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The Effects of Directive and Non-Directive Techniques and Locus of Control on Preference for a Therapist, Perceived Therapist Effectiveness, and Attendance Rates of Geriatrics in a Music Therapy Setting

Katrina Alison Picha

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THE EFFECTS OF DIRECTIVE AND NON-DIRECTIVE TECHNIQUES
AND LOCUS OF CONTROL ON PREFERENCE FOR A THERAPIST,
PERCEIVED THERAPIST EFFECTIVENESS, AND
ATTENDANCE RATES OF GERIATRICS IN
A MUSIC THERAPY SETTING

by

Katrina Alison Picha

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Master of Music
School of Music

Western Michigan University
Kalamazoo, Michigan
April 1984

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It was hypothesized that external locus of control subjects would prefer directive techniques and perceive them as more effective while non-directive techniques would be preferred and perceived as more effective by internal locus of control subjects. Nineteen external and internal geriatric residents in a healthcare facility were divided by randomized matched pairing into two groups, both led by the same therapist. Subjects participated in either a directive or non-directive group and rated the therapist on bipolar semantic differential scales for perceived effectiveness and preference. No significant main or interaction effects were found for type of treatment, locus of control, or attendance rates.

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Katrina Alison Picha

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CHAPTER I

INTRODUCTION

In recent years, concern for the problems of the elderly has been growing. National and governmental agencies have recognized that further research is needed in the area of gerontology since the elderly population is substantially increasing yearly. In fact, Butler (1975) predicted that an estimated 25 percent of the world population will be over the age of 65 by the year 1985.

Much gerontological research also focuses upon determining the personality variables and social stressors which affect the elderly's ability to adjust to the process of aging. One such variable, locus of control, was isolated by Rotter (1966) as a significant determinant of a person's adjustment to aging. Locus of control (LOC) is defined as the extent to which people feel they are controlled by luck and fate (external LOC) or by their own actions (internal LOC). Rotter further explains that:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the factors surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his relatively permanent characteristics, we have termed this a belief in internal control. (p.3)

It is also important that researchers recognize the specific problems and needs encountered by the elderly since these may affect their ability to adjust to aging. Providing the elderly with an appropriate means of dealing

with these needs is of primary importance for psychotherapists working with the elderly. It is, therefore, necessary to determine the elderly's preferences for, and perceived effectiveness of, various therapeutic orientations.

The Statement of the Problem

This study investigated the possibility that a geriatric subject's locus of control orientation might determine their preference for, and perceived effectiveness of, non-directive and directive therapeutic techniques. It was also possible to study the relationship between subject's locus of control orientation, session attendance behavior, and types of treatment.

The Research Hypotheses

The First Hypothesis

External locus of control subjects would prefer the use of directive therapeutic techniques in music therapy sessions.

The Second Hypothesis

Internal locus of control subjects would prefer the use of non-directive, client-centered therapeutic techniques in music therapy sessions.

The Third Hypothesis

External locus of control subjects would perceive the directive therapeutic techniques as more effective than the non-directive.

The Fourth Hypothesis

Internal locus of control subjects would perceive the non-directive therapeutic techniques as more effective than the directive techniques.

The Fifth Hypothesis

External locus of control subjects would attend more directive sessions than Internal locus of control subjects.

The Sixth Hypothesis

Internal locus of control subjects would attend more non-directive sessions than External locus of control subjects.

The Null Hypotheses

The First Hypothesis

There will be no significant difference in preference scores between the directive and non-directive treatments.

The Second Hypothesis

There will be no significant difference in mean preference scores from Internal and External locus of control subjects.

The Third Hypothesis

There will be no significant difference in mean effectiveness scores between the directive and non-directive treatments.

The Fourth Hypothesis

There will be no significant difference in mean effectiveness scores of Internal and External locus of control subjects.

The Fifth Hypothesis

There will be no significant interaction effect upon preference between levels of therapy and locus of control.

The Sixth Hypothesis

There will be no significant interaction effect upon perceived effectiveness between levels of therapy and locus of control.

The Seventh Hypothesis

There will be no significant difference in attendance rates between the directive and non-directive treatments.

The Eighth Hypothesis

There will be no significant difference in attendance rates between Internal and External locus of control subjects.

The Ninth Hypothesis

There will be no significant interaction effect upon attendance between levels of therapy and locus of control.

The Delimitations

The subjects in this study were limited to residents from a life care

retirement community. These residents were all currently residing in the Health Center due to health problems. The Health Center was a skilled nursing care facility adjoining the apartment residences. Residents remain at the Health Center until their health problems are corrected and they can live independently in their apartments.

All tests were administered verbally in a one-on-one situation due to the subjects' visual impairments.

A standardized test (Rotter's Locus of Control Scale, 1966) was used to determine subjects' locus of control orientation. Standardized scales were not available for testing either subjects' preferences for, or perceived effectiveness of, treatment. Therefore, two experimenter designed scales were implemented to determine the effects of treatment.

Assumptions

It was assumed that self report measures of perceived effectiveness and preference were reliable and valid. However, this was not certified through testing.

It was assumed that geriatric subjects could understand and reliably use the bipolar semantic differential scales used to measure subjects' preferences for, and perceived effectiveness of, treatment orientation.

Locus of control scores for geriatric subjects were assumed to fall in a bell curve. Therefore, scores were divided on the mean with scores falling above the mean designated as External and below the mean as Internal.

CHAPTER II

THE REVIEW OF RELATED LITERATURE

Locus of Control in Geriatrics

Locus of control is a personality variable which affects the physical, social, and psychological components of the geriatrics' lifestyle. Bradley and Webb (1976) attempted to define the effects of LOC orientation in these areas when they examined age-correlated differences in LOC orientation for subjects aged 13-90 in three behavior domains: intellectual, social, and physical. Their results indicated that subjects over the age of 60 were more external than those under the age 60 in both physical and social situations. No differences were found between age groups in the intellectual domain of LOC.

Somewhat contradictory findings were reported by Ryckman and Malikios (1975). They note that an increasing sense of personal efficacy developed in subjects from youth to adulthood and became stabilized throughout middle age. However, no decline in internal LOC orientation was reported for subjects in old age.

The personality characteristics and ego functioning levels of the elderly were also studied by Kuypers (1972). Internal LOC subjects were found to be more "flexible, purposive and open," "less defensive," "cognitively more complex," "more sensitive," and "intellectually superior" to external LOC subjects (p. 168). These results appear to indicate that internal locus of control orientation in the elderly allows them to adapt better to the physical, social, and emotional changes that come with the aging process.

Environmental/Situational Effects on Locus of Control of Geriatrics

Environmental changes may also have an effect on the LOC orientation of the elderly. Wolk (1976) executed a study in which elderly subject's LOC orientations were compared to the amount of situational constraint in their living situations. Wolk found that subjects in low constraining environments were significantly more internally controlled than subjects in high constraining environments. It is also interesting to note that only subjects in the low constraining environment reported a relationship between their expectancy for internal control with life satisfaction, positive self concept, and maintenance of their activity level. This effect did not hold true for subjects in the high constraining environment.

The question of effect of environment on LOC orientation was also addressed by Queen and Freitag (1978). Nursing home residents and "active elderly" were examined to determine the relationship between their living environment and their LOC orientation, anxiety level, and life satisfaction. The "active elderly" were significantly more internal, showed higher life satisfaction, and reported less anxiety than the nursing home residents.

Self-Concept and Life Satisfaction of Geriatrics

Studies have also been conducted to determine the relationship between elderly subjects' LOC orientation and their perceived self-concepts and life satisfaction levels. Reid, Haas, and Hawkings (1977) noted that positive self-concept correlated significantly with a subject's internal locus of desired control. These findings were replicated and extended by Hunter, Linn, and Harris (1981). They found that elderly subjects with high or low

self-esteem did not differ with respect to age, income, education, or living arrangement. Nevertheless, the low self-esteem subjects had a more external LOC orientation, poorer self-reported health, and more pain than high self-esteem subjects.

Life satisfaction has been found to correlate highly with the self-concept of the elderly. Nehrke, Hulicka, and Morganti (1980) investigated the difference in life satisfaction, self-concept, and LOC orientation in three age ranges. The results indicated that life satisfaction and self-concept levels differed significantly for each of the three age groups while locus of control orientation did not. The experimenters also observed that the members of the eldest group (70+ years) were more satisfied with their lives and had a significantly higher self-concept than the other age groups.

The life satisfaction and LOC orientation of the elderly may be affected by their health and income levels. Mancini (1980) reported that internal LOC orientation and higher life satisfaction were significantly associated in aged public housing residents. He also observed that this effect remained constant when controlling for the effects of self-rated health and income.

Linn and Hunter (1979) attempted to determine elderly subjects' perceptions of their age as a function of their locus of control orientation. Subjects were asked to identify themselves as feeling younger, as old, or older than their age. Seven variables were utilized to measure the subjects' psychological functioning. The results indicated that younger perceptions were associated with more internal LOC orientation and better psychological functioning in the seven areas of testing.

Music Therapy with Geriatrics

The relationship among LOC orientation, self-esteem, and life satisfaction of the elderly is also important for the music therapist. Music therapy can be a valuable treatment modality for establishing and enhancing the self-esteem and life satisfaction of the elderly. This is discussed by Leiderman (1967) who noted that "music and tempo, therefore, create within the patient a more alert and receptive state to the world around him" (p. 126).

Palmer (1977) further explored the use of music therapy as a modality of helping the elderly cope with the inevitable problems of aging. She points out that "in addition to the effect of physical loss upon ego functioning, the aging process often involves a loss in social status" (p. 191). This loss in social status is one of the causes of the lowered self-concept in the elderly, and Palmer advocates the use of music therapy techniques as a means of increasing self-esteem.

Maultsby (1977) also reported success with a technique which combines the use of Rational Behavior Therapy with music therapy. He suggests that the two techniques compliment one another since they both deal with the cognitive, emotional, and physical behaviors of clients. Furthermore, he noted that "music can be therapeutic because it is a positive reinforcer for new learning" (p. 92).

It also appears that musical learning of social interaction skills can be more effective than non-musical learning. Cassity (1976) investigated the influence of group musical activities upon the peer acceptance, group cohesiveness, and interpersonal relationships of psychiatric adult clients. He

found that the musical group made significant gains in these three areas when compared with the non-musical group.

Preferences and Perceived Effectiveness of Treatment as Determined by Locus of Control Orientation

The importance of these factors in therapeutic treatment is an issue that cannot be denied. However, the previously cited studies only seek to explore the different methods and personality variables involved in invoking a desired treatment outcome. They do not determine what variables prompt a client to prefer specific treatment techniques and perceive them as effective. Cashen (1979) believed that the gender of a client might influence a client's preference for a counseling technique. She found that male and female clients reported no preference for either male or female counselors but significantly preferred a behavioral rather than a client-centered approach.

Additional studies have focused upon clients' preferences for different treatment approaches. The negative and positive aspects of directive and non-directive therapy were investigated by Obitz (1975). Fifty male alcoholics were shown films of directive and non-directive therapists counseling the same client. Subjects were asked to rate the therapist(s) on 12 variables (adjectives selected from Anderson's Likeableness Ratings of 555 Personality Trait Words, 1968) on a seven point scale. Subjects perceived the non-directive therapist as significantly more socially desirable (considerate, warm, friendly, patient, tolerant, sympathetic, and passive) but preferred the directive techniques for themselves. The directive approach was perceived as significantly more irritating, unpleasant, hostile, annoying, insulting, unreasonable, cold, capable, and receptive.

Schroeder and Bloom (1979) investigated clients' attractions to a therapeutic orientation. They found that college students exposed to a variety of approaches (Gestalt, Analytic, Behavioral, and Client-Centered) were more attracted to Gestalt and Psychoanalytic therapists and perceived them as being more credible. Contradictory findings were reported by Dougherty, Horne, and Ollendick (1978) and Horne, Chaney, and Dougherty (1976). In two similar studies grade-school children and institutionalized male delinquents were found to react to Adlerian and analytically derived therapy with feelings of attack and withdrawal, and to advice-giving with positive feelings.

Bloom (1978) attempted to determine clients' attractions and preferences for a therapeutic orientation by using the clients' behaviors in therapy as an indicator of preference. He assigned subjects to structured, unstructured, and control training groups. Group leaders and subjects were then asked to rate and rank themselves and other group members on the quality and quantity of their in-group self-disclosing behavior. No significant differences were noted between the groups in self-disclosing behavior. This may indicate that in-group behavior may not be the best way of determining a client's preference for treatment orientation.

Such studies clarify the issue that clients prefer different types of treatment but do not distinguish the relationship between preference for therapeutic orientation and the personality and psychological background of the client. Helweg and Gaines (1977) investigated the preferences of control subjects and psychotic patients for non-directive and directive therapeutic styles. No relationship was noted between sex, education, and psychological backgrounds of the subjects. However, it was reported that subjects who

preferred the Ellis (behavioral) method of treatment were significantly more dogmatic and externally controlled than those who preferred the Rogers (client-centered) technique.

In a similar study, Canter (1971) studied the interaction of authoritarian attitudes, degree of pathology, and preference for structured versus unstructured psychotherapy. For both male and female subjects, high dogmatism scores were associated with preference for the structured approach. There was no significance for either sex in interaction with the degree of pathology.

Several studies have also attempted to determine whether the use of directive or non-directive techniques would affect the locus of control, or personal and behavioral adjustment of subjects. Kilmann (1974a) utilized six therapy groups (two directive, two non-directive, and two control) in a 23-hour marathon format to investigate the effects of these techniques on locus of control. All groups contained both external and internal LOC members. The no-treatment group as a whole significantly shifted toward externality, and External members of the non-directive and directive groups did not differ on their pre- and post- Locus of Control tests. However, it was noted that Internal subjects in the directive and control conditions did shift significantly towards externality. Kilmann believes this suggests that: "(a) with no treatment, subjects with an internal orientation shift toward externality, and that, (b) non-directive treatment keeps internal subjects from shifting towards externality while directive treatment facilitates this shift" (p. 383).

This idea is refuted by Panzica (1975). In a study which compared a programmed-activity group with a client-centered group, Panzica noted that

the programmed-activity group sustained higher scores in measures of self-concept and perceived internalized control. A similar effect was reported by Leak (1979). Leak used behavioral and personality measures of outcome to compare non-directive and control groups to subjects in the PEER approach structured group; Hebeisen, (1973). His treatment effectiveness was evaluated by the California Personality Inventory (Gough, 1969) and the BiPolar Psychological Inventory (Roe, 1972). Behavioral measures of adjustment for 1 year following treatment were also utilized. Leak found that the highly structured PEER approach produced significantly greater empathy, improved interpersonal functioning, and a reduction of serious rule violations in incarcerated felons.

The use of the same therapist in both directive and non-directive techniques was examined by Abramowitz, Abramowitz, Roback, and Jackson (1974). Twenty-six "mildly distressed" college students were randomly assigned to a non-directive group or to one of three directive groups. Transcriptions from the middle 15-minute segment of three randomly selected meetings were judged as either directive or non-directive by psychology graduate students and a Clinical Psychologist to ascertain whether leader directiveness and activity had been carried across the two treatment conditions. A multivariate personality battery provided an index of the subject's pre- and post-treatment psychosocial adjustment. It was found that external LOC subjects were significantly more responsive to directive techniques. These results were replicated by Nowick, Bonner, and Feather (1972). They found that therapists were perceived differently depending upon the technique used and that these perceptual differences were related to the clients' LOC orientation.

Contradictory findings were reported by Kilmann (1974b) when he investigated the preferences of internal and external LOC clients for groups in which they shared leadership or were controlled by a leader. The results indicated that Externals significantly preferred the shared over the controlled leadership group while Internals did not prefer one group over the other.

The previously cited studies were critiqued by Messer and Meinster (1980). Reviews were made of research that claims Internals are more successful with non-directive therapy and Externals with directive. Each study was examined for deficiency of design, statistical analysis, and measures of outcome. Messer and Meinster note that "the I-E (Internal-External) scale in its present form does not distinguish between two types of Externals — those who are ambitious and achievement oriented but rationalize failures and project blame whenever failure occurs or seems imminent ("defensive Externals") and those who in fact believe that events are determined by forces beyond their control" (p. 287). A plea is made for studies on this topic which: (a) define the therapies used; (b) use a large number of clients; (c) use a locus of control scale which contains items of personal control and powerful other, refers to client's specific problem area and excludes defensive Externals; (d) is conducted over three months; (e) employs behavioral and self-report outcome measures, and (f) includes pre-, post-, and follow-up assessments of treatment.

The interaction effects of treatment orientation and locus of control were also investigated by Stuehm, Cashen, and Johnson (1977). External and internal locus of control subjects viewed the same counselor and same problem in three films of behavioral, psychoanalytic, and humanistic

approaches. A Chi squared analysis found no differences between Externals and Internals but noted that both External and Internals significantly preferred the behavioral approach. This effect was also demonstrated by Holen and Kinsey (1975). They found that college students viewing films of three treatment orientations significantly preferred the behavioral approach over client-centered and psychoanalytic methods and believed it was more effective.

The Purpose of This Study

The purpose of the present study was to examine the effect of the differences in external and internal locus of control on subjects' preferences for, and perceived effectiveness of, non-directive and directive therapeutic techniques. Self-report and a valid personality scale (Rotter's Locus of Control Scale, 1966) were used pre- and post-treatment to assess the outcome of treatment.

CHAPTER III

METHOD

The Subjects

Nineteen geriatric patients in the Health Center of Friendship Village in Kalamazoo, Michigan, served as subjects. Friendship Village is a life care retirement community for the elderly which serves its residents with supervised apartment living and skilled nursing care in the Health Center. Residents are required to pay a substantial amount of money to receive the services and housing offered.

The subjects ranged in age from 64-93 years. The mean ages for males and females were 90.5 and 84, respectively. The diagnoses for subjects included organic brain syndrome, hypertension, diabetes, stroke, arthritis, and general weakness. The Registered Music Therapist (RMT) at the facility provided the author with a list of possible subjects she felt could reliably complete the testing and would enjoy the therapy. Each possible subject was approached individually and asked if they would commit themselves to participate in the study. Residents who indicated that they would do so were used in the study.

The Measurement Instruments

Rotter Locus of Control Scale

All subjects were administered the Julian B. Rotter (1966) Locus of Control Scale prior to treatment. The Locus of Control Scale is scored by counting the number of external items chosen in 29 pairs of statements. Six

pairs of these statements serve as filler items only (see Appendix A). A recreation therapy intern at the facility who was blind to the nature of the study verbally administered the scale since many of the subjects experienced severe vision problems. Each pair of test items was read aloud several times with no interpretation.

Reliability and validity correlations for the Rotter Locus of Control Scale are noted by Rotter (1966). Several studies report satisfactory concurrent validity for the scale (Liverant & Scodel, 1960; James, et al, 1965; and Lefcourt & Ladwig, 1965). The test-retest reliability coefficients for two samples of undergraduate psychology students were reported by Rotter to be .72 and .55 (p. 13). He attributed this variation in scores to the fact that one test was administered individually while the other test was administered by group.

In the present study, subjects' Locus of Control scores were divided by the mean, with scores below the mean counted as internal, and above the mean as external. This method was used since it was assumed that all scores would fall in a bell curve. No special method is identified in previous research for determining the line between external and internal scores. Some studies divided the scores by the median or mean, and others used subjects who fell in the top and bottom 20 percent of the scale. The author used the mean because scores appeared to cover the complete range of the bell curve.

Experimenter-Designed Scales

At the conclusion of treatment, subjects were asked to complete two experimenter-designed, semantic differential scales. These scales were comprised of five bipolar adjective pairs selected from Anderson's

Likeableness Ratings of 555 Personality Trait Adjectives (1968). The first scale contained a list of adjectives designed to test the perceived effectiveness of the given treatment on a 5-point scale (see Appendix B). The second scale contained adjectives on a 5-point scale which indicated preference for a therapeutic modality (see Appendix C). Due to the subjects' visual impairment these scales were administered verbally. For example, subjects were asked, "On a scale of 1-5 with 1 being competent and 5 being incompetent, how would you rate your therapist?" Positive adjectives were randomly placed at the top or bottom of the scale to ensure against polarity effects.

Procedure

Two males and 17 females were placed into one of two music therapy groups based upon a randomized matched pairing of high external and high internal locus of control scores. Both music therapy groups were led by a music therapy intern who was in the last month of her internship at the facility. The planning and leading of sessions was supervised by the Registered Music Therapist (RMT) at the facility and the author. The same therapist led both groups; one in a directive behavioral manner, and the other in a non-directive and client-centered manner.

The treatment groups utilized activities which were designed to promote goals of social interaction, increased physical movement, reality orientation, and remotivational discussions. The therapist used the same format and same activity for both directive and non-directive groups but changed her style of leadership as determined by the treatment condition. Each session began with a hello song to encourage subjects to interact with

one another. This was followed by reality orientation activities, song lyric remotivation discussions, singalongs, instrument playing, and movement with various props. All sessions concluded with a good-bye song and a one-on-one affirmation of the subject by the therapist.

A pilot study prior to treatment determined that the therapist was effectively directive and non-directive. The therapist and three judges (RMT's) were given a list of verbal directive behaviors and examples. These included:

1. Giving directions
Ex. "Everyone play their instruments now."
2. Giving specific feedback to clients
Ex. Correcting client's behaviors — "Please sit up straight, ____."
Ex. Correcting client's statements "No, _____. It's Tuesday today not Wednesday."
Ex. Verbally stating that client's behaviors or statements are inappropriate or appropriate
3. Verbal reinforcement
Ex. "Very good, ____." or "That's right, ____."
4. Asking direct questions of clients
Ex. "What mood is most prominent in this music, _____?"
5. Therapist leads from one activity to another
Ex. Therapist states, "Now let's work with the rhythm instruments.", and leads into next activity
6. Therapist verbally refocuses client's attention to the task at hand
Ex. "_____, do you like the music you hear?"
7. Negative behaviors are reprimanded and corrected
Ex. "Hold the sticks this way, _____."

The therapist and judges were also given examples of behaviors which were considered non-directive, and some points to keep in mind:

To prevent confusion, here is a list of non-directive behaviors. These will not be counted by the judges, but will hopefully help you to qualify the difference between directive and non-directive behaviors.

1. Reflecting or reiterating client's statements
2. Encouraging member to ask another member a question
3. Physical reinforcement or smile, touching, etc.
4. Verbal reinforcement which merely reiterates client's statement
Ex. "Thank you, _____. It is Monday."
5. Maintaining silence to prompt responses from clients
6. Asking open-ended questions which cannot be answered with

"Yes" or "No". These questions should be asked of the whole group in general.

Ex. "How is everyone feeling today?"

The following delineations were made between directive and non-directive therapy:

Directive therapy is more structured, and more specific (ie: asking questions of specific clients, and directing specific behaviors). The therapist should take an active role and plan and lead all activities. Think "behavioral" when acting as a directive leader.

Non-Directive therapy is less structured and less specific (ie: asking questions in an open-ended way and of the group in general). Therapist acts as a facilitator, trying to involve patients by getting them to ask questions of each other rather than the therapist. The therapist suggests, rather than directs. Think "client-centered" when acting as a non-directive leader.

Eight 15-minute segments of the middle of directive and non-directive group sessions were taped on a Craig J102 tape recorder. The first two of these sessions served as the pilot study to determine if the judges understood and could delineate between the two treatment orientations.

Typed transcripts of the verbal behavior during these sessions were provided to the three judges, who were blind to the treatment condition. The transcripts contained all of the statements made by the therapist in both the non-directive and directive conditions. The statements were randomized by condition throughout the transcripts to prevent biasing effects. The judges were asked to place a check next to each therapist statement which was directive as determined by the guidelines given them.

The percentage of agreement between the three judges was calculated for the three paired combinations of judges by dividing the number of agreements by the number of agreements and disagreements. The results indicated that judges one and two, two and three, and one and three scored 73 percent, 76 percent, and 69 percent, respectively. This percentage

of agreement was judged as acceptable by the author as an indication that treatment was correctly given by the therapist and judged by the judges.

The subjects attended a directive or non-directive music therapy session twice a week for a 30-45 minute session. Treatment was given for three weeks, in a total of six sessions for each group.

CHAPTER IV

RESULTS

Statistical Data

Table 1 shows the means and standard deviations of the locus of control scores for the independent variables.

Table 1
Locus of Control Means, Standard Deviations
and N's for all Cells

	Internal LOC			External LOC			Totals		
Treatment	Mean	St. Dev.	N	Mean	St. Dev.	N	Mean	St. Dev.	N
Non-Directive	7.25	1.71	4	12.4	2.07	5	10.11	3.26	9
Directive	6.60	3.05	5	12.2	2.39	5	9.4	3.92	10
Totals	6.89	2.42	9	12.3	2.11	10			

Note. There are a possible 23 points on the Locus of Control Scale. In this study scores of 1-9 were defined as Internal LOC, and 10 and above as External LOC.

Since subjects were matched on locus of control and then randomly assigned to non-directive and directive groups, the difference between the two groups should not be significant. That was indeed the case: Table 2 shows that there were no significant differences between the mean scores.

Table 2
Analysis of Variance on Locus of Control Scores
Broken Down by Treatment Level

Source	SS	df	MS	F	Probability
Between	2.40	1	2.40	0.18	0.67
Within	223.29	17	13.13		
Total	225.69	18			

Table 3 denotes the correlations between the preference test items. Items 1 and 3 (likeable; not likeable, and friendly; unfriendly) did not correlate highly with test items 2, 4, and 5 (0.54, 0.52, 0.46, and 0.07, 0.10, and 0.25, respectively). Therefore, these items were discarded from further data analysis and scores for the preference tests were collapsed over the remaining test items.

Table 3
Correlations Between Preference Test Items

Likeable; Not Likeable	(Item 1)	1.00				
Obnoxious; Not Obnoxious	(Item 2)	0.54	1.00			
Unfriendly; Friendly	(Item 3)	0.22	0.07	1.00		
Pleasant; Unpleasant	(Item 4)	0.52	0.70	0.10	1.00	
Irritating; Not Irritating	(Item 5)	0.46	0.75	0.25	0.81	1.00
	Item 1	Item 2	Item 3	Item 4	Item 5	

The same effect was noted with the perceived effectiveness test

items (see Table 4). Items 1, 2, 3, and 4 were found to correlate highly,

Table 4
Correlations Between Perceived Effectiveness Test Items

Competent; Incompetent	(Item 1)	1.00				
Incapable; Capable	(Item 2)	0.72	1.00			
Effective; Not Effective	(Item 3)	0.79	0.78	1.00		
Unskilled; Skilled	(Item 4)	0.73	0.60	0.78	1.00	
Not Helpful; Helpful	(Item 5)	0.60	0.21	0.57	0.81	1.00
		Item 1	Item 2	Item 3	Item 4	Item 5

therefore indicating that they were measuring the same thing. However, item 5 (helpful; not helpful) was found to have an inconsistent correlation when paired with test items 1, 2, 3, and 4 (0.60, 0.21, 0.57, and 0.81, respectively). Item 5 was therefore discarded from further data analysis and perceived effectiveness scores were collapsed over test items 1, 2, 3, and 4.

The means and standard deviations of the preference scores are reported in Table 5. In Table 5 all of the mean test scores fall in the 4.0-5.0 range, thus indicating that all subjects tended to rate the therapist very highly. Table 6 contains the analysis of variance of preference scores which showed that there were no significant differences between levels of treatment, locus of control, and the interaction between treatment and LOC.

Table 5
Preference Score Means, and Standard Deviations
for Internal, External and All Subjects

Treatment	Mean	St. Dev.	N	Mean	St. Dev.	N	Mean	St. Dev.	N
Non-Directive	4.75	0.50	4	4.73	0.60	5	4.74	0.52	9
Directive	4.40	1.20	5	5.00	0.00	5	4.70	0.83	10
Totals	4.56	0.90	9	4.87	0.42	10			

Note. A five point scale was used. Items were scored so that a response at the bottom of the scale (1.00) indicated the negative reflection of the adjective while a response at the top (5.00) indicated a positive reflection of the adjective.

Table 6
Analysis of Variance of Preference Scores
Broken Down by Levels of Treatment and LOC

Source	df	SS	MS	F	Probability
Cells	3	0.91	0.30		
Treatment	1	0.01	0.01	0.02	0.9006
LOC	1	0.40	0.40	0.79	0.3879
Treatment X LOC	1	0.45	0.45	0.88	0.3621
Within	15	7.59	0.51		
Total	18	8.50			

The means and standard deviations for perceived effectiveness scores were somewhat lower than those of the preference scores, as demonstrated in Table 7.

Table 7
Perceived Effectiveness Scores Means and Standard Deviations
for Internal, External and All Subjects

Treatment	Internal LOC			External LOC			Totals		
	Mean	St. Dev.	N	Mean	St. Dev.	N	Mean	St. Dev.	N
Non-Directive	4.00	1.68	4	4.30	0.54	5	4.17	1.11	9
Directive	4.30	1.43	5	4.70	0.45	5	4.50	1.02	10
Totals	4.17	1.45	9	4.50	0.51	10			

Note. A five point scale was used. Items were scored so that a response at the bottom of the scale (1.00) indicated the negative reflection of the adjective while a response at the top (5.00) indicated a positive reflection of the adjective.

No significant differences were found for effectiveness by levels of treatment and locus of control, as can be seen in Table 8. Note that the scores still do not fall out of the upper 4.0–5.0 range, thus limiting the possibilities for finding significance.

Table 8
Analysis of Variance of Effectiveness Scores
Broken Down by Levels of Treatment and LOC

Source	df	SS	MS	F	Probability
Cells	3	1.13	0.38	0.46	0.5063
Treatment	1	0.58	0.58	0.46	0.5063
LOC	1	0.58	0.58	0.01	0.9238
Treatment X LOC	1	0.01	0.01		
Within	15	18.65	1.24		
Total	18	19.78			

The effect of treatment and locus of control of subjects on their attendance at groups was also analyzed. Table 9 shows that there is very little difference between the attendance rates of Internals and Externals under both treatments.

The results of an analysis of variance on attendance scores shown in Table 10 indicated that the differences between levels of treatment, and LOC were not significant.

Table 9
Attendance Scores Means and Standard Deviations
for Internal, External and All Subjects

	Internal LOC			External LOC			Totals		
Treatment	Mean	St. Dev.	N	Mean	St. Dev.	N	Mean	St. Dev.	N
Non-Directive	5.25	0.96	4	5.60	0.55	5	5.44	0.73	9
Directive	5.00	1.73	5	5.20	0.45	5	5.10	1.20	10
Totals	5.11	1.36	9	5.40	0.52	10			

Note. Six possible sessions could be attended.

Table 10
Analysis of Variance on Attendance Scores
Broken Down by Levels of Treatment and LOC

Source	df	SS	MS	F	Probability
Cells	3	0.93	0.31	0.45	0.5148
Treatment	1	0.50	0.50	0.32	0.5807
LOC	1	0.36	0.36	0.02	0.8797
Treatment X LOC	1	0.03	0.03		
Within	15	16.75	1.12		
Total	18	17.68			

Summary

The following null hypotheses were tested and the results were as

follows:

1. There will be no significant difference in preference scores between the directive and non-directive treatments; not rejected.
2. There will be no significant differences in preference scores from Internal and External Locus of Control subjects; not rejected.
3. There will be no significant difference in effectiveness scores between the directive and non-directive treatments; not rejected.
4. There will be no significant differences in effectiveness scores of Internal and External Locus of Control subjects; not rejected.
5. There will be no significant interaction effects upon preference between levels of therapy and locus of control; not rejected;
6. There will be no significant interaction effects upon perceived effectiveness between levels of therapy and locus of control; not rejected.
7. There will be no significant difference in attendance rates between the directive and non-directive treatments; not rejected.
8. There will be no significant difference in attendance rates between the Internal and External locus of control subjects; not rejected.
9. There will be no significant interaction effect upon attendance between levels of therapy and locus of control; not rejected.

CHAPTER V

DISCUSSION

General Comments

The results did not support the hypothesis of interaction between treatment condition and locus of control orientation. Several factors may have influenced this lack of effect.

The most obvious probable cause was the relatively small number of subjects available for this study. Most research manuals indicate that the possibility of finding significance in a study is determined partly by enlisting a large number (at least 15 per group) of subjects for the study. This is a safe rule for researchers to follow but is not always realistic or possible in research that deals with subjects represented in limited numbers in the population. Further research in this area might seek to concentrate upon obtaining the use of a larger number of subjects.

The short length of experimental treatment may have also affected the results of the study. Subjects were unwilling to make a long time commitment to experimental therapy groups and appeared to be disinterested in the results of the study. This lack of subject interest could be attributed to many possible causes. Subjects were elderly, lived in a fairly constrained environment, and were often preoccupied more with the past than the present. They were initially willing to participate in the study, but during treatment appeared to lose interest and motivation. This may be attributed to the fact that they were in a nursing home type environment and felt a lack of control over their lives. The author did not suspect that the subjects

would display such a lack of interest since they came from environments in which they controlled their lives (apartment living situations). However, the effect of the nursing home atmosphere at the Health Center apparently affected their sense of control. These factors may all have combined to make these subjects less than serious or suitable subjects for study. These were not apparent causes for the lack of significant results but may have contributed to the overall effect.

It was also noted that subjects tended to rate the therapist on preference and perceived effectiveness scales as being either all positive or all negative. Very few subjects took the option of the middle choices. This may be related to the fact that subjects did not appear to distinguish between the various scale items. For instance, they appeared to feel that the adjectives "competent," "effective," "skilled," and "helpful" measured the same aspects of the therapist's leadership. Future research in this area might concentrate upon developing a better method of measuring the effect of the therapist's leadership style on the group members.

It is not possible to determine if the subjects were able to distinguish between the adjectives of effectiveness and preference. The author attempted to use words in the scale which measured abilities of the therapist and attitudes towards the therapist. Apparently subjects saw little difference between judging the therapist's abilities and how they felt about those abilities.

One final factor may have rendered insignificant results in this study. The subjects had been exposed to the therapist during her previous group work with them. The memory of past work with them and their impressions of her from past groups may have carried over to bias the experimental effects.

Positive Aspects of Study

No statistically significant results were apparent in this study. However, several positive gains were observed informally by the therapist leading the group and the author.

All subjects appeared to enjoy the social, physical, and psychological aspects of the actual music therapy sessions. As treatment progressed they became more friendly with each other and were observed to help each other more during activities which required physical movement or specific answers. At the end of treatment several members commented that they would miss the regularity of the group's occurrence and the mental and physical stimulation they had received during treatment.

The intern who led each group also stated that she felt that she had profited from having to delineate her leadership style. In leadership roles the leader is often unaware of the methods he/she is using to obtain results. The intern commented that she felt herself to be much more aware of her leadership style and had learned when directive and non-directive styles were most appropriate during therapy.

Recommendations

The question of interaction of treatment orientation and personality variable remains unanswered. However, this research does clarify the need for more research in this area.

Future research might concentrate upon utilizing more active and personally-controlled elderly subjects for study. The Health Center was not considered to be a nursing home setting, but many of the subject residents appeared to feel a lack of control over their environment and displayed

noncommittal and ambiguous feelings during therapy sessions. It is possible that research investigating these effects with active and independent geriatrics might find more significant results.

This is one of the first studies which has attempted to deal with therapeutic issues within a true therapy setting. As such it was complicated by the difficulty of obtaining experimental control outside of a laboratory setting. Future research in this area might concentrate upon the use of active and independent elderly subjects in larger and more stable treatment groups. It is also recommended that such treatment take place within a true therapy setting, because the results are more transferable to actual therapy settings.

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Appendix A

Locus of Control Scale

Circle the item with which you most agree. (*Indicates a filler item)

- *1.a. Children get into trouble because their parents punish them too much.
 - b. The trouble with most children nowadays is that their parents are too easy with them.
- 2.a. Many of the unhappy things in people's lives are partly due to bad luck.
 - b. People's misfortunes result from the mistakes they make.
- 3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.
 - b. There will always be wars, no matter how hard people try to prevent them.
- 4.a. In the long run people get the respect they deserve in this world.
 - b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- 5.a. The idea that teachers are unfair is nonsense.
 - b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
- 6.a. Without the right breaks one cannot be an effective leader.
 - b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 7.a. No matter how hard you try some people just don't like you.
 - b. People who can't get others to like them don't understand how to get along with others.
- *8.a. Heredity plays a major role in determining one's personality.

- b. It is one's experiences in life which determine what one is like.
- 9.a. I have found that what is going to happen will happen.
 - b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- 10.a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
 - b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
- 11.a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
 - b. Getting a good job depends mainly on being in the right place at the right time.
- 12.a. The average citizen can have an influence in government decisions.
 - b. This world is run by the few people in power, and there is not much the little guy can do about it.
- 13.a. When I make plans, I am almost certain I can make them work.
 - b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- *14.a. There are certain people who are just not good.
 - b. There is some good in everybody.
- 15.a. In my case getting what I want has little or nothing to do with luck.
 - b. Many times we might just as well decide what to do by flipping a coin.
- 16.a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
 - b. Getting people to do the right things depends upon ability, luck has little or nothing to do with it.

- 17.a. As far as the world affairs are concerned, most of us are the victim of forces we can neither understand, nor control.
- b. By taking an active part in political and social affairs the people can control world events.
- 18.a. Most people don't realize the extent to which their lives are controlled by accidental happening.
- b. There really is no such thing as "luck".
- *19.a. One should always be willing to admit mistakes.
- b. It is usually best to cover up one's mistakes.
- 20.a. It is hard to know whether or not a person really likes you.
- b. How many friends you have depends on how nice a person you are.
- 21.a. In the long run the bad things that happen to us are balanced by the good ones.
- b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
- 22.a. With enough effort we can wipe out political corruption.
- b. It is difficult for people to have much control over the things politicians do in office.
- 23.a. Sometimes I can't understand how teachers arrive at the grades they give.
- b. There is a direct connection between how hard I study and the grades I get.
- *24.a. A good leader expects people to decide for themselves what they should do.
- b. A good leader makes it clear to everyone what their jobs are.
- 25.a. Many times I feel that I have little influence over the things that

happen to me.

- b. It is impossible for me to believe that chance or luck plays an important role in my life.

26.a. People are lonely because they don't try to be friendly.

- b. There's not much use in trying too hard to please people, if they like you, they like you.

*27.a. There is too much emphasis on athletics in high school.

- b. Team sports are an excellent way to build character.

28.a. What happens to me is my own doing.

- b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29.a. Most of the time I can't understand why politicians behave the way they do.

- b. In the long run the people are responsible for bad government on a national as well as on a local level.

Appendix B

Effectiveness Scale

Directions for person administering this scale: For each item have the subject rate the therapist with a numerical response on each of the following items.

Example: On a scale of one to five with one being sincere and five being insincere, how would you rate your therapist?

Test Items

1. Competent Incompetent

1 2 3 4 5

2. Incapable Capable

1 2 3 4 5

3. Effective Not Effective

1 2 3 4 5

4. Unskilled Skilled

1 2 3 4 5

5. Not Helpful Helpful

1 2 3 4 5

Appendix C

Preference Scale

Directions for person administering this scale: For each item have the subjects rate the therapist with a numerical response on each of the following five items.

Example: On a Scale of one to five with one being sincere and five being insincere, how would you rate your therapist?

Test Items

1. Competent Incompetent
; 1 ; 2 ; 3 ; 4 ; 5 ;
2. Incapable Capable
; 1 ; 2 ; 3 ; 4 ; 5 ;
3. Effective Not Effective
; 1 ; 2 ; 3 ; 4 ; 5 ;
4. Unskilled Skilled
; 1 ; 2 ; 3 ; 4 ; 5 ;
5. Not Helpful Helpful
; 1 ; 2 ; 3 ; 4 ; 5 ;

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