 1 - on the ward; 2 - no regular assignment.

19. The patient knows his own name: 0 - almost always responds to his name; 1 - sometimes responds to his name; 2 - almost never responds to his name.

20. The patient keeps self occupied in constructive or useful activity (works, reads, plays games, has hobbies etc.): 0 - almost always occupied; 1 - sometimes occupied; 2 - almost never occupied.

21. The patient wants to go home or leave the hospital: 0 - expresses great eagerness in leaving; 1 - expresses some interest in leaving; 2 - expresses almost no interest in leaving.

22. The patient socializes with other patients: 0 - does establish a good relationship with one or more patients; 1 - has some difficulty establishing a good relationship with one or more patients; 2 - has a great deal of difficulty establishing a good relationship with one or more patients.

23. The patient's sleep pattern at night is: 0 - almost never awake; 1 - sometimes awake; 2 - often awake.

24. The patient is willing to do things suggested to or asked of him: 0 - often goes along; 1 - sometimes goes along; 2 - almost never goes along.

25. The patient has privileges to leave the ward (companion or full ground privileges or town pass); 0 - has privileges and gets to use them often; 1 - has privileges but only sometimes gets to use them; 2 - does not have privileges or has privileges but never gets to use them.

26. The patient engages in apparently useless repetitive movements (pacing, rocking, wringing of hands, making random movements, etc.): 0 - never; 1 - sometimes; 2 - frequently.

27. The patient engages in repetitive vocal sounds (yelling, moaning, talking, etc.) which are directed to no one in particular or to everyone:) - never; 1 - sometimes; 2 - frequently.

28. The patient takes the initiative to start conversations with others (excluding side remarks not intended to open conversations): 0 - often takes the initiative; 1 - sometimes takes the initiative; 2 - never takes the initiative.

29. The patient threatens to harm other patients, staff, or people outside the hospital either verbally (e.g. "I'll get him") or physically (e.g. raising of fists): 0 - never; 1 - sometimes; 2 - frequently.

30. The patient accuses others (patients, staff, or people outside the hospital) of doing him bodily harm or stealing his personal possessions (if you are sure the accusations are true, rate 0; otherwise rate one or two); 0 - never; 1 - sometimes; 2 - frequently.

31. The patient hoards apparently meaningless items (wads of paper, string, scraps of food, etc.): 0 - never; 1 - sometimes; 2 - frequently.

32. The patient is destructive of materials around him (breaks furniture, tears up magazines, sheets, clothes, etc.): 0 - never; 1 - sometimes; 2 - frequently.

33. The patient, without being asked, physically helps one or more patients in various situations (pushing wheel chair, helping with food tray, assisting in shower, etc.): 0 - often helps without being asked; 1 - sometimes helps without being asked; 2 - never helps without being asked.

APPENDIX B

BEHAVIOR QUESTIONNAIRE

1. Over the past 2 weeks, have you noticed any change in the frequency with which the patient has socially interacted (including direct conversation or phone calls) with friends? *

large decrease	slight decrease	no change	slight increase	large increase

2. Over the past 2 weeks, have you noticed any change in the frequency with which the patient has socially interacted (including direct conversations or phone calls) with family members? *

large decrease	slight decrease	no change	slight increase	large increase

3. Over the past 2 weeks, have you noticed any change in the frequency with which the patient has socially interacted with staff? *

large decrease	slight decrease	no change	slight increase	large increase

4. Over the past 2 weeks, have you noticed any change in the frequency with which the patient has taken the initiative to start conversations with others (either friends, family members or staff?) *

large decrease	slight decrease	no change	slight increase	large increase

5. Over the past 2 weeks, have you noticed any change in the frequency with which the patient has participated in social activities? *

large decrease	slight decrease	no change	slight increase	large increase

6. Over the past 2 weeks, have you noticed any change in the frequency with which the patient helps one or more patients in various situations? *

large decrease	slight decrease	no change	slight increase	large increase

* Please note if you think any decrease was due to illness

APPENDIX C

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

SCALE OF HAPPINESS

I would like to ask you some questions about how things have been going. Please answer "yes" if a statement is true for you and "no" if it does not apply to you.

In the past few months have you ever felt:

1. On top of the world? ____
2. In high spirits? ____
3. Particularly content with your life? ____
4. Lucky? ____
5. Bored? ____
6. Very lonely or remote from other people? ____
7. Depressed or very unhappy? ____
8. Flustered because you didn't know what was expected of you? ____
9. Bitter about the way your life has turned out? ____
10. Generally satisfied with the way your life has turned out? ____

The next 14 questions have to do with more general life experiences.

11. This is the dreariest time of my life. ____

12. I am just as happy as when I was younger. ____

13. Most of the things I do are boring or monotonous. ____

14. The things I do are as interesting to me as they ever were. ____

15. As I look back on my life, I am fairly well satisfied. ____

16. Things are getting worse as I get older. ____

17. I often feel lonely. ____

18. Little things bother me more this year. ____

19. I am quite satisfied with living in this town (city, village). ____

20. I sometimes feel that life isn't worth living. ____

21. I am as happy now as I was when I was younger. ____

22. Life is hard for me most of the time. ____

23. I am satisfied with my life today. ____

24. My health is the same or better than most people my age. ____

APPENDIX D

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

ACTIVITIES INVENTORY

1. Do you manage to do things for yourself, such as eat, dress, and wash? ____

2. Do you do general housework?:

	some	/most	/all
for yourself	____	____	____
for yourself and your spouse	____	____	____
for others	____	____	____

3. Do you take care of your own hair?:
   - self ____
   - barber/beautician ____
   - friend ____

4. Do you generally do your own work around the house and garden? ____

5. Do you get your own groceries and pay bills yourself? ____

6. Do you still work, either full (2) or part-time (1)? ____

7. Do you go for a walk regularly, either daily (2) or weekly (1)? ____

8. Do you have a nap or rest during the day? ____

9. How often do you see your family or relatives? ____

10. Do you get many phonecalls from your family? ____

11. Does your family or relatives drop by to see you very much? ____

12. Do you have regular visits with your family

(such as Sunday dinners, car rides)? ____

13. Do you go on regular trips to visit your family or do they regularly come to see you? ____

14. Do you and your family get together for special occasions (birthdays, weddings, Christmas, etc.)? ____

15. How often do you attend church services? 0. Never ____
1. Special occasions only ____ 2. Occasionally ____
3. Monthly ____ 4. Weekly ____ 5. Daily ____

16. How often does your parish priest or minister visit you? 0. Never ____ 2. Occasionally ____
3. Monthly ____ 4. Weekly ____ 5. Daily ____

17. Are you involved in any church or community groups (e.g. UCWA, the Vestry, K of C, Vetrans, etc.)? ____

18. Do you go to any church events (e.g. garden parties, flower services, bake sales, etc.)? ____

19. Do you attend organized events (e.g. bingo, card parties, etc.)? ____

20. Would you entertain friends in you own room (e.g. make a cup of tea, have a game of cards, etc.)? ____

21. How often do you get together with your friends? ____

22. Do you have any hobbies that involve you and your friends? ____

23. Do you read the Bible, say prayers, or listen to religious programs on TV and radio regularly? ____

24. Do you watch TV, listen to the radio, play records or tapes? ____

25. Do you read newspapers or magazines? ____

26. Do you read books? ____

27. Do you write letters and read your mail? ____

28. Do you sew, crochet, knit or quilt? ____

29. Do you go shopping? ____

30. Do you watch Another World or any soap opera either occasionally(1) or frequently(2)? ____

31. Do you have any hobbies that you do? ____

32. Do you go to the doctor very often? 0. Never ____
1. Yearly ____ 2. Every 6 months ____
3. Every 3 months ____

33. Do you see the nurse? ____

34. Are you able to get up and around all the time or just occasionally? ____

35. Do you do any baking? ____

APPENDIX E

MEMORIAL UNIVERSITY MOOD SCALE

INSTRUCTIONS: Please record how you are feeling right now for each word listed below by circling either no, ?, or yes.

	NO, I DO NOT FEEL	CANNOT DECIDE	YES, I DO FEEL
PEPPY	NO	?	YES
DOWNHEARTED	NO	?	YES
STRONG	NO	?	YES
REFRESHED	NO	?	YES
HAPPY	NO	?	YES
PLEASANT	NO	?	YES
ENTHUSIASTIC	NO	?	YES
BLUE	NO	?	YES
VIGOROUS	NO	?	YES
CONTENTED	NO	?	YES
LIVELY	NO	?	YES
ACTIVATED	NO	?	YES
LONELY	NO	?	YES
ACTIVE	NO	?	YES
ENERGETIC	NO	?	YES

PLEASED	NO	?	YES
WORRIED	NO	?	YES

APPENDIX F

ANALYSIS OF VARIANCE TABLES

1. Pre-scores on the SGRS, MUNSH, MUNAI and MUMS subscales by groups(3)

(i) SGRS

Source	DF	Sum Of Squares	Mean Square	F
Between	2	2.33	1.17	0.04
Error	21	700.63	33.36	

(ii) MUNSH

Source	DF	Sum Of Squares	Mean Square	F
Between	2	3.08	1.54	0.03
Error	21	1118.75	53.27	

(iii) MUNAI

Source	DF	Sum Of Squares	Mean Square	F
Between	2	5.58	2.79	0.26
Error	21	225.75	10.75	

(iv) VIGOR

Source	DF	Sum Of Squares	Mean Square	F
Between	2	9.33	4.67	0.48
Error	21	202.50	9.64	

(v) AFFECT

Source	DF	Sum Of Squares	Mean Square	F
Between	2	0.58	0.29	0.46
Error	21	13.37	0.64	

2. Change scores (pre minus post) on the SGRS, MUNSH, MUNAI and MUMS subscales by groups(3)

(i) SGRS

Source	DF	Sum Of Squares	Mean Square	F
Between	2	0.08	0.04	0.12
Error	21	6.88	0.33	

(ii) MUNSH

Source	DF	Sum Of Squares	Mean Square	F
Between	2	75.00	37.50	5.27
Error	21	149.50	7.12	

(iii) MUNAI

Source	DF	Sum Of Squares	Mean Square	F
Between	2	8.08	4.04	1.88
Error	21	45.25	2.16	

(iv) VIGOR

Source	DF	Sum Of Squares	Mean Square	F
Between	2	5.33	2.67	0.39
Error	21	145.63	6.94	

(v) AFFECT

Source	DF	Sum Of Squares	Mean Square	F
Between	2	1.08	0.54	0.88
Error	21	12.88	0.61	

3. Groups(2) by weeks(4) by time(pre-session/ post-session) for vigor and affect.

(i) VIGOR

Source	DF	Sum Of Squares	Mean Square	F
Groups	1	6.57	6.57	0.32
Error	14	285.80	20.41	
Weeks	3	16.35	5.45	1.98
Gps X Wks	3	7.51	2.50	0.90
Error	42	116.52	2.77	
Time	1	60.50	60.50	45.55
Gps X Time	1	3.78	3.78	2.85
Error	14	18.59	1.33	
Time X Wks	3	4.11	1.37	1.91
G X T X W	3	0.67	0.22	0.31
Error	42	30.09	0.72	

(ii)AFFECT

Source	DF	Sum Of Squares	Mean Square	F
Groups	1	4.31	4.31	5.53
Error	14	10.92	0.78	
Weeks	3	2.05	0.68	5.57
Gps X Wks	3	0.32	0.11	0.86
Error				
Time	1	1.42	1.42	6.94

Gps X Time	1	0.05	0.05	0.24
Error	14	2.87	0.21	
Time X Wks	3	0.43	0.14	1.94
G X T X W	3	0.02	0.01	0.10
Error	42	3.08	0.07	

4. Groups(3) by weeks(4) on vigor and affect scores

(i) VIGOR

Source	DF	Sum Of Squares	Mean Square	F
Groups	2	11.45	5.73	0.40
Error	21	300.27	14.30	
Weeks	3	2.49	0.83	0.47
Gps X Wks	6	9.01	1.50	0.85
Error	63	111.45	1.77	

(ii) AFFECT

Source	DF	Sum Of Squares	Mean Square	F
Groups	2	2.97	1.49	1.22
Error				
Weeks	3	0.90	0.30	2.66
Gps X Wks	6	1.40	0.23	2.08
Error	63	7.08	0.11	

5. Groups(2) by weeks(4) for talking scores

Source	DF	Sum Of Squares	Mean Square	F
Groups	1	1345.97	1345.97	1.48
Error	14	12742.46	910.18	
Weeks	3	1380.14	460.05	6.87

Gps X Wks	3°	99.54	33.18	0.50
Error	42	2813.26	66.98	