GROUP APPROACHES WITH THE DISORIENTED ELDERLY: REALITY ORIENTATION AND VALIDATION THERAPIES

BY

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ABSTRACT

The present study investigated the differences in the manner disoriented institutionalized elderly female (80 years and older) scored on measures of cognitive, social, personality and behavioral areas.

Stages of disorientation were based on the tool for assessing the degree of confusion in the elderly developed by M. Peoples.

Experiment One studied RO from a behavior-modification approach. A total of 16 subjects in Stage one disorientation were included. Nine subjects were assigned to the RO treatment and seven subjects to a no-treatment control. The RO group met three times a week totalling 29 sessions. The results revealed small cognitive improvements, no apparent personality changes and some positive social and behavioral changes.

Experiment Two examined VT from a humanistic person-centered approach. A total of 12 subjects in Stages Two and Three participated in this study. There were five subjects that were selected for the validation group and seven in the no-treatment control group. The validation group met twice a week totalling 22 sessions. The results showed no cognitive improvements, but subjects appeared to express themselves more during the last three sessions than the first three sessions. Also, there were some small social and personality changes.

The implications of this study were discussed in terms of alternative approaches with disoriented elderly.

RESUMÉ

La présente étude porte sur les différences entre les scores obtenus par des femmes âgées (80 ans et plus) atteintes de désorientation et résidant en institution, à des tests mesurant la cognition, la socialisation, la personnalité et le comportement.

L'expérience numéro un consistait à étudier l'Orientation au réel selon une approche de modification du comportement. L'expérience a porté sur un total de 16 sujets présentant une désorientation de degré 1. Neuf sujets ont reçu le traitement d'OR, les sept autres constituant le groupe témoin. Le groupe OR s'est réuni trois fois la semaine, soit en tout pour 29 sessions. Les résultats montrent qu'il y a eu de légères améliorations sur le plan cognitif, qu'il n'y a eu aucun changement apparent sur le plan de la personnalité; certaines améliorations ont en outre été observées sur les plans de la socialisation et du comportement.

L'expérience numéro deux visait à étudier la Thérapie de validation selon une approche humaniste axée sur la personne. L'expérience a porté en tout sur 12 sujets présentant une désorientation de degrés 2 et 3. Cinq sujets ont été sélectionnés pour faire partie du groupe recevant la thérapie de validation, les sept autres constituant le groupe témoin. Le groupe recevant la TV s'est réuni deux fois la semaine, soit pour un total de 22 sessions. On n'a observé aucune amélioration sur le plan cognitif, mais les sujets semblaient s'exprimer davantage au cours des trois dernières sessions qu'au cours des trois premières sessions. On a également observé de légères modifications sur le plan de la socialisation et de la personnalité.

Cette étude semble indiquer que la TV représente une possibilité de solution de rechange pour traiter les personnes âgées. Certains faits semblent indiquer que l'OR pourrait être bénéfique aux malades les moins confus, qui n'ont pas régressé jusqu'aux derniers degrés de la désorientation. Il semble également que les malades les moins confus s'accrochent à la réalité actuelle.

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CHAPTER I

Development of the Problem

Introduction

In today's society, with its improved medical technology, older persons are increasing in number at a faster rate than persons under 65 years of age, (Weg, 1978). Therefore, there is an immediate concern about this age group's health care. For instance, approximately 5-15% of all people over 65 years of age residing in the community suffer from senile dementia, (Post, 1973).

During aging brain cell atrophy occurs as well as a decrease in the amount of oxygen flowing to the brain. There are neuroanatomical changes like neurofibrillary tangles throughout the neocortex and hippocampus, (Reisberg, 1981). Also, atrophy of the cerebral cortex and enlargement of the ventricles are other common findings, (Fishback, 1977).

A layperson's use of the word "senility" in old age is oftened labelled Organic Brain Syndrome (OBS) by health professionals. More recently, senile dementia of an Alzheimer's type is also used. Traditionally, it is defined as a disorder which manifests itself through impairment of orientation memory, and other cognitive, affective and behavior dysfunctions, (Liebowitz and Lawton, 1979).

However, Liebowitz, et al., (1979) have suggested that OBS has puzzled physicians since the degree of brain cell atrophy

often does not match the degree of behavioral dysfunction evidenced by the older person. Therefore, Babins (1984) has suggested that there is not always a one-to-one relationship between physical changes and behavioral ones.

Similarly, Houts (1967) examined reports from the results of autopsies between the patient's behavior and the amount of brain damage. The findings were that many patients behaved "normally" until the time of death despite severe physiological damage, while others with relatively in tact brain structures showed marked levels of disorientation, (Aker, Walsh, Beam, 1977).

More recently, Fox, Kaszniak and Huckman (1979) have concluded that the correlation between the amount of cognitive dysfunction and cerebral atrophy is positive in dementia but relatively weak. Merskey, Ball, Blume, Fox, Hersch, Kral and Palmers (1980) have indicated that this relationship is strongest in the patient with advanced dementia.

In general, it has been suggested by Babins (1985) and Feil (1984) that the condition of the brain is not the only regulator of behavior. Other regulators include psychological factors and coping mechanisms which determine how they relate to their environmental surroundings. Peoples (1982) suggested that the actual environment can affect orientation.

According to Peoples (1982) elderly persons who have been relocated from their homes to a nursing care facility lose the comfort of familiar surroundings. When an elderly person is institutionalized, it may result in various levels of

disorientation. Since each patient is limited as to personal space and property, important references are reduced. This may further reduce memory functioning for nursing home residents. However, there is increasing evidence that the effectiveness of group therapy counteracts the effects of institutionalization, (Teasdale, 1983).

Two therapies that are currently being used in this area are: Reality Orientation (RO) from a behavior-modification approach; and Validation Therapy (VT) from a person-centered approach, (Feil, 1982; Langston, 1981).

RO assumes that a person must be oriented in order to be able to participate and function in his or her environment in a satisfactory manner. Its goals are to bring disoriented residents back to present reality, (Jones, 1985). Validation Therapy's purpose is to help old-old (80 years and older) disoriented persons to achieve their own goals of living, to ease their stress, to resolve their life's unresolved conflicts, and to communicate with them in whatever time or location is real to them, (Jones, 1985).

According to Peoples (1982), both Validation Therapy and Reality Orientation attempt to help the disoriented person return to some type of reality by forming a "therapeutic relationship" between the therapist and the person. Both therapies share a basic objective of helping the elderly live their lives with dignity, both use a group approach, and they both differ in their philosophies, methods, and goals.

Conceptual Framework of Reality Orientation

This procedure was originally developed by Taulbee and Folsom in 1958 and refined in 1965 in the Veterans Administration hospitals. This therapy is a behavioral approach designed to reduce confusion and disorientation, (Taulbee, Folsom, 1966).

The primary goal of RO is to reduce confusion experienced by the elderly, (i.e., orientation as to time, place, person). Implicit in most descriptions of RO is the notion that the oriented individual is more likely to be independent and happy than one who is not, (Schwenck, 1979).

Langston (1981) identified behavior modification as the program's underlying theory. By providing environmental stimuli and controlling the interaction between the staff and the confused patient, RO proposes to elicit a desired response from the patient. The approach stresses changing behaviour by positively reinforcing answers and actions that coincide with reality, which is defined as that which has objective existence and is not merely an idea, (Lehman, 1974).

This therapy includes the use of environmental stimuli such as clocks and calendars. It also includes behaviors of the staff aimed at consistently increasing patients' awareness of the environment, or asking the patients to name objects and then rewarding correct responses with verbal or non-verbal praise, (Drummond, Kirchoff, Scarborough, 1978).

According to Hall (1971), there are two types of reinforcers: Primary and Secondary. Primary reinforcers are consequences that satisfy certain biological needs, such as food to a hungry animal. Secondary reinforcers are consequences like attention, praise, and money, which do not directly relate to biological needs but have acquired reinforcing power. In RO verbal praise, touching by the nurse, is a secondary reinforcer for the eldery patient. It has been suggested by Lehman (1974) that verbal rewards and praise should immediately follow desired responses or behaviors. Scarbrough (1974) suggested that rewards for correct responses should consist of secondary reinforcers, such as verbal praise, touch, smiles, etc. Contigency management, that is providing a reinforcer following an appropriate performance, is clearly intended as an important part of RO, (Phillips, 1973). To delay a reward is to lose an opportunity since a very confused person forgets quickly and might not connect the praise with their own response, (Holden, Woods, 1982).

There are two forms of RO: 24-hour RO, and Class RO. Twenty-four hour RO involves staff in using all contacts with elderly, confused patients to remind them of details of time, place, and person. It also demands an environment filled with memory aids, such as clocks, signs or calendars, and organized in a way that makes such information relevant. Class RO was

originally intended as a supplement to the 24-hour approach, but has evolved as a therapy itself. It involves structured sessions in which a therapist and a small group of patients sit together for approximately 30 minutes, (Teasdale, 1983).

According to Langston (1981), the performance aspect of RO has been articulated clearly: Patients are to respond appropriately to a specific basic question about themselves or their environment. The ultimate performance goal is that clients are oriented and able to function in the environment with socially accepted behaviors. This becomes important because this approach maintains that confusion and disorientation can successfully be treated with RO, no matter what the etilogies, (Phillips, 1973; Taulbee, 1976).

Hogstel (1979) suggests that people who are labelled confused, senile or disoriented are not considered capable of making decisions regarding their needs and care. Agreeing with their distortions of reality often reinforces and increases their confusion. The basic concepts of RO are similar to Glasser's (1965) Reality Therapy which aims to direct the individual to be more realistic, more authentic, more responsible, and more involved with other people.

The rigid control of human responses propsed in RO would appear to be anti-humanistic. However, Kanfer and Phillips, (1970), defend behaviour modification because it increases the human dignity of the patients as they regain an ability for

independent living. As they suggest, it is non-humanistic rather than anti-humanistic, a neutral tool whose value depends on its use. Similarly, Holden and Woods (1982) indicated that using RO permits elderly people who are deteriorating to feel cared for and respected by others.

Conceptual Framework of Validation Therapy

The conceptual framework of Validation Therapy (VT) was based on an existential humanistic psychology represented by Erik Erikson and Carl Rogers.

Erikson (1963) defined the final stage of life as "ego integrity" versus "despair", and describes integrity as the readiness to defend the dignity of the individual's own life style against all physical and economic threats. The integrated person accepts life's events and resolves its conflicts. Feil (1982) and Peoples (1982) have pointed out that failure to resolve this stage means that the person will not be able to defend himself against both his physical and psychological losses. The person avoids facing life goals and holds onto outworn tasks that leads to disorientation in old age, (Feil, 1981). For instance, an 80 year old woman who, as a young person, blamed other people for personal failures, may continue to blame people in the nursig home. This old-old person may think that the nurses are trying to poison her food, or that other residents are stealing her clothes. When this same individual was younger, her style of blaming others was never successfully resolved, although she was able to function reasonably well in society. Now that this person has reached old-old age, her losses create anxiety and ultimately is left

with a feeling of despair, (Babins, 1985). Without the ability to resolve unfinished past conflicts, the individual vegetates until death, (Feil, 1982).

Implicit in the concept of ego integrity is the acceptance of a person's own definition of himself. Engle (1980) defined this acceptance as confirmation. She saw confirmation and validation as interconnected. She defined validation as acknowledgement that the individual has received the message which the helper transmitted and that from the helper's perspective, is understood. The opposite of confirmation, disconfirmation, was defined by Watzlawick, Beavin, and Jackson (1967) as a pathalogical form of communication in which the listener denies the individual his self-identification. Labelling an old person as disoriented, confused, or senile without offering him help to overcome the behaviors associated with these labels, may be seen as an example of disconfirmation, (Peoples, 1982). Typically, rather than confirming the attitude of acceptance and worth, we apply labels that do not take into account a person's life experiences. In many cases a climate of warmth and acceptance is not used to discover the person's perspective, (Peoples, 1982).

According to the originator of VT Naomi Feil (1982) suggested that the old-old person with little or no stimulation from the outside world, lose their identity. They fantasize, using their vivid memories, and return to their past when they

were useful, productive and loved. Reacting to physical and intellectual deprivation, the old-old disoriented may retreat from present reality that holds no role or no future. Clinically, they recreate and re-live the past in order to restore their integrity, (Feil, 1985). Ornstein (1977) has described early emotional behavior which procedes later-learned cognitive rational thought. It is this early emotional behavior that is expressed by the disoriented old-old, (Feil, 1982).

As aging occurs, there are many physiological changes that may result in an impairment in logical thinking. When this occurs, it has been suggested by Zaidel (1978) that non-rational or emotional outputs become heightened. For instance, during the dream state one does not use logical thinking but non-rational eidetic images. These images are often used by the old-old disoriented to help restore events from the past. Similarly, Feil (1982) has termed the recreation of old memories as "seeing with the mind's eye". For example, if a 90 year old woman never told her mother that she loved her, she may recreate her through eidetic imagery, (Babins, 1985).

These old-old people, from our point of view, are often labelled demented when they reveal unresolved inner issues through eidetic imagery. The fact that certain feelings have been denied during adulthood may lead to a breakdown of defense mechanisms in old age. Often this denial or repression leads

to a final retreat to fantasy and emotional behavior when the individual is isolated and dependent on others for activities of daily living. This stimulates the regression to past experiences and unresolved feelings from this period, (Verwoerdt, 1980).

Feil's approach is similar to Carl Roger's humanistic outlook in that it emphasizes the essential freedom and dignity of the unique person. When the therapist is experiencing a positive, acceptant attitude toward whatever the client is experiencing at that moment, therapeutic movement or change is more likely to occur. The therapist is willing for the client to be whatever immediate feeling is going on--confusion, resentment, fear, anger, courage, or love, (Rogers, 1977). As a result, rational thinking is not the only way of behaving; feelings have a right to be expressed when rational thinking fails, (Ornstein, 1977).

The theory behind VT is that human beings can change and grow in a genuine, loving and caring relationship. This is supported by Rogers, (1975). Accepting the individual's right to be unique has been suggested by Watzlawick, et al. (1967), as probably the greatest single factor ensuring mental development and stability of persons in a relationship. Therefore, the primary goal of Validation Therapy is to give the person a sense of identity, dignity and self-worth by validating their feelings without analyzing and interpreting their actions.

Aged disoriented persons will respond to a caring, trustingparent-person who listens with empathy to help them resolve their past. They need a trusted individual in this final resolution stage of life (Burnside, 1976). Unlike Rogerian Psychotherapy or RO, Validation Therapy is concerned with the expression of unfinished conflicts. Validation Therapy, like other humanistic approaches, is not overly concerned with discovering causes of confusion. A major premise for the validation method comes from the observation that the causes of confusion are numerous including social, emotional, and physical losses, (Jones, 1985). Therefore, the validation therapist is not analytical or judgemental towards the elderly, (Feil, 1982).

Feil (1982) divided disorientation into four stages ranging from mild to severe disorientation. Each stage is distinguishable on the basis of emotional characteristics, physical characteristics, and feelings that are experienced by the old-old in that stage (see Table 1).

This theoretical formulation of stages is based on many years of observation but has not been standardized.

Stage One: Malorientation

Patients hold onto socially prescribed rules, however, their past conflicts are not expressed directly, but by using

TABLE 1

STAGES OF DISORIENTATION

STAGES	CHARACTERISTICS		
	EMOTIONAL	PHYSICAL	FEELINGS
One Occasional Disorientation	Holds onto present reality. Can play games with rules. Has sense of humour. Denies disorientation, confabulates. Can dress, toilet and control self most times. Holds onto rules and "proper" ways of behaving.	Eyes clear and focus. Stance rigid, unmoving. Movement in space definite, sustained, precise. Face and body muscles tight. Fingers and hands often pointing Arms often folded, protecting the chest.	Feelings are denied. Speech, reason, rational thinking dominates. Considers anyone who shows feelings or uses napkins to represent babies is "demented".
Two Time Confusion	Expresses feelings. Does not remember facts. Remembers sensory, pleasurable feelings from childhood. Energy focus is to resolve past unfinished conflicts. Loses sense of humour.	Muscles are loose. Eyes clear, but often unfocused, gazing into distance. Movement in space slow, indirect, often questioning. Shoulders tend to slump forward, neck down.	Returns to universal feelings shared by all: love, hate, fear of separation, struggle for identity. Expresses these in symbols and body movements. Rhythms and rhymes come without reason, to avoid boredom.

TABLE 1 (Continued)

STAGES OF DISORIENTATION

STAGES	CHARACTERISTICS		
	EMOTIONAL	PHYSICAL	FEELINGS
Three Repetitive Movement	Need for speech lost with disuse. Ability and desire to think is lost. Repetitive sounds stimulate, reassure, help resolve. Increasing loss of sense of self-awareness and of body in space. Does not respond unless stimulated through a combination of close contact, nurturing touch, voice tone and eye contact.	Sways or dances. Sings but cannot talk in sentences. Moves gracefully with muscles loose, but is unaware of movements. Is incontinent of bowel and bladder. Eyes often closed or unfocused. Fingers and hands pound, tap, beat, button and unbutton.	Feels shame, guilt, sexual feelings, repressed rage at parents who implanted "bad" feelings for "bad" behavior. Feelings stopped-up for a lifetime, overflow. Use body to act out unfinished feelings with a goal toward peace.
Four Vegetation	Moves in slow, half-time. Murmurs one sound, very weak, very rarely. Sleeps or sits with eyes closed most of the time.	Eyes closed, dull when open, unfocused, staring. Muscles loose, without expression. Do not respond to touch, voice tone, eye contact. Sits in geriatric chair, or lies in bed to vegetate, often for many years.	Very little evidence of response to validation therapy.

SOURCE: Naomi Feil. Validation/Fantasy Therapy: New Manual Tells How to Help Disoriented Old-Old (Cleveland, Ohio: Edward Feil Productions, 1981),pp. 22-31.

people in their present as symbols to represent people in their past, (Jacobi, 1971).

Body patterns are characterized by tense tight muscles; usually these patients are continent, their movements are direct and purposeful. The vocal tone is harsh, accusatory and often whining, (Jones, 1985).

At this stage, they deny feeling. The validation therapist does not explore feelings. In fact, a validation group, according to Feil (1982), would not be helpful for Stage One because these patients are threatened by feelings and by their occasional disorientation.

Stage Two: Time Confusion

Patients in this stage create their own inner reality made up of fantasies. Early memories substitute for present reality; patients openly express their feelings. They are able to recall past events that consist of strong feelings. Patients in this stage do not keep track of clock time. They forget names and places. Their body patterns are such that they sit upright but are relaxed. They may be aware of their incontinence, and have slow, smooth movement, their voices are low, rarely harsh, and they tend to sing and laugh readily. These residents respond to a nurturing tone and touch, (Jones, 1985).

Stage Three: Repetitive Motion

This stage is characterized by repetitive sounds that stimulate, reassure and help resolve feelings; for instance, a patient may moan, make "ooo" sounds, or clicking sounds. Patients may repeat certain words or phrases, (Feil, 1982). Patients shut out most stimulation from the outside world. The body patterns are slumping forward, restlessness, and pacing. Their vocal tones are slow and steady. Patients often laugh easily and are usually unprompted, (Jones, 1985).

Stage Four: Disorientation: Vegetation

In Stage Four, the old-old person shuts out the outside world completely, giving up the struggle to resolve living. Self-stimulation is minimal but just enough to survive. When the person in Stage Three is drugged or restrained, they often retreat to vegetation, (Feil 1982).

Patients will not recognize family, visitors or staff. Their physical features include flaccid posture, little or no verbal activity, and they often appear to be sleeping, (Jones, 1985).

In summary, Validation Therapy relies on the same therpeutic tools seen in Rogerian Psychotherapy--empathy, genuiness, and being non-judgemental. This approach is a humanistic approach for old-old disoriented that centers discussions on conflicts that are relevant to the resident's life experiences.

Review of the Literature (Reality Orientation)

One of the biggest problems with RO is that research in the past has been based on anecdotal reports and uncontrolled studies. For instance, Folsom (1967 and 1968) and Taulbee and Folsom (1966) supplied brief case histories of seven men undergoing RO. Two were mute before starting RO, and a third would not converse. Following RO, all were talking more. Another patient became more cooperative and talked more freely. One patient's progress was minimal. One patient became generally more responsive and was tranferred to a nursing home; another ceased to use a wheelchair and became much less incontinent and violent. These anecdotal reports suggest that there were changes in sociability, incontinence, aggression and cooperation as a result of RO, (Holden and Woods, 1982). However, no methodological procedures were used to scientifically evaluate the results.

Another earlier study was done by Barnes (1974) who used Classroom RO with six geriatric patients with a moderate to severe degree of memory loss, confusion and disorientation. Results indicated no significant improvement in questionnaire responses after the classroom sessions were terminated. However, observed behavior showed considerable improvement in the subjects. However, no control group was used to compare to the experimental group.

The first controlled trial of RO was carried out by Brook, Degun and Mather (1975). Eighteen patients were assigned either to daily RO sessions or to control groups. In the control group patients sat in a circle for 30 minutes a day and, unlike the RO group, received no encouragement from the therapist to use the RO materials; their questions were answered as briefly as possible. The results indicated that patients who were rated highest on orientation (i.e., had a relatively high intellectual and social functioning) benefitted the most from RO. Also, unless patients received reinforcement from the therapist, they did not seem to benefit. All groups seemed to improve in the first two weeks. This occurred because taking the patient out of their ward environment and placing them in a stimulating environment seemed to have a positive effect on all groups. After the initial two weeks, the control group deteriorated while the RO group either maintained progress or continued to improve. The most deteriorted patients showed the least improvement in RO.

Harris and Ivory (1976) administered RO to 29 geriatric patients, and 28 in a control group. The control group received traditional treatment. The results indicated that RO had improved both the verbal orientation behaviors and the overall clinical impression, while no such changes were found in the control group.

Citrin and Dixon (1977) attempted to experimentally evaluate RO. There were two dependant measures used in this

experiment: The RO Information Sheet, a 25-item questionnaire asked of the resident; and the Geriatric Rating Scale, a 30-item behavioral checklist completed by floor personnel. There were 12 subjects in the experimental group and 13 in the control group. Results on the RO Information Sheet indicated that following implementation of the RO program, the experimental group was more oriented to their environment than the control group. The Geriatric Rating Scale results were inconclusive. It can be concluded from this study that RO did increase the orientation to reality of the confused and disoriented residents who were involved in the program, and that RO may be helpful for solving some problems of disoriented and confused residents.

MacDonald and Settin (1978) did a study comparing RO and Sheltered Workshops using three variables: The Life Satisfaction Index-A; Nurses' Ratings; and Behavior Observations. Thirty residents were assigned randomly to either RO, Sheltered Workshop or an assessment-only control.

There were significant gains on the Life Satisfaction Index for members of the Sheltered Workshop condition. On the Nurses' Rating of the resident's social interest, the Sheltered Workshop group improved. The RO group, in fact, tended to deteriorate on Life Satisfaction Index, whereas untreated controls showed little change. Residents assigned to the Sheltered Workshop condition freguently mentioned "their

projects" to staff members and reported a great deal of satisfaction from doing something that would help other people. RO residents mentioned to staff that the sessions seemed boring and useless.

Voelkel (1978) did a study comparing RO to resocialization groups with 20 residents living in a nursing home. They were measured on Activities of Daily Living (ADL) and the Short Portable Mental Status Questionnaire. Those participants in the RO group did not improve significantly, but those in the resocialization group did improve. Voelkel (1978) implied that RO may be a more useful tool as a preventive measure to be used at the onset of confusion or disorientation as opposed to a therapeutic approach that restores mental status.

Woods (1979) included in her study a social therapy control group which was a non-directive group discussion in which RO materials were not used. The purpose of this was to include a control group aimed at eliminating the extraneous effects of staff attention seen in RO condition. The results of the various cognitive assessments were clearly in favour of the RO group. On the concentration test, the "Social Therapy" group seemed to fare worse than even the untreated group.

Zepelin, Wolfe and Kleinplatz (1981) studied the effectiveness of RO as treatment for disorientation and behavioral deficits in institutionalized elderly adults over a one-year period. Evaluations were made at six-month

intervals. Residents were given a 24-hour RO program and were compared to a control group. A sub-sample of disoriented residents also attended RO classes and was compared to the control group. Treatment effects were assessed with Mental Status Questionnaire (MSQ), Activities of Daily Living (ADL) and interpersonal behavior.

The sub-sample attending RO classes showed slight statistically significant improvement on the MSQ after six months. There was no favourable effect on ADL or other measures. Comparison with other studies suggest that advanced age, severity of disorientation and disabilities limit the effectiveness of RO.

Although, it is difficult to say how much a small change in MSQ score contributes to the general welfare of a disoriented patient, the authors concluded that RO helps prevent some mental deterioration that may otherwise occur.

In a large scale study conducted by Hanley, McGuire and Boyd (1981), in both long-stay psycho-geriatric wards and an old people's home, 28 subjects received RO classes four times weekly and 29 control subjects received no treatment over a 12-week period. The results indicated that RO gave changes in orientation only. There were no differences on a behavior rating scale between RO and control groups.

In an attempt to vary the rate of RO sessions over a four-week period, Johnson, McLaren and McPherson (1981)

compared RO presented once daily in groups, twice daily in groups, oncedaily individually. On a questionnaire measure of orientation all three versions produced significantly greater improvement than that found in an untreated control group, but did not differ in their relative effectiveness.

In a recent review by Campos (1984), she suggests based on the work of Nodhturft and Sweeny (1982), that RO programs have succeeded in sensitizing the staff of nursing homes to the possiblities of improvements by elderly residents. To the extend that these programs enrich the environment and broaden opportunities for social interaction, they may enhance morale of staff and residents and motivate both groups to use their capabilities to the fullest.

In summary, many studies have attempted to determine if Reality Orientation reduces or prevents confusion. Also, these studies have investigated the effects on overt behavior as measured by many different scales. In general, the results are varied due to reasons such as no control groups, methodological difficulties, and different rating scales. It does appear that RO has its major positive effect on orientation for mild to moderate amounts of confusion.

Review of the Literature (Validation Therapy)

Feil's (1963) initial goals were to help severely disoriented old-old labelled "chronic organic brain syndrome", "senile psychosis", "ambulatory schizophrenia", "severe arteriosclorestic", with coronary insufficiency to face reality and related to each other in a group. Feil (1968) found the goal of helping severely disoriented old-old people face reality to be unrealistic. They had regressed to total dependancy on the nursing staff and were unaware of time and place. Each person was observed to be more interested in a world of fantasy, and behaved in a withdrawn manner. She observed patients reminiscing and being stimulated when they were engaged in an exploration of their feelings by a group leader.

In an earlier study by Feil (1963), she reported that 12 disoriented old patients were divided into two groups of VT and met four times a week for six months. Behavioral observations were recorded by the geriatric aids at four regular intervals each day on the basis of six positive and 17 negative manifestations of affect. Behavioral data were recorded during daily group meetings. The results showed that all but one group member displayed an increase in positive affect. This study, however, lacked methodological controls.

Feil (1967) observed that patients who had been the most withdrawn of the nursing home residents became more comfortable

in facing and expressing their feelings with help of a supportive therapeutic relationship. This study was an anecdotal report of Validation Therapy and without a control group.

Feil (1971) did a study that showed that after five years of Validation Therapy, 30 severely organically brain damaged disoriented old-old people became less incontinent, speech improved, had less negative affect (crying, pounding, hitting), had more positive affect (smiling, talking, helping others), and they became more aware of external reality. They talked outside of group meetings and showed greater contentment. However, no control group was used to compare VT.

Alprin (1980) studied the effectiveness of using Validation Therapy with second and third stage disoriented aged. They used "Form Y" which listed 32 resident behaviors. Eighteen behaviors on Form Y were judged to be negative behaviors, and the remaining items were judged to be positive by the project evaluator. The extent that negative behaviors tended to disappear and positive behaviors appeared, VT would be viewed as beneficial.

The evidence that was obtained based on 15 respondants from nursing homes in the eastern half of the United States suggests very strong positive changes in behavior of resident groups following Validation Therapy. Respondants selected negative behaviors almost exclusively prior to VT and selected

positive behaviors almost exclusively following VT. Negative behaviors included screaming when alone, sitting alone, undressing in public, banging on chair, and biting. Positive behaviors included intitiating comments, talking in phrases, attentiveness, eyes focusing, and sitting up in a chair.

There were two problems with this investigation. The first was that there was no mention of any control group. The second was that the forms were mailed to nursing home directors, activities directors or social workers who were using Validation Therapy in their work situations. However, there appears to be no evidence of controlling any factors that could enter into a mail questionnaire study.

Supporting the positive effects of VT has been reported by Corcelli (1982) who saw marked improvement in behaviors, decrease in crying, improved gait, decrease in wandering, more frequent interaction, and a positive self-image.

In a better controlled study, Peoples (1982) compared RO, VT and a no-treatment control group. She found that VT helped some of the moderately to severely disoriented persons to get in touch with their own feelings and self-esteem by validating their own reality. This therapy helped to change the subject's behavior to more effective functioning. In the RO group the behaviors exhibited in the early weeks during therapy by all members did not change throughout the six-week period beyond

the daily variability normally experienced. Therefore, a pattern of change did not emerge which demonstrated any progress as measured by Tool for Assessing Degree of Confusion in the Elderly, (Hogstel, 1981) and the Ego Integration Scale, (Peoples, 1982). For instance, those who confabulated or interrupted conversation at the beginning of treatment continued to do so until the end. Those who began with a greater degree of orientation improved the most. For those with less confusion, RO was not appealing unless the class also satisfied their need for social approval. Also, for those who were initially severely confused, or very near there, RO decreased their orientation scores. People (1982) points out that VT produced more qualitative changes in group members as compared to RO. Seven of the 10 members in VT expressed a desire to continue sessions, compared with only two of the eight in the RO group.

Validation Therapy was most helpful to those who exhibited Feil's Stage Two behavior to draw them back to more functional behaviors. Finally, there was evidence that VT gave the staff a model for an alternative method of communicating with the residents. Staff members were observed using some of the behaviors they had seen demonstrated. For instance, touching, using eye contact, listening, using empathy, and validating what was expressed. These were important trials that were successful in VT.

Indirect evidence stems from Barrett-Lennard (1962) and Taugh (1973) who have suggested that the more empathic therapistsare towards their patients (as measured by Accurate Empathy Scale by Truax, 1967), the better the success in therapy. It has been shown that empathy, understanding, and unconditional positive acceptance are related to positive outcome. From schizophrenic patients in psychiatric hospitals to pupils in ordinary classrooms, from clients of counselling centers to patients in group therapy, the evidence indicates that the more humanistic towards the client, the more likely the clients will feel better about themselves and will prompt constructive growth, (Rogers, 1967, 1975; Tausch, 1977).

Purpose Rationale

Peoples (1982) found that Stage Two patients responded best to VT. Feil (1982) articulated that patients in Stage One were holding onto reality and were threatened by feelings and their own disorientation. These residents may benefit from RO but not from VT. This was a similar view held by Jones (1985) who pointed out that in Stage Two patients communicate most readily. Also, patients in Stage Three may not be able to respond with words but may sing or act out feelings. They typically string together pieces of phrases that have meaning for them and repeat or echo them frequently. Both Stage Two and Stage Three may benefit from VT.

In Peoples' (1982) study, she rated 31 subjects using the Behaviour Assessment Tool to determine the stages of disorientation. Each of these 31 subjects were randomly assigned: 11 to the control, 10 to the validation group, and 10 to RO. Empirically, each group contained Stage One, Two and Three disoriented. Although the researcher chose to use a randomized design with respect to the stages, it would appear to be counter to the theoretical concepts.

The rationale behind the present study is that patients in Stage One are mostly unwilling to express themselves emotionally. Feil (1982) found that patients who were in Stage

One and received VT became threatened and upset. Since they are mildly confused and are pre-occupied with time, place and day, RO may be an effective therapy of choice to help them return to reality. Patients in Stages Two and Three are characterized on the basis of more affective qualities and appear to benefit more from VT which focuses on an exploration of conflicts through expressions.

The ideal situation would be to administer the individual therapies with subjects from the appropriate stages of disorientation and compare them to control groups that are in the same stages as the treatment group. Since both approaches are used for different stages of disorientation, it would be incorrect to directly compare the approaches against each other. This was the situation in the present study.

Statement of the Problem

This study explored the differences of how two groups of disoriented old-old patients scored on measures of cognitive, social, personality and behavioral functioning when treated with Validation Therapy, Reality Orientation or No-Treatment.

Dependent Variable: Measurement Selection

This brief section is an outline of the reasons that each measure was selected. To evaluate orientation (memory) the Philadelphia Geriatric Center Multi-Level Assessment Instrument-Cognitive Domain was used because it contains items related to orientation. For instance, age, date, and birthdays that give an accurate indication of the patient's orientation, (Kane and Kane, 1981). Also, when testing an aged group, it would be difficult to administer measures that were longer. This measure took about 10-15 minutes for each subject.

The Nurses' Observation Scale for In-Patient Evaluation was used because it broke down positive and negative social and personality traits and gave an overall picture of the patient's total assets.

The Adult Personality Rating Schedule was selected to evaluate personality over a three-month period. The originators of this schedule, Kleban, Brody, Lawton, (1971),

used it to evaluate personality changes over an extended period of time. The possible shifts in personality traits with a disoriented population may be a good reason to use a measure of this type.

The Therapy Group Observation Reporting form was designed by Peoples (1982) to record important information seen on a sessional basis. It was used in the present study because of previous successful use and the ease with which behavioral and non-verbal information could be charted.

Research Questions

Question 1: To test the question if Validation Therapy changes the disoriented person's score on a measure of cognition and orientation.

Although the purpose of VT does not include a re-orientation to accepted reality, a change in cognition (orientation) may occur. Feil (1982) suggested that fantasy, being a way of restructuring his or her world, the disoriented old-old person may choose to withdraw further into fantasy, or to feel safe enough to accept external reality and become more oriented to the environment as a result of VT.

Question 2: To test the question if VT changes the patient's score on measures of social and personality characteristics.

Since VT is a method allowing residents to express themselves, it would be interesting to see the changes on scores on measures of social and personality charateristics in light of positive change indicated by anecdotal reports and earlier findings, (for example, Alprin 1980; Corcelli, 1982).

Question 3: To test the question whether there are any changes seen during the actual therapy sessions using VT.

Since a study of this nature involves small sample sizes, clinical changes may only be seen during actual sessions. This can be assessed through direct observations.

Question 4: To test the question if RO changes the disoriented person's score on a measure of cognition and orientation.

In line with previous research RO has been suggested to improve measures of orientation, (for example, Merchant and Saxby, 1981). Also, studies have shown that patients who were not as "demented" responded better to RO, as evidenced by improved orientation, (for example, Greene, Nicol, Jamieson, 1979). The present study will investigate these findings.

Question 5: To test the question if RO changes the patient's score on measures of social and personality characteristics.

Research in this domain are contradictory. Some studies, like Zepelin, Wolfe, and Kleinplatz (1981) do not indicate favourable changes on these measures. However, Letcher, Peterson, and Scarbrough (1974) and Brook, Dégun and Mather (1975) indicated positive changes. The present study will examine these issues.

Question 6: To test the question whether there are any changes seen during the actual therapy sessions involving RO.

Since a study of this type involves small sample sizes, clinical changes may be noticed during actual sessions. This can be assessed through direct observations.

Summary

This study proposed to investigate the differences in the way disoriented old-old patients scored on cognitive functioning, social, personality, and behavioral measures when treated with VT, RO or no treatment. This is based on the theory that these therapies have beneficial effects when used with the appropriate stages of disorientation as outlined in this chapter.

CHAPTER II

Methodology

Introduction

The methodology of this section will be presented in the chapter. It will include the setting, administrative, experimental and sample designs. Also, the procedures and instruments are described in this section.

Setting Design

This study was conducted at Mount Royal Villa Nursing home, owned by Extendicare. The institution consists of 150 beds and is located in a residential part of central Montreal in the Town of Mount Royal.

The physical dimension will be briefly described since environment is often related to orientation, (Drummond et al., 1978; Hahn, 1980; Peoples, 1982). The building consists of three floors. The first floor has a nursing station located to the left of the main entrance and is at the far end of the wings. The second and third floors are structurally identical. On each floor there are two units. One unit is situated in the East Block and the other in the West Block. There are two wings on each unit. Each unit has a separate

nursing station located approximately in the middle of the unit, dividing each wing into almost an equal number of rooms to the right and left of the nursing station.

Immediately facing each nursing station is a lounge which includes chairs, sofas, a television set, a large table and a smaller round table. The hallways and lounges are painted a bright colour making it easy for residents to identify important places. In each hallway was a large wooden banister that helps the resident walk from different areas on the floors.

There are two large calendars, one located facing the lounge, which indicates, in large print, the daily meals during the entire month. The other large calendar faces the elevator located to the left of the dining area. This landmark divides the entire East Block from the West Block. This calendar consists of the current month's daily activities, the present date and the residents' birthdays. Experiment One (Reality Orientation Therapy) took place in the dining area on the second floor. Experiment Two (Validation Therapy) took place in the lounge on the third floor. Both places were selected on the basis of availability of space during the times of therapy.

The activities and physiotherapy departments work with the nursing team in order to provide frequent group activities of interest to this diverse group of residents.

In summary this is a long-term care institution, in which the environment within the nursing home is conducive to

orientation. Peoples (1982) points out that these conditions must be noted because the enriched environment must be considered as a possible extraneous variable in a study of this nature.

Administrative Design

After an initial phone call to the Administrator, a meeting took place at the nursing home introducing this project. A second meeting between the researcher and the Administrator and Activities Director took place to discuss the details and expectations of the study. At this time, the researcher requested access to residents' medical charts to gather background information. Permission was granted for the study and full cooperation was assured.

Experimental Design

This study employed the Quasi-Experimental Pre-Test/Post-Test control group design.

Factors of internal invalidity were controlled; for instance, mental history, sex, age, testing, and mortality. These factors were held constant.

External invalidity which limits the generalizability of these finds could not be controlled. For example, this institution is an upper-middle class nursing home which is unlikely to be representative of other nursing homes in Montreal.

Many drugs are often prescribed for elderly patients such as: Tranquillizers, anti-depressants, anti-psychotics, cardiac drugs and vitamines, (Whittington, Peterson, 1978; Sloan, 1982). Also, there are usually many medical conditions seen in this population, (Weg, 1978). Since it was very difficult to find elderly subjects who did not use medication and who did not suffer from medical diseases, the counter-balancing method that was previously employed by Babins (1984) is used in the present study.

All baseline testing was completed before the beginning of treatments. Confidentiality was assured by not showing any results and by storing any patient information at the researcher's home.

The post measures were completed 11 days following the completion of both experiments.

The Philadelphia Multi-Level Assessment Instrument was done by the researcher before and after the experiment on an individual basis. The Nurses' Observation Scale for In-Patient Evaluation and the Adult Personality Rating Schedule were completed by the charge nurse on each unit. The Therapy Group Observation Tool was filled out after each session by the experimental therapists.

Sample Design

Subject Selection

In order to be included as a subject in this study, nursing home residents met the following criteria:

1) were 80 years or older;
2) gave informed consent to participate (closest relative or guardian gave consent in cases of extreme disorientation);
3) were physically able to participate in a group;
4) scored in the range of 10-27 on the Behavior Assessment Tool;
5) were rated by the physician (see Appendix G) as either (i), (ii), (iii):
   - (i) approximately normal (with a minimum score of 10 on the Behavior Assessment Tool); or
   - (ii) occasional brief periods of confusion and/or forgetfulness; or
   - (iii) marked confusion and disorientation with brief periods of alterness and proper orientation.

In order to avoid additional confounding variables with respect to the psycho-medical diagnosis, patients who had been or were currently suffering from any psychiatric disorders

(such as manic-depressive psychosis, or schizophrenia), or neurological disorders (such as adv schizophrenia) s disease or a stroke), were not considered as possible subjects in either Experiment One or Two. Generally, the patients were diagnosed as having senile dementia, Alzheimer-type senile dementia or Organic Brain Syndrome without a known neurophysiological cause.

Subjects:

Twenty-eight female patients between the ages of 80-95 years old were selected from an intial female population which totalled 129 patients. All patients that participated in the study were institutionalized and able to speak English fluently.

Subject Attrition

One subject in the Validation group (Experiment Two) was lost after only two sessions because she left the nursing facility.

Procedure

If the subject met the above criteria, the researcher had a brief 10-minute interview to verify if the resident was able to communicate. For instance, "Hello, Mrs. _____. My name is _____. How are you today?"

If the subject responded, the researcher assessed their stage of disorientation using the Tool for Assessing Confusion in the Elderly. If the score fell between 10 and 15, they

participated in Experiment One. If the score fell between 16 and 27, they were selected for Experiment Two.

The researcher approached each of the patients individually; an explanation of the study was given in simple words, and they were asked for written consent (see Appendix I) in order to participate. In the event of moderate disorientation, a family member was telephoned and was explained the purpose of the study (see Appendix H). If there was a positive response, the consent form was either mailed to the resident's family or left at the nursing station to be signed.

When the groups for both experiments were finalized, a memo was sent to the respective wards informing all staff of the names and times of the patients involved in the groups.

Experiment One

A total of 16 subjects were assigned to this experiment, either to the control or to the Reality Orientation treatment condition. A total of nine subjects were selected in the control group and seven subjects in the experimental group.

Although, subjects were assigned to each condition randomly unavoidable conflicts in schedules required a change in group assignment for some subjects before the start of the experiment.

The total number of sessions was 29. There were a total of seven residents involved in the treatment. However, not all seven residents received 29 sessions. One reason was illness.

The treatment group lasted a total of 10 weeks and met three times per week between 3:15-4:00. This is similar to Voelkel (1978) who held RO classes three times per week for six weeks.

Treatment Therapist

To eliminate treatment bias, a final year social work student administered RO. She had been instructed in this therapy by: 1) The VA Hospital's (in Tuscaloosa, Alabama) Guide for Reality Orientation (1974), plus an audio tape; 2) Reality Orientation Psychological Approaches to the "Confused" Elderly by U. P. Holden and R. T. Woods (1982); 3) extensive discussions with the researcher.

Reality Orientation Therapy

This therapy was limited to classroom group sessions only. The physical arrangement of the group included chairs that were placed in a semi-circle facing the therapist.

The therapist began with the group by orientating members to each other by introducing their names to one another. This was done at the beginning of each meeting.

Some important topics that were discussed included: the name of the nursing facility, the name of the city, the day of the week, month, season, the weather, past employment, current events, birthdays, and holidays. They were discussed verbally and were written on a large white (4' X 5') sheet with coloured

markers to aid residents. Information cues to current reality were used in the form of pictures, props, models, weather charts, and postcards. Other topics were introduced by the therapist as outlined in Holden and Woods (1982).

The routines and the principles used by the therapist followed those published in the VA Hospital's, Guide for Reality Orientation, (1974). Some basic principles of RO include adhering to set routines in a stable environment, asking clear and simple questions of group members, giving brief, definite information and discouraging incoherent, purposeless actions or speech by referring to the present, being firm but supportive. In general, secondary reinforcement (verbal praise) was used for appropriate responses.

The therapist made daily observations of group members which were recorded on the Therapy Group Observation Tool, (Appendix F).

Experiment Two

A total of 12 subjects were assigned to this experiment, either to the control or validation treatment condition. A total of seven subjects were selected in the control and five subjects in the experimental group.

The total number of sessions was 22. There were a total of five residents involved in the treatment. However, not all

five residents participated in all 22 sessions. One reason was illness.

The treatment group lasted a total of 11 weeks and met twice a week between 10:15-11:00.

Treatment Therapist

To eliminate experimental bias, a first year graduate student in counselling psychology administered Validation Therapy. He had previous experience with elderly residents and was familiar with Rogerian psychotherapy. He had been instructed in this therapy by: 1) having read Feil's V/F Validation. The Feil Method, (1982), and 2) listened to a four-hour tape by Feil on VT, (1984).

Validation Therapy

Although Peoples (1982) in the first well-designed study of this kind held group sessions every week day for six weeks, this type of scheduling was not possible in the present study. Also, it was interesting to note the effects of this approach extended over a longer period of time. In fact, Peoples (1982) points out that no research has demonstrated the length of time that would be most effective. Feil (1985) mentioned in a personal communication that since it is the quality of the relationship that is very important in this approach, the number of sessions per week five versus two should not have

been as crucial as compared to a more behavioral approach. Also, Feil (1981) recommended that the group meet at least once a week and that the therapy continue for at least three months.

Each therapy session included a discussion of a topic that was relevant to the group. For example, loneliness, living on a farm, family relations and conflict experiences. Soft music was played in the background as suggested by Feil (1982).

The validating therapist recognized the emotions behind behaviors and shared and validated the feelings expressed by the group. The therapist established trust by sharing the thrust of the sensations, rhythms, emotions and memories that the members expressed rather than emphasizing the truth or non-truth of the facts.

The therapist made daily observations of group members which were recorded on the Therapy Group Observation Tool (Appendix F.).

Instruments

The following instruments were used in the present study:

- Nurses' Observation Scale for In-Patient Evaluation (NOSIE-30) (Appendix A)
- Philadelphia Geriatric Center Multi-Level Assessment Instrument-Cognitive Domain (Appendix B)
- Adult Personality Rating Schedule (APRS) (Appendix C)
- Behavior Assessment Tool (Appendix D)
- Demographic Information Question (Appendix E)
- Therapy Group Observation Tool (Appendix F) and
- The Medical Assessment Form - Physician's Certificate (Appendix G).

Introduction

The seven measures or instruments used to collect data in this study are explained in this section. The NOSIE-30 and APRS were used to measure the patients on social personality and overt behavior. The Philadelphia Multi-Level Assessment Instrument-Cognitive Domain was used to assess cognition and orientation. The Behavior Assessment Tool was used to divide the patients into stages of disorientation as a function of ten different behaviors. The Demographic Information Sheet was used to obtain general, social and medical background

information. The Medical Assessment form was also used for the same purpose but was already present in the resident's chart. This was usually completed by the physician when the patient was admitted to this institution. The Therapy Group Observation Tool was used to gather information during each group session that provided relevant descriptive information.

NOSIE-30 (Appendix A)

The Nurses' Observation Scale for In-Patient Evaluation was developed by Honingfeld, Klett (1965). The NOSIE-30 was based directly on the NOSIE-80. Only the items most sensitive to therapeutic effects analysis were retained from the factor analysis. The six factors that were assessed were social competence, social interests, personal neatness, irritability, and manifest psychosis, and retardation. Originally, the NOSIE-30 was used with hospitalized male chronic schizophrenic patients aged 26-74. Kane and Kane (1981) suggest that among observer-rating scales, the NOSIE-30 shows promise for geriatric populations.

Inter-rater reliabilities of the factor scores were assessed using the ratings by nursing personnel in the normative sample. These estimates based, in most instances on abbreviated scales, compared quite favorably with the NOSIE-80 estimates previously reported with an intra-class correlation of .74, (Honingfeld, Klett, 1965; Kendall, 1947).

Regarding the validity of the scale favorable evidence has been reported independently by Lentz, Paul, Calhoun (1971). Concerning the reliability of these scores, the report by Lentz, et al. (1971) showed high inter-rater reliabilities as follows:

Factor	Inter-Rater Reliability
Total Assets (TOT)	.95
Social Competence (COM)	.86
Social Interest (INT)	.95

(Cont'd) Factor	Inter-Rater Reliability
Personal Neatness (NEA)	.95
Irritability (IRR)	.83
Manifest Psychosis (PSY)	.82
Retardation (RET)	.83

In comparing the NOSIE with other scales, Ludwig and Marx (1969) reported a correlation of +.90 between NOSIE Total Assests and a ward-behavior form.

This becomes important since only one rater was used in the present study. Also, the high inter-rater correlation is important because the NOSIE-30 results of five patients in the control group in Experiment One was filled out by different charge nurses (pre-test versus post-test). This occurred beause the nurse who completed the pre-test evaluation left her position at this institution. Since this affects the control condition, the high inter-rater reliability, with this scale, should not result in a major difference between the pre- and post-measure under function of a different charge nurse. Permission to use the questionnaire was obtained from the author.

The Behavior Assessment Tool (Appendix D)

This was developed by Peoples (1982) using selected items from Feil's list of characteristics common to each of the four

stages of disorientation as they related to 10 general categories of behavior. The inter-rater reliability coefficient was established at 1.0 when Peoples (1982) and Feil (1982) separately tested the same five members of a validation group. Other information was not available at this time because this is a new scale in geriatrics.

Demographic Information Questionnaire (Appendix E)

This form sought to answer items that have been noted in previous studies to affect the course of therapy. For example, medical history, mental history, drugs, age, sex and religion. This form was devleoped by Peoples (1982).

Therapy Group Observation Tool (Appendix F)

This was designed by Peoples (1982) to record observations of behavior in the group. It served to give any clinical information among each subject from each session that may not be detected on the pre-/post-measures.

Medical Assessment Form - Physician's Certificate (Appendix G)

A standard assessment form used by this institution to give background information on medical, social and psychological factors.

Philadelphia Geriatric Center Multi-Level Assessment Instrument-Cognitive Domain (Appendix B)

This test consisted of several different sub-scales. For the purposes of this study, the researcher used the Cognitive Scale. This was assessed by sub-indices based on: A) Mental status (The Mental Status Questionnaire of Kahn, Goldfarb, Pollack, Peck, 1960); and B) Cognitive symptoms, for example, memory problems, disorientation and confusion; four questions constructed the Cognitive Symptoms Index. The full-length test, however, has many sub-indices, measuring activities of daily living, mobility, time use, and physical health. The authors wrote a letter to the researcher indicating that using the cognitive portion of the instrument alone was acceptable.

On the 15 items in this scale, an alpha of .87 has been reported. An R-retest reliability done three weeks later was .84, accounting for 70% of the variance. R, which is based on multiple regression of summary interviewers rating on all items,in this index was .70, (Lawton, Moss, Fulcomer, Kleban, 1982).

Adult Personality Rating Schedule (APRS) (Appendix C)

This schedule was developed by Kleban and Brody (1972). They were interested in evaluating the personality at two different periods of life and thus predict the evolution of deteriorated patients according to their previous personality.

The scale has five grades ranging from very low, low, medium, high, to very high. When the evaluation of personality was done by immediate relatives, the methods of averaging scores from different raters was used. The following aspects of personality were assessed by this scale: attitudes towards others; activities; aggressiveness; negativism; emotional investment; social integration; and anxiety. There were a total of 50 items.

Initially, this test was used with a deteriorated female population over 80 years of age. The items in the first two facts ("outgoingness toward people and activities", and "aggressiveness, negativism") were multiple correlated with the project treatment excess disability criterion. The social worker's ratings on the "aggressiveness, negativism" items were apowerful prediction of that criterion predicting 92% of the variance, (Kleban, Brody, 1972).

Data Analysis

The data were analyzed using descriptive statistics. This included means, standard deviations, summary, tables, and gain scores. Since the sample size for each group was less than ten, inferential statistical models were not feasible. Therefore, descriptive statistics were used to summarize and reduce to manageable form the properties of an otherwise unwieldy mass of data, (Glass and Hopkins, 1984).

Summary

In this chapter the methodology of this study has been discussed. The experiment was conducted in a 150-bed nursing home in the central part of Montreal in the Town of Mount Royal.

The procedures for both experiments were outlined and the protocol for carrying out the study was mentioned. The instrument design described how the instruments were developed and used.

CHAPTER III

Results

Introduction

Results from experiments one and two are presented in the same set of tables. The two experiments will be reported separately in this chapter.

Experiment One - Reality Orientation

The distribution of demograph characteristics are shown in Table 2. The RO control group consisted of nine subjects with a mean age of 83.11 ranging from 75 to 89 years old. The Reality Orientation experimental group consisted of seven subjects with a mean age of 81.28 ranging from 73 to 91 years old . The average length of stay in the present institution was 27.44 months for the control group and 13.71 months for the experimental group.

A summary of therapy sessions attended by each individual subject is illustrated in Table 3 for the RO experimental group. The mean number of sessions attended for the entire group was 21.57. The means and standard deviations for the RO experimental group, using the observation reporting forms, is presented in Table 4. The means are based on the following rating scale: 0-never; 1-rarely; 2-occasionally; 3-frequently; 4-always.

TABLE 2

DISTRIBUTION OF DEMOGRAPHIC CHARACTERISTICS AMONG ALL GROUPS

Group	N	Sex	A G E		Length of Stay	R E L I G I O N		
			Mean	Range	Mean # of Months	Jewish	Protes-ant	Catholic
ROTC	9	FM	83.11	75-89	27.44	5	0	4
ROTE	7	FM	81.28	73-91	13.71	3	2	2
VC	7	FM	83.00	77-89	22.42	2	3	2
VE	5	FM	85.00	82-90	16.40	1	3	1

ROTC - Reality Orientatio Control
ROTE - Reality Orientation Experimental
VC - Validation Control
VE - Validation Experimental

TABLE 3

SUMMARY OF THERAPY SESSIONS

Group	N	MAXIMUM NUMBER OF SESSION ATTENDED													Mean # of Sessions Attended	Total # of Sessions Attended
		13	14	15	16	17	18	19	20	21	22	23	24	25		
ROTE	7	1	0	0	0	0	1	0	0	1	0	0	1	3	21.57	29.00
VE	5	0	0	0	0	0	0	1	2	0	2	0	0	0	20.60	22.00

ROTE - Reality Orientation Experimental
VE - Validation Experimental

TABLE 4

THERAPY GROUP OBSERVATION REPORTING FORMS

MEANS AND STANDARD DEVIATIONS

	ROTE (N=7)		VE (N=5)	
	$\overline{X}$	S.D.	$\overline{X}$	S.D.
Talks in Groups	2.51	1.15	1.69	.20
Makes Eye Contact	2.74	.94	1.87	.28
Touches	1.68	.49	1.15	.32
Smiles	2.23	.93	1.49	.41
Shows Leadership	1.91	1.31	.97	.19
Physically Participates	3.39	.56	1.06	.19

ROTE - Reality Orientation Experimental
VE - Validation Experimental

In Table 5 gain scores and means were calculated by comparing the first three sssions and the last three sessions by subtracting the last from the first. The gain score model will be explained later on.

The results of the NOSIE-30 are presented in Table 6. Part (A) illustrates total scores for each group on total positive factors and their sub-scores for pre- and post-tests. The sub-scores are based on the following: social competence, social interest, and personal neatness. Total positive factors are the sum total of these sub-scores. The RO experimental group increased from 378 for total positive factors on the pre-test to 446 on the post-tests. In Part (B) are total scores for each group on total negative factors and their sub-scores for both pre- and post-tests. The sub-scores are based on the following: irritability, manifest psychosis and retardation. Total negative factors are the sum totals of these sub-scores. The RO experimental group decreased from 196 on total negative factors on the pre-test to 170 on the post-test. Part (C) consists of total positive and negative factors as expressed in terms of standard deviations.

Total patient assests were expressed in terms of total scores, standard deviations, adjusted means, gain score totals, and gain score means which are shown in Table 7. Total patient

TABLE 5

RESULT OF THE FIRST THREE SESSIONS AND THE LAST THREE SESSIONS

	ROTE (N=7)				VE (N=5)			
	Sum of First 3 Sessions	Sum of Last 3 Sessions	Gain Score	Mean Gain Score	Sum of First 3 Sessions	Sum of Last 3 Sessions	Gain Score	Mean Gain Score
Talks in Groups	45	47	+2	.28	20	29	+9	1.8
Makes Eye Contact	43	52	+9	1.28	23	29	+6	1.2
Touches	19	34	+15	2.14	11	24	+13	2.6
Smiles	38	43	+5	.71	20	31	+11	2.2
Shows Leadership	32	44	+12	1.71	6	19	+13	2.6
Physically Participates	57	62	+5	.71	7	23	+16	3.2
SUMS	234	282	+48	6.83	87	155	+68	13.6

ROTE - Reality Orientation Experimental
VE - Validation Experimental

TABLE 6

NURSES' OBSERVATION SCALE FOR IN-PATIEN EVALUATION

A - Illustrates total scores for each group on total positive factors and their sub-scores for pre- and post-tests.

Group	N	Social Competence		Social Interest		Personal Neatness		Total Positive Factors	
		Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test
ROTC	9	284	286	202	174	248	236	734	696
ROTE	7	152	166	88	122	138	158	378	446
VC	7	178	150	126	138	130	126	434	414
VE	5	50	56	44	40	48	42	142	138

B - Illustrates total scores for each group on total negative factors and their sub-scores for pre- and post-tests.

Group	N	Irritability		Manifest Psychosis		Retardation		Total Negative Factors	
		Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test
ROTC	9	74	106	14	14	50	70	138	190
ROTE	7	76	94	6	4	114	72	196	170
VC	7	144	122	60	48	92	106	296	276
VE	5	58	78	56	52	100	74	214	204

TABLE 6 (Cont'd)

C - Total positive and negative factors for pre- and post-tests expressed in terms of S.D.

Group	N	Total Positive Factors		Total Negative Factors	
		Pre-Test S.D.	Post-Test S.D.	Pre-Test S.D.	Post-Test S.D.
ROTC	9	14.34	14.03	22.62	12.5
ROTE	7	14.09	8.46	14.78	12.9
VC	7	28.56	21.89	23.69	21.09
VE	5	10.80	18.47	11.36	16.08

NOSIE-30

ROTE - Reality Orientation Experimental
VE - Validation Experimental
VC - Validation Control
VE - Validation Experimental

assets were derived by subtracting the total positive factors (Table 6-A) from the total negative factors (Table 6-B) and then multiplying this value by the standardized test constant of 96 for each subject, (Honingfeld, Gillis, Klett, 1966).

Gain scores were calculated by subtracting pre-score means from post-score means. Using this approach introduces two sources of error; one from the pre-score and the other from the post-score. Therefore, it is possible that if the standard error of differences between means is large, differences can be accounted for by error. To test this fact, the researcher used the standard error of difference between means from Hardyck and Petrinovich (1969). One interesting comparison is between RO experimental group pre- and post-condition which reveal a mean gain score of 13.4 (see Table 7).

If we compute the standard error of estimate, it is 10.65. Therefore, if we compare this to each standard deviation (17.9, ROTE Pre-Test; 21.8, ROTE Post-Test, Tabel 7), it would appear that there is not a large increase in error. Therefore, the present study will utilize gain scores with the awareness that there are two sources of error.

The results of the Philadelphia Multi-Level Full-Length Cognitive Scale for Reality Orientation groups are presented in Table 8. Intellectual functioning, cognitive symptoms and Cognitive Domain Index are shown in Table (A). The Cognitive Domain Index reflects the sum of scores from intellectual functioning plus cognitive symptoms, (Lawton, Moss, Fulcomer,

TABLE 7

NOSIE-30

Group	N	TOTAL PATIENT ASSETS						Gain Score	
		Pre-Test	Pre-Test S.D.	Adjusted $\bar{X}$ Pre-Test	Post-Test	Post-Test S.D.	Adjusted $\bar{X}$ Post-Test	Total Score	Mean Score
ROTC	9	1460	23.8	162.2	1370	31.8	152.2	-90	-10.0
ROTE	7	854	17.9	122.0	948	21.8	135.4	+94	+13.4
VC	7	810	45.8	115.7	810	42.4	115.7	00	00
VE	5	408	20.5	81.6	414	16.16	82.8	+6	+1.2

ROTE - Reality Orientation Experimental
VE - Validation Experimental
VC - Validation Control
VE - Validation Experimental

TABLE 8

PHILADELPHIA MULTI-LEVEL ASSESSMENT INSTRUMENT

A - Philadelphia Multi-Level Full-Length Cognitive Scale: Intellectual Functioning, Cognitive Symptoms and Cognitive Domain Index for Pre- and Post-Test.

GROUP	N	Intellectual Functioning						Cognitive Systems						Cognitive Domain Index					
		Pre-Test			Post-Test			Pre-Test			Post-Test			Pre-Test			Post-Test		
		Total Score	Mean	S.D.	Total Score	Mean	S.D.	Total Score	Mean	S.D.	Total Score	Mean	S.D.	Total Score	Mean	S.D.	Total Score	Mean	S.D.
ROTC	9	59	6.5	1.58	64	7.11	1.76	25	2.77	.97	23	2.55	1.01	84	9.33	2.22	87	9.66	2.17
ROTE	7	40	5.7	3.67	48	6.85	2.96	14	2.0	2.0	17	2.42	1.29	54	7.71	5.42	65	9.28	3.97
VC	7	28	4.0	3.46	25	3.51	3.20	9	1.28	.97	12	1.71	1.60	37	5.28	3.78	37	5.28	4.39
VE	5	14	2.8	1.92	14	2.8	1.92	3	.60	1.34	3	.60	.89	18	3.4	2.96	17	3.4	2.70

B - Gain Score Expressed in terms of Total Score and Mean Score.

Group	N	Gain Scores	
		Total Score	Mean Score
ROTC	9	+3	+.33
ROTE	7	+11	+1.57
VC	7	0	0
VE	5	0	0

ROTC - Reality Orientation Control
ROTE - Reality Orientation Experimental
VC - Validation Control
VE - Validation Experimental

Kleban, 1982). Gain scores expressed terms of total scores and means; these are located in Table 8 (B).

Table 9 illustrates the Adult Personality Rating Schedule. The means are based on a frequency distribution of each question item (1-50) based on the rating scale (1-very low, 2-low, 3-medium, 4-high, 5-very high). Upon visual inspection of the data, there would appear to be low correlation between items (also, the standard deviations are variable). Therefore, any meaningful account of this data will be carried out by individual items analyzed with frequencies. Item number 8 has a mean of 1.85 with a standard deviation of .89 for the ROTE pre-test. This compares with a mean of 1.71 and standard deviation of .75 on the ROTE post-test. Item number 49 has a mean of 3.57 for the ROTE on the pre-test compared to 3.0 for the same group on the post-test with a standard deviation of 1.15.

Experiment Two - Validation Therapy

The distribution of demographic characteristics are shown in Table 2. The validation experimental group consisted of five subjects with a mean age of 85 ranging from 82 to 90 years old. The validation control group was made up of seven subjects with a mean age of 83 ranging from 77 to 89 years old. The average length of stay in this institution was 22.42 months for the control group and 16.4 months for the experimental group.

TABLE 9

ADULT PERSONALITY RATING SCHEDULE (ITEMS 1-50)
THE MEANS AND STANDARD DEVIATIONS

ITEM	PRE - TEST							
	ROTC		ROTE		VC		VE	
	N=9		N=7		N=7		N=5	
	X	S.D.	X	S.D.	X	S.D.	X	S.D
1	2.66	1.22	2.57	1.13	2.14	1.34	1.60	1.34
2	2.88	1.36	2.14	1.06	2.00	1.41	1.40	.89
3	3.22	.97	2.57	1.39	3.14	1.21	2.60	1.14
4	3.00	1.22	3.00	1.00	2.57	1.61	2.60	.55
5	2.33	.86	3.14	1.06	2.14	1.34	2.60	.55
6	2.22	.97	2.00	1.00	2.14	1.34	1.40	.55
7	3.55	1.50	3.14	.89	4.00	1.00	3.40	1.14
8	2.33	1.32	1.85	.89	2.00	1.15	1.40	.55
9	2.55	1.42	1.85	.89	2.14	1.21	1.60	.89
10	3.33	1.58	3.00	1.15	2.42	.78	3.40	1.14
11	1.55	1.13	1.85	.89	2.14	.89	4.00	1.41
12	2.11	1.45	2.42	1.61	2.28	1.60	2.00	1.00
13	2.77	1.30	2.85	.89	2.14	.89	2.00	1.73
14	2.33	1.50	2.57	1.51	3.28	1.25	2.20	1.09
15	2.88	1.27	3.00	1.63	2.14	1.21	1.40	.89
16	3.33	1.58	2.28	.755	2.00	1.29	1.20	.45
17	2.55	1.23	1.85	.69	2.28	1.38	1.20	.45
18	3.88	1.05	2.71	.75	3.42	1.27	1.00	0.00
19	3.44	.73	2.14	1.06	3.14	1.46	1.40	.89
20	1.44	.72	2.57	1.71	2.71	1.38	1.20	.45
21	2.22	1.20	2.42	1.13	1.71	1.11	2.00	1.73
22	1.77	.97	2.85	1.57	2.71	1.88	1.00	0.00
23	3.40	1.23	2.42	1.13	2.57	1.61	2.20	1.64
24	1.11	.33	2.28	1.38	2.28	.95	1.40	.54
25	2.00	1.50	2.57	1.39	3.42	.97	2.00	1.41

POST - TEST							
ROTC		ROTE		VC		VE	
N=9		N=7		N=7		N=5	
X	S.D.	X	S.D.	X	S.D.	X	S.D.
2.88	1.16	2.00	1.15	1.85	1.06	1.40	.89
3.11	1.05	1.71	1.11	1.85	1.06	1.40	.89
3.00	.86	2.77	.95	3.00	1.52	1.60	.89
3.11	1.26	3.57	1.51	2.57	1.61	2.20	1.30
2.55	.53	2.42	1.61	2.57	1.61	2.00	1.41
2.55	1.23	1.86	1.21	2.14	1.34	1.40	.89
4.00	1.00	3.71	.95	3.00	1.73	2.60	1.14
2.77	.66	1.71	.75	2.00	1.53	3.00	0.00
3.44	.88	3.00	1.00	2.28	1.70	2.60	.89
3.33	1.00	3.71	.75	2.85	1.77	2.40	.89
1.77	.66	2.14	.69	2.28	1.49	3.00	0.00
2.00	.71	1.85	.89	2.43	1.81	2.20	1.78
2.55	1.42	1.85	.69	1.71	1.25	2.20	1.78
2.22	.66	2.42	1.13	1.71	1.25	1.40	.89
2.77	.44	2.57	1.51	1.71	1.25	2.20	1.09
2.66	1.00	2.00	.81	2.42	1.81	2.60	.89
2.88	.92	2.71	.75	2.42	1.39	2.60	.89
3.44	.73	2.42	1.13	3.42	1.81	2.40	.89
3.11	1.16	2.71	1.25	3.00	1.52	2.40	.89
2.44	.73	2.42	.78	2.00	1.52	3.20	.44
2.44	.53	1.85	.89	1.86	1.06	2.60	.89
2.44	.53	2.42	1.27	2.14	1.67	3.00	0.00
2.88	1.16	2.57	.53	2.71	1.49	3.00	0.00
1.88	1.05	1.28	.75	2.86	1.57	2.40	1.34
2.11	1.27	1.85	1.06	2.57	1.51	2.60	1.81

TABLE 9 (Continued)

ITEM	PRE - TEST							
	ROTC		ROTE		VC		VE	
	N=9		N=7		N=7		N=5	
	X	S.D.	X	S.D.	X	S.D.	X	S.D
26	2.33	1.80	2.85	1.06	2.71	1.25	1.20	.44
27	1.44	.88	1.71	.95	2.00	1.00	1.20	.44
28	2.55	.73	2.42	1.51	1.86	1.46	1.40	.89
29	3.66	1.65	3.14	1.06	2.71	1.50	2.60	1.51
30	2.47	1.53	2.57	1.39	2.28	1.50	1.60	.89
31	1.44	.88	2.65	1.59	2.71	1.25	1.40	.54
32	2.88	1.30	3.28	1.11	3.14	1.34	1.80	.83
33	2.66	1.41	1.57	.97	2.14	1.21	2.20	.83
34	1.33	.50	2.28	1.38	2.28	1.11	2.80	2.04
35	2.77	1.30	2.71	1.70	3.14	1.57	1.20	.44
36	2.88	1.61	2.14	1.21	1.86	1.06	2.20	1.78
37	2.44	1.50	2.00	1.29	2.14	1.34	2.20	1.78
38	3.22	1.20	2.71	1.38	2.14	1.21	1.80	1.78
39	2.88	1.61	2.85	1.77	2.71	1.25	1.00	0.00
40	2.33	1.50	2.57	1.27	3.00	1.29	1.60	.89
41	2.77	1.78	3.42	1.13	2.14	1.21	1.80	1.09
42	2.00	1.22	2.28	.95	2.00	1.00	3.00	1.58
43	2.88	.78	2.85	1.77	2.57	1.27	2.60	1.51
44	2.62	1.06	1.57	.97	2.86	1.57	2.40	1.14
45	2.33	1.11	2.71	1.38	2.00	1.52	2.20	1.30
46	2.00	1.00	3.00	1.29	3.42	1.27	2.40	1.14
47	2.55	.88	3.14	1.06	3.14	1.57	1.80	.83
48	2.55	.88	2.85	1.21	2.86	1.67	3.00	.70
49	2.66	1.00	3.57	.73	2.14	1.06	2.00	1.41
50	3.00	1.41	2.71	1.11	2.42	.78	2.20	1.64

POST - TEST							
ROTC		ROTE		VC		VE	
N=9		N=7		N=7		N=5	
X	S.D.	X	S.D.	X	S.D.	X	S.D.
2.77	1.20	2.00	.81	2.00	1.52	3.00	0.00
2.22	.66	2.42	.97	2.28	1.11	3.00	0.00
2.44	.88	2.42	.97	2.57	1.61	2.60	1.14
3.66	.86	2.42	.78	3.00	1.63	2.60	.89
2.77	1.20	3.14	.38	1.86	.69	2.60	1.14
2.00	.86	2.14	1.21	2.28	1.49	2.60	.89
2.66	.71	3.14	.69	3.00	1.41	2.60	.89
2.22	.66	2.42	1.39	2.14	1.57	2.20	1.09
2.11	1.26	1.85	1.06	2.14	1.34	2.40	.89
3.44	1.01	2.14	1.06	2.57	1.39	2.80	1.30
3.66	1.00	2.42	.78	1.85	1.06	3.00	1.41
3.55	.88	1.57	.78	2.28	1.70	2.80	1.09
3.88	.93	3.00	1.63	2.28	1.88	2.60	.89
2.88	1.36	2.85	1.46	2.14	1.46	3.00	0.00
2.88	1.36	2.50	1.04	2.57	1.27	3.00	.70
2.55	1.33	2.85	1.46	2.00	1.00	3.00	0.00
3.11	.78	2.57	1.51	2.71	1.11	2.80	1.09
3.55	.88	3.00	1.29	2.85	1.46	3.00	1.41
3.00	1.32	2.85	1.21	2.57	1.81	3.40	.89
2.44	1.13	2.85	1.34	2.14	1.57	2.20	1.09
2.66	1.22	2.57	1.39	2.28	1.70	3.40	.89
3.22	.97	3.71	.95	2.57	1.27	2.60	1.14
2.55	1.23	3.42	.78	2.71	1.49	3.40	.89
3.11	1.05	3.00	1.15	1.71	1.25	3.00	0.00
3.33	1.12	3.57	.78	2.71	1.79	3.60	1.34

A summary of therapy sessions attended by each individual subject is illustrated in Table 3 for the validation experimental group. The mean number of sessions attended for the entire group was 20.6.

The means and standard deviations for the validation experimental group using the Observation Reporting form is shown in Table 4. The minimum value was .97 for the category "shows leadership" with a standard deviation of .19. The largest value was 1.87 for "making eye contact" with a standard deviation of .28.

In Table 5 gain scores were used to compare the first three sessions with the last three sessions. In all categories there were gains ranging from a minimum of +6 on "makes eye contact" to a maximum of +16 on "physically participates".

The results of the NOSIE-30 are presented in Table 6 and are identical to Experient One. Total positive factors on the pre-test for validation experimental group was 434 compared with 414 on the post-test. Total negative factors on the pre-test for the validation group was 214 compared with 204 on the post-test.

Total patient assets were expressed in terms of total scores, standard deviations, adjusted means, gain score totals and gain score means which are shown in Table 7. The total patient assets adjusted mean score was 115.7 for the pre- and post-test for validation control group. For the validation

experimental group this value was 81.6 for the pre-test compared with 82.8 for the post-test.

The results of the Philadelphia Multi-Level Full-Length Cognitive Scale are illustrated in Table 8. The validation control group scored a mean of 5.28 on the pre-test and 5.28 on the post-test. The standard deviations were 3.78, 4.39, respectively. The validation experimental group had an identical pre- and post-test mean of 3.4, with standard deviations of 2.96 and 2.70, respectively. Since, in both cases, means were identical, the computed gain scores were zero (see Table 8 (B)).

Table 9 illustrates Adult Personality Rating Schedule. The values are expressed in terms of means and standard deviations. On item number 20 ("tendency to blame others when in difficulty"), the pre-test validation experimental mean was 1.2 compared to a post-test mean of 3.2. On item number 22 ("tendency to be critical"), the pre-test mean for the validation experimental group was 1.0 and 3.0 on the post-test. Both standard deviations were 0.00.

Summary

A presentation of the results for both experiments one and two were illustrated in this chapter. Tables 2 to 9 were presented following a description of the data.

CHAPTER IV

Discussion

Introduction

A discussion of Experiment One and Two are presented separately in this chapter. The data from each experiment were analyzed and the result interpreted in this section.

Reality Orientation

The mean age of the subjects in RO group was 81.1 years of age which is similar to Johnson (1979) whose subjects mean age was 80.1 years. The length of stay in the institution, as expressed by mean number of months, differed by 13.7 months between the RO experimental and the RO control group. Although most researchers do not report mean length of stay at an institution, Holden et al., (1978) reported nine months as an average for their residents which is comparable to 13.7 in the current study. The present study used this item as a demographic characteristic; future studies might consider the possible interaction between length of stay and effectiveness of RO. In general, Blenkner (1967) mentioned that older people admitted to institutions died at excessively high rates during the first year. This does not relate directly to the present study. However, it does suggest that the "length of stay at an

institution" may be a factor with its own effect, independent of the treatment. For instance, patients who have been at the same institution for a long period of time with little or no attempt at any form of RO may be relatively insensitive to their possible therapeutic benefits because of the effects of institutionalization.

The mean number of sessions attended was 21.57 which ranged from 13 to 25 sessions. This compares to Peoples' (1982) study having 23.12 mean number of sessions ranging from 15 to 28 sessions. If we divide the mean number of sessions attended by RO group with the total number of sessions that took place for this same group, that number represents a percentage of overall participation. In the present study, the participation percentage was 74 which compares favorably to Peoples' (1982) result of 79.7 for the RO group.

Results from the Group Observation form (see Table 5) indicates differences between the sum of the first three sessions and the sum of the last three sessions. In the RO group the total gain score across the six items was +48. The largest mean gain score occurred on "touching" and "shows leadership". The other four items increased slightly with a mean gain score range of .28 to 1.28. Although Peoples (1982) suggested that this observation form is more conducive to changes during Validation Therapy, it does reveal that RO group

members were more "expressive" towards the last three sessions than the first three sessions. However, Table 5 illustrates a larger mean gain score for validation group members in five out of six categories. (This will be discussed under Validation Therapy). This is not surprising since these categories were formed on the basis of Validation Therapy.

Based on the comments by the RO therapist, patients at the beginning of the meetings were uncertain about what they were doing in the group or they expressed a desire to leave. This occurred in spite of the therapist beginning each session with an outline of the purpose of the group at each meeting. Towards the latter stages of the study, patients appeared more orientated and were more interested in coming and remaining in the group. The therapist reported that it took less time to bring the patients together and begin the group.

Towards the latter stages of the group, there appeared to be more group participation which could reflect the residents feeling more comfortable with the others. This may explain the overall increases seen in the Group Observation form.

The overall NOSIE-30 for total positive factors increased from a group total of 378 to 446 for the RO group. Breaking the total positive factors down indicates that social interest had the greatest increase from 88 to 122, a gain of plus 34 for the entire group. When converted to a normalized T-Score (as

shown by the scoring key in Appendix J), this increase corresponds to approximately a six-point increase. Holden and Sinebruchon (1978) using the Stockton Geriatric Rating Scale, a somewhat comparable measure, assessed degree of physical disability, communication, apathy and social disturbance, did not show significant changes. However, RO did result in overall improvement in nine out of the 16 patients who were observed on the wards. In the current study, there were no observations done on the wards that measured overall improvement independent of the rating scales filled out by the nurses.

The overall negative factors decreased from a group total of 196 to 170 for RO. Breaking this down into the sub-scale, "retardation" revealed a decrease from 114 to 72 or 42 points. Converted to a normalized T-Score, this decrease corresponds to approximately a 10-point decrease. The RO control group increased from 50 to 70 points on the same sub-scale. This may be interpreted as the RO treatment being effective in attenuating or delaying "retardation" scores which could be considered a measure of "deterioration. In the control group the small decrease may reflect a continuation of deterioration.

MacDonald and Settin (1978) using the Nurses' Observation Scale for In-Patient Evaluation (Honigfeld and Klett, 1965), 61-item rating scale, found no significant differences between pre- and post-scores after RO treatment. However in a similar

treatment using Sheltered Workshop, it was effective in increasing both positive affect, staff attention and social involvment. For instance, they found a significant difference on the social interest scale. They interpreted this as depending on the characteristics of a given institutionalized population. For example, simply introducing an approach that gives them "attention" may increase their social interest. This could have been operating in this study.

A small positive difference was seen in the RO group in terms of mean gain score for Total Patient Assets Adjusted (see Table 7). What is surprising is that the control group decreased a total of 10 points from the pre- and post-tests as expressed in mean gain score. One plausible reason for this was a ceiling effect for the control group. The total mean assets for the pre-test was 162.2 which was the highest of any group. The next highest pre-test mean was 122.0 for the RO experimental group which was 40 points lower. Therefore, the control group decrease may indicate that only a decline in score was likely. Another possible factor that could explain this decline was a general deterioration that may have showed up more clearly because of a high pre-test mean. However, this is not supported by the Cognitive Domain Index which did not indicate any decline.

Wallis, Baldwin and Higginbotham (1983) found that patients who were treated by RO fared better than the controls

but not significantly. Their results suggested that subjects benefited cognitively but hardly at all behaviorally. A general interpretation of the present research is based on Holden's (1979) speculation that the subject population and the degree to which the institution has in the past "encouraged" dependent behaviors may be an important factor underlying behavioral and social changes. Thus, for example, if the particular group has been under functioning in self-care then RO may tip the balance, whereas if the institution is already encouraging independence, there may be less room for improvement. Future investigations must be aware of this factor as a possible predictor of success. In the present study, it was difficult to determine if the institution encouraged independence or facilitated dependence.

The cognitive measure (see Table 8) indicated that the only important change was seen in the RO experimental group where intellectual functioning improved from a total score of 40 to 48, and the cognitive symptoms went from a total score of 14 to 17. However, both these changes must be viewed as small since the standard deviations were 5.42 (pre-test), 3.97 (post-test) for the Cognitive Domain Index. This is consistent with both Johnson, McLaren and McPherson (1981) and Zepelin, et al. (1981),who have commented that the effects on orientation were small. Although, a test of significances was not used in

the present study, other studies, like Harris and Ivory (1976), have used inferential techniques to detect highly significant effects on a carefully selected measure, yet the effect may be small and of little practical value. It would be interesting, as Powell-Proctor and Mill (1982) pointed out, to use measures of effect size employing the index as Smith and Glass (1977) did. Effect sizes where the measure was a direct test of information relating to orientation were in the order of .5 to 1.2 (Johnson, et al., 1981; Citrin and Dixon, 1977), respectively.

The lowest effect size was demonstrated by Zepelin et al., (1981) at .05 on a measure of behavior. In the present experiment, only a descriptive design was employed because of very small sample sizes. Therefore, inferential statistics, if used, would have been incorrectly applied. However, an "effect size" statistic should be developed to add further meaning to a small set of data.

On the Adult Personality Rating Schedule, a visual inspection of the data indicates that there was a lot of variability in the data. On most items, differences were very small and, in general, the standard deviations were large. Correlational models (such as "Item Analysis") were not used because they would likely reveal very low correlations. In general, Woods (1979) found that the use of small groups introduces large variability in the data that could obscure possible changes that took place.

In summary, the cognitive improvements in the present study were small and scores on NOSIE-30 reveal very small positive changes. No changes were seen in the APR Schedule. In general these lack of behavioral changes parallel the results of Woods, (1979). The most noted changes occurred on the observation forms. Perhaps, as Voelkel (1978) concluded, it is not the constant reminder of current information that improves mental status, but the coming-together as a group in a social setting that makes the difference.

Validation Therapy

The mean age of the subjects in this group was 85 years of age compared to 87 years of age in Peoples' (1982) study. In the present study, the mean number of sessions attended was 20.6 with a range of 19 to 22 sessions. The percentage of participation was 93.6. This compares to Peoples' (1982) experiment which averaged 26.9 mean number of sessions with a range of 23 to 29. The percentage of participation was 92.7%.

Results from the group observations form (see Table 5) reveals differences between the sum of the firt three sessions and the sum of the last three sessions. In all six categories, the validation group mean gain score increased. The largest mean gain score occurred on "physically participates" (3.2), "shows leadership" (2.6), and "touches" (2.6). These changes

indicate that group members had a tendency to express themselves verbally and non-verbally more during the last three sessions as compared to the first three. This could be partially explained on the basis of feeling more comfortable with the other residents in the group. The validation group scored a total of 20 points or 6.8 (mean gain score) higher than the RO group. Although the experimental design did not include a comparison of the two treatment groups, the VT group appeared to have a more positive effect on expressing characteristics than did the RO group.

The validation therapist recorded a summary of what transpired during each session. Patient A talked about going to heaven to meet others there. She expressed sorrow that her sister died at a very early age. Later on during the study, she expressed sadness of her husband's death and stated that she wanted to see him. Death was one topic that the group focused on as a conflict.

Patient B discussed the importance of being silly, the desire to make a somersault, play tennis and golf and go out in the garden. She made reference to herself by calling herself an old maid. This may indicate that she wanted to do these activities but was not able to do in the past or perhaps she had performed them and was reliving them. In a later session, she asked the therapist to kiss her. She verbalized about the

therapist marrying her by talking to her stuffed animal which she squeezed at the same time. Another resident exclaimed that the therapist probably would not be able to do so.

Patient C articulated about her husband that she believed would love her again and take her out of "this awful place". In an earlier session, she revealed that her husband broke her heart for life. However, she did not elaborate very much in this area.

Patient D, for half of the sessions, did not talk very much, mostly uttering syllables and babbling. Perhaps this resident was actually in the latter stages of three and was very disoriented. However, towards the end of the study, she began to make excellent eye contact and verbalized a few short sentences. For example, "Yes, I want..." and touching the therapist's nose while smiling.

Patient E seemed very obsessed with life on a farm and the responsibilities and disappointments of the family unit. Family responsibilities and losses were also a discussion topic. Her accepted role was to look at pictures and talk about what they meant to her.

Although the group was not very cohesive at the beginning of the experiment and no actual leader emerged, there was some interaction among the group members. The patients responded to the music that was playing in the background by singing

different tunes to each other. Patient B could have been considered the song leader since she began the song and led the singing.

In general, the subjects in VT did express their feelings and conflicts which appeared to reveal different coping mechanisms. Defense or coping mechanisms can be viewed as those psychological processes that are used to defend one's self against anxiety and fear that tends to provide some temporary security. Often attempts to utilize these mechanisms leads an old-aged person to be labelled as a difficult, uncooperative or non-complacant person, (Hamner, 1984).

The fact that on a whole the patients in the validation group talked about important issues not only of the present (example: feelings, loneliness), but of their past, has been indentified by Hamner (1984) as reminicsing, an important coping mechanism. Reminscing has been described as part of the life review which allows the aged to put their life in order and/or derive pleasure from their past, (Butler, Lewis, 1973). It has been suggested that reminiscing promotes interaction, stimulates personal awareness and, during this process, self-esteem of the aged is enhanced, (Burnside, 1976). According to Feil (1982) exploring the past by asking questions about the patient's past stimulates life review. This helps the person restore integrity and justify living. This also helps to build trust between the therapist and the old-old person. In the

present study, Patients A to E were involved, interested and willing to interact about their pasts and by being validated, it helped to restore their integrity.

Patient C who had difficulty accepting rejection by her husband, used denial as a coping mechanism. For example, although she acknowledged that her husband "broke her heart", she had difficulty discussing how or when this oc red and instead preferred to fantasize about rejoining him. Verwoerdt (1976) mentioned that denial is utilized as a means of coping until some resolution of the feeling about the decrements can be developed. However, Feil (1982) has stated that the disoriented old-old person may choose to continue to withdraw further into fantasy as opposed to accepting present reality. The major point is that the feelings that were validated appeared to give the group members a sense of dignity. For instance, behaviorally, the subjects continued to express and interact after being validated which could imply that a positive effect took place.

The therapist used touching, genuine lingering, eye contact, and a nurturing empathic tone of voice in order to establish a good communication with the patients. Mirroring was also used effectively as a technique that built on the meaningfulness of body movements. By mirroring the rhythms, the validation therapist approached each patient on their level using positive regard towards them. For example, when Patient

C clapped her hands while talking, the therapist mirrored this by clapping his own hands. This enhanced the relationship in the context of the group parameters.

The results of the NOSIE-30 revealed that irritability scores increased from 58 to 78 or approximately 55 to 63 on the normalized T-Scores. Although this is not a very large difference, explanation of an increased irritability score is that since the group centered around conflicts and self-expression, perhaps this increase reflects a disclosure of their life's coping mechanisms. Statements which reflected the irritability sub-scale include, "gets angry or annoyed easily", "is irritable or grouchy", "is quick to fly off the handle", which all reflect a highly affective domain. In the validation control group, the irritability sub-scale decreased slightly.

In the Validation Experimental group, the results of the Adult Rating Schedule support this interpretation. For instance, Item 20, "tendency to blame others when in difficulty", increased from a pre-test score of 1.2 to 3.2 for the post-test. The standard deviation was .45 to .44, respectively. Item 22, "tendency to use people as targets for anger", changed from 1.4 to 2.6 with the standard deviation increasing from .54 to .89. Overall, these results suggested that subjects were expressing anger, irritability and critism and were supported to some extent by the observation during group sessions.

The second change in the NOSIE-30 occurred on the retardation sub-scale. The pre-test total score was 100 compared to 74 on the post-test. Although this corresponds to a change of 5 on the normalized T-Score, it appeared that VT may have been effective in slowing down general mental deterioration. The validation control group increased a total of 14 points on the retardation sub-scale suggesting that deterioration may be continuing.

The results of the APR Schedule, Item 11, "Tendency to be irresponsible", decreased from 4.0 to 3.0, illustrating a possible therapeutic effect. This result may agree with Peoples' (1982) study which showed that the group kept patients from further regression.

On the cognitive scale both the validation experimental and control groups showed no changes in scores which supports the result of the Peoples' (1982) investigation using a test of orientation. This was expected since VT is not aimed at promoting a sense of orientation based on present reality.

Summary

The major differences on the scales and observations were discussed within the context of each therapy. The results were compared to other research findings where appropriate. A description and explanation of patients' behaviors was also outlined in this chapter based on the therapist's comments.

CHAPTER V

Concluding Remarks

Introduction

In this chapter major limitations of the present study are briefly discussed. Also, recommendations and implications are given to provide ideas concerned with future research in this area.

Limitations and Implications

In the following pages is a list of some limitations and possible implications in the current study.

1. The small size of the groups did not allow more inferential statistical models. Usually, a study in this area would only be feasible with small sample sizes (less than eight). One way to ensure a larger sample size is to perform several studies with similar conditions (age, sex, social and economic status) and pool the results, thereby increasing the sample. This would also increase the power of the study which is defined as the probability of rejecting the null hypothesis when, in fact, it is false.
2. The length of time of this study, although similar to other cited studies, may not have been sufficient to yield more clinical benefits.

3. The population from which this sample was drawn consisted solely of persons within one nursing home in Montreal. Conclusions of this study apply only to this population, and any generalizations done beyond this population should be made with caution.
4. The nursing staff in the present setting were very often unaware of the importance of cooperation between themselves, the research team and other departments in this institution. Therefore, it was difficult for the nurses to fill out and answer questions concerning the patient's without spending a great deal of time re-explaining basic information.
5. Also, Lockyer (1979) showed how different raters used the same scale in quite different ways and suggested that more attention is needed in training raters in the consistent use of scales. Since the nurses in this study were untrained in the use of rating scales, it is always a concern whether the results reflect a true picture of the patients.
6. Hall (1980) argued that rating scales and rating procedures do not systematically evaluate published standard scales in terms of any common set of standards or criteria. This means that the results of one study are very difficult to compare to another study.

Therefore, arguing this point of view would imply that the results of Peoples' (1982) study, using her rating scales and methods, are difficult to compare to the present thesis without some form of standardized procedures.

7. Although stages of disorientation were based on the Behavior Assessment Tool formulated by Feil, it is possible that within each stage, a heterogeneous population of disorientation exists with their own set of characteristics. Further research is needed to investigate this possibility.
8. The scales may be a relatively crude way of assessing behavior, particularly when scores from different areas are added to give a total score, for example, the NOSIE-30. A firmer assessment of behavior may be done by directly observing actual activities on the wards that might give a better indication of "real" clinical changes. However, rating scales do provide an approximation of behaviors.
9. In the present experiment, no-treatment control groups were employed. However, as briefly discussed, it is possible that introducing a "treatment" could have resulted in positive effects due to paying "attention"

to the residents. Therefore, "attention" as an extraneous factor must be included as a limitation of this study. Perhaps, another control group receiving non-specific socialization should be included in order to more specifically isolate the underlying effects of the different treatments.

Recommendations and Implications

As a result of small sample sizes, variability in the data and perhaps the lack of clinical significance of the dependent measures, the instruments in this study need further testing to determine the validity and reliability and clinical importance.

Since the observed relationship between ego integrity and reminiscing has been suggested to add to the growing body of evidence that links reminiscing to adjustment in old age, as measured by Reminiscing Questionnaire, (adapted from Havighurst and Glasser, 1972), and Ego Adjustment sub-scales, (Constatinople, 1969; Boylin, Gordon, Nehuke, 1976), it is suggested that these measures may be more related to and sensitive towards clinical changes from VT. Naturally, further research is recommended.

Although in the present study no assessment was done on the treatment therapists, Rogers (1977) has suggested that the depth of empathy interact with changes seen in therapy. For example, client-perceived empathy was strongly related to therapy outcome, (Kurtz, Grummon, 1971). Therefore, independent of treatment method, the "depth" of level of empathy may be a factor worth investigating since it forms part of the foundation of VT.

Validation Therapy represents a well-formulated effective alternative for use of those who have already withdrawn into their own world of fantasy, who find facing commonly-accepted

reality threatening and undesirable. This study recommends that VT is an acceptable option for use with the confused elderly to express the caring essence of nursing in assisting the person to resolve life's conflicts in the last stage of living.

Feil (1982), Peoples (1982) and Jones (1985) have pointed out that RO may not be the treatment of choice for elderly who are moderately and severely confused. There were some indications that RO may increase the orientation of those who are less confused, and who have not regressed into the later stages of disorientation.

Hellebrant (1978) found that patients could not be re-orientated when therapists used clocks and calendars to stimulate reality in them. They pointed out that unless the concept taught to the patient is practical or meaningful, they will not be able to integrate the material, (Feier, Leight, 1981). Instead, there should be more meaningful activities and applications. For instance, some patients may benefit from reading the daily newspaper, others by associating names and faces by means of visual images, (Zarif, et al., 1982). Lehman (1974) suggested using a desired sense of the patient to identify, for example, the flavor of Fruit Life Savers by colour, using texture to identify pencils, bars of soap, and hearing to identify a clock by its ticking. Whatever RO methods that are used during the classroom, must be generalized

to every day functioning, which is the view elaborated by Greene (1979). Further research is needed in this area.

The results from basic cognitive research also shows promise for improving the methods of RO. Keitz and Gounard (1976) and Winograd, Smith and Simon (1982) reported that older adults recalled pictures better than words and Park, Puglisi and Sovacool (1984) confirmed the findings for recognition memory.

Adding colour to real world pictures or symbols, (eg.: coloured food symbols pointing towards an eating area, coloured chair symbols directing someone to a waiting area), would appear to be a potentially useful and meaningful manipulation, (Park and Puglisi, 1985). These ideas would be incorporated into RO which is similar to RO by Haneley, McGuire, Boyd (1981) who included a "Ward Orientation Training" as part of a practical and meaningful RO treatment. For instance, they used coloured symbols and actually taught patients to walk to and locate different areas.

Cavanaugh, Grady and Perlumutter (1982), in a very specific study, were interested in older adults who forgot names. They found that on the average older adults forgot names proportionally higher than on the categories such as appointments, phone numbers and locations. Also, Cavanaugh (1983) found that older adults perceived forgetting more negatively than younger adults. Both these studies reveal an

attempt to perform research in the individual's own particular environment as opposed to task-oriented research. Finally, basic research and more applied studies are both important and necessary in order to develop more effective programs for the eldery in the future.

In closing, the therapies that were presented in this thesis reflect our North American society in the 1980's. That is, when our elderly can no longer take care of themselves, we institutionalize them. This is a prescriptive solution. In the future, we need to educate society in more preventative measures related to our elderly. This cultural change will take a long time. Perhaps the examples from the Indian and the Oriental societies are good models to follow in that children take care of their elderly parents up until the time of death.

Summary

This chapter outlined some limitations of the present study based on methodological and practical problems that were encountered. Also, a brief discussion on future recommendations was described. This was based on basic research in the field of geriatrics.

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APPENDICES

APPENDIX A

NURSES' OBSERVATION SCALE FOR INPATIENT EVALUATION (NOSIE-30)

SUBJECT'S NAME _____ DATE _____

RATER'S NAME _____ TITLE _____

DIRECTIONS

PLEASE RATE THIS PATIENT'S BEHAVIOR AS YOU OBSERVED IT DURING THE LAST THREE DAYS ONLY
INDICATE YOUR CHOICE BY FILLING IN ONE BLOCK FOR EACH ITEM, USING THIS KEY

0 = NEVER 1 = SOMETIMES 2 = OFTEN 3 = USUALLY 4 - ALWAYS

USE NO. 2 PENCIL. MAKE YOUR MARKS HEAVY AND BLACK. ERASE MISTAKES COMPLETELY.

0 1 2 3 4 (1) IS SLOPPY.
0 1 2 3 4 (2) IS IMPATIENT.
0 1 2 3 4 (3) CRIES.
0 1 2 3 4 (4) SHOWS INTEREST IN ACTIVITIES AROUND HIM.
0 1 2 3 4 (5) SITS, UNLESS DIRECTED INTO ACTIVITY
0 1 2 3 4 (6) GETS ANGRY OR ANNOYED EASILY
0 1 2 3 4 (7) HEARS THINGS THAT ARE NOT THERE.
0 1 2 3 4 (8) KEEPS HIS CLOTHES NEAT.
0 1 2 3 4 (9) TRIES TO BE FRIENDLY WITH OTHERS.
0 1 2 3 4 (10) BECOMES UPSET EASILY IF SOMETHING DOESN'T SUIT HIM.
0 1 2 3 4 (11) REFUSES TO DO THE ORDINARY THINGS EXPECTED OF HIM.
0 1 2 3 4 (12) IS IRRITABLE OR GROUCHY.
0 1 2 3 4 (13) HAS TROUBLE REMEMBERING.
0 1 2 3 4 (14) REFUSES TO SPEAK.
0 1 2 3 4 (15) LAUGHS OR SMILES AT FUNNY COMMENTS OR EVENTS.
0 1 2 3 4 (16) IS MESSY IN HIS EATING HABITS
0 1 2 3 4 (17) STARTS A CONVERSATION WITH OTHERS.
0 1 2 3 4 (18) SAYS HE FEELS BLUE OR DEPRESSED.
0 1 2 3 4 (19) TALKS ABOUT HIS INTERESTS.
0 1 2 3 4 (20) SEES THINGS THAT ARE NOT THERE
0 1 2 3 4 (21) HAS TO BE REMINDED WHAT TO DO
0 1 2 3 4 (22) SLEEPS, UNLESS DIRECTED INTO ACTIVITY.
0 1 2 3 4 (23) SAYS THAT HE IS NO GOOD.
0 1 2 3 4 (24) HAS TO BE TOLD TO FOLLOW HOSPITAL ROUTINE.
0 1 2 3 4 (25) HAS DIFFICULTY COMPLETING SIMPLE TASKS ON HIS OWN.
0 1 2 3 4 (26) TALKS, MUTTERS, OR MUMBLES TO HIMSELF.
0 1 2 3 4 (27) IS SLOW-MOVING OR SLUGGISH.
0 1 2 3 4 (28) GIGGLES OR SMILES TO HIMSELF FOR NO APPARENT REASON
0 1 2 3 4 (29) IS QUICK TO FLY OFF THE HANDLE.
0 1 2 3 4 (30) KEEPS HIMSELF CLEAN.

0 1 2 3 4 5 6 7 8 9	
	PROJECT NUMBER
	HOSPITAL NUMBER
	SUBJECT NUMBER
	TREATMENT GROUP
	DOCUMENT
	FORMAT
	PERIOD
	RATER
	CARD NUMBER

CENTRAL NP RESEARCH LABORATORY (151E), VA HOSPITAL, PERRY POINT, MD 21902

APPENDIX B

Philadelphia geriatric center
Multilevel assessment Instrument

name-_____ Group_____

Cognitive domain

	correct:	Yes	No/Dk
I. Let me jot down: What is today's date_____			
	Month_____	2	I
(probe); What (month/date/year) is it now?			
	Date_____	2	I
Correct date:_____	Year_____	2	I
4. How old are you?	Correct:		
	Age_____	2	I
5. When were you born?	MOnth_____	2	I
(probe); What (month/date/year) were you born?	Date_____	2	I
	Year_____	2	I
S's Correct Birthdate _____			
(month/date/year/)	S's Correct age _____		
	Correct:		
I3. What is your exact address?		2	I
I4. Where is it located? (city, section)		2	I
49. A couple of memory questions... Who is the president of the united states? (write in)		2	I
50. Who was the president before him? (write in)		2	I
** ' ' ' prime minister of Canada?		2	I
** ' ' ' prime minister before him? (write in)		2	I

In the past year, have you had any of the following problems:
(ask Qs. 96 through 99)

	yes	no
96. major problems with your memory?	I	2
97. you sometimes don't know the time of day, day of week, or season?	I	2
98. you sometimes don't know where you are ?	I	2
99. you sometimes become confused in conversation?	I	2

APPENDIX C

M | Ic.7

ADULT PERSONALITY RATING SCHEDULE (A.P.R.S.)

M.H. KLEBAN - E.M. BRODY

*INSTRUCTIONS: This set of statements asks you to make judgments about the way your client, parent or relative is **now**, not as he or she was in the past. You will find a list of 50 statements below. You are being asked to rate your parent or relative on each item in terms of five categories: very low, low, medium, high, and very high. Read each statement and decide which one of these five categories best fits your parent or relative. Then place an "X" or a check-mark in that box. How would you rate your mother, father, or relative **now** on the following characteristics?*

	Very Low	Low	Medium	High	Very High
1. Tendency to be interested and active in many things					
2 Tendency to finish what one starts (Stick-to-itiveness)					
3 Tendency to enjoy other poeple					
4. Sense of humor					
5. Tendency to enjoy social activities					
6 Willingness to seek new experiences or try new things					
7 Warmth of feeling for family members					
8. Tendency to enjoy work (or housewife duties)					
9. Capacity to adjust one self to life's pressures					
10. Warmth of feeling for friends or acquaintances					
11. Tendency to be irresponsible					
12. Tendency to give orders and be bossy					
13. Willingness to accept responsibilities					
14. Tendency to be stubborn					
15. Degree of initiative					
16. Tendency to be open-minded					
17. Tendency for an optimistic outlook on life					
18. Generosity toward family members					
19. Generosity toward friends and acquaintances					
20. Tendency to blame others when in difficulty					
21. Tendency to blame self when in difficulty					
22. Tendency to be critical					
23. Ability to be understanding and sympathetic					

	Very Low	Low	Medium	High	Very High
24. Capacity to hurt others when angry					
25. Tendency to have temper outbursts					
26. Tendency to show favoritism for a member of the family					
27. Tendency to pick on a member of the family					
28. Tendency to be out-going					
29. Neatness of physical appearance					
30. Ability to maintain control when angry					
31 Tendency to use people as targets for anger					
32. Tendency to be sensitive to criticism					
33. Degree of ambitiousness					
34. Tendency to do things on the spur of the moment without giving thought to consequences					
35. Capacity to stand up for oneself					
36. Tendency to be orderly and organized					
37. Tendency to be a disciplinarian					
38. Tendency to be independent					
39. Tendency to be protective towards members of the family					
40. Tendency to be moody					
41. Degree of maturity					
42. Tendency to be selfish					
43. Degree of cautiousness					
44. Tendency to worry					
45. Tendecy to complain					
46. Degree of conceit					
47. Tendency to be nervous					
48. Tendency to be even-tempered					
49. Willingness to admit mistakes					
50. Tendency to cooperate with others					

Source : Kleban (M H), Brody (E M), Journal of Gerontology, 1972, 27, 1, 69-76.
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APPENDIX D

BEHAVIOR ASSESSMENT TOOL
BASED ON FEIL'S STAGES OF DISORIENTATION

Directions: Circle number of behavior in each category which is most characteristic

Patient Number _____ Therapy Code: BRO ABO BVT AVT CBT CAT Total Score _____

Behavior being assessed	First Stage	Second Stage	Third Stage	Fourth Stage
1. Control of body functions	Can dress, toilet, and control the self most of the time. 1	Incontinent due to lack of assistance. Cannot control bowel and/or bladder over long periods. Aware of incontinence. 2	Bowel and/or bladder incontinence persistent. Resigned to it or unaware of it. 3	No effort made toward control or awareness of incontinence 4
2. Relation to reality	Holds onto present reality. Is aware of self and aware of confusion. Is threatened by confusion of self and others. 1	Forgets facts, names and places from the present immediately. Continues to withdraw inward, creates his own rules. 2	Shuts out stimuli from outside world. 3	Will not recognize staff or family who visit daily. 4
3. Muscle control	Muscles tight. Stance rigid. Holds himself together to keep in control as defense 1	Sits upright in chair with muscles relaxed. Neck muscles and lips loose. 2	Body slumped. Head bent forward in chair. 3	Completely loose. Little voluntary movement. 4

4. Appearance of eyes	Eyes are clear and bright. Respond to interpersonal eye contact. Directly focuses on person to whom speaking. 1	Eyes are clear but often unfocused or downcast. Eye contact triggers recognition. Not dependent on recognition of outside environment. Eye contact not necessary. 2	Eyes are most often closed unless stimulated. 3	Eyes are closed. Face lacks expression. 4
5. Voice tone	Speaks in harsh, accusatory or whining voice. 1	Voice is low, seldom harsh or whining, often off-key or distorted when singing or laughing. 2	Voice is low, steady, even toned and melodic. 3	Murmurs in very low, very weak voice. 4
6. Body movements	Movements in space are quick and direct, related to events in environment. 1	Movements in space are slow, sustained, indirect or questioning. Dances with rhythm. 2	If walking, paces restlessly back and forth. Repeats restless, agitated movements. 3	May move finger slowly. Shows little or no voluntary movement. 4
7. Response to communication	Seeks reminders of present time and place. May respond with some sense of humor. Responds positively to recognized authority. Responds negatively to behavior or physical disability of less-oriented persons. 1	Responds to nurturing touch or voice tone. When supported in trusting, respectful way may relate in present time with speech. Smiles when greeted. Can initiate communication. 2	Responds with little or no use of commonly understood words or phrases. Will not risk listening or talking to others unless stimulated. 3	Shuts off outside world. Does not respond to eye contact or touch unless stimulated repeatedly day after day. 4

8. Relation to own feelings	Denies feelings by strictly adhering to rules. Usually carries a cane, blanket, purse, or muster to ward off loneliness. 1	Expresses feelings through movements and symbols. Is sensitive to voice tones, and feelings from present and past. Can respond positively to sexual feelings. Can substitute memories of feelings from past in present situations. 2	Expresses longings to return to early childhood sensory experiences by repeating body movements and sounds. Openly acts out sexual feelings without regard for propriety. 3	Self-stimulation is minimal. Makes no effort to express feelings. 4
9. Relation to time	Keeps track of present clock time. Desires to adhere to schedule. Confabulates when doesn't know time. 1	Loses track of clock time. Interprets present time as past time without awareness of doing so. 2	Never moves in commonly accepted time. Has lost ability to relate to present time. Remembers and relates to early life and events. Always moves in personal time in increments of personal life. 3	Shuts out all relation to present time. No longer talks to even people from past life. 4
10. Ability to read and write.	Can read (unless blind) and write well. 1	Able to read but is losing ability to write legibly. 2	Does not read or write since no longer motivated to communicate. 3	Shuts off outside world. Cannot be motivated to try to read or write. 4
Total of circled scores				

Key: Stage One 10-15 Stage Two 16-25 Stage Three 26-35 Stage Four 36-40

APPENDIX E

DEMOGRAPHIC INFORMATION

Date:_____

1. Patient Number_____Therapy Code: BO VT C

2. Sex_____Age_____Marital Status_____

3. Length of stay in previous institution_____

4. Primary medical diagnosis (List first two):_____
_____
_____

5. Daily medications and doses:_____
_____ _____
_____ _____

6. Physical impairment: (hearing, sight, immobility, etc.)
_____ _____
_____ _____

7. Ever been diagnosed as having mental illness? If yes, give diagnosis, how long institutionalized, when and if resolved.
_____
_____
_____

8. When last able to care for self in own home:_____
_____

9. When last away from the nursing home other than for being hospitalized, and for what purpose:
_____ _____

10. How frequently visitors come specifically to visit this person, and who comes (e.g., family, friends)_____
_____

11. Highest level of education attained_____

12. Efforts made by the staff to stimulate environment_____
_____

13. How frequently this person participates in planned group activity _____

APPENDIX F

THERAPY GROUP OBSERVATION REPORTING FORM

Week _____ Group _____

Key 0 - Never 1 - Rarely 2 - Occasionally 3 - Frequently 4 - Always

Name		Talks in Group	Makes Eye Contact	Touches	Smiles	Shows Leadership	Physically Participates
	M						
	T						
	W						
	Th						
	F						
	M						
	T						
	W						
	Th						
	F						

APPENDIX G

MEDICAL ASSESSMENT FORM — PHYSICIAN'S CERTIFICATE

NAME OF PATIENT	AGE	SEX
ADDRESS		
If in an institution state its name and address		

SECTION A — ASSESSMENT OF GENERAL CARE NEEDS

(This section may be completed by nurse or other person considered competent by Physician)

CHECK THE MOST APPROPRIATE CATEGORY IN EACH OF THE FOLLOWING GROUPS

(a) SKIN

Does examination reveal any evidence of abrasions, rash, bruises, ulcerations or abnormality?

Yes ☐ No ☐ If "yes" explain: _____

(b) NUTRITIONAL STATE

Undernourished ☐ Well nourished ☐ Overweight ☐

(c) MENTAL CONDITION

1. Approximately normal ☐
2. Occasional brief periods of confusion and/or forgetfulness ☐
3. Marked confusion and disorientation with brief periods of alertness and proper orientation ☐
4. Obvious and persistent confusion and disorientation ☐
5. Complete stagnation and vegetation of mental and emotional functions ☐
6. Mental deficiency (i) Congenital ☐
   (ii) Acquired (organic brain damage) ☐

(d) BEHAVIOR

	Yes	No
1. Approximately normal	☐	☐
2. Quiet and Cooperative	☐	☐
3. Agitated	☐	☐
4. Talkative	☐	☐
5. Emotional Changeability or Lability	☐	☐
6. Suspicious	☐	☐
7. Noisy, disturbing to others	☐	☐
8. Quarrelsome — Belligerent (underline)	☐	☐
9. Requires restraint	☐	☐

(e) HABITS

	Yes	No
1. Bladder control normal	☐	☐
2. Bowel control normal	☐	☐
3. Able to speak normally	☐	☐
4. Able to read a newspaper	☐	☐
5. Able to hear conversational voice	☐	☐
6. Able to wash face and hands	☐	☐
7. Able to bathe self	☐	☐
8. Able to use toilet facilities	☐	☐
9. Able to use for purpose of ambulation	☐	☐

(f) USE OF LIMBS

Arms and Hand	Right	Left	Lower Limbs	Right	Left
Normal use	☐	☐	Normal use	☐	☐
Impaired use	☐	☐	Impaired use	☐	☐
No use	☐	☐	No use	☐	☐
Amputation	☐	☐	Amputation	☐	☐

(g) FEEDING

1. Feeds self ☐
2. Requires supervision for feeding ☐
3. Requires assistance for feeding ☐
4. Requires to be fed ☐

(h) DRESSING

1. Able to dress self ☐
2. Requires supervision or assistance in dressing ☐
3. Requires to be dressed ☐
4. Continuous full bed care ☐

(i) BED CARE

1. Requires no assistance to get in or out of bed ☐
2. Requires some assistance to get in or out of bed ☐
3. Requires lifting in and out of bed ☐
4. Requires to be turned in bed ☐

(j) AMBULATION

1. Able to walk without help
   (i) Normal for age ☐
   (ii) Feeble, requires supervision ☐
2. Independent with wheelchair ☐
3. Requires assistance such as
   (i) Personal assistance to walk ☐
   (ii) Lifting in and out of chair ☐
   (iii) Unable to propel wheelchair ☐
4. Unable to do anything for self ☐

SIGNATURE (if completed by nurse) _____ DATE _____

SECTION B — PROFESSIONAL SERVICE NEEDS

	Yes	No
1. Special diet	☐	☐
2. P.R.N. orders	☐	☐
3. Injections — Subcutaneous	☐	☐
— Intramuscular	☐	☐
— Intravenous	☐	☐
4. Sterile dressings	☐	☐
5. Tube feeding or intubation	☐	☐
6. Irrigations	☐	☐
7. Indwelling catheter	☐	☐
8. Laboratory services		
(a) Microscopic urinalysis	☐	☐
(b) Blood counts and smears	☐	☐
(c) Blood chemistry	☐	☐
9. X-ray	☐	☐
10. Rehabilitation services		
(a) Physiotherapy	☐	☐
(b) Occupational therapy	☐	☐
(c) Speech therapy	☐	☐
(d) Vocational assessment	☐	☐
11. Other	☐	☐

IF "YES", PLEASE SPECIFY _____

(OVER)

091908

SECTION C — MEDICAL ASSESSMENT

1. BRIEF MEDICAL HISTORY _____

2. DESCRIBE PATIENT'S PRESENT CONDITION _____

3. LIST PRESENT MEDICATION WITH DOSAGE — Date Ordered

(a) _____

(b) _____

(c) _____

(d) _____

4. NOTE ANY DRUG SENSITIVITIES OR ALLERGIES _____

5. DIAGNOSES: (LIST IN SPACES A, B, C, D, IN ORDER OF IMPORTANCE, THE CONDITIONS THAT MAKE CARE OR TREATMENT NECESSARY AT THIS TIME)

	DURATION Wks	Mos	Yrs.
A.			
B.			
C.			
D.			

FOR EACH CONDITION INDICATE YOUR ASSESSMENT IN THE VERTICAL LINE BY ONE CHECK (THE MOST APPROPRIATE) IN EACH OF THE FOLLOWING GROUPS.

	A	B	C	D
6. PROGNOSIS:				
1. Little effect on life span	☐	☐	☐	☐
2. Some deterioration in 3 months	☐	☐	☐	☐
3. Probably fatal in 3 months	☐	☐	☐	☐
4. Improvement in 3 months	☐	☐	☐	☐
7. REHABILITATION POTENTIAL:				
1. None	☐	☐	☐	☐
2. Limited — needs vocational therapy	☐	☐	☐	☐
3. Moderate — to self-care level	☐	☐	☐	☐
4. Complete — independent living	☐	☐	☐	☐
8. PRESENT STATUS OF DISEASE:				
1. Stabilized	☐	☐	☐	☐
2. Mildly active	☐	☐	☐	☐
* 3. Unstable	☐	☐	☐	☐
4. Active	☐	☐	☐	☐
9. PURPOSE OF MEDICAL CARE:				
1. Maintenance	☐	☐	☐	☐
2. Evaluation and treatment	☐	☐	☐	☐
3. Rehabilitation procedures	☐	☐	☐	☐
4. Palliative therapy	☐	☐	☐	☐

* If condition is classified "unstable", indicate nature and frequency of exacerbations, relapses, etc.

_____

_____

_____

_____

_____

10. PLACEMENT

HOSPITAL FACILITIES
- Convalescent Hospital Care ☐
- Chronic Hospital Care ☐

OTHER _____

_____

DOMICILIARY CARE FACILITIES
- Home for the Aged ☐
- Rest Home ☐
- Nursing Home: Class 1 ☐
- Nursing Home: Class 2 ☐

11. ESTIMATED DURATION OF STAY

_____ Weeks _____ Months ☐ Continuous

12. COMMENTS: _____

_____

_____

_____

_____

CERTIFICATION: I certify that in my opinion the care needs of this applicant indicate that he or she is eligible for admission to the facility indicated in paragraph 10 above, and that the statements contained herein are correct to the best of my professional knowledge.

Date _____ _____
Signature of Attending Physician

APPROVAL: This form has been reviewed by me, found to be properly completed and I am in agreement with the placement indicated above.

Date _____ _____
Signature of Physician

APPENDIX H

Explanation that was given to the relatives by the researcher over the telephone.

Hello, Mr./Miss/Mrs. _____. My name is Mr. L. Babins and I'm associated with Mount Royal Villa in conjunction with McGill University. I am conducting a research study along with my associates.

The project involves several residents meeting in a group a couple of times a week to discuss certain topics that are important to them, and/or I will be asking them questions relating to themselves and what interests them. The potential benefits are increased interest in their surrounding and social meetings with others, improved orientation and expression.

It would be beneficial to us if you could sign a consent form in order for Mr./Miss/Mrs. _____ to participate in this activity.

If you have any questions, you may feel free to discuss them with either myself or Miss Racine (Director).

APPENDIX I

INFORMED CONSENT

Subject's Name: _____ Date: _____

Project Title: Reality Orientation and Validation Therapy

You will be asked some questions relating to yourself and the world around you, plus what you do during the day. After this, you may be asked to take part in a group meeting three times a week for 10 weeks (approximately 40 minutes per meeting), and you will be asked to answer some questions a total of four times; or you will be asked to answer some questions a total of four times without taking part in the group meetings.

In the groups, you will talk about different things that will interest you and/or your group members. The potential benefits are increased interest in your surroundings and meetings with other group benefits.

Consent:

I have fully explained to _____

Subject/Relative/Guardian (Circle one)

I have answered and will answer all questions to the best of my ability.

_____

Investigator's Signature

I give permission for my/my relative's (circle one) participation in this study. I know that Mr. Lennie Babins (investigator) or his associate will be available to answer any questions I may have.

I understand that I am free to withdraw this consent and discontinue participation in this project at any time without prejudice.

_____
Signature of Subject/Relative/
Guardian (Circle one)

_____
Witness to Signature

APPENDIX J

NOSIE-30
SCORING KEY

SUBJECT _____ CODE # _____ DATE OF RATING _____

NAME OF RATER 1 _____ POSITION OF RATER 1 _____

NAME OF RATER 2 _____ POSITION OF RATER 2 _____

NOSIE FACTOR SCORES ARE BASED ON THE SUM OF TWO RATERS' ITEM RESPONSES. THEREFORE, IF ONE RATER IS USED, HIS SCORES MUST BE DOUBLED.

POSITIVE FACTORS

1. SOCIAL COMPETENCE (COM)

	RATER 1	RATER 2
11	-	-
13	-	-
21	-	-
24	-	-
25	-	-
ADD	+20	+20
SUM	____ +	____ = ☐

2 SOCIAL INTEREST (INT)

	RATER 1	RATER 2
4		
9		
15		
17		
19		
SUM	____ +	____ = ☐

3. PERSONAL NEATNESS (NEA)

	RATER 1	RATER 2
1	-	-
8		
16	-	-
30		
ADD	+8	+8
SUM	____ +	____ = ☐

TOTAL POSITIVE FACTORS = SUM COM + SUM INT + SUM NEA = ☐

NEGATIVE FACTORS

4 IRRITABILITY (IRR)

	RATER 1	RATER 2
2		
6		
10		
12		
29		
SUM	____ +	____ - ☐

5. MANIFEST PSYCHOSIS (PSY)

	RATER 1	RATER 2
7		
20		
26		
28		
SUM	____ +	____ - ☐

6. RETARDATION (RET)

	RATER 1	RATER 2
5		
22		
27		
SUM	____ +	____ ☐

TOTAL NEGATIVE FACTORS SUM IRR + SUM PSY + SUM RET ☐

---

7. TOTAL PATIENT ASSETS (TOT)

96 + TOTAL POSITIVE FACTORS ☐ - TOTAL NEGATIVE FACTORS ☐ ☐

SUBJECT'S NAME _____ No. _____ DATE _____

PROFILE SHEET - NOSIE-30

	POSITIVE FACTORS			NEGATIVE FACTORS			TOTAL PATIENT ASSETS
	COM	INT	NEA	IRR	PSY	RET	
80	40	34-40	32	40	28-32	24	192-208
							191
				37-39	25-27	23	190
				35-36			189
75		32-33		34	24	21	187
					23		186
	39	29-30		32		20	184
70			28	29-30	21	19	180-181
				26-27	19		177-179
		26				18	174-175
65		24	31	22-23	16	17	171
	38					16	168-170
		22		19-20			
	37	20	30	18	14	15	164-166
60	36	18	29	16-17	12	14	159-161
			28	13		12	154-156
	33	16			9	11	148-150
55	32	14	26	10-11	8	10	146-147
	30	12	25	9		9	139-142
		10-11			6		134-136
50	29		21	7	5	8	132-133
		8		5		7	126-128
	26	6	18		4	6	123-125
45	24-25		15-16	3	3	5	115-118
		5	13	2		4	112-114
	20-21	4	11-12		2		105-107
			10	1			101-104
40	18				1	3	98-100
	16-17	3	9			2	92-94
	15	2		0			88-91
			7		0		
35	12	1	5			1	84-85
	10	0					82-83
						0	80-81
			3				74-76
30	8		1				72-73
	7						69-71
							63-66
	5-6						59-62
25							58
	4						
	3						50-56
							45-49
			0				42-44
20	0-2						0-41
	COM	INT	NEA	IRR	PSY	RET	TOTAL

NORMALIZED T-SCORES