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EGO STRENGTHENING HYPNOTIC SUGGESTIONS VERSUS
SPECIFIC HYPNOTIC SUGGESTIONS IN THE
TREATMENT OF OBESITY

by

Richard A. Hutchison

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1981

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Major Professor: Elaine C. Nielson, Ph.D.

Department: Psychology

A comparison was made of two types of hypnotic suggestions. Twenty-seven subjects in two groups participated in eight weekly one-hour group hypnotic sessions. All subjects were given the Minnesota Multiphasic Personality Inventory, the Tennessee Self-Concept Scale, and were weighed pre, post and at a four month follow-up. Both types of hypnotic suggestions were equally effective in helping individuals lose weight. The average weight loss was 10 pounds at follow up. Both groups showed improvement on the personality tests. Those who received the ego-strengthening hypnotic suggestions showed more improvement and more long lasting improvement than did those who received the specific hypnotic suggestions.

(112 pages)

ABSTRACT

Ego Strengthening Hypnotic Suggestions Versus
Specific Hypnotic Suggestions in the
Treatment of Obesity

by

Richard A. Hutchison, Doctor of Philosophy
Utah State University, 1981

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Department: Psychology

A comparison was made of two types of hypnotic suggestions. Twenty seven subjects in two groups participated in eight weekly one-hour group hypnotic sessions. All subjects were given the Minnesota Multiphasic Personality Inventory, the Tennessee Self-Concept Scale, and were weighed pre, post and at a four month follow-up. Both types of hypnotic suggestions were equally effective in helping individuals lose weight. The average weight loss was 10 pounds at follow up. Both groups showed improvement on the personality tests. Those who received the ego-strengthening hypnotic suggestions showed more improvement and more long lasting improvement than did those who received the specific hypnotic suggestions.

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INTRODUCTION

Therapists are constantly confronted with questions relating to the relative efficacy of specific therapeutic techniques. Throughout the history of psychological treatment of individuals, different treatment approaches and techniques have been advanced and shown to be useful. However, one question which often remains is, what within a treatment approach is the most effective way to use that approach.

Hypnosis

Hypnosis, as a treatment technique, generally is accepted to have had its beginning with Franz Mesmer in 1774. Previous to that time similar types of experiences were practiced by religious and other healers (Gottschall, 1974). However with Mesmer's theory of "animal magnetism" and his own rather egocentric and flamboyant style, scientific interest in hypnosis was aroused. Although there were various official inquiries into hypnosis, it was not until 1925 (Gottschall, 1974) that the first experimental study of hypnosis was conducted. During the 30's and 40's various researchers began serious investigations of hypnosis and its effects (Gottschall, 1974). There appears to have been a steadily increasing amount of research of the topic since that time. In the late 60's hypnosis seemed to fall into disfavor and disinterest. However, over the last few years the interest in hypnosis has once again increased.

Hypnosis has been used both as an integral part of the treatment process such as with hypnoanalysis (Wolberg, 1964), as a part of regular psychotherapy (Frankel, 1976), for working with patients where regular psychotherapy fails (Sanders, 1977), for treating such conditions as pain (Barber, et al., 1974), neurodermatitis (Lehman, 1978), stuttering (Dempsey, 1978), poor reading (Krippner, 1966), amphetamine abuse (Book, 1974), and various types of habit control such as overeating and smoking (Spiegel & Spiegel, 1978). Hypnosis has been used to help solve criminal investigations (Reiser, 1976), and has been used to help individuals increase their self-esteem and self-confidence (Wollman, 1978).

Many therapists use hypnosis as a way of increasing the confidence of their clients. Wollman (1978) states that "if the patient concentrates all his thinking processes on the idea that he can, by this type of concentration, achieve greater success in whatever he chooses to do, this will produce within him a greater degree of self-assurance and self-confidence. The ability he thus achieves makes him master of his fate" (p. 44). It may be that mastery of the task of hypnosis is in itself therapeutic. According to Gardner (1976), with several patients "it was important not to emphasize completion or resolution of the imagined problem, this being for these patients associated with return to the underlying state of helplessness, but rather to focus on the mastery process itself" (p. 204). By being able to master the process, the patients no longer feel so helpless and can allow themselves to work on their problems.

It is important in any type of therapy that the individual experience mastery in "three broad areas: the self, the nonpersonal environment, and interpersonal relationships" (Gardner, 1976, p. 207). It is important that these mastery techniques emphasize positive feeling states. Hartland (1971) feels that general positive hypnotic suggestions which have "ego strengthening" characteristics are helpful in a variety of ways. He found that if he routinely used these positive suggestions with his patients that "not only was the average length of treatment substantially shortened, but the need for the more involved analytical techniques was also greatly reduced" (p. 2).

Hartland postulates the principle that "in all cases, direct symptom removal will be most successful . . . if at each and every session, it is preceded by a sequence of simple psychotherapeutic suggestions designed to remove tension, anxiety and apprehension, and to restore the patient's confidence in himself and his ability to cope with his problems" (p. 2). Hartland feels that the use of these "ego strengthening" techniques helps individuals become more capable of satisfactory adjustment to their problems. This general more adaptive functioning makes it easier for the patient to relinquish his symptoms and helps to prevent relapse.

Hartland feels that ego-strengthening suggestions need to be focused as "(a) those arising as a consequence of the illness itself, such as anxiety, fear, tension, and agitation; and (b) those arising from personality defects, such as excessive nervousness, lack of confidence, over-dependence and maladjustment" (p. 3). Hartland found that in his own psychiatric practice, approximately seventy percent of

his patients recovered as a result of his ego-strengthening suggestions alone.

Stanton (1975) concurs with Hartland. He has found that of a weight reduction group utilizing hypnosis, "all of the patients treated (with ego-strengthening suggestions) reported one or more of the following benefits: (a) gains in their ability to relax, (b) increased confidence, independence and energy; and (c) enhanced powers of concentration and memory" (p. 95). Gardner (1976) also agrees with Hartland that the use of ego strengthening techniques has the generalized effect of reducing the length of therapy and often eliminating time-consuming hypnoanalytic procedures. In trying to define why this works, Gardner concludes that the ego-strengthening suggestions work because the patients begin to feel generally better about themselves, which facilitates mastery of other specific problems in other areas of their life.

Dangers of Hypnosis

From the very beginning of "animal magnetism" and hypnosis, the perceived dangers of hypnosis have been of concern. Individuals from Puysegur (Conn, 1772) in the late 18th century to the United States Department of Health, Education and Welfare in 1971 (Coe & Ryken, 1979) have questioned whether or not hypnosis is an "at risk" procedure.

Practically everyone has seen either on television or in the movies, individuals completing antisocial behavior "due to hypnosis" or at least some evil hypnotist completely controlling a "helpless"

person. In the literature, there have been a variety of hypnotic experts who insist that antisocial behavior cannot be produced by hypnosis, and yet a variety of other hypnotic experts who claim that hypnosis can produce antisocial behavior (Watkins, 1972). This issue of hypnosis being an "at risk" procedure for producing negative effects has been the subject of several major reviews and investigations. An entire issue of the International Journal of Clinical and Experimental Hypnosis was devoted to this topic in 1972. Recently, another major review was published in the American Psychological Association's journal, The American Psychologist (Coe & Ryken, 1979).

Jacob Conn (1972), after reviewing the literature on the power and abuse of hypnosis, consulting with various experts in the field and using his own personal experience with over 3000 psychiatric patients concludes that "hypnosis is not a 'power' or external 'force' which can be used to 'influence' or coerce subjects into doing what is suggested. Rather, it is a kind of adaption or psychological compromise, whose goal is to obtain the gratification of (unacceptable) wishes or needs and to avoid superego condemnation by denial. . . . It is the subject who makes the assumption that he is completely under the hypnotist's control so that he can obtain the implied benefits of this association--the shared fanasty or folie a deux" (p. 69).

The trance of hypnosis is not something done to a patient, but results from a patient wanting to be hypnotised. "Even those who agree that it is possible to commit a crime under hypnosis, and have conducted experimental studies, are unanimous in their conclusions

that hypnosis is not an essential and sufficient antecedent to crime" (Conn, 1972, p. 69). Conn states that Wolberg, in a personal communication to him, talked about the fact that actually only a few people act out in antisocial ways and they will do so in or out of hypnosis when it satisfies an important need in themselves.

Coe and Ryken (1979) after reviewing the literature and conducting research conclude that "the results indicate that hypnosis is no more bothersome than are the comparison activities" (p. 673). Their research compared the sequel of participating in a brief verbal learning experiment, taking a college exam, attending a college class, attending college in general, and being exposed to the Stanford Hypnotic Susceptibility Scale, form C.

Conn (1972) also evaluated the question as to whether hypnosis is a psychologically risky technique. There have been authors who warn that hypnosis can precipitate a psychiatric illness. Conn discussed this with a number of clinicians including Erickson, Wolberg and Kline. "All of them agreed that the psychotic process develops slowly over a period of years and that it is not 'precipitated' by one or many hypnotic experiences" (p. 70). After discussing several other therapeutic issues, Conn concludes "my experience over the past 30 years has convinced me that the dangers of hypnosis are real but they are those which accompany every psycho-therapeutic relationship--no more and no less. It would seem that when the historical, experimental, and clinical data are evaluated, the answer to the question posed in the title of the paper, 'Is Hypnosis Really Dangerous,' is, in my opinion, an unqualified 'NO' " (p. 76).

It appears that the dangers involved in the use of hypnosis are those involved in the use of any psychotherapeutic technique. Hypnosis is a treatment technique which should be used only by those trained in psychotherapy.

Obesity

One of the primary health problems facing Americans today is obesity. It has been estimated that one-third of the population is at least twenty percent overweight. This excess weight contributes to a variety of health problems such as liver, heart, and general circulatory disturbances along with various psychological manifestations. According to Sturant and Davis (1972) an estimated 40 to 80 million Americans are significantly overweight.

There are many different theories concerning the etiology of obesity. These theories include psychological, social, and biological explanations of obesity. There are probably as many treatment approaches to obesity as there are theories of cause. There are professionally run programs, lay programs, programs which involve just dieting, behaviorally oriented programs, dynamically oriented programs, commercially run programs, medical programs and probably others.

Hypnosis in Treating Obesity

One of traditional strategies for treating obesity involves the use of hypnosis. According to Erickson and Rossi (1979), the utilization of hypnosis is "a process whereby we help people utilize

their own mental associations, memories, and life potentials to achieve their own therapeutic goals" (p. 1).

Therapists who treat obesity with hypnosis can choose between two general suggestion formats. Hartland (1965, 1971) reported that the use of a general hypnotic suggestion strategy, termed "ego-strengthening," produced desired reductions in target behaviors in a variety of subjects. This type of hypnotic treatment consists of giving the subject general self-image enhancing hypnotic suggestions regardless of the specific target behaviors being treated.

The ego-strengthening hypnotic technique is designed to reduce anxiety and to increase confidence so that the client can begin to function adequately without his symptom complex. Hartland reported success using the ego-strengthening technique alone with a variety of target behaviors. Based on this type of technique, many therapists utilize similar ego-strengthening strategies in the treatment of obesity. Stross (1979), in a recent presentation, reported significant weight loss, and that his clients were able to maintain this loss using ego-strengthening suggestions alone. Many others who use hypnosis for weight control make their suggestions very specific. Smith (1972) tells his patients prior to hypnosis that "under hypnosis we will use your own words which you have used to describe your own hunger sensations, and we will help you to reinforce and emphasize your own feelings" (p. 182).

Erickson's (Erickson & Rossi, 1979) style of hypnosis is to use a personal specialized communication which is different for each patient. He feels that the "requisite to effective hypnotherapy--and

the same holds true for experimental hypnosis--is the adequate communication of ideas and understandings to the hypnotized person" (p. 112). Erickson claims that since the goal of hypnosis is not just understanding or intellectual clarification, but rather helping individuals achieve their personal goals, suggestions "need to be presented in terms of the patient's personal and subjective needs, learnings, and experiences, whether reasonable or unreasonable, recognized or unrecognized, so that there can be an acceptance and a response and a feeling of personal fulfillment" (p. 112). This requires specialized communication in the patient's own language.

Spiegel and Spiegel (1978) concur with Erickson in that their suggestions directly approach the patient's problem rather than the general approach of Hartland. Their approach, however, is less individualized, as they have specific suggestions which they use with certain types of problems. In Erickson and Rossi's book (1976), they state that "Erickson's indirect forms of suggestions are all means of arranging such suitable conditions so that individuals can accomplish things that are within their behavioral repertory but usually not available to voluntary control . . . suggestions are designed to bypass the patient's erroneously limited belief system: suggestions must circumvent the all too narrow limits of ordinary every day consciousness" (p. 309).

Erickson's (1960) personal, individualized approach is illustrated in his approach to three cases of obesity. In each case, his suggestions were totally unique for each of the three cases.

Hanley (1967) states that "for the obese, overeating is not simply an occasional practice but has become a habit, a . . . learned pattern of behavior involving longstanding attitudes to food and eating. Added to this are self-dislike generated by the disfigurement and discouragement due to the frequent failure to reverse the process of weight gain or even to control it adequately by dieting" (p. 549). Obese people tend to rationalize and defend against these feelings. Often when feeling really bad about this, the obese person will try to do away with these feelings by eating. Thus, they become caught in a vicious cycle. Hanley believes that it is necessary to help the patient learn new, more satisfactory eating patterns and implant them firmly so they will last. In his use of hypnosis, he directly confronts the eating problem with his suggestions. He essentially suggests to the patients that they will enjoy eating food more but will need less of it to feel satisfied. He also suggests feeling more confident and uses visual imagery of the patient looking as they want to look. Hanley believes "the unconscious is re-educated so that other satisfactions of achievement come to outweigh the primitive gratifications of eating, and the food loses its central place in the patient's life" (p. 552). In the group treatment of obesity, Hanley uses both general suggestions to the group, similar to Spiegel & Spiegel (1978), and individual suggestions to the group's members. He reports an average weight loss of 2-3 pounds per week for the group members and that his patients report that their outlook on life changed and they experienced improvements in areas other than their weight.

Stanton (1975) uses a combination of Hartland's "ego-strengthening" suggestions and direct suggestions specifically relating to the patients' weight problem. His final suggestions are always for mental imagery of their desired goal. In a follow up study of ten of his patients who had received four one-hour individual hypnotic sessions using his weight control methods, Stanton found that all ten of his patients had reached and maintained their target goals.

Aja (1977), in treating overweight clients, used a group approach. Each group met for three one-hour sessions in one week. His suggestions were directly related to reduction of eating. He found, for 40 subjects, a mean weight loss of 12.6 pounds three months after treatment. Six months after treatment the subjects still showed a 9.5 pound mean weight loss from their original weight. The subjects, although their weight losses were not large, reported "increased positive expressions of self worth" (p. 234). Wallman (1962), treating 440 overweight men and women primarily by group hypnosis, found an average weight loss of 30 pounds over a three month treatment period. In his treatment he first uses group discussion of problems and then uses hypnosis with direct suggestions to decrease intake of food and to feel satisfied with less food. He then also uses mental imagery to have the patients visualize themselves as they want to look.

In her investigation of the factors associated with weight maintenance, Lazarus (1978) studied 99 formerly overweight females from commercial weight loss groups. The subjects completed a variety of psychological and social questionnaires upon reaching their goal

weight and 6 months later. She then evaluated their responses and compared the groups of weight regainers, weight retainers and those inbetween. Lazarus found that the women who maintained their weight loss for 6 months were less depressed, less hostile and also improved their self concept. Regainers became more depressed, but their hostility decreased and their self concept improved. Body concept in both groups remained stable.

Klein (1977), in his research, reports that overweight individuals tend to have lower self esteem than do those of normal weight. His results suggest that "the overweight individual's feelings of inadequacy center around physical appearance and do not necessarily reflect general feelings of low self esteem" (p. 2371-B).

Summary

It appears that those practitioners who use hypnosis as a treatment approach to the problem of habit control and, more specifically, weight loss and weight maintenance have two basic approaches from which to choose. These two approaches are (1) general ego-strengthening hypnotic suggestions, and (2) specific hypnotic suggestions confronting the target behavior. While there appear to be valid arguments supporting each of the treatment approaches, it has never been confirmed by research which of these two methods is more effective in reducing specific target behavior. If one of these two suggestion approaches was significantly more effective than the other, it would be important for therapists to know this so that they could use the most efficient and effective approach. If neither approach is

more effective than the other, then therapists could continue to choose which ever method they prefer and still be assured they were providing their clients with the most effective treatment.

The relative effectiveness of these two hypnotic suggestion approaches will be determined by testing their effectiveness on a specific target behavior. The specific target behavior used in this research will be weight loss. Weight loss will be used due to easy access of clients and because of the wide usage of hypnosis to treat the problem of overweight individuals.

In addition to investigating the relative efficacy of the two types of hypnotic suggestions on the specific target behavior, this study will examine changes in self-concept as a result of the type of hypnotic suggestion or as a result of the loss of weight.

OBJECTIVES AND HYPOTHESES

Objectives

The general objective of this study is to investigate the relative effectiveness of specific and general ego-strengthening hypnotic suggestions for the reduction of a target behavior. A secondary objective is to evaluate any changes in self concept as a result of the type of hypnotic suggestion or the reduction of the target behavior. The target behavior to be used is over-eating. Of specific concern are the questions:

1. To what extent is there a difference in effectiveness between general ego-strengthening hypnotic suggestions and specific target behavior hypnotic suggestions in producing weight loss in overweight subjects?
2. To what extent is there a difference in effectiveness between general ego-strengthening hypnotic suggestions and specific target behavior hypnotic suggestions in maintaining weight loss in overweight subjects?
3. To what extent is there a difference in effectiveness between general ego-strengthening hypnotic suggestions and specific target behavior hypnotic suggestions in improving self concept.
4. To what extent does self concept change due to weight loss in overweight individuals.

Hypotheses

The specific hypotheses of this study, stated in the null form are:

I. There is no difference in the weight of individuals prior to inclusion in a hypnotic weight reduction program and after participation in that program.

II. There is no difference in the amount of weight loss between a group of overweight individuals treated by specific target behavior hypnotic suggestions and those treated by general ego-strengthening hypnotic suggestions.

III. There is no difference in the maintenance of weight loss between a group of overweight individuals treated by specific target behavior hypnotic suggestions and those treated by general ego-strengthening hypnotic suggestions.

IV. There is no interaction effect between the type of hypnotic suggestion and time on individuals involved in hypnotic weight reduction groups.

V. There is no difference in self-concept between pre, post and follow-up testing periods of overweight individuals involved in hypnotic weight reduction groups as measured by the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale.

VI. There is no difference in self-concept change between groups of overweight individuals treated by specific target behavior hypnotic suggestions and those treated by general ego-strengthening

hypnotic suggestions as measured by the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale.

VII. There is no interaction effect between the type of hypnotic suggestion at the time of testing on overweight individuals as measured by the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale.

PROCEDURES

This chapter describes the procedures used in the current investigation. It describes the (a) population and sample, (b) the evaluation measures, (c) the methods of conducting the investigation, and (d) the statistical analysis.

Population and Sample

The population to which this study is directed is the population of individuals who seek help with habit changing through hypnosis. It is specifically aimed at the general nonpsychiatric population who seek help with weight loss. The sample for this study was drawn from the population of Cache County Utah and Utah State University. Initially forty (40) individuals volunteered for this study. Out of the forty (40) individuals starting the study, twenty-seven (27) individuals completed the entire course including the follow up evaluation. Therefore, the sample used in this study consists of twenty-seven individuals. There were twenty-five females and two males whose ages ranged from 19 years to 62 years old. Their mean age was 30 and the median age was 27. Their weights ranged from 126 pounds to 314 pounds with a mean weight of 188 pounds. The median weight was 184 pounds. The Ss percentage overweight ranged from 13 percent to 109 percent with a mean percent overweight of 43. The median percent overweight was 39. Table 1 gives the sex, age, weight and percent overweight for each S. Ten of the Ss were students at

Table 1
Subject characteristics at beginning of study

S	Sex	Age	Weight	% Overweight
1	Female	44	256	71
2	Female	30	137	16
3	Female	26	145	21
4	Female	21	133	27
5	Female	24	229	76
6	Female	19	314	109
7	Female	31	201	61
8	Male	31	255	39
9	Male	19	280	44
10	Female	19	126	15
11	Female	28	137	14
12	Female	20	150	15
13	Female	27	173	28
14	Female	52	217	45
15	Female	24	205	46
16	Female	43	221	100
17	Female	35	165	32
18	Female	62	196	26
19	Female	20	184	31
20	Female	25	130	13
21	Female	23	184	36
22	Female	25	182	38
23	Female	53	214	63
24	Female	35	193	54
25	Female	37	210	56
26	Female	19	180	50
27	Female	29	163	30

Mean		30	188	43
Median		27	184	39

Utah State University. Seventeen of the Ss were general residents of Cache Valley Utah. Thirteen of the females and one of the males had never been married or were divorced. Twelve females and one male were married at the time of this study.

Evaluation Measures

This study employed three dependent measures. These measures were:

1. Client Weight: A scale for the measurement of weight was used for weekly weighing of the subjects. This scale was zero balanced before the subjects were weighed. The scale used was a physician's quality scale located and used by the Bear River District Health Department.

2. Minnesota Multiphasic Personality Inventory (MMPI): The MMPI is a 566 question true-false questionnaire used to measure a variety of personality traits. The MMPI is self-administered. It requires a ninth grade reading level to complete. Reliability on test-retest of college students on the various scales range from the upper 40's to the low 90's. In relation to validity, Dahlstrom and Welsh (1960) state that "It is now true that the instrument (MMPI) possesses hundreds of validities" (p. 247). Along with the three validity scales and the ten clinical scales, Barron's ego-strength scale and Cuadra's control scale was used.

Barron's ego strength scale of the MMPI "has reported a number of relationships of the scale with attributes that are consistent with the construct of ego strength . . . a triserial eta of .54 was found between Es (Ego strength scale) and level of improvement of 52 clinic cases; a correlation of .38 between Es and level of improvement on 46 clinic cases still in treatment; and a correlation of .42 between a 39 item Es scale . . . and terminal ratings of improvement on the 53 cases" (p. 301).

3. Tennessee Self Concept Scale (TSCS): The TSCS consists of 100 self-descriptive statements which the subjects use to portray their own picture of themselves. The scale is self-administered. It requires a minimum of a sixth grade reading level. The test consists of 14 major scales. The test-retest reliability coefficients of all major scales are generally in the .80's, ranging from .60 to .92. To provide content validity, an item was retained in the test only when there was unanimous agreement by seven clinical psychologist judges. It has been found to significantly (.001) differentiate between psychiatric patients and nonpatients (Fitts, 1965).

Independent Variable

The independent variable of this study was the type of hypnotic suggestion given to the weight reduction groups by the researcher. Two types of hypnotic suggestions that were given were:

1. Specific Weight Reduction Hypnotic Suggestions: (Appendix A) Specific hypnotic suggestions relating to weight reduction. These suggestions focus on not desiring high calorie food, eating less and feel satisfied and visually imagining themselves as thinner.

2. Ego Strengthening Hypnotic Suggestions: (Appendix B) Hartland's (1965, 1971) ego strengthening suggestions were used. These are general hypnotic suggestions relating to reducing anxiety, tension, fear and agitation, and increasing confidence, independence and energy.

Procedure

Advertisements announcing the hypnotic weight loss groups were placed in the student newspaper of Utah State University and the local city newspaper. A group meeting of those responding to the advertisements was held. Forty individuals, a minimum of 10 percent overweight according to the Metropolitan Life Insurance Scales (Appendix C) were selected to participate in the study. These subjects had the weight research explained to them. They were required to sign an agreement authorizing the use of hypnosis (Appendix D) and an agreement to participate in the evaluation procedures and to attend all sessions. (Appendix E).

Each subject agreed to not participate in any other weight control procedure during the period of this study. A twenty dollar fee was initially collected from each subject. This fee was entirely returned to the subjects upon completion of all segments of this research.

Four group times were determined based on work/school schedules and the individuals selected a group. The groups were then randomly assigned to one of the two treatment approaches. Two groups of ten individuals each were in each treatment. Each subject was then required to complete the evaluation instruments.

All subjects were instructed to wear the same type of light-weight clothing to each session to facilitate weekly weighing. Their weights were charted so that the subjects knew their weekly progress. All subjects initially selected a target amount of weight

to be lost during the eight weeks of hypnosis and a final goal weight defined as the weight they eventually wanted to reach.

All subjects were exposed to the same hypnotic induction script (Appendix F). The Standardized Hypnotic Induction script developed and used by the Human Behavior Laboratory, Department of Psychiatry, University of Colorado School of Medicine was used. This is a relaxation type of induction, emphasizing psychophysiological states of nonmovement, heaviness, warmth and relaxation.

The four groups met at different times. All group sessions were conducted by this researcher. Each group met for one hour sessions one time weekly for eight weeks. These group sessions consisted of group hypnotic induction and suggestions, which lasted approximately 30 to 40 minutes, followed by the weighing of each individual and 5 to 10 minutes of discussion of the specific topics of exercise and high calorie foods and how the hypnosis was affecting them. The group discussion was controlled so that all groups received the same information.

The two groups in treatment 1 (designated Group 1) received the specific hypnotic weight reduction suggestions while the two groups in treatment 2 (designated Group 2) received the general ego strengthening hypnotic suggestions. Upon completion of the eight hypnotic sessions, the subjects were again asked to complete the evaluation instruments (MMPI & TSCS).

Four months following the completion of the hypnotic sessions, all subjects were again weighed and asked to complete the evaluation instruments. Of the 40 subjects who began the research, two subjects

dropped out by the fourth week due to their nervousness over the hypnosis which prevented them from being able to relax and obtain a hypnotic state. Three of the remaining 38 subjects moved from the area before completing the eight weekly sessions and six subjects failed to complete the post and follow-up evaluations. Two of the female subjects became pregnant during the course of this study. The total number of subjects who completed the total study was 27. There were 15 subjects in Group 1 and 12 in Group 2.

FINDINGS OF THE STUDY

The present study was undertaken to investigate the differences between using general ego-strengthening hypnotic suggestions and specific target behavior hypnotic suggestions to help individuals lose weight.

A review of the literature indicates that many practitioners of hypnosis use and believe that ego-strengthening hypnotic techniques are the most effective means of helping individuals with a specific target behavior. Other practitioners feel that using specific target directed hypnotic suggestions is the most effective means of helping individuals with a specific target behavior. This study tested which of the two above hypnotic suggestions approaches were the most effective in helping individuals lose weight and any resultant personality changes.

Data Analysis

Initially an Analysis of Variance (ANOV) was conducted to determine if there were any significant differences between the two groups on their weight, percent overweight, and their scores on the MMPI and the TSCS at the time of initial testing. No significant differences were found between the two groups on any variable. This indicates that both groups were initially similar on all characteristics measured.

All data were then analyzed with a two way analysis of variance with repeated measures for unequal Ns. If a significant difference over time was found, Scheffe's method of multiple comparison was used to determine where the inequality existed. A probability value of .05 was used to determine significance.

Analysis of Specific Hypotheses

Hypothesis I

There is no difference in the weight of individuals prior to inclusion in a hypnotic weight reduction program and after participation in that program.

To analyze Hypothesis I all subjects were weighed prior to the beginning of the hypnotic sessions and after the completion of the eight hypnotic sessions and four months after the termination of the hypnotic sessions (Table 2).

Table 2

Mean weights of subjects in pounds for each testing period

	Pretesting	Posttesting	Follow-up Testing	Group Means
Group 1	197.20	190.26	187.40	191.62
Group 2	185.16	180.5	175.91	180.52
Time Means	191.18	185.38	181.66	

The analysis of variance of the weight data over time is given in Table 3.

Table 3
Analysis of variance of weight over time

DF	Sum of Squares	Mean Square	F	P (>F)
2	518.19	259.10	3.03	.057

As can be seen in Table 3, statistically the weight variable did not change significantly over time. The F, however, is almost significant and it may be due to the relatively small N that this variable was not significant.

The mean weights of the two groups are shown graphically in Figure 1 (page 50). As can be seen in Figure 1, both groups reacted similarly to the hypnotic sessions in their weight loss.

To further investigate how the two groups lost weight, a comparison was made of the percent overweight of the two groups. These data are shown in Table 4 and Figure 2 (page 50).

Table 4
Mean percent overweight of subjects for each testing period

	Pretesting	Posttesting	Follow-up Testing	Group Means
Group 1	141.21	138.09	134.43	137.91
Group 2	144.67	140.37	136.62	140.55
Time Means	142.94	139.23	135.52	

As can be seen in Table 4 and Figure 2, both groups were initially very similar in percent overweight. Both groups decreased their percent overweight. The analysis of variance of this data is given in Table 5.

Table 5

Analysis of variance of percent overweight of subjects over time

DF	Sum of Squares	Mean Square	F	P (>F)
2	661.56	330.78	341.59	0.00

This analysis shows that there is a significant difference for the groups across time. Scheffe's test shows that this significant difference holds true across all three testing periods. There was a significant difference between the percent overweight of the subjects at pretesting and posttesting. There was a significant difference between the percent overweight of the subjects at posttesting and follow-up testing. There was a significant difference between percent overweight of the subjects at pretesting and follow-up testing. Therefore Hypothesis I is rejected.

Hypothesis II

There is no difference in the amount of weight loss between a group of overweight individuals treated by specific target behavior hypnotic suggestions and those treated by general ego-strengthening hypnotic suggestions.

Analysis of variance showed no significant differences between the two groups on either weight or percent overweight. Table 2, Table 4, Figure 1 and Figure 2 show that both groups lost weight at the same rate. Group 1 (specific target behavior hypnotic suggestions) lost an average of 9.8 pounds while Group 2 (general ego-strengthening hypnotic suggestions) lost an average of 9.25 pounds. Group 1's percent overweight decreased 6.78 percent while Group 2's percent overweight decreased 8.05 percent. Hypothesis II is accepted.

Hypothesis III

There is no difference in the maintenance of weight loss between a group of overweight individuals treated by specific target behavior hypnotic suggestions and those treated by general ego-strengthening hypnotic suggestions.

To investigate this hypothesis the Ss were weighed four months following the final hypnotic session. No significant differences were found between the groups in the maintenance of weight loss. Hypothesis III is accepted.

Tables 2 and 4, Figures 1 and 2 show these data. Group 1 lost an average of 2.96 pounds between the post weighing and the follow-up weighing. Group 2 lost an average of 4.59 pounds between the post weighing and the follow-up weighing. Group 1 decreased their percent overweight 3.66 percent between the post weighing and the follow-up weighing. Group 2 decreased their percent overweight 3.75 percent between the post weighing and the follow-up weighing.

Hypothesis IV

There is no interaction effect between the type of hypnotic suggestion and the time of treatment on individuals involved in hypnotic weight reduction groups.

Table 6 gives the analysis of the interaction data for weight. Table 7 gives the analysis of the interaction data for percent overweight.

Table 6

Analysis of variance - interaction effect,
group x time for weight

DF	Sum of Squares	Mean Square	F	P (>F)
2	299.62	149.81	1.75	0.18

Table 7

Analysis of variance - interaction effect, group x time
for percent overweight

DF	Sum of Squares	Mean Square	F	P (>F)
2	7.68	3.84	0.48	0.62

There was no significant interaction effect for either weight or percent overweight. Hypothesis IV is accepted. Figures 1 and 2 show graphically the lack of interaction effect between group and time. Both groups responded in a similar manner to the hypnotic suggestions over time.

Hypothesis V

There is no difference in self-concept between pre, post and follow-up testing periods of overweight individuals involved in hypnotic weight reduction groups as measured by the Minnesota Multiphasic Personality Inventory (MMPI) and the Tennessee Self-Concept Scale (TSCS).

Hypothesis V was investigated by administering the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale during pre hypnotic sessions, post hypnotic sessions and at a follow-up sessions four months after the post testing. Figure 3 (page 51) shows the total means for the Tennessee Self-Concept Scale across the three testing periods. Figure 4 (page 52) shows the total means for the Minnesota Multiphasic Personality Inventory across the three testing periods. These figures show a movement toward the average in both of these tests. Three of the scales on the TSCS were significantly different between the testing periods and four of the scales on the MMPI were significantly different between the testing periods. The Scheffe test of multiple comparisons was applied to these significant scales. The Scheffe test showed that on all the significant scales, there were significant differences between pretesting and posttesting and between posttesting and follow-up testing.

Table 8 gives the analysis of the scales on the Tennessee Self-Concept scale. Table 9 gives the analysis of the scales on the Minnesota Multiphasic Personality Inventory.

Table 8

Analysis of variance of the Tennessee Self-Concept Scale
for total means across time

Scale	DF	Sum of Squares	Mean Square	F	P (>F)
Self-Criticism	2	5.53	2.76	0.18	0.838
T/F	2	197.08	98.54	1.91	0.158
Net Conflict	2	62.20	31.10	0.81	0.452
Total Conflict	2	17.31	8.66	0.19	0.825
Total	2	63.94	31.97	2.28	0.112
Row 1	2	114.53	57.26	2.58	0.086
Row 2	2	80.39	40.19	2.41	0.099
Row 3	2	90.12	45.06	2.13	0.129
Column A	2	209.00	104.50	3.58	0.035*
Column B	2	57.97	28.98	1.00	0.376
Column C	2	318.34	159.17	6.51	0.003*
Column D	2	35.91	17.96	1.30	0.282
Column E	2	26.24	13.12	0.56	0.573
Total					
Variability	2	35.97	17.98	0.41	0.667
Column Total					
Variability	2	21.88	10.94	0.28	0.761
Row Total					
Variability	2	213.91	106.96	2.69	0.078
0	2	16.57	8.28	0.55	0.579
5	2	74.00	37.00	2.10	0.133
4	2	37.52	18.76	0.48	0.624
3	2	58.52	29.26	1.26	0.293
2	2	12.39	6.19	0.14	0.868
1	2	7.43	3.72	0.12	0.888
DP	2	36.39	18.19	0.94	0.397
GM	2	123.03	61.52	2.24	0.117
Psy	2	110.90	55.45	1.57	0.217
PD	2	10.72	5.36	0.24	0.790
N	2	90.20	45.10	2.91	0.064
PI	2	40.74	20.37	0.66	0.52
NDS	2	154.68	77.34	3.76	0.030*

*Significant at $\alpha = .05$

Table 9

Analysis of variance of the Minnesota Multiphasic Personality Inventory for total means across time

Scale	DF	Sum of Squares	Mean Square	F	P (>F)
L	2	70.98	35.49	2.62	0.083
F	2	82.23	41.11	2.50	0.09
K	2	60.78	30.39	2.24	0.12
HS	2	17.73	88.66	5.96	0.005*
D	2	127.30	63.65	2.69	0.078
HY	2	77.90	38.95	2.64	0.082
PD	2	248.64	124.32	4.77	0.013*
MF	2	48.97	24.48	0.80	0.457
Pa	2	9.66	4.83	0.27	0.768
Pt	2	240.69	120.35	6.84	0.002*
Sc	2	50.03	25.02	1.12	0.334
Ma	2	159.98	79.89	2.15	0.127
Si	2	118.91	59.46	3.95	0.026*
Es	2	259.53	129.77	2.40	0.101
Cn	2	56.87	28.43	0.38	0.686

*Significant at $\alpha = .05$

The three scales on the TSCS which were significant are Column A, Column C, and NDS. The Column A score refers to how individuals feel about their physical self. The Ss felt significantly more positive about their physical self after the hypnotic sessions (Figure 3). Initially the mean score on this scale was, according to the test,

significantly below (negative) average. The posttesting found that while the Ss were still significantly below average, they had significantly (Scheffe) increased their positive feelings about themselves. The follow-up testing found that the Ss had significantly (Scheffe) increased their feeling about themselves in a positive direction. By the follow-up testing time, the scores on this scale had risen into the average range.

Column C on the TSCS refers to how the individual views his personal self, his personal worth. Posttesting found a significant change (Scheffe) in the scores in a positive direction so that the Ss score was almost at a T score of 50, having risen from a T score of 43.

The NDS score refers to the number of deviant scores. The number of deviant scores decreased significantly (Scheffe) for each testing period. At the pretesting, the NDS score was significantly (TSCS) high. The posttesting showed the NDS to be right on the line between being significantly (TSCS) high and being in the average range. The follow-up testing placed the NDS score in the average range. Of the 29 total scales on the TSCS, 15 scales showed movement toward a T score of 50 during the research study, 4 scales showed movement away from the T score of 50 and 10 scales essentially remained the same.

The four scales on the MMPI which significantly changed over time for the total group were hypochondriasis, psychopathic deviate, psychasthenia, and social introversion. The Scheffe test found significant differences for all testing periods on all four scales. The movement on all four of these significant scales was toward the

fiftieth T score. Of the 15 total scales measured on the MMPI, 11 of them moved toward the fiftieth T score during the study, 2 moved away and 2 remained the same.

With significant movement on seven scales, Hypothesis V is rejected.

Hypothesis VI

There is no difference in self-concept change between groups of overweight individuals treated by specific target behavior hypnotic suggestions and those treated by general ego-strengthening hypnotic suggestions as measured by the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale.

This hypothesis was tested by analyzing the group means for each of the scales on the MMPI and the TSCS. The initial ANOV on the pretest data found no significant differences, therefore any significant differences found between the group means must be the result of differential responding to the hypnotic weight loss sessions. Of the 44 total scales on the two tests, there were significant differences on 24 scales. Therefore Hypothesis VI is rejected. Table 10 gives the analysis of the group data for the TSCS. Table 11 gives the analysis of the group data for the MMPI. Significant differences were found on 16 of the 29 scales of the TSCS and on 8 of the 15 MMPI scales. Of the 24 significant differences, Group 1 (specific hypnotic suggestions) was closer to the fiftieth T score on 8 scales and Group 2 (ego-strengthening hypnotic suggestions) was closer to the fiftieth T score on 16 scales.

Table 10
 Analysis of variance for group differences on the
 Tennessee Self-Concept Scale

Variable	DF	Mean Square	F	P (>F)
SC	1	65.20	4.18	.0000*
TF	1	142.82	2.77	.0007*
NC	1	86.34	2.24	.0057
TC	1	.30	0.01	1.0000
Total	1	1.73	0.12	1.0000
R ₁	1	124.44	5.61	.0000*
R ₂	1	4.15	0.25	0.9999
R ₃	1	8.45	0.40	0.9957
CA	1	0.30	0.01	1.0000
CB	1	49.09	1.69	0.0500*
CC	1	82.24	3.36	.0001*
CF	1	5.45	0.39	.9961
TV	1	49.79	2.13	.0086*
CTV	1	87.73	1.99	.0151*
RTV	1	.99	0.02	1.0000
D	1	479.11	12.06	0.0000*
D ₅	1	247.34	16.48	0.0000*
D ₄	1	328.95	18.70	0.0000*
D ₃	1	176.02	4.47	0.0000*
D ₂	1	42.37	1.82	0.0300*
D ₁	1	225.94	5.17	0.0000*
DP	1	385.25	12.34	0.0000*
GM	1	3.38	0.17	1.0000
PSY	1	.00062	0.00	1.0000
PD	1	763.30	21.67	0.0000*
N	1	8.16	0.36	.9981
P ₁	1	6.30	0.41	.9950
NDS	1	441.80	14.27	.0000*

* = significant at $\alpha = .05$

Table 11
 Analysis of variance for group differences on the
 Minnesota Multiphasic Personality Inventory

Variable	DF	Mean Square	F	P (>F)
L	1	42.37	2.06	.0117*
F	1	672.80	49.61	0.0000*
K	1	11.42	0.69	.8575
HS	1	29.07	2.14	.0085*
D	1	75.62	5.08	0.0000*
Hy	1	0.59	0.03	1.0000
Pd	1	57.42	3.89	0.0000*
MF	1	0.94	0.04	1.0000
PA	1	121.69	3.96	0.0000*
PT	1	138.69	7.61	0.0000*
Sc	1	40.45	2.30	0.0045*
MA	1	24.69	1.11	0.3671
S1	1	48.74	1.31	0.1936
ES	1	7.07	0.47	.9855
CN	1	.45	0.01	1.0000

* = significant at $\alpha = .05$

Figure 5 (page 53) displays the group differences on the TSCS. Figure 6 (page 54) displays the group differences on the MMPI. Figure 7 (page 55) displays the mean scores of Group 1 across the three testing periods on the MMPI. Figure 8 (page 56) displays the mean scores of Group 2 across the three testing scales of the TSCS.

Figure 9 (page 57) displays the mean scores of Group 1 on the TSCS. Figure 10 (page 58) displays the mean scores of Group 2 on the TSCS. These figures show that Group 2 (ego-strengthening hypnotic suggestions) made larger changes in the positive direction than did Group 1.

Hypothesis VII

There is no interaction effect between the type of hypnotic suggestion and time on overweight individuals as measured by the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale.

Of the 44 scales on the two tests, 8 scales showed significant interactions on the analysis of variance. Seven of these were on the TSCS and one was on the MMPI.

Table 12 gives the significant interaction effects for the TSCS. The seven scales which were significant on the TSCS were SC, Total, R₂, CB, CC, D, D₅. On each of these scales Group 1 showed most gains at posttestings but at follow-up testing, Group 1 had lost most of their gains while Group 2 had made significant gains. Table 13 gives the significant interaction effects for the MMPI. The scale which had a significant interaction effect on the MMPI was the Pt scale. Both Groups 1 and 2 showed a movement in a positive direction on posttesting. Group 1 showed no further movement on follow-up testing while Group 2 continued to show movement in a positive direction. Figures 11 (page 59), 12 (page 59), 13 (page 60), 14 (page 60), 15 (page 61), 16 (page 61), 17 (page 62), and 18 (page 62) display the

Table 12

Significant type of hypnotic suggestion x time
interaction effect on the Tennessee Self-Concept Scale

Variable	DF	SS	MS	F	P (>F)
6 (Sc)	2	128.93	64.47	4.13	0.0219
10 (Total)	2	91.35	45.67	3.26	0.0466
12 (R2)	2	147.94	73.97	4.44	0.0168
15 (CB)	2	186.07	93.03	3.20	0.0494
16 (CC)	2	216.62	108.31	4.43	0.0170
22 (D)	2	118.00	59.00	3.93	0.0260
23 (D5)	2	178.74	89.37	5.08	0.0098

Table 13

Significant type of hypnotic suggestion x time
interaction effect for the Minnesota Multiphasic
Personality Inventory

Scale	DF	Sum of Squares	Mean Square	F	P (>F)
Pt	2	118.08	59.04	3.35	0.0429

interaction effects on each of the significant scales. As there were significant interaction effects, Hypothesis VII is rejected.

Many of the other scales of the TSCS and the MMPI, while not statistically significant, appear to display interaction effects. Figures 19 through 39 (Appendix I) show this data. This data might have been significant if the number of Ss had been greater. Figure 40

(see Appendix I) displays the relationship of Group 1 and Group 2 on the TSCS at the pretesting. Figure 41 (Appendix I) displays the relationship of Group 1 and Group 2 on the TSCS at the posttesting. Figure 42 (Appendix I) displays the relationship of Group 1 and Group 2 on the TSCS at the follow-up testing. Figure 43 (Appendix I) displays the relationship of Group 1 and Group 2 on the MMPI at pretesting. Figure 44 (Appendix I) displays the relationship of Group 1 and Group 2 on the MMPI at posttesting. Figure 45 (Appendix I) displays the relationship of Group 1 and Group 2 on the MMPI at follow-up testing.

DISCUSSION

This chapter includes a discussion of the overall results of the study with recommendations.

Overall Results

The primary purpose of this research was to determine what type of hypnotic suggestion is most useful in helping individuals with a specific type of behavior. The specific type of behavior was weight loss. Two types of hypnotic suggestions were compared, specific target directed suggestions and general ego-strengthening suggestions.

The data show that both groups significantly reduced their overweight percentage. Both groups lost weight during the eight hypnotic suggestions and both groups continued to lose weight for four months after the hypnotic sessions. The average total weight loss for both groups was within one half pound of each other. These results indicate that for weight loss, neither type of hypnotic suggestion is more effective than the other. The only difference between the groups on weight loss, is the fact that the group which received the specific target directed hypnotic suggestions appeared to lose more weight during the eight week hypnotic sessions than did the group receiving ego-strengthening hypnotic sessions (See Figures 1 and 2 and Tables 2 and 4). During the follow-up period, the group which had received the ego-strengthening suggestions lost more weight than did the group

which had received the specific target behavior suggestions. While neither of these two differences are statistically significant, this may be a trend which would have been significant if the N had been larger.

This data shows then that practitioners of hypnosis may choose either type of hypnotic suggestion and their results will be just as effective as if they had chosen the other type. This data demonstrates that both types of suggestions are equally effective in helping people lose weight and in helping people maintain that weight loss for at least four months. If the difference between when the two groups lost the weight is an actual difference and not an artifact of the groups, it would appear that perhaps a combination of the two types of suggestions would be the most beneficial. The specific target directed hypnotic suggestions would help the individuals initially to make significant gains while the ego-strengthening hypnotic suggestions would help these gains to continue after the hypnotic sessions have been discontinued.

On the TSCS and the MMPI, both groups showed a general movement toward the average of the tests (Figure 3 and 4). Differences between the two group's movements can be seen in Figures 7, 8, 9 and 10. It can be seen that generally Group 1 (specific hypnotic suggestions) made the greatest movement while directly involved in the 8 weeks of hypnotic sessions. After termination of the hypnotic sessions, Group 1 individuals tended to return toward their pretested level. This can be seen in Figures 11 through 39. Group 2 (ego-strengthening hypnotic suggestions), on the other hand, tended to make its largest moves in

a positive direction during the four months following termination of the hypnotic sessions.

There were statistically significant positive changes for the groups across time in their perception of their physical selves. Both groups felt more positive about their appearance at the posttesting than they did at the pretesting. Group 2 (ego-strengthening hypnotic suggestions) continued to improve their perception of themselves throughout the four month follow-up period. Group 1 (specific hypnotic suggestions) made no further gains in their perception of their physical selves. In several of the other variables, however, Group 1 showed a movement in a negative direction between posttesting and follow-up testing.

Group 2 generally became less defensive and increased their capacity for healthy self-criticism while Group 1 tended to remain the same on this dimension. Group 2 also increased their overall level of self-esteem and feelings of increased confidence and increased feelings of personal worth. Group 1 initially improved on these variables but then returned to the pretest levels by the time of follow-up testing. On the General Maladjustment Scale of the TSCS, Group 1 tended to remain the same while Group 2 moved significantly toward the mean indicating a better, more healthy adjustment than at the pretesting.

Both groups showed positive increases in their feelings about themselves internally and in their perception of their physical bodies. How they viewed their behavior in relation to others also increased. Both groups decreased the similarity of their responses to groups of neurotic patients.

On the MMPI both groups became less concerned with their bodies and generally less depressed. They became emotionally less reactive and their impulsivity and manipulative behavior decreased. As can be seen in Figures 7 and 8, Group 2 (ego-strengthening hypnotic suggestions) had generally the greatest movement in a positive direction. They initially were more depressed than Group 1 (specific hypnotic suggestions), but by the follow-up testing were less depressed. Group 2 initially were the most anxious and concerned with themselves but by the follow-up testing were significantly less anxious than were Group 1 (Figure 18). On the two scales which generally reflect isolation from others (Sc and Si) Group 2 made significant progress in a "more interaction" direction than did Group 1. Group 1 also decreased slightly in general ego strength while Group 2 increased their ego strength. Group 1 did, however, increase their control of things while Group 2 seemed to decrease theirs.

All of these results do substantiate that while both types of hypnotic suggestions do have positive effects on both weight loss and personality variables, it appears that individuals receiving general ego-strengthening suggestions generally will make the most positive changes in personality variables.

If this research can be taken as an example of the use of hypnosis to help specific target behavior and its results generalized to the treatment of other target behaviors, then it appears that if a therapist wishes to use hypnosis to help a client with a specific target behavior, that therapist may use either suggestion approach and expect similar results. This is particularly true in helping

individuals break various habit behaviors such as smoking or nail biting. If however, the therapist wishes to help changes occur in the client's personality, the general ego-strengthening suggestions seem to be the most effective.

Since the specific target behavior suggestion group lost more weight during the eight weeks of hypnotic sessions and the ego-strengthening hypnotic suggestion group lost more weight during the four month follow-up period, it appears that perhaps a combination of these two approaches would be the most beneficial to both initially help a client break or decrease a certain habit behavior and then to help them continue with their new behavior after the termination of the hypnotic sessions.

RECOMMENDATIONS

The results of this study lead to several recommendations both for therapist utilizing hypnosis and for further research.

Therapist Recommendations

1. It appears that when involved with helping a client break or decrease a certain specific habit, or target behavior, both specific target behavior hypnotic suggestions and general ego-strengthening hypnotic suggestions are equally effective. Therefore the choice of the type of suggestion to use may be based on therapist preference rather than on which is the most effective.

2. This research suggests, but does not prove, that a combination of ego-strengthening and specific target behavior hypnotic suggestions may be the most helpful use of hypnosis in helping clients reduce a specific target behavior and maintain that reduction.

Research Recommendations

1. As this research was conducted using weight loss as the identified target behavior, further research should be conducted using other types of habits as target behaviors, such as smoking, to substantiate whether or not the results of this study are generalizable to the treatment of other target behaviors.

2. As there appeared to be several interaction trends which were not statistically significant in this study, it would be valuable to

replicate this study using a larger N to determine if these trends are significant or if they were just artifacts of this research.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Need for the Study

Many therapists today use hypnosis for the treatment of behaviors such as overeating, smoking or nail biting. These therapists generally use one of two types of hypnotic suggestions. They either use specific target behavior directed hypnotic suggestions or they use general ego-strengthening hypnotic suggestions. Both types of hypnotic suggestions have proponents which claim that they are the most effective type of suggestion. There has been no research to help answer this question of which type of suggestion is actually the most effective.

Purpose of the Study

The purpose of this study was to investigate which type of hypnotic suggestion is the most effective in the treatment of specific behaviors.

Methods and Procedures

Two groups of overweight volunteers were drawn from the population of Cache County, Utah and the student population of Utah State University. All individuals were initially assigned to one of four groups of 10 individuals. The groups were then randomly assigned to one of two treatment groups. Group 1 consisted of two groups who received specific target behavior directed hypnotic suggestions.

Group 2 consisted of two groups who received general ego-strengthening hypnotic suggestions. All participants agreed not to participate in any other weight loss program for the duration of this study. All Ss were weighed and tested on the Minnesota Multiphasic Personality Inventory and the Tennessee Self-Concept Scale prior to the initiation of the hypnotic sessions, immediately following the hypnotic sessions and four months following the termination of the hypnotic sessions.

Eight hypnotic sessions were given to each group. Each session lasted approximately one hour and the sessions were scheduled one each week for eight weeks. Each session consisted of hypnosis, weighing and a brief discussion.

Conclusions

The findings of this study showed that both types of hypnotic suggestions were equally effective in helping individuals lose weight. Both groups also showed improvement on the personality tests. Group 2 (ego-strengthening) did show more improvement and longer lasting improvement on the personality variables than did Group 1 (specific weight reduction suggestions). Group 1 personality changes as measured at the posttesting tended to return to the pretest levels by the four month follow-up testing.

Recommendations

Two types of recommendations were generated by this study to therapists and to researchers. Two recommendations were made to therapists who use hypnosis in the treatment of habit behaviors.

Therapists were told that both types of suggestions were equally effective in reducing target behavior and therefore they could select whichever type of suggestion format they liked. It was also recommended that perhaps therapists should combine the types of suggestions as the specific type of suggestion tends to help reduce behavior quickly while the ego-strengthening suggestions appear to help maintain and continue the reduction in habit behavior.

It was recommended to researchers that this study be replicated using different types of target behaviors to test the generalizability of the results of this study. It was also recommended that this study be replicated using a larger N as there were a variety of interesting trends which may be significant if a larger N is used.

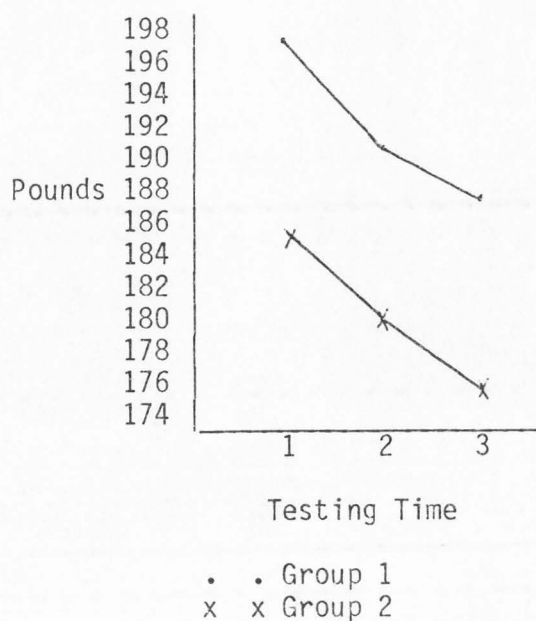


Figure 1. Mean weights of subjects for each testing period.

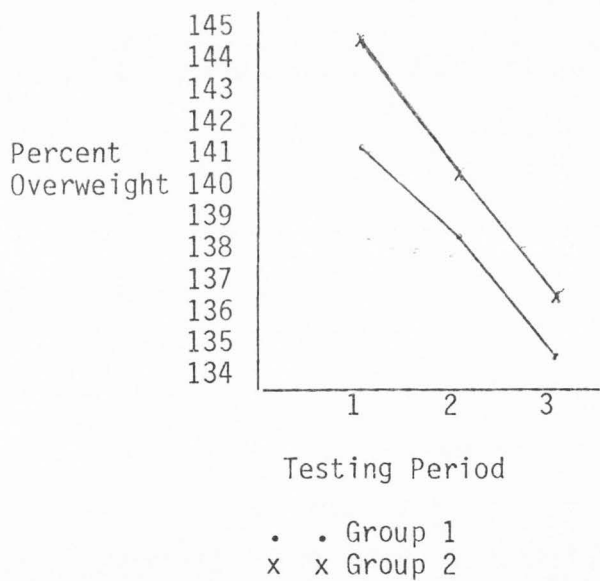
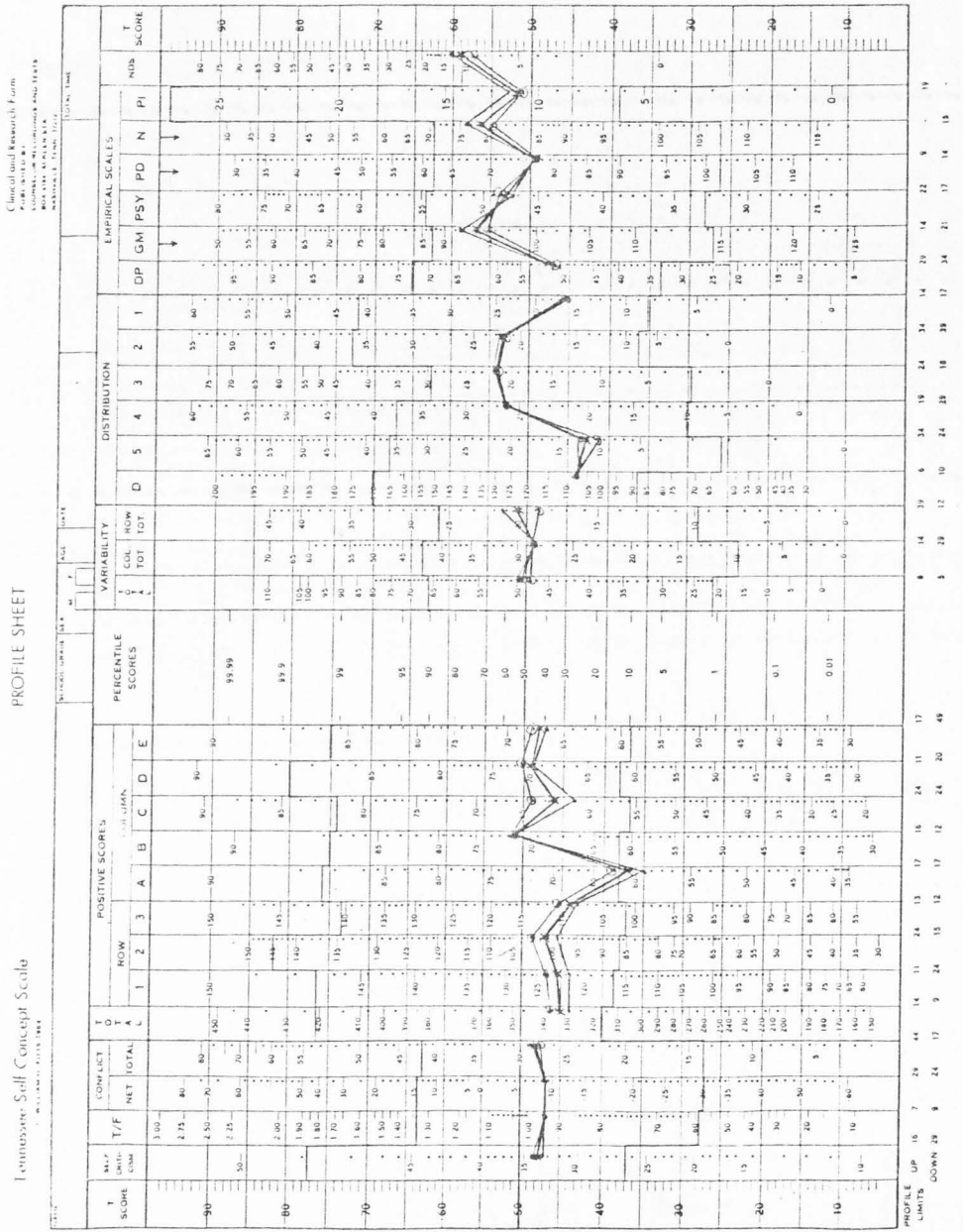


Figure 2. Mean percent overweight of subjects for each testing period.



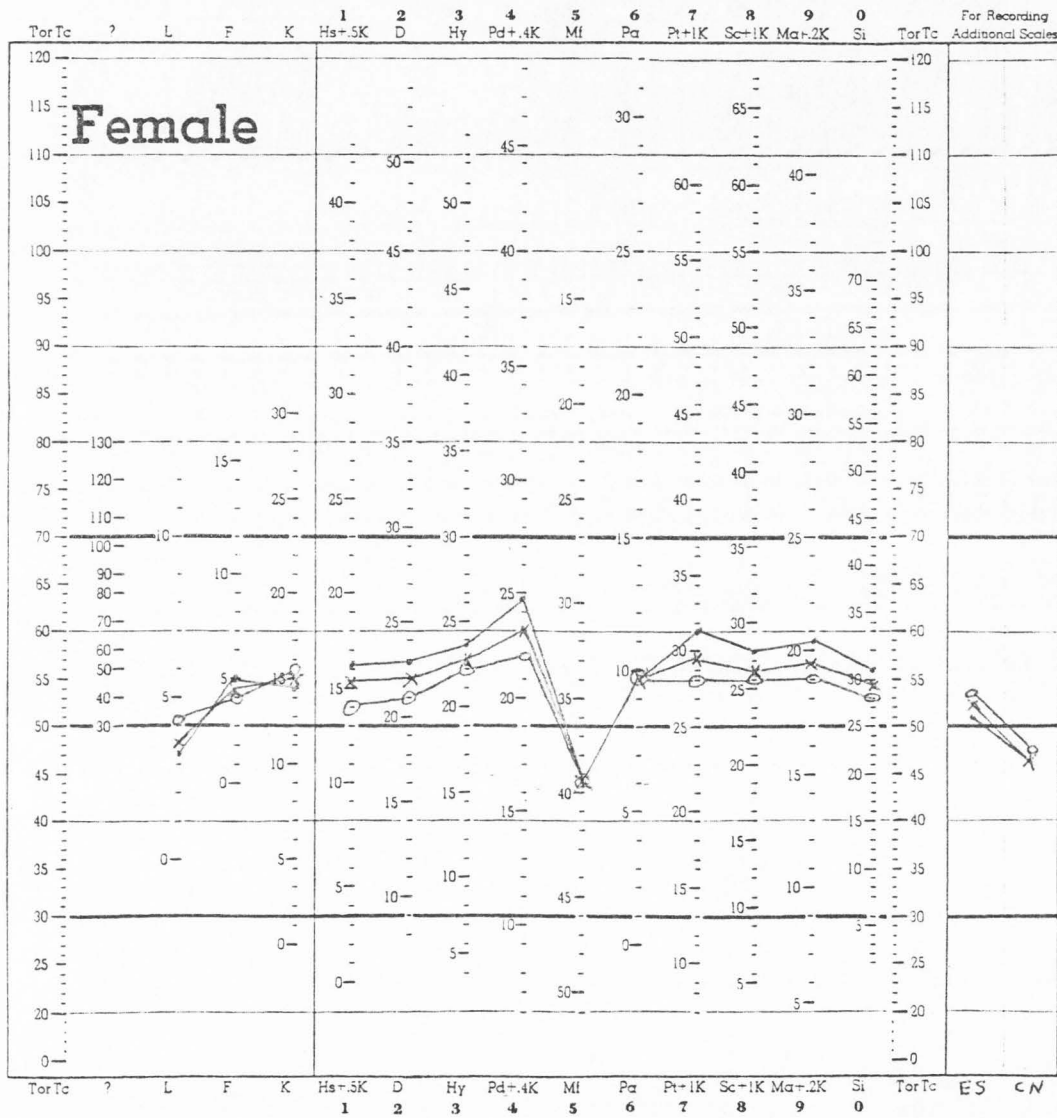
—○— pretest -x-x posttest ····□···· follow-up

Figure 3. Total means across three testing periods.

The Minnesota Multiphasic Personality Inventory

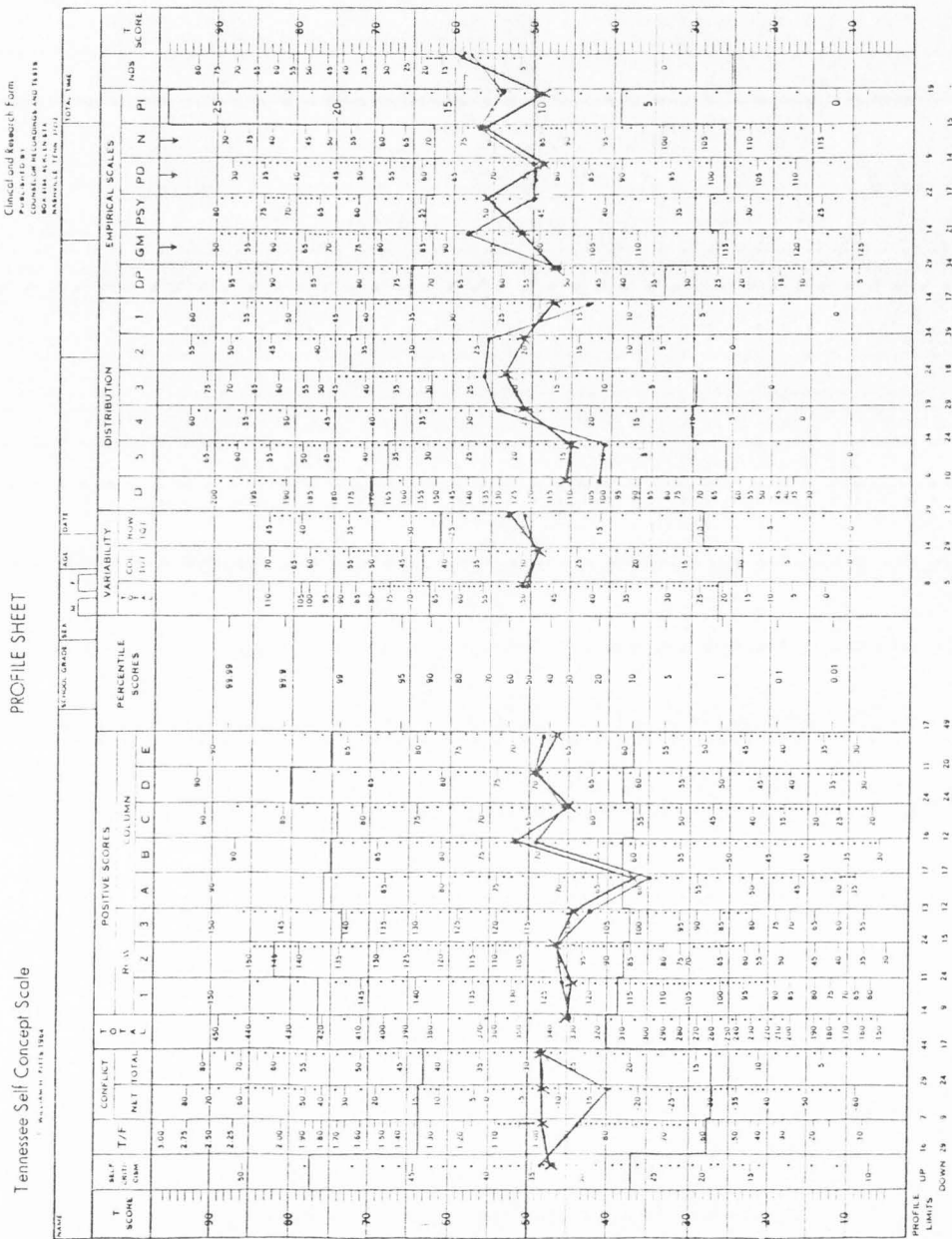
Starke R. Hathaway and J. Charnley McKinley

Scorer's Initials _____



—●— pretest x—x posttest o—o follow-up

Figure 4. Total means across three testing periods.



—○— Group 1
 -x- Group 2

Figure 5. Group differences.

The Minnesota Multiphasic Personality Inventory

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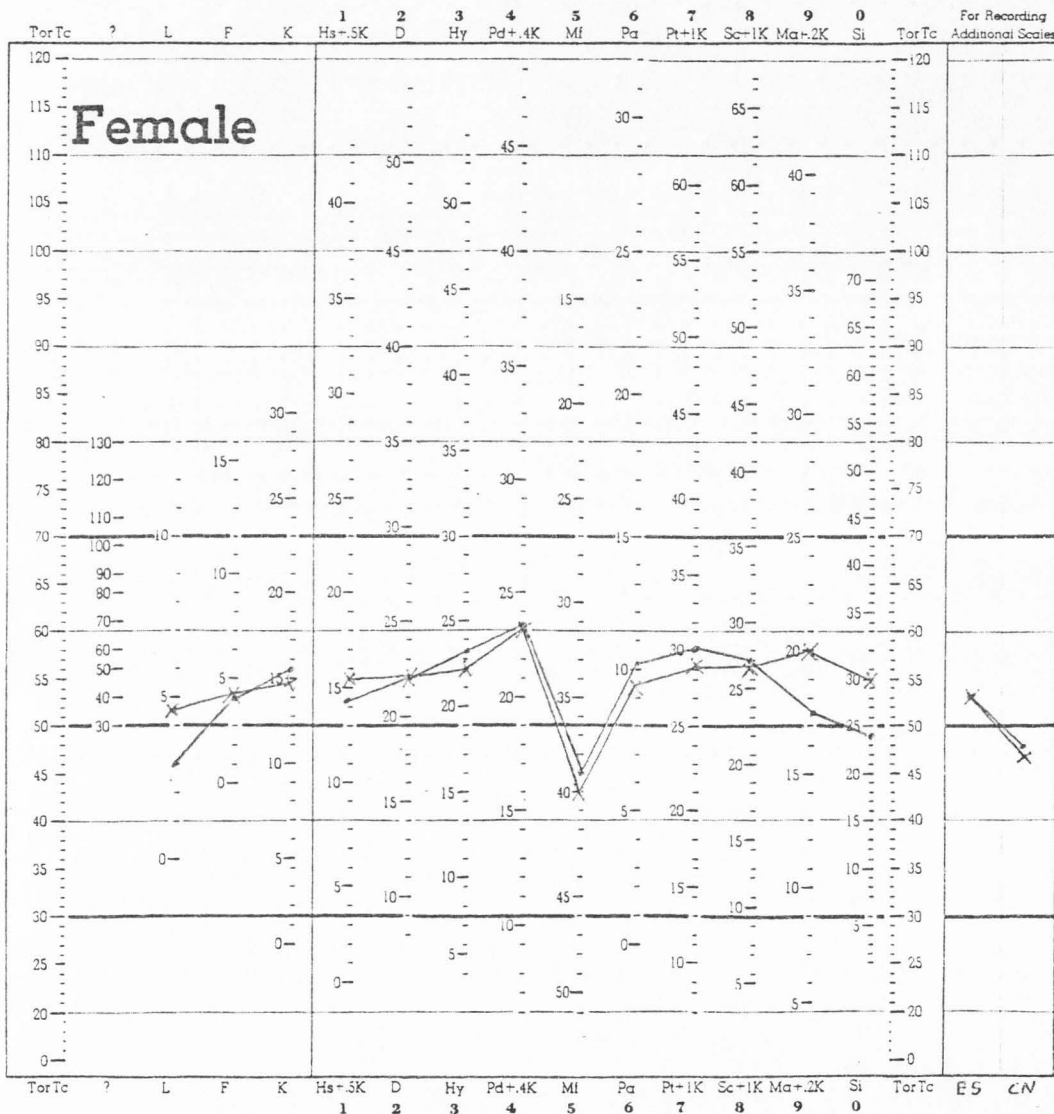


Figure 6. Group differences.

The Minnesota Multiphasic Personality Inventory

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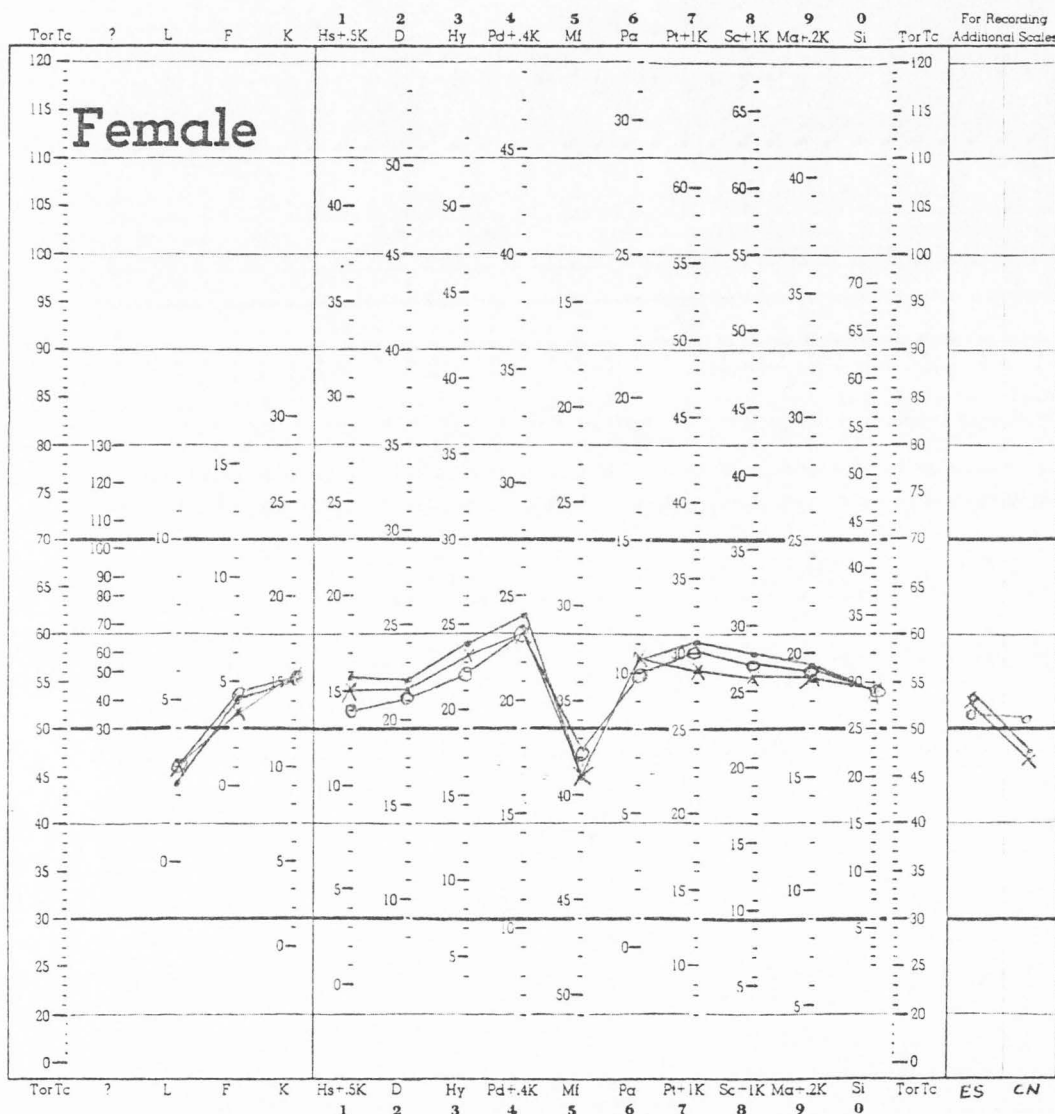
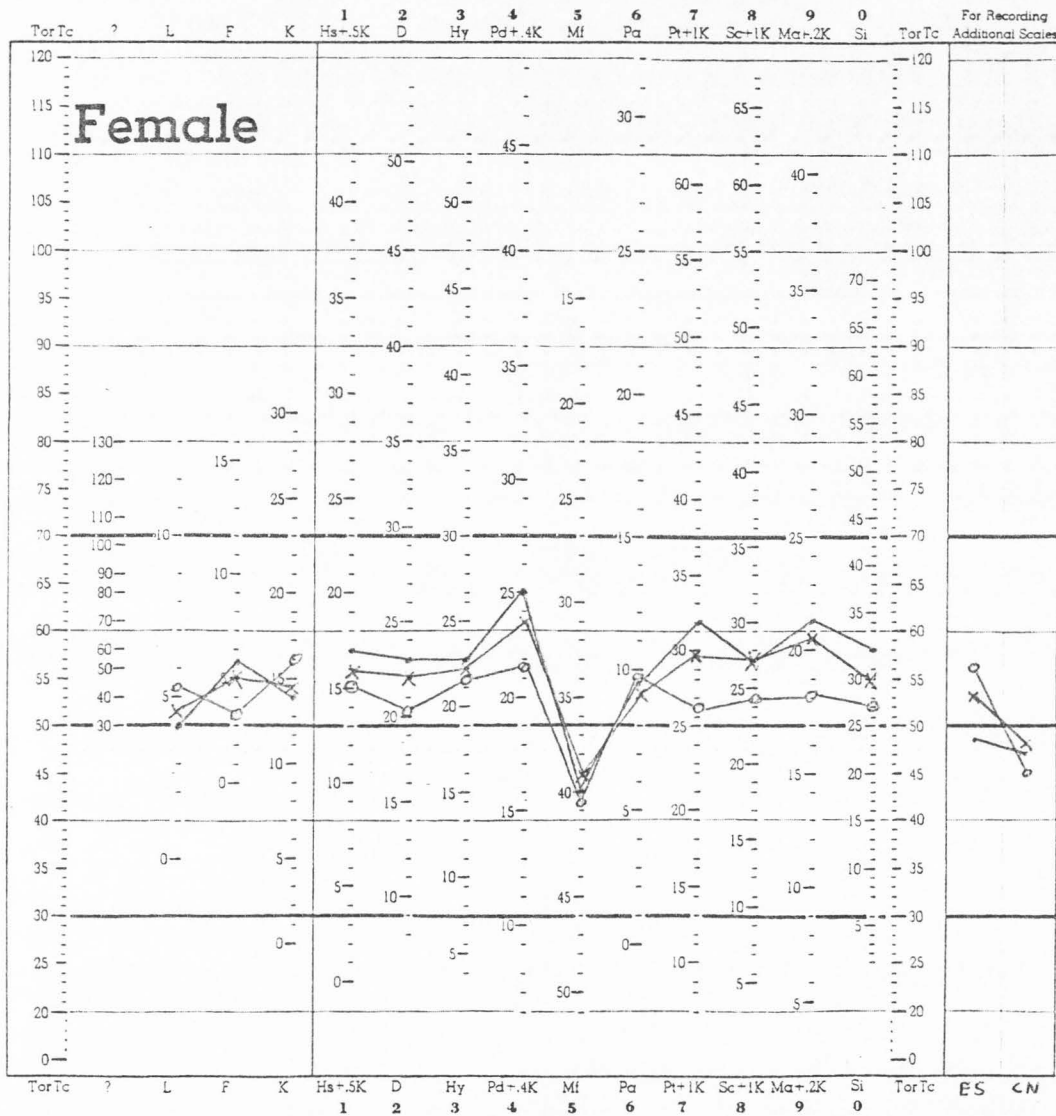


Figure 7. Group 1 mean scores across testing periods.

The Minnesota Multiphasic Personality Inventory

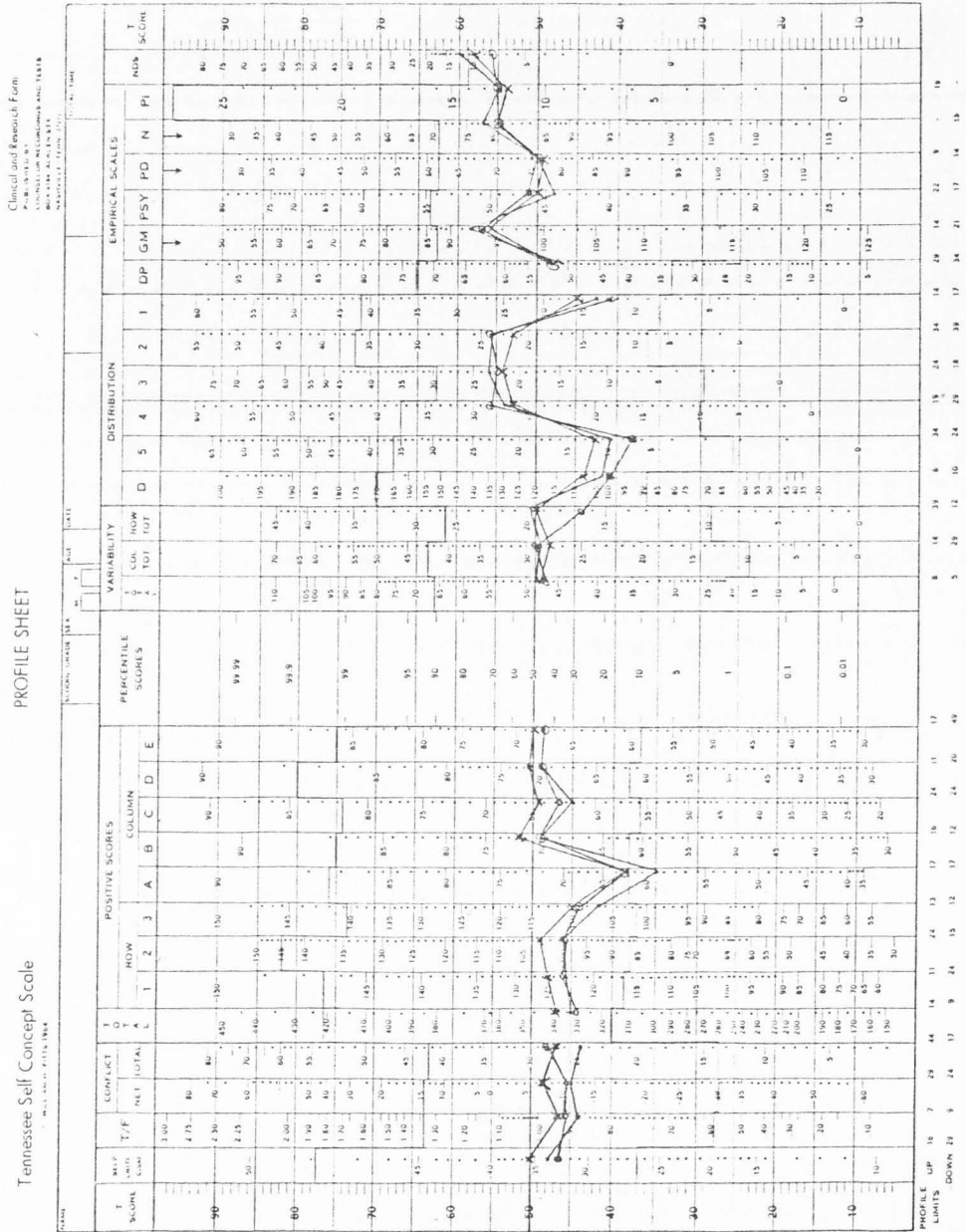
Starke R. Hathaway and J. Charnley McKinley

Scorer's Initials _____



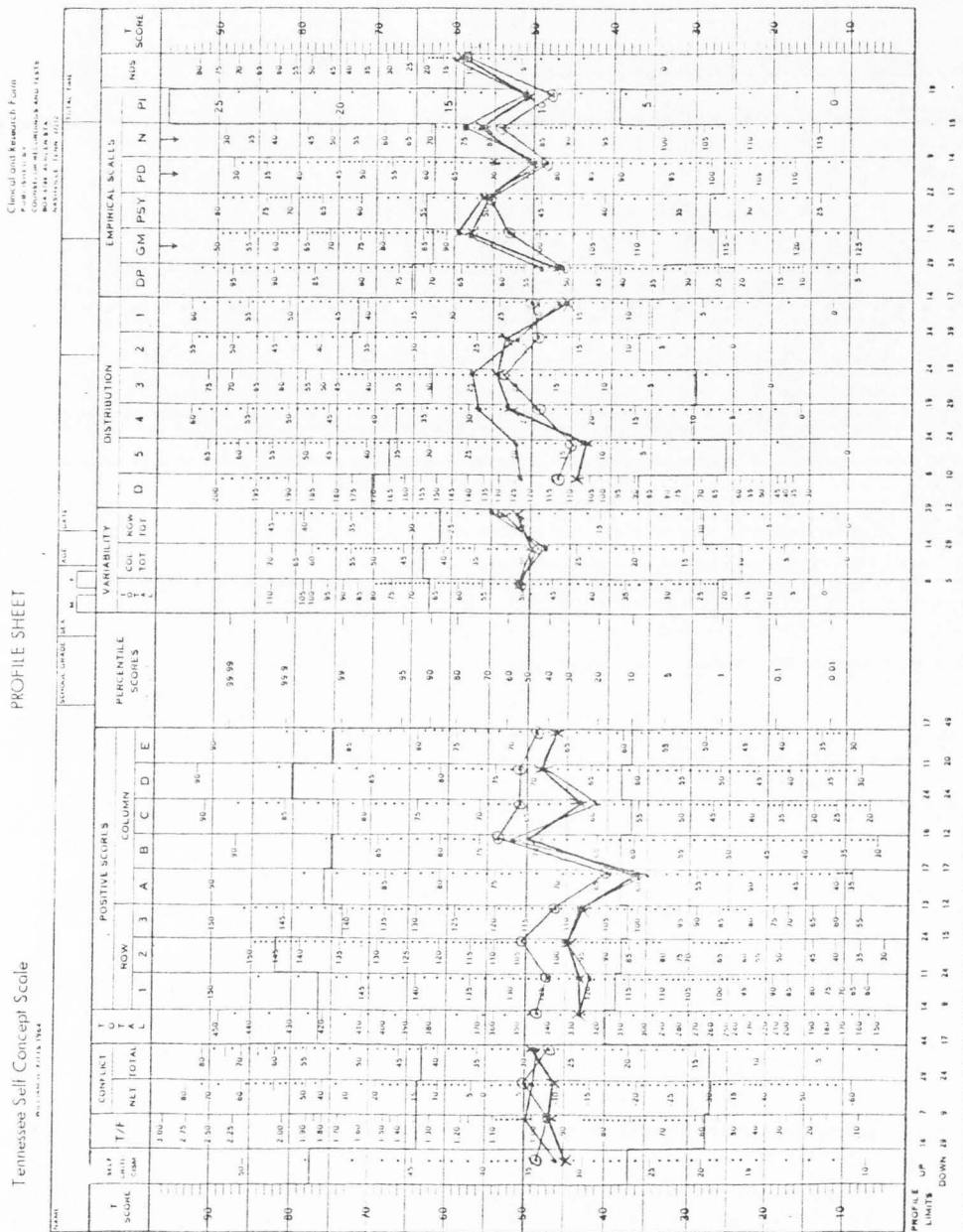
→ pretest x-x posttest o-o follow-up

Figure 8. Group 2 mean scores across testing periods.



—•— pretest x—x posttest o—o follow-up

Figure 9. Group 1 mean scores across testing periods.



—●— pretest x—x posttest ○—○ follow-up

Figure 10. Group 2 mean scores across testing periods.

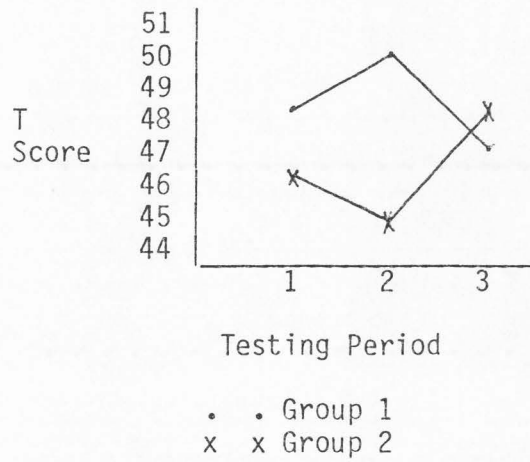


Figure 11. Interaction effects for the self-criticism scale of the Tennessee Self-Concept Scale.

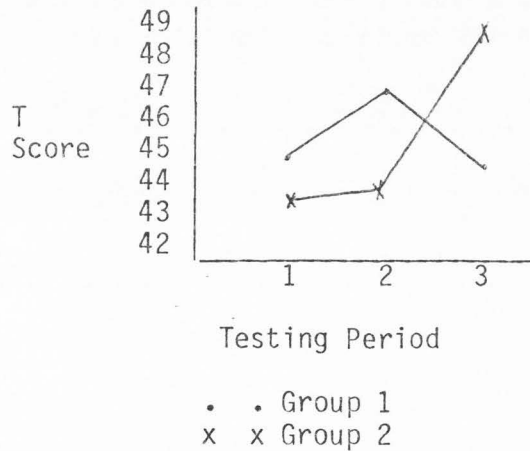


Figure 12. Interaction effect of the total scale of the Tennessee Self-Concept Scale.

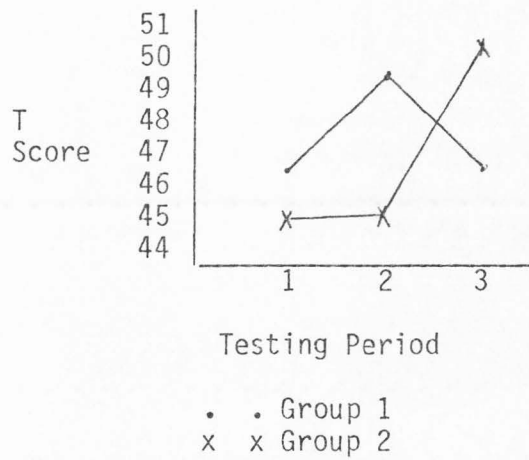


Figure 13. Interaction effect for the row 2 (self satisfaction) scale of the Tennessee Self-Concept Scale.

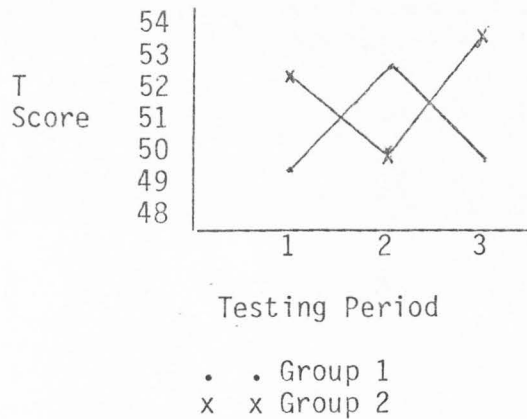


Figure 14. Interaction effect for the column B (moral-ethical self) scale of the Tennessee Self-Concept Scale.

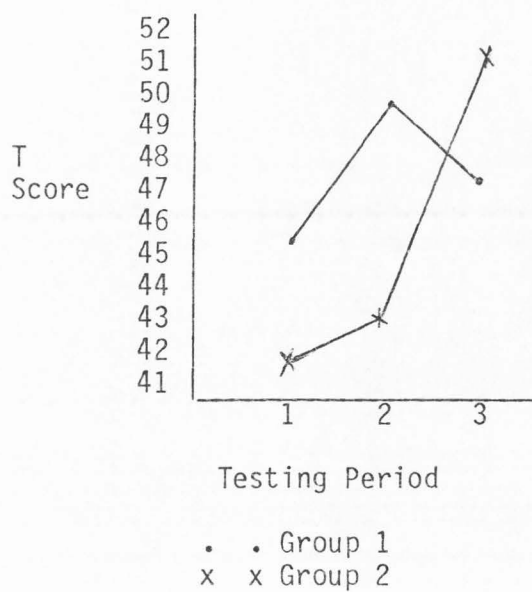


Figure 15. Interaction effect for the column C (personal self) scale of the Tennessee Self-Concept Scale.

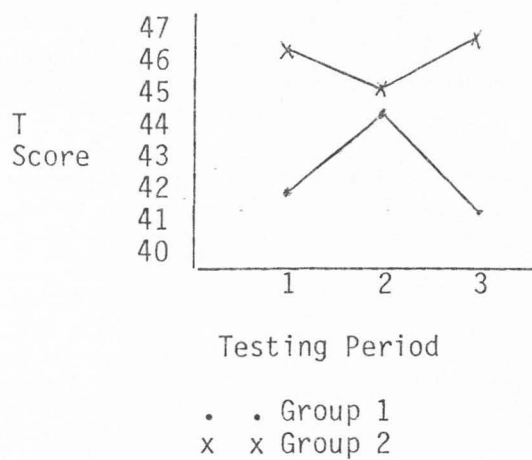


Figure 16. Interaction effect for the D (distribution) scale of the Tennessee Self-Concept Scale.

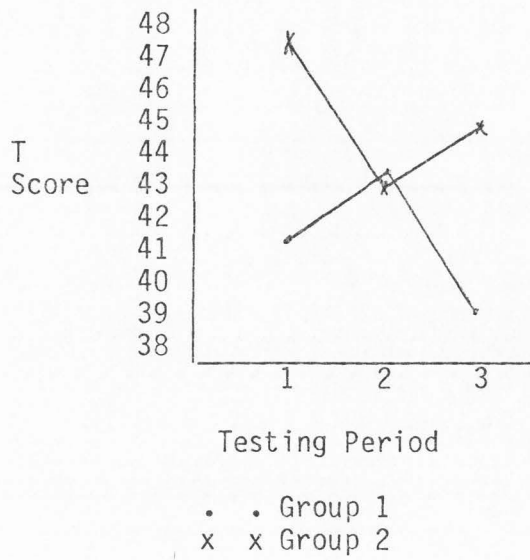


Figure 17. Interaction effect for the D5 (distribution of 5s) scale of the Tennessee Self-Concept Scale.

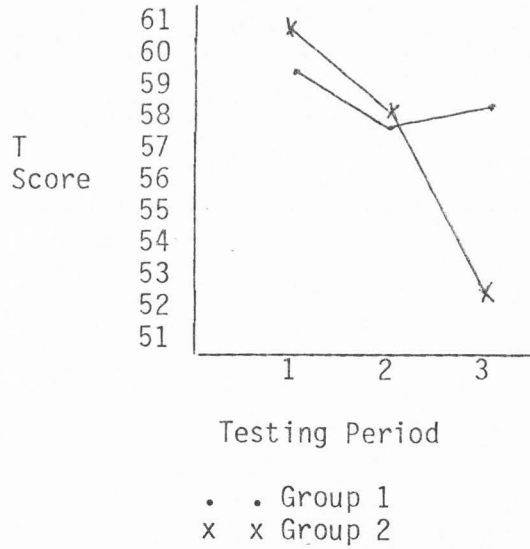


Figure 18. Interaction effect for the Pt (psychoasthenia) scale of the Minnesota Multiphasic Personality Inventory.

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APPENDICES

Appendix A

Specific Weight Loss Hypnotic Suggestions

Specific Weight Loss Hypnotic Suggestions

And now I want you to have a clear mental image in your mind of yourself standing on the scales and the scales registering the weight you wish to be. See this very, very clearly for this is the weight you will be. See yourself looking the way you would like to look with the weight off those parts of the body you want the weight to be off. See this very, very vividly and summon this image into your mind many times during the day; particularly just after waking in the morning and going to sleep at night; also have it vividly in your mind before eating meals. And this is the way you will look, and this is the weight you will be. As you believe this, so it will happen. When you have attained this weight, you will be able to maintain it, and you will find yourself eating just enough to maintain your weight at the weight you would like to be. Until you do attain this weight, you will find you have less, and less desire to eat between meals. In fact, very, very soon, you will have no desire at all to eat between meals. You simply will not want to. Also, you will find you will be content with smaller meals. There will be no sense of unhappiness or dissatisfaction, smaller meals will be quite satisfactory to you, and you will have no desire to eat large meals. Also, you will have less, and less desire for high calorie, rich unhealthy foods. Day by day your desire for such foods will become less and less, until very, very soon, you will have no desire at all for rich, high calorie, unhealthy foods. Instead, day by day, you will desire low calorie, healthy foods, and these will replace the high calorie foods, the rich

foods you have eaten in the past. As you lose weight and approach closer and closer to the weight you wish to be, you will find yourself growing stronger and stronger, healthier and healthier. Your resistance to illness and disease will increase, day by day. With less weight you will feel better and better and your health will become better and better. Remember too, that your own suggestions will now be just as effective as the suggestions I give you, either personally, or by tape.

Appendix B

Ego Strengthening Hypnotic Suggestions

Ego Strengthening Hypnotic Suggestions

"Every day . . . you will become physically stronger and fitter. You will become more alert . . . more wide aware . . . more energetic. You will become much less easily tired . . . much less easily fatigued . . . much less easily depressed . . . much less easily discouraged.

Every day . . . you will become so deeply interested in whatever you are doing . . . so deeply interested in whatever is going on . . . that your mind will become much less preoccupied with yourself . . . and you will become much less conscious of yourself . . . and your own feelings.

Every day . . . your nerves will become stronger and steadier . . . your mind will become calmer and clearer . . . more composed . . . more placid . . . more tranquil. You will become much less easily worried . . . much less easily agitated . . . much less fearful and apprehensive . . . much less easily upset.

You will be able to think more clearly . . . you will be able to concentrate more easily . . . your memory will improve . . . and you will be able to see things in their true perspective . . . without magnifying them . . . without allowing them to get out of proportion.

Every day . . . you will become emotionally much calmer . . . much more settled . . . much less easily disturbed.

Every day . . . you will feel a greater feeling of personal well-being . . . a greater feeling of personal safety . . . and security . . . than you have felt for a long, long time.

Every day . . . you will become . . . and you will remain . . . more and more completely relaxed . . . and less tense each day . . .

both mentally and physically . . . even when you are no longer with me.

And, as you become . . . and, as you remain . . . more relaxed . . . and less tense each day . . . so, you will develop much more confidence in yourself, much more confidence in your ability to do . . . not only what you have to do each day . . . but, much more confidence in your ability to do whatever you ought to be able to do . . . without fear of failure . . . without fear of consequences . . . without unnecessary anxiety . . . without uneasiness.

Because of this . . . every day . . . you will feel more and more independent . . . more able to stick up for yourself . . . to stand upon your own feet . . . to hold your own . . . no matter how difficult or trying things may be.

And because all these things will begin to happen . . . exactly as I tell you they will happen, you will begin to feel much happier . . . much more contented . . . much more cheerful . . . much more optimistic . . . much less easily discouraged . . . much less easily depressed."

Appendix C

Metropolitan Life Desirable Weight Chart

Desirable Weights*
Weight in Pounds According to Frame (In Indoor Clothing)

MEN

HEIGHT (with shoes on) 1-inch heels				
Feet	Inches	Small Frame	Medium Frame	Large Frame
5	2	112-120	118-129	126-141
5	3	115-123	121-133	129-144
5	4	118-126	124-136	132-148
5	5	121-129	127-139	135-152
5	6	124-133	130-143	138-156
5	7	128-137	134-147	142-161
5	8	132-141	138-152	147-166
5	9	136-145	142-156	151-170
5	10	140-150	146-160	155-174
5	11	144-154	150-165	159-179
6	0	148-158	154-170	164-184
6	1	152-162	158-175	168-189
6	2	156-167	162-180	173-194
6	3	160-171	167-185	178-199
6	4	164-175	172-190	182-204

WOMEN

HEIGHT (with shoes on) 2-inch heels				
Feet	Inches	Small Frame	Medium Frame	Large Frame
4	10	92- 98	96-107	104-119
4	11	94-101	98-110	106-122
5	0	96-104	101-113	109-125
5	1	99-107	104-116	112-128
5	2	102-110	107-119	115-131
5	3	105-113	110-112	118-134
5	4	108-116	113-126	121-138
5	5	111-119	116-130	125-142
5	6	114-123	120-135	129-146
5	7	118-127	124-139	133-150
5	8	122-131	128-143	137-154
5	9	126-135	132-147	141-158
5	10	130-140	136-151	145-163
5	11	134-144	140-155	149-168
6	0	138-148	144-159	153-173

For girls between 18-25, subtract one pound for each year under 25.

*Metropolitan Life. 1969

Appendix D

Permission for Hypnotherapy

PERMISSION FOR HYPNOTHERAPY

(Address)
Date _____

Permission is hereby given to _____ to render
treatment and/or service to _____
whose relationship to me is (Check one):

_____ Self _____ Spouse
_____ Child _____ Other (Specify) _____

The modern concept of hypnotism, in terms of subjects being in the power of the hypnotist is a myth. The following clarifies hypnosis.

No patient can be induced to do things against his or her will, or those which are socially objectionable or repulsive. The hypnotic state is purely a physiological one. It can be simply defined as a specific state of the body, which is highly efficient in its response senses and highly responsive to objective therapy that can be (directly) directed at the automatic motor functions of the body organs.

Hypnosis can be induced in all patients in need (and desirous) of therapeutic treatment. "Show" type hypnosis can, indeed, be induced in some of those with a congenial desire to "show off" and be a specific center of attraction. Stage hypnosis owes whatever success it enjoys to this very small minority of people.

When there is a pressing need, however, such as trauma, dental work, surgical anesthetic rejection, childbirth, arthritis, or habits (smoking, nail biting, bed wetting, etc.), muscle troubles, mental laxity and certain afflictions of the nervous system, etc., hypnotherapy is usually very successful in clients who cooperate and participate with the Hypnotherapist. The patient is never unaware of what is going on. In fact, in a deep efficient state of hypnosis the patient is more response than in his normal state. Amnesiac "trance" is a basic paradox to the concept of hypnosis. Only when it is specifically required to eradicate distasteful memory recurrence, can it be believed that hypnosis can eradicate memory or induce amnesia. In fact, by definition, at a proper hypno-therapeutic session, a good patient will invariably have complex recall, even to the minutest details of the therapeutic prescription rendered.

Signature of Patient or Client

Signature of Patient's or Client's agent or representative

Witness Date

Relationship

Address

Appendix E

Agreement to Participate in Weight Loss Research

AGREEMENT TO PARTICIPATE IN WEIGHT LOSS RESEARCH

I, _____ agree to participate in the weight loss research being conducted by Richard Hutchison. I understand that hypnosis will be used to help me lose weight. Hypnosis and its potential dangers have been explained to me.

I understand and agree to participate in the evaluation procedures before and after the weight loss sessions and during the follow-up in September, 1981. I also agree to be weighed at each session and I agree that the only weight loss methods I will attempt for the duration of this study will be that which is directed by this study.

I understand that my fee of \$20.00 will be refunded to me if I complete all aspects of this study.

Name: _____

Date: _____

Witness: _____

Appendix F

HBL Standardized Hypnotic Induction Procedure

HBL Standardized Hypnotic Induction Procedure

Please place your feet flat on the floor and lean back in your chair. Rest your hands, palms down, on your thighs.

Wiggle your toes for one or two seconds and let them effortlessly settle and remain where they may.

Focus your attention on your toes, especially on new and unusual sensations of which you were not aware.

(Five Seconds of Silent Self Observation)

You will gradually become aware of faint tingling or slight itching in your toes as if they were falling asleep, and of warm or cool temperature changes. You may even have some uncertainty as to where your toes are, as if they were floating.

(Five Seconds of Silent Self Observation)

Shift your attention to the top and sole of your feet. Slowly, there will appear the interesting feeling of tingling along with warmth or coolness.

(Five Seconds of Silent Self Observation)

Now pay attention to your ankles and heels. Here too, it will seem that my statement, "Pay attention," induces this pleasurable mixture of tingling, itching and temperature changes.

(Five Seconds of Silent Self Observation)

Let your attention move up the front, sides and especially the back of your legs to your knees.

(Five Seconds of Silent Self Observation)

Again, the now familiar sensations will appear. There may be tingling over the shins, or it may be more marked over the backs of your legs.

(Five Seconds of Silent Self Observation)

At this point, you are to perform a simple objective test. You are to make your legs go soft. They are to become so absolutely soft that they will feel as heavy as lead. The simple objective test for the necessary amount of softness and heaviness is this: If you have made your legs soft and heavy enough, it will take too much effort to move your toes. If you can move your toes at all, increase the softness of your legs until you feel that it will be too much effort to move your toes and therefore you will not want to.

(Five Seconds of Silent Self Observation)

Move your attention to your knees. Again, you will experience the tingling and the temperature changes.

(Five Seconds of Silent Self Observation)

As your awareness slowly proceeds from your knees, to your thighs, your hips, the now expected tingling and temperature changes naturally will follow. It may be on the back or side of the thighs, or in the groin.

(Five Seconds of Silent Self Observation)

As with your legs, make your thighs go soft. Make them so absolutely soft and heavy that moving your legs will require too much effort. This softness and heaviness, along with not wanting to move, will make your feet feel as though they are lightly floating on the floor.

(Five Seconds of Silent Self Observation)

Now pay attention to the upper parts of your hips and the sensations of tingling and temperature changes will be perceived mostly over the bony parts of your hips.

(Five Seconds of Silent Self Observation)

Become aware of the lower part of your back and of the associated tingling and temperature changes.

Induce the feeling of profound softness and heaviness, so that you do not want to move your hips or your lower back.

(Five Seconds of Silent Self Observation)

Let this quality of massive softness and immovable heaviness extend all the way up your back into your shoulders.

(Five Seconds of Silent Self Observation)

The softness and heaviness from your shoulders to your hips cause you to lean back and sink down in your chair. As the softness and heaviness increase in your shoulders, they will sag and sink alongside your chest, as if their weight and that of your arms pull them down. Again, you will not want to move them.

(Five Seconds of Silent Self Observation)

Allow the tingling, temperature changes and especially the softness and heaviness to dominate your arms down to your elbows. As before, the simple objective test for the required softness

and heaviness in your arms will be the awareness of too much effort to move or bend your arms.

(Five Seconds of Silent Self Observation)

As your interest moves to your elbows, the tingling and temperature changes appear there.

(Five Seconds of Silent Self Observation)

Let the profound softness and heaviness and the associated sensations enter into your forearm. Again, you will experience the tingling and temperature sensations in your fingers. The same simple objective test will apply. By making the softness and heaviness profound enough, moving your fingers will take too much effort.

(Five Seconds of Silent Self Observation)

From your shoulders to the tips of your fingers and down your body to your toes, there is a generalized feeling of softness and heaviness which becomes more and more pleasant and comfortable. The greater the softness and heaviness, the greater the comfort and not wanting to move.

(Five Seconds of Silent Self Observation)

Now let your neck go soft and your head will naturally tilt, preferably over your shoulder. This happens because of the softness of your neck and the weight of your head.

(Five Seconds of Silent Self Observation)

Let your cheeks go totally soft, and allow your jaw to sag a bit as if by its own weight rather than by opening your mouth. You will feel as if your lips and cheeks were gently lifting away from your teeth and gums. Your face will feel so soft as to be totally without expression.

(Five Seconds of Silent Self Observation)

Let the feeling of intense and total softness include your eyes, your eyelids and especially your brows. Your eyes will be closed and it will be too much effort to open them. The total softness and smoothness of your brows and forehead and absence of any facial expression will make you feel very peaceful and very comfortable.

(Five Seconds of Silent Self Observation)

The feeling of softness can now extend over your scalp, down behind your ears, where it will meet the softness of the back of your neck. The

induction of smoothness and of softness in your scalp is often associated with tingling or prickling.

(Five Seconds of Silent Self Observation)

You have now achieved a wonderful state of generalized softness, pleasurable heaviness and of not wanting to move. The feeling is warm, happy and full of security. Let us review the procedure so that you can reinforce the special qualities of this most agreeable state. You will enjoy intensifying every part of it.

(Five Seconds of Silent Self Observation)

I shall now begin a rapid review of the induction: Slowly consider the tips of your toes, the soles and tops of your feet, the area around your ankles and your heels, your legs from your ankles to your knees. . . . Let your legs go absolutely soft and heavy. Be aware of warmth and comfort.

Consider your knees, your thighs and your hips. Let your thighs go absolutely soft and heavy and warm and comfortable.

Let your attention go to your hips, around your hips, to your lower back -- again, the agreeable

feeling of softness, heaviness, warmth and comfort.

Let your attention go to your hips, around your hips, to your lower back -- again, the agreeable feeling of softness, heaviness, warmth and comfort.

Let your attention extend up into your back, up into your shoulders. The intense feeling of softness and heaviness will naturally cause you to sink down and lean back in your chair. The warm, secure and comfortable feeling will become more marked.

As your shoulders become soft, they comfortably sag and sink of their own weight. At this time, all discomforts in any part of your body will go away because of the generalized state of softness, heaviness and warmth securely wrapped up in a very comfortable desire not to move.

Let the sense of softness extend from your shoulders down to your elbows, from your elbows down into your forearms, your wrists, your hands, the tips of your fingers. Let the feeling of softness, heaviness mixed with warmth and comfort and of not wanting to move totally absorb your body.

Let the overwhelming softness include your neck, and let your head tilt sideways over your shoulder.

Let your jaw sag as if of its own weight. Be profoundly aware of the softness and smoothness around your lips, your cheeks, your eyes, your brows, your forehead and of the total expressionless quality of your face.

Let the softness extend over your scalp and ears down into the back of your neck.

By following these instructions, you have induced this state of total softness, heaviness, warmth, security and of comfort. You know how your body feels in this state. You know how your jaw, face, mouth, eyes, brows, forehead and scalp all feel. You know how your shoulders, back, arms, forearms, legs, feet -- how every part of you feels. All of this is due to your efforts.

You are also fully aware of how you have accomplished this state. This knowledge is now part of you and will always be available to you. You will always remember the softness, heaviness and warmth.

Appendix G

Weight Loss Chart

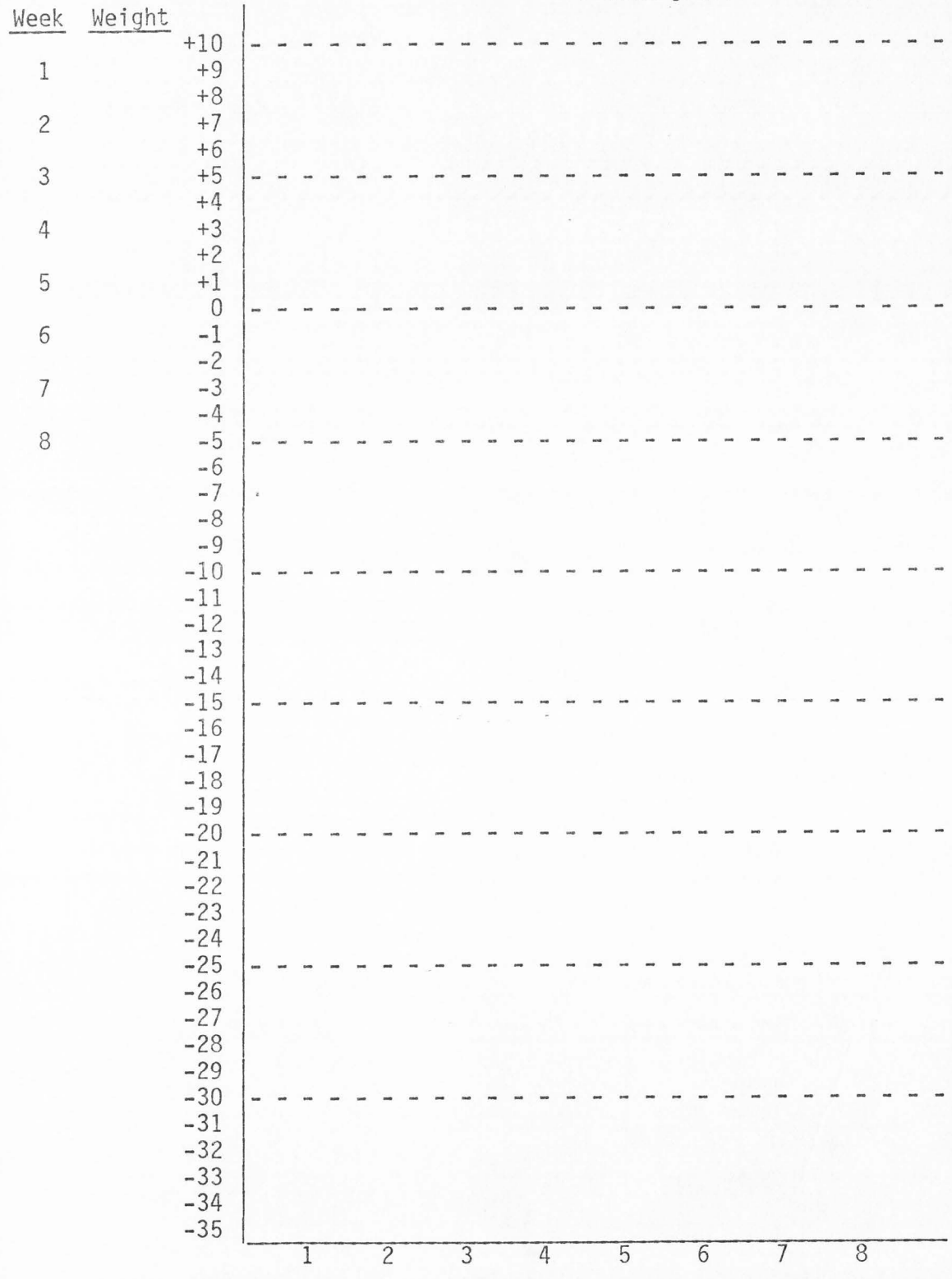
WEIGHT LOSS CHART

NAME: _____

Date: _____

Initial weight: _____

8 week goal: _____ Total goal: _____



Appendix H

Health Questionnaire

WEIGHT GROUP

HEALTH QUESTIONNAIRE

Please answer the following:

YES NO

Are you in generally good health?

Have you been hospitalized within the last two years?

Currently on medical supervision?

Currently on any medication?

If so, explain: _____

If you have any of the following, please check:

Hypoglycemia _____ High blood pressure _____

Hypertension _____ Headaches _____

Diabetic _____ Heart disease _____

Other (specify) _____

Signature: _____

Date: _____

Appendix I

Figures 19 - 39

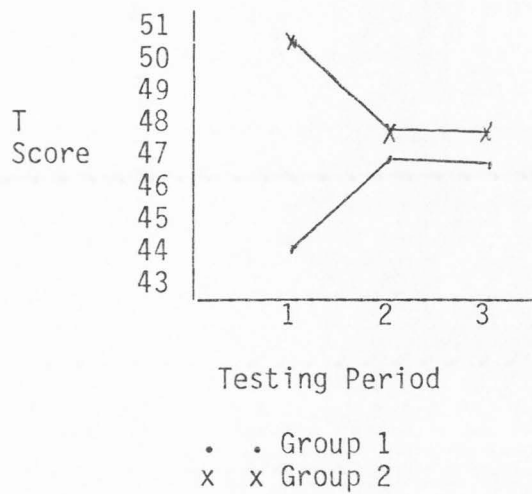


Figure 19. Interaction effect for the T/F scale of the Tennessee Self-Concept Scale.

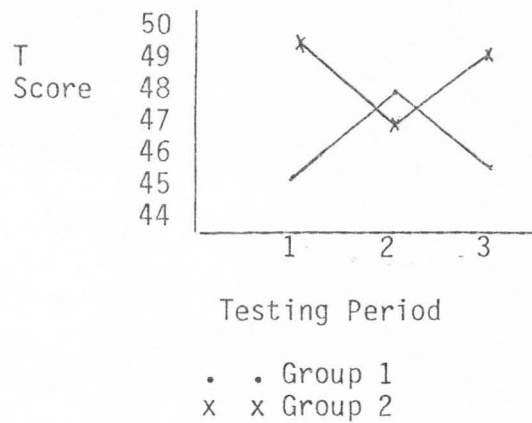


Figure 20. Interaction effect for the NC scale of the Tennessee Self-Concept Scale.

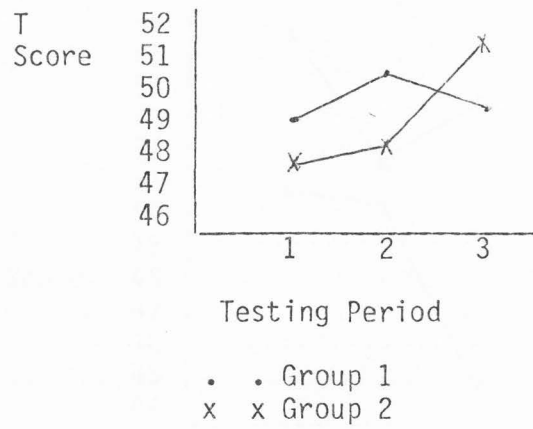


Figure 21. Interaction effect for the CD scale of the Tennessee Self-Concept Scale.

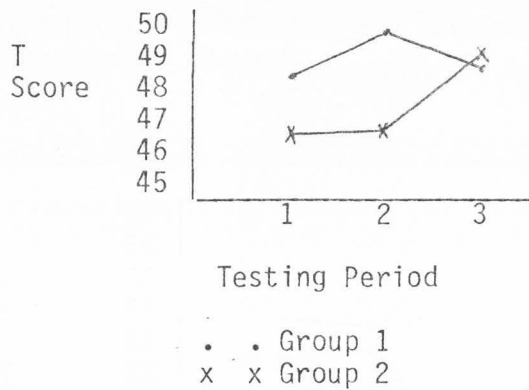


Figure 22. Interaction effect for the CE scale of the Tennessee Self-Concept Scale.

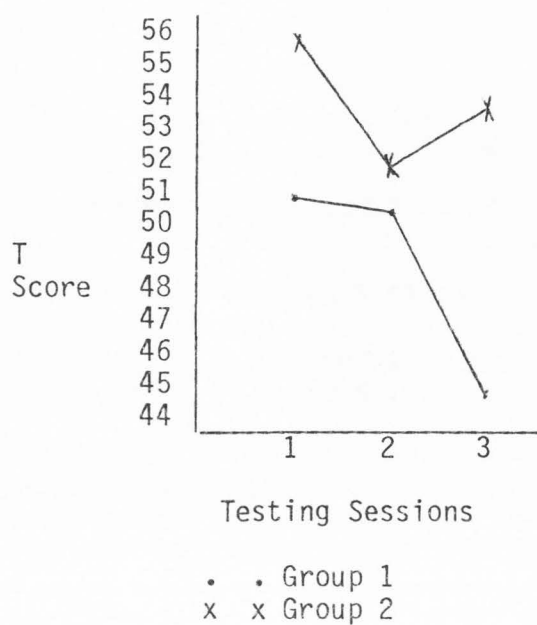


Figure 23. Interaction effect for the RTV scale of the Tennessee Self-Concept Scale.

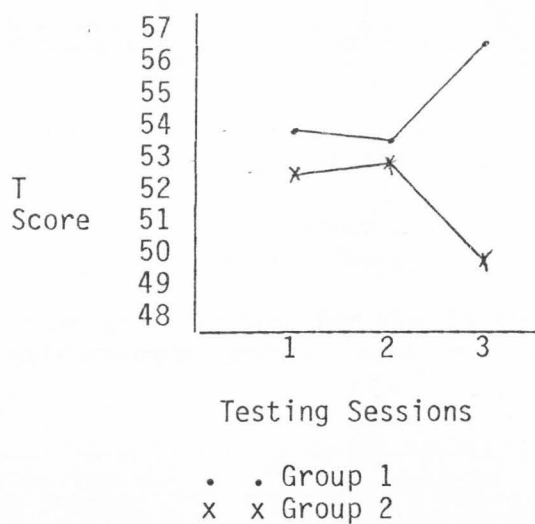


Figure 24. Interaction effect for the D4 scale of the Tennessee Self-Concept Scale.

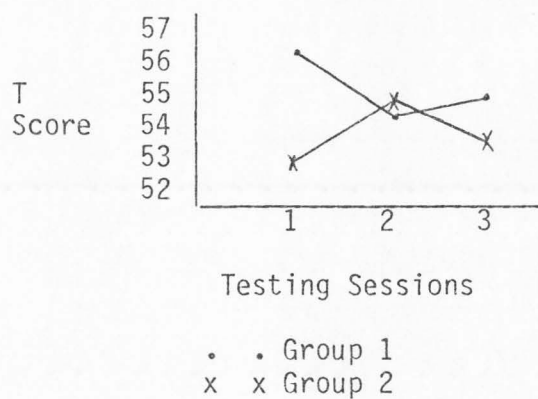


Figure 25. Interaction effect for the D3 scale of the Tennessee Self-Concept Scale.

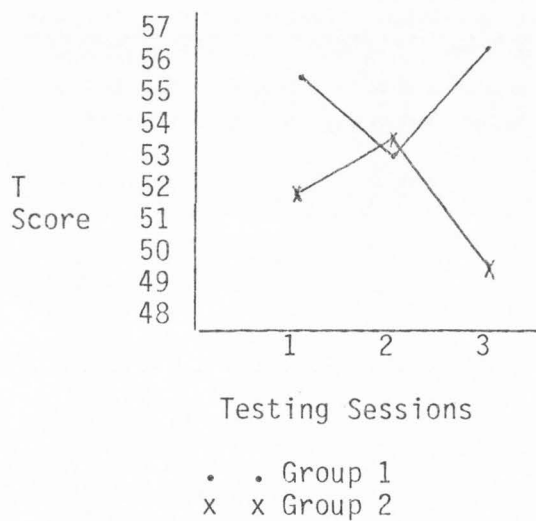


Figure 26. Interaction effect for the D2 scale of the Tennessee Self-Concept Scale.

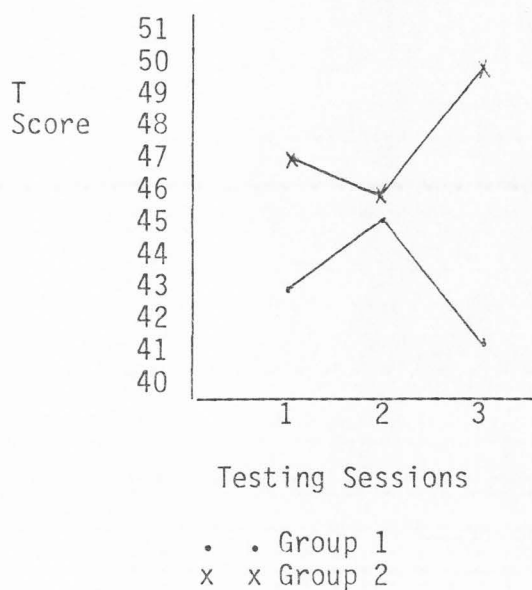


Figure 27. Interaction effect for the D1 scale of the Tennessee Self-Concept Scale.

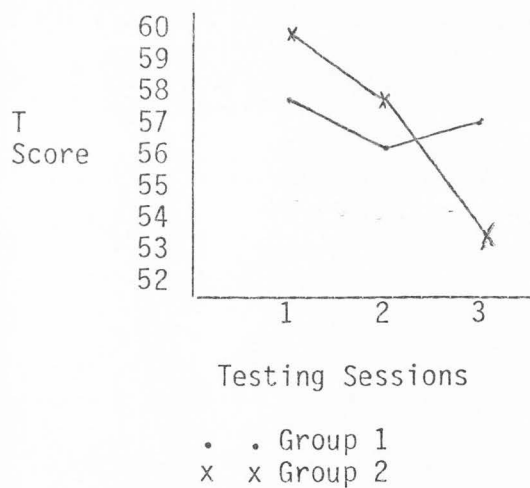


Figure 28. Interaction effect for the GM scale of the Tennessee Self-Concept Scale.

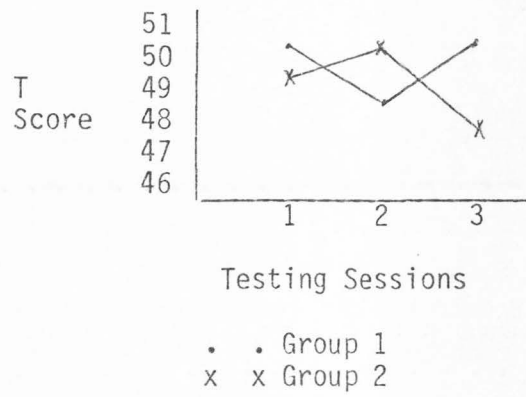


Figure 29. Interaction effect for the PD scale of the Tennessee Self-Concept Scale.

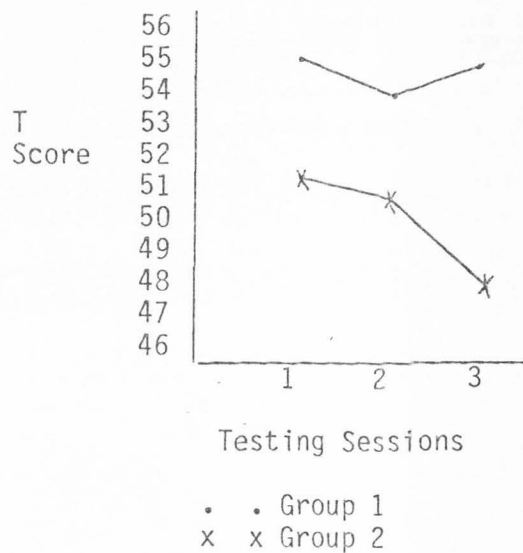


Figure 30. Interaction effect for the PI scale of the Tennessee Self-Concept Scale.

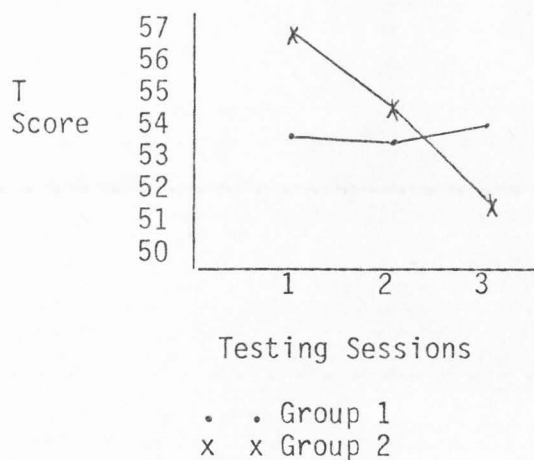


Figure 31. Interaction effect for the F scale of the Minnesota Multiphasic Personality Inventory.

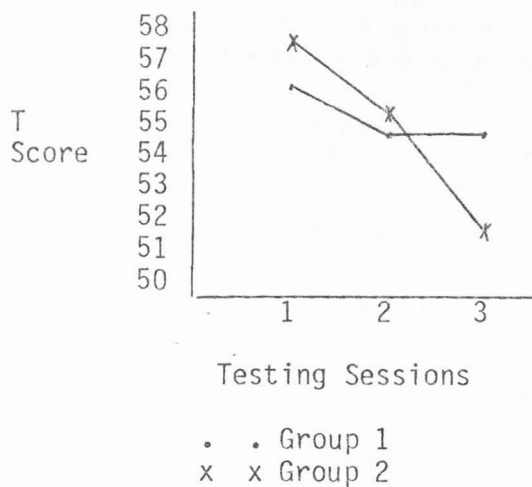


Figure 32. Interaction effect for the D scale of the Minnesota Multiphasic Personality Inventory.

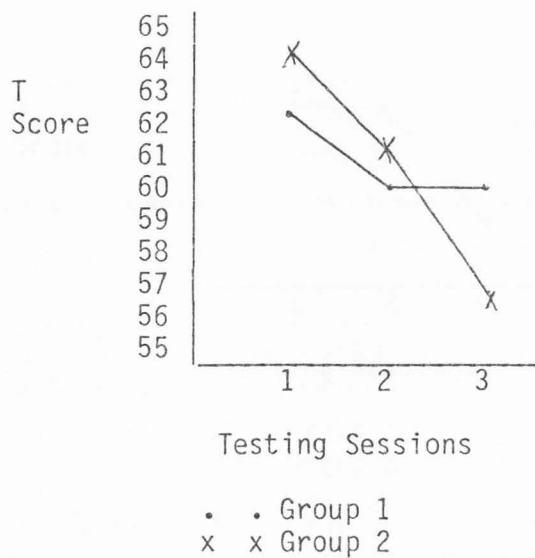


Figure 33. Interaction effect for the PD scale of the Minnesota Multiphasic Personality Inventory.

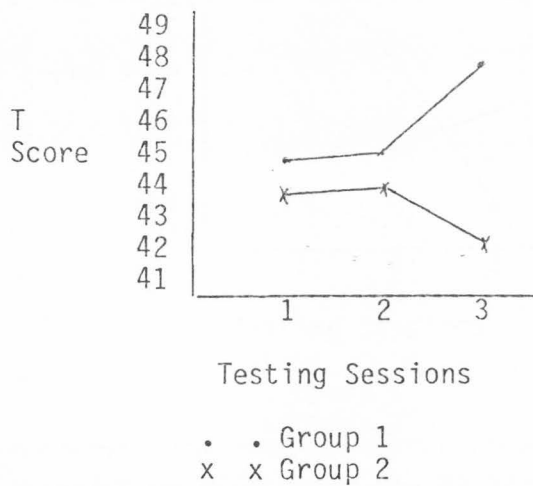


Figure 34. Interaction effect for the MF scale of the Minnesota Multiphasic Personality Inventory.

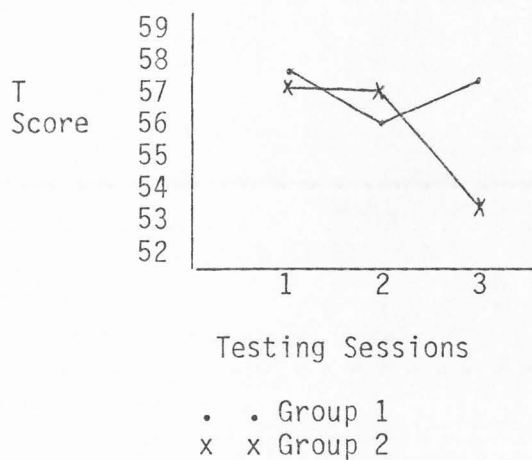


Figure 35. Interaction effect for the SC scale of the Minnesota Multiphasic Personality Inventory.

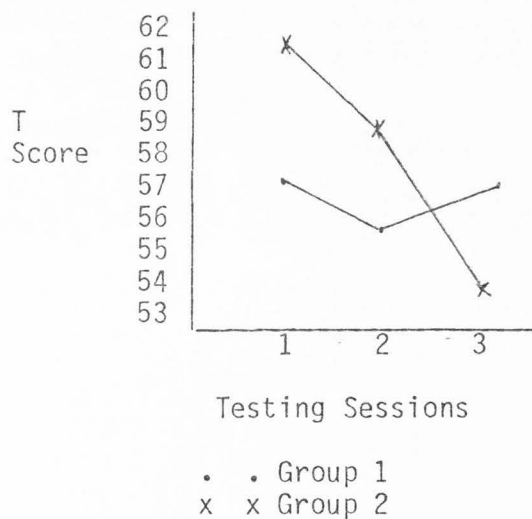


Figure 36. Interaction effect for the MA scale of the Minnesota Multiphasic Personality Inventory.

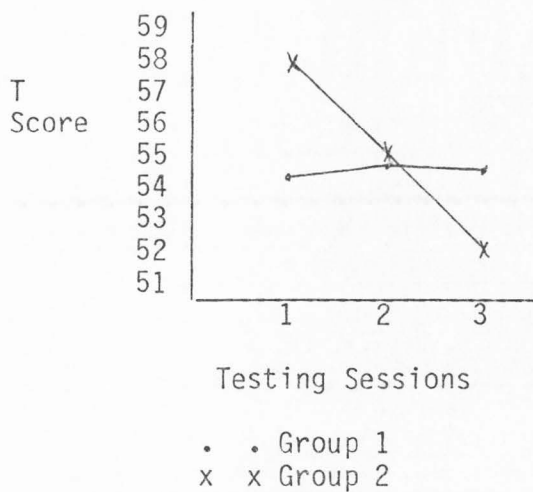


Figure 37. Interaction effect for the SI scale of the Minnesota Multiphasic Personality Inventory.

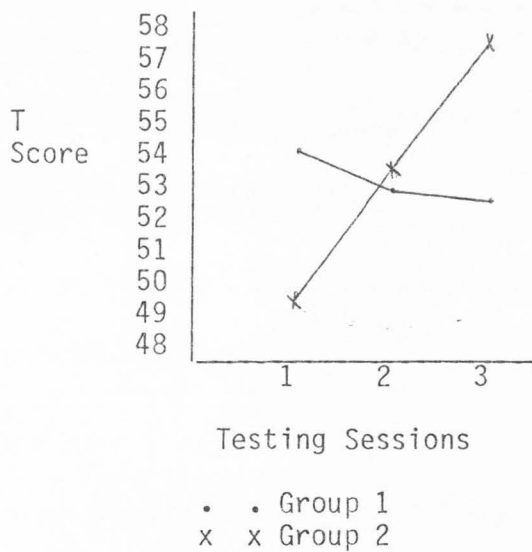


Figure 38. Interaction effect for the ES scale of the Minnesota Multiphasic Personality Inventory.

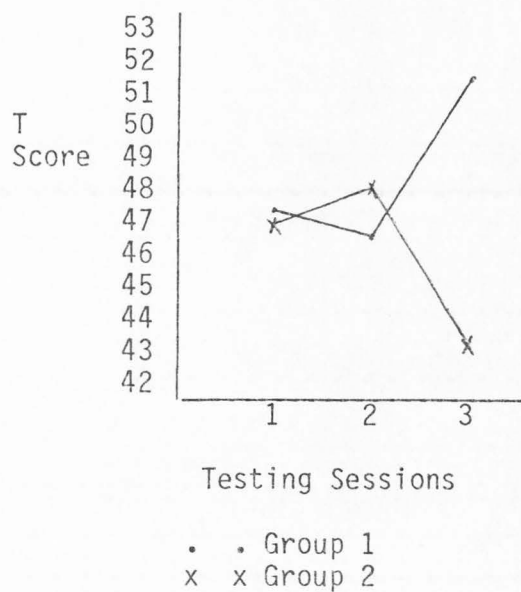
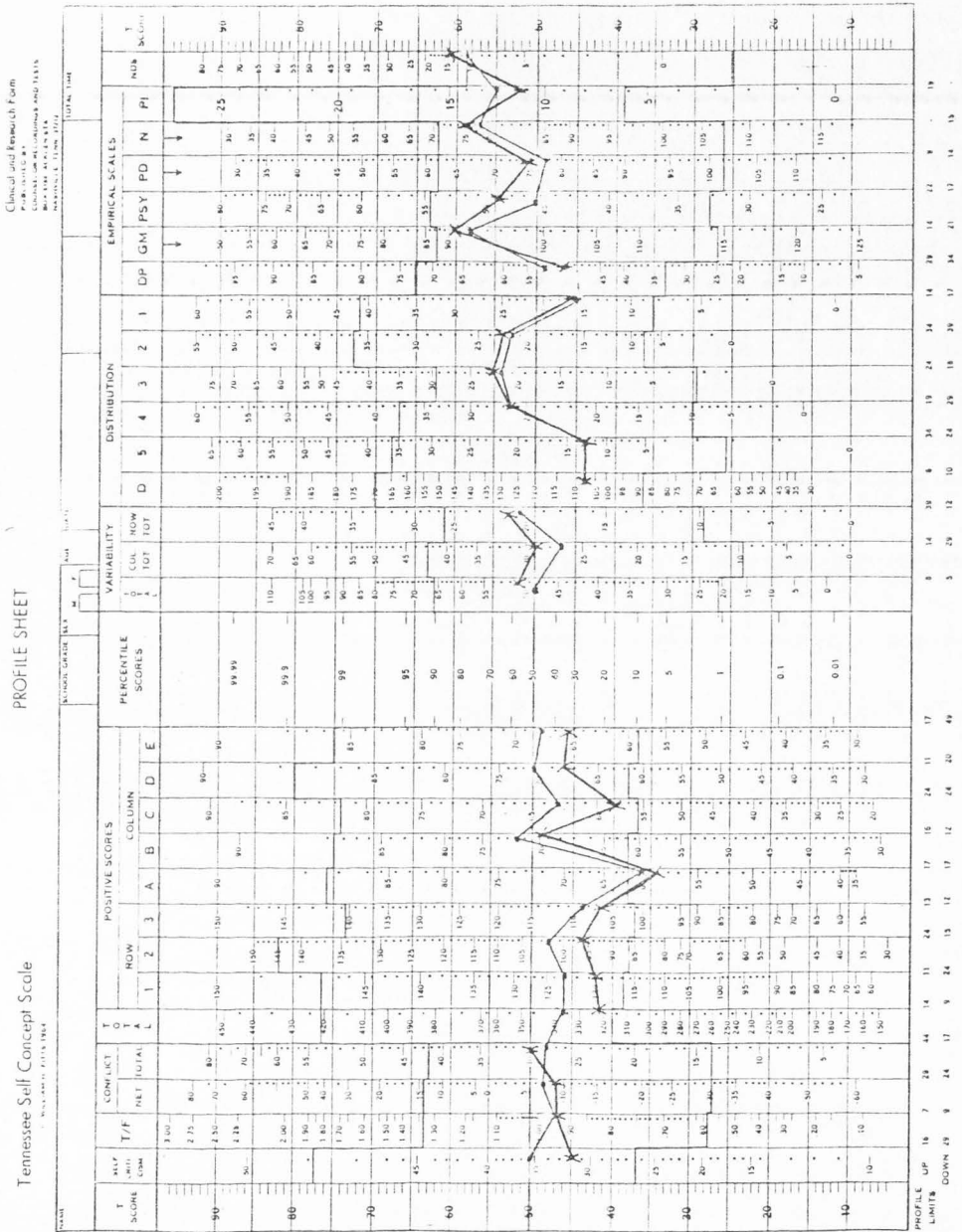


Figure 39. Interaction effect for the CN scale of the Minnesota Multiphasic Personality Inventory.



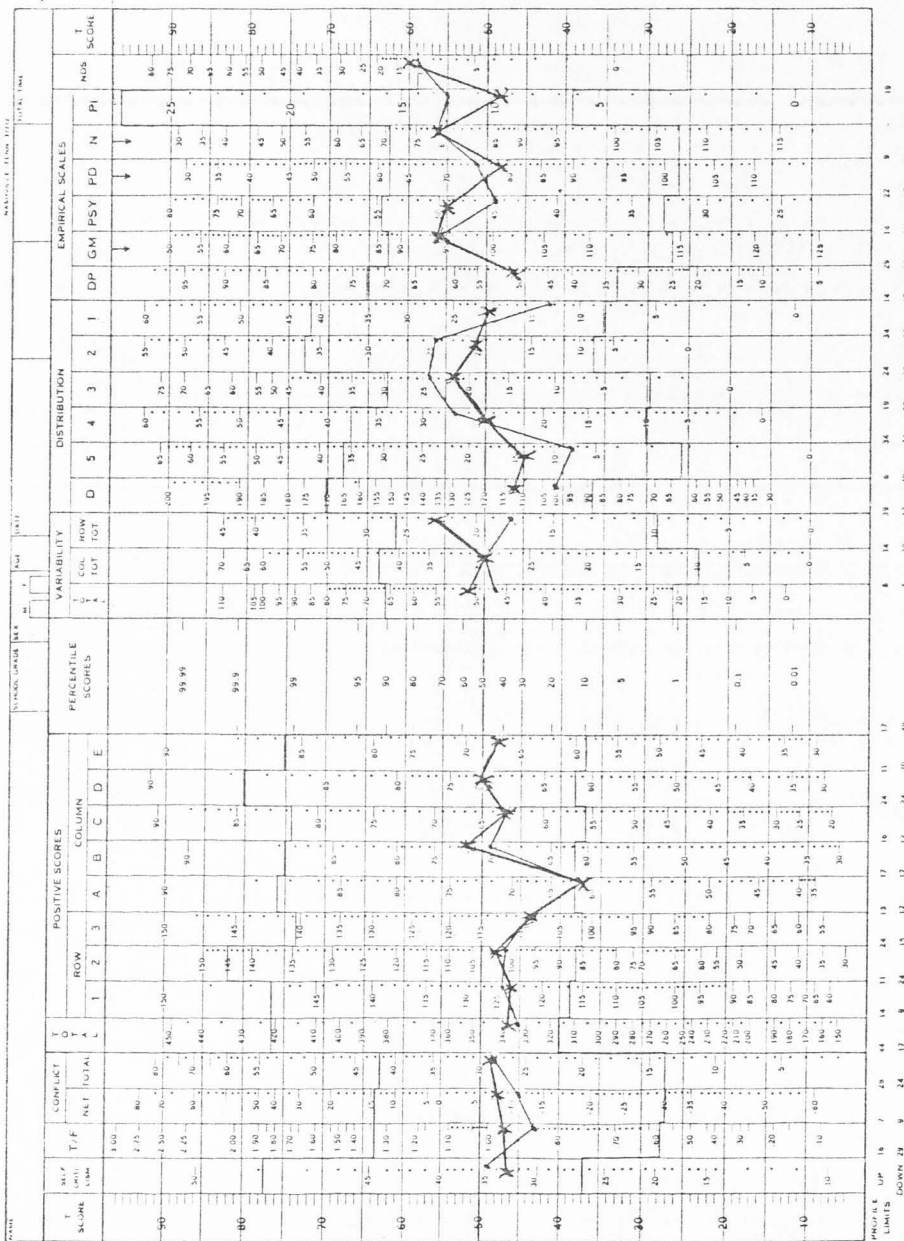
- Group 1
- x- Group 2

Figure 40. Group 1 and Group 2 mean scale scores pretesting.

Tennessee Self Concept Scale
REVISED BY JAMES M. COLEMAN, JR. AND MARY M. COLEMAN, JR. BOSTON, MASSACHUSETTS, 1964

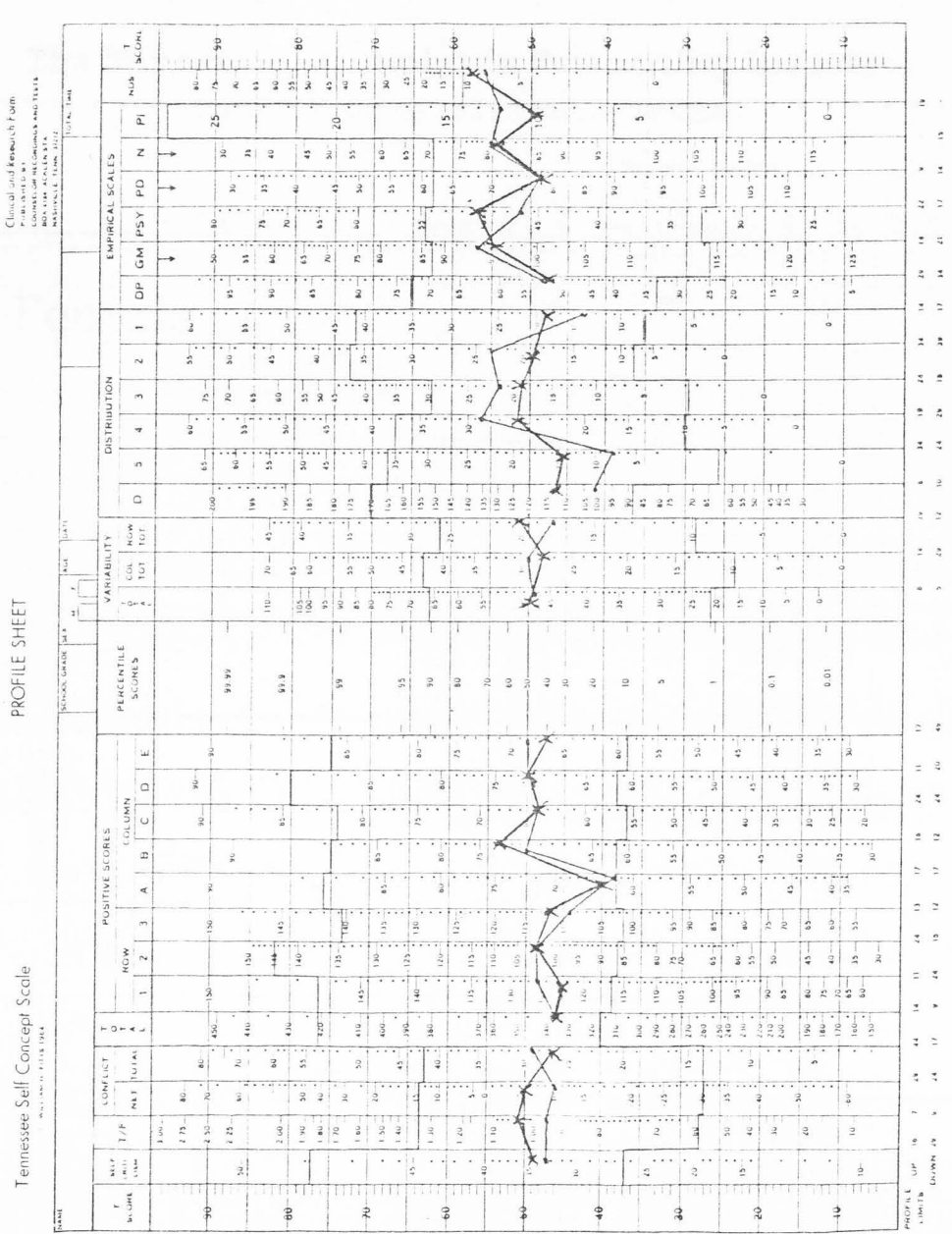
PROFILE SHEET

Clinical and Research Form
REVISED BY JAMES M. COLEMAN, JR. AND MARY M. COLEMAN, JR. BOSTON, MASSACHUSETTS, 1964



— Group 1
 x—x Group 2

Figure 41. Group 1 and Group 2 mean scale scores posttesting.



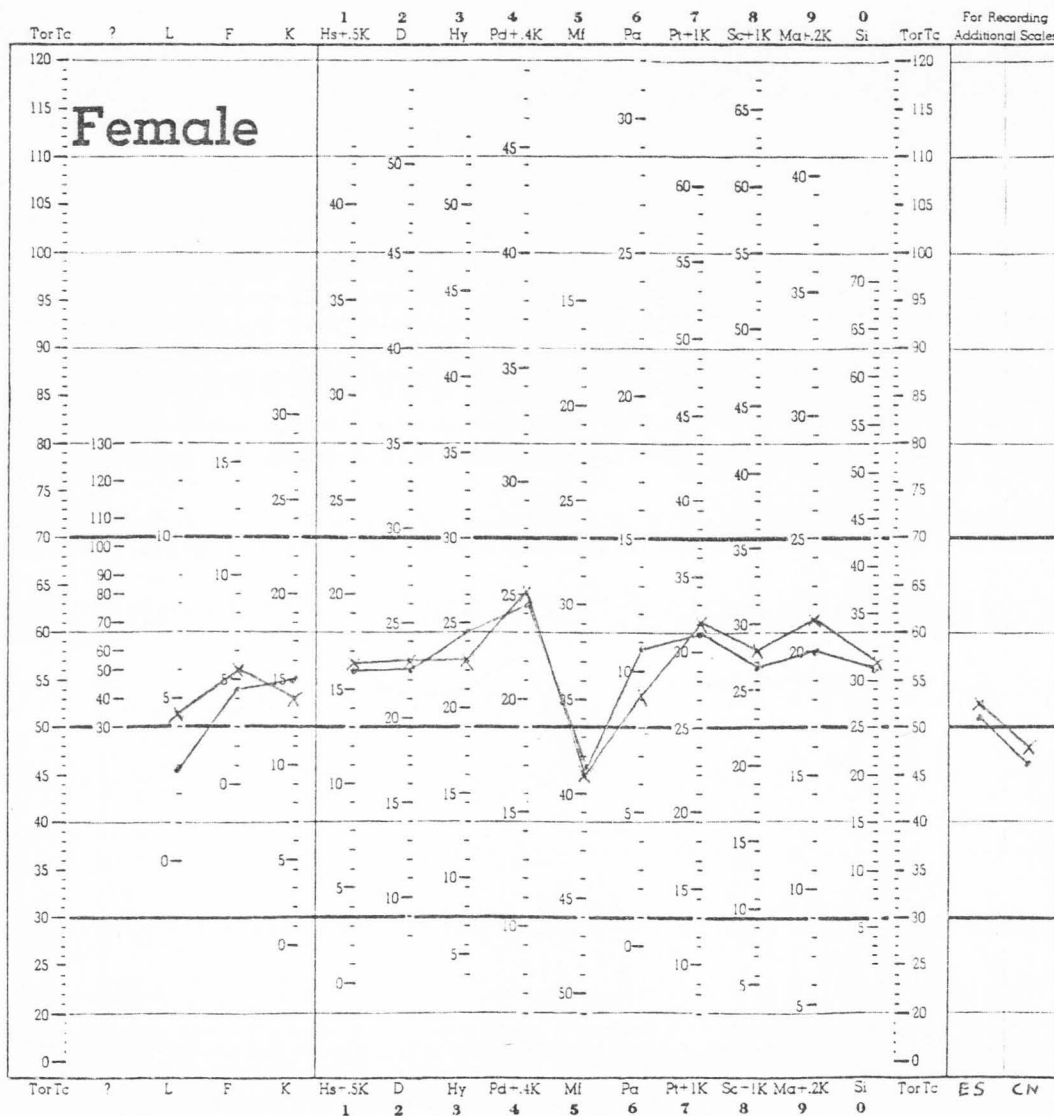
— Group 1
x-x Group 2

Figure 42. Group 1 and Group 2 mean scale scores follow-up testing.

The Minnesota Multiphasic Personality Inventory

Starke R. Hathaway and J. Charnley McKinley

Scorer's Initials _____



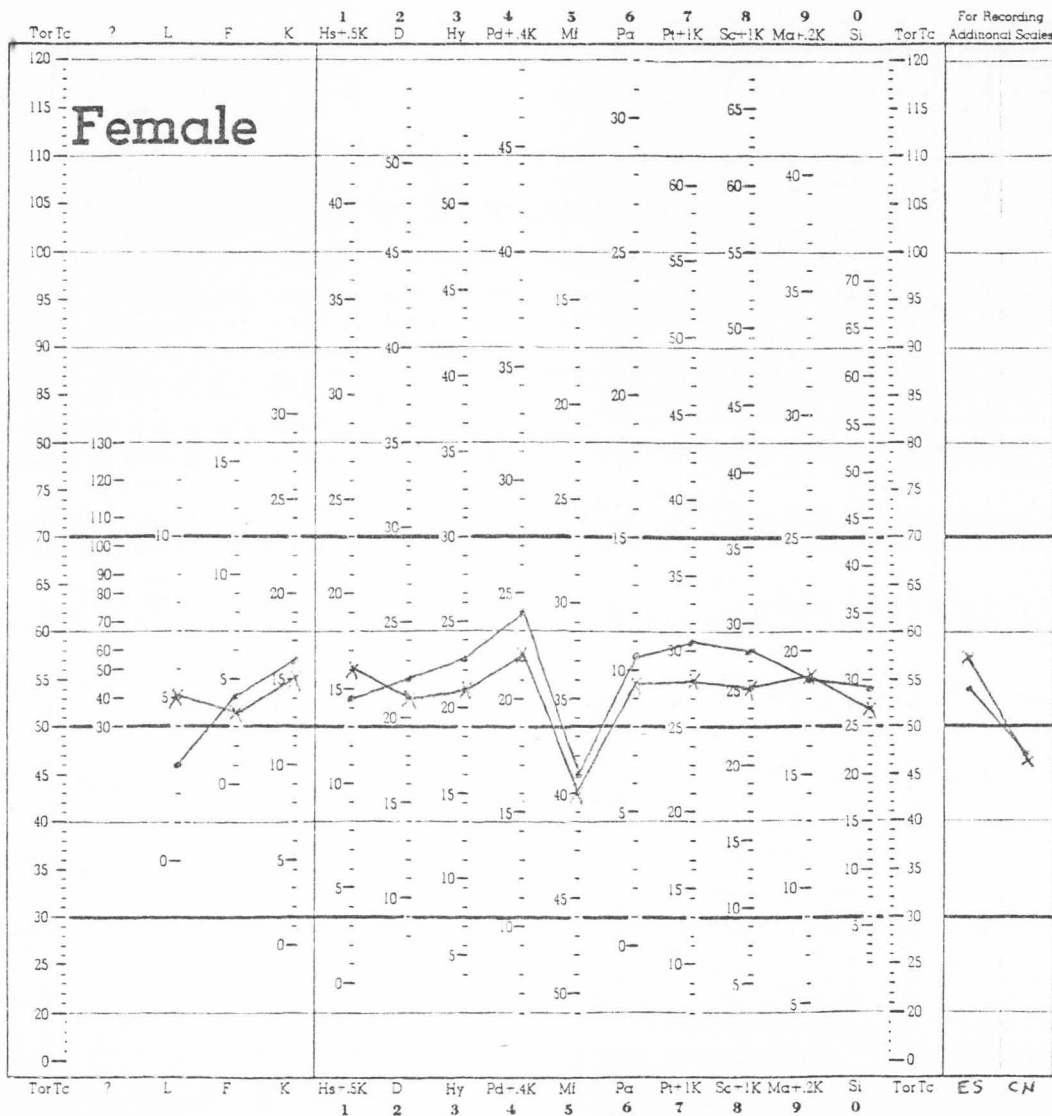
—•— Group 1
 -x- Group 2

Figure 43. Group 1 and Group 2 mean scale scores pretesting.

The Minnesota Multiphasic Personality Inventory

Starke R. Hathaway and J. Charnley McKinley

Scorer's Initials _____



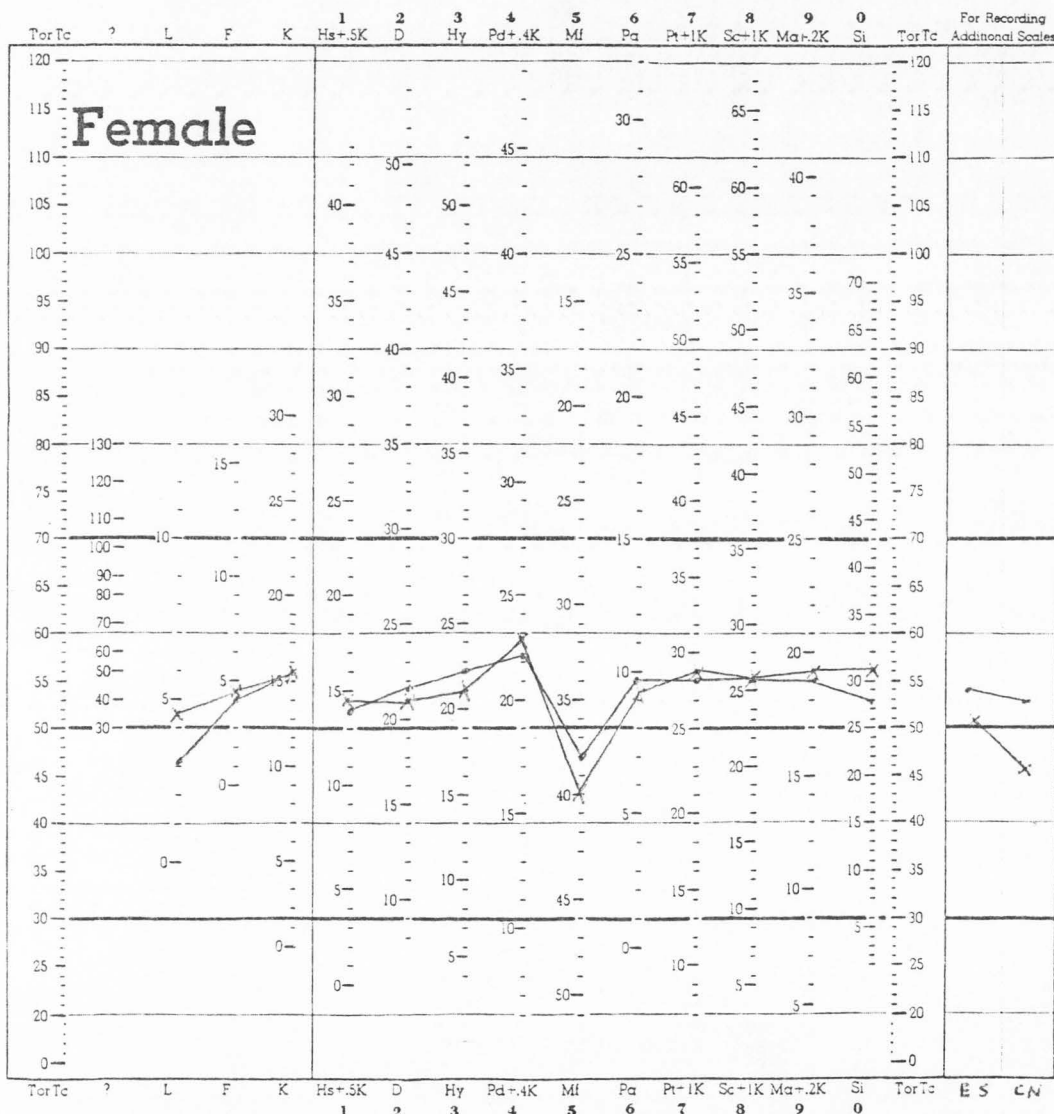
—●— Group 1
-x- Group 2

Figure 44. Group 1 and Group 2 mean scale scores posttesting.

The Minnesota Multiphasic Personality Inventory

Starke R. Hathaway and J. Charnley McKinley

Scorer's Initials _____



—○— Group 1
 -x- Group 2

Figure 45. Group 1 and Group 2 mean scale scores follow-up testing.

VITA

Richard A. Hutchison

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Doctor of Philosophy

Dissertation: Ego Strengthening Hypnotic Suggestions Versus Specific Hypnotic Suggestions in the Treatment of Obesity

Major Field: Psychology

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Education: Attended elementary school in Bettendorf, Iowa, graduated from Bettendorf High in 1963, received the Bachelor of Science degree from Iowa State University, Ames, Iowa with a major in Psychology in 1967; 1969 completed the requirements for the Master of Science degree at Iowa for the Doctor of Philosophy degree at Utah State University, with a major in Psychology.

Professional Experience: 1968-69, Psychology instructor at Bemidji State College, Bemidji, Minnesota; 1969-75, Psychologist at the Faribault State Hospital, Faribault, Minnesota; 1975-77, Outpatient coordinator at the South Central Community Mental Health Center, Hastings, Nebraska; 1977-80, Psychology intern at the Bear River Community Mental Health Center, Logan, Utah; 1980-81, School psychologist for the Logan School System, Logan, Utah.