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A PROGRAM OF SELF-ADVOCACY AND SOCIAL SUPPORT FOR DIABETIC PEOPLE

By

Thereasa A. Cronan

A DISSERTATION

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ABSTRACT

A PROGRAM OF SELF-ADVOCACY AND SOCIAL SUPPORT FOR DIABETIC PEOPLE

By

Thereasa A. Cronan

The purpose of the present study was to compare the efficacy of two interventions for people with diabetes. The first intervention taught self-advocacy and social networking. The second program provided the same information; however, the information was presented in a manual. People who had received some educational instruction about diabetes were eligible to participate in the study. They were randomly assigned to one of the two conditions. All subjects participated in assessments at their entry into the study (pre-assessment), at the end of the intervention (post assessment), and approximately three months later (follow-up).

The outcome measures included body weights, glyco-hemoglobin assays, blood pressure, health beliefs, amount of reported compliance in following medication, diet, exercise regimes, general health practices, assertiveness or general advocacy, health locus of control, cohesiveness, and satisfaction with the program.

Both comparative and associative analyses were performed on the data from the three groups (two experimental groups and the manual group). The results from the comparative analyses revealed no significant differences between groups or over time for body weights, health beliefs, reported compliance in medication, diet, exercise, general health practices, or health locus of control. Significant differences were found for glyco-hemoglobin levels, blood pressure, cohesiveness, and satisfaction with the program. Glyco-hemoglobin levels increased over time for both the experimental groups and the manual group. Blood pressure decreased for the three groups by the follow-up assessment. People in the experimental groups were more cohesive than people assigned to the manual group. People in one of the experimental groups rated the program lower than the people in the other experimental group or people in the manual condition.

The associative analysis (cluster analysis) indicated that people who scored high on the specific advocacy dimension more often had a medication change between the post and follow-up assessments. The general advocacy dimension was not related to any measures of behavior change. These findings support the need for focused and specific training in advocacy.

The O-Types analysis identified ten O-Types. Only two of the types consisted of over six people; because of this only these two types were used in the additional comparisons. The first O-Type contained ten people, five males and five females; all were from the manual condition. Half of them had juvenile onset diabetes. These people scored high-average on the blood and physical condition clusters, and very low on the cohesiveness cluster (necessarily, since they were in the manual group). Nine people made up the second O-Type. All of them were from the experimental groups; four of the nine people were females. These people scored lower on the blood cluster, lower on the physical condition cluster, and higher on the cohesiveness cluster than the people who made up the first type.

The experimental hypotheses may have received minimal verification because of weaknesses in the measures of the dependent variables, in experimental manipulations, or in the specificity of the training. Arguments are presented for the latter interpretation. Future research should include more specific interventions, and early and frequent consultation with subjects in helping to decide on what goals should be pursued, and how success in reaching those goals should be measured.

TO AL HILLIX

MY PARTNER IN LIFE

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INTRODUCTION

Definition

The word "diabetes" comes from the Greek. It means "to run through a siphon." Mellitus is a Latin word which means honey. According to Surwit, Feinglos, and Scovern (1983), the word was first used in 200 CE. No doubt it was easy to detect by a rough kind of urinanalysis (taste), since the high level of glucose in the blood results in the excretion of sugar in the urine.

Physiology

In order to understand the behaviors required of diabetics, and the information available to guide that behavior, it is necessary to understand the basic physiological events of diabetes and how those events are controlled and monitored.

Insulin's Relationship to Diabetes

Diabetes is related to the function of the pancreas, a 3-4 inch gland located behind the stomach. Insulin is a hormone produced by the pancreas. It is the key that opens the cells for the entry of glucose,

which then nourishes the cell and furnishes it with energy.

In diabetes the body is unable to use glucose normally. Sometimes the body makes either too little insulin for its needs, or too much. In other cases the body makes sufficient, but ineffective, insulin. Unused glucose remains in the bloodstream, and some of the excess is eventually passed by the kidneys and eliminated with the urine. This process is often referred to as "spilling sugar," and gives diabetes its name. When glucose cannot be used properly, fat cells start breaking down to be used for energy by the body. The by-products of this fat breakdown are called ketones. Acetone is the most abundant ketone. Ketones are poisons made when the body cells burn fat for energy. This occurs when there is not enough insulin, and the resulting condition is referred to as ketoacidosis.

Hyperglycemia and Hypoglycemia

People are considered to be within the normal range if their blood glucose level is within the 70-160 mg range. Two conditions can result when insulin is not produced or used by the body. One is hyperglycemia, which is a high level of blood glucose (160 or over). Hyperglycemia may result in ketoacidosis, which is also

called diabetic acidosis, and may result in a diabetic coma. This occurs when insulin decreases to a very low level, and glucose cannot be used for energy by the cells. Thus hyperglycemia may produce ketoacidosis via the substitution of fat for sugar as an energy source.

Ketoacidosis is more likely to occur when a diabetic eats too much, doesn't take enough insulin (or forgets to take it), is less active but eats the same amount of food, or experiences too much stress. Ketoacidosis is relatively rare in a non-insulin-dependent diabetic.

Another type of hyperglycemia is nonketotic hyperosmolar hyperglycemia. This usually occurs in persons over the age of 50 who have mild, non-insulin-dependent diabetes. More than half of the diabetics who develop this complication do so following another disease or event such as heart attack, stroke or burn. This happens because there is enough insulin present to prevent fat breakdown, but not enough to control sugar.

The second general condition that diabetics may have is hypoglycemia. This is low blood glucose (70 or below). It is also referred to as hypoglycemic reaction, insulin reaction, or insulin shock. Low blood glucose levels can occur if a diabetic eats too little

food or delays a meal, takes too much insulin or oral medication for his or her body's needs, or increases physical activity without increasing food intake or insulin dose.

Diagnosis

There are several glucose tests used for detecting and treating diabetes. They include urinanalysis, a simple blood-glucose test, the fasting blood-glucose, two-hour post-prandial glucose tolerance test, and hemoglobin Alc (glyco-hemoglobin). These tests are important for practitioners of behavioral medicine to understand, in part because the patient must use a test to monitor his or her own condition. The urine test, although only an indirect measure of blood glucose, is usually preferred by patients because it is painless and relatively simple. Unfortunately, the more complex and difficult the test of blood sugar level, the more reliable it tends to be.

A simple blood-glucose is a determination of a patient's blood sugar. It is often identified by the timing of its administration. This test provides immediate feedback on the current level of glucose in the bloodstream. A fasting blood glucose measures blood sugar after a period of fasting (usually overnight, with the test before breakfast). A two hour post-prandial

test is taken two hours after breakfast or a meal. If any of these test results deviate grossly from normal (elevated), they may be used by a physician, along with a patient's medical history and symptoms, in making a diagnosis of diabetes.

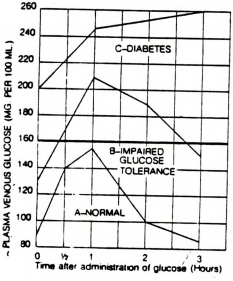
In a known diabetic patient a blood-glucose provides the doctor or patient with information on the effectiveness of short-term therapy (whether type, amount or timing of administration of insulin or other diabetic medication needs to be altered). If a blood-glucose is done while a patient is experiencing symptoms of hypoglycemia (low blood sugar), an objective evaluation cannot be made (symptoms of hypoglycemia and hyperglycemia are similar and may be confused).

A glucose tolerance test consists of measures of blood glucose made at several intervals: fasting, 1/2 hour and 1, 2, or 3, hours after the patient drinks or is given a shot of glucose (the dose is determined by the patient's height and weight). This test is given to people with a family history of diabetes, to pregnant women, and to people suspected of having functional hypoglycemia. Cooper (1980) reported that the glucose tolerance test is especially useful in gestational diabetes, so that if the results are abnormal appropriate treatment may be instituted. Figure 1 shows

responses to a glucose tolerance test by three individuals: one normal, one with impaired glucose tolerance, and another with diabetes.

A relatively new test, the glyco-hemoglobin assay, measures a type of hemoglobin found in the red blood cells. In poorly controlled diabetes the amount of glyco-hemoglobin present may be two to three times normal. The test results reflect the average blood sugar level over an extended period of time (approximately 2-3 months before the test). A major advantage of this test is that it is only slightly and slowly affected by recent diet, exercise, or recently administered insulin or oral medications (these factors influence a regular blood-glucose test dramatically). Thus the glyco-hemoglobin test results allow for a long-term evaluation of therapy, but are useless as measures of current blood sugar level.

In summary, the blood glucose, fasting blood sugar, and post-prandial tests are used in making a diagnosis of diabetes and in evaluating short-term therapy. The glucose tolerance test is often used to detect impaired glucose tolerance and diabetes which develops during pregnancy. The glyco-hemoglobin assay reflects blood sugar levels over an extended period of time. The relatively simple and painless urinanalysis test,



The three people represented on this graph each had 100 grams of glucose administered by mouth. One person (A-Normal) is nondiabetic. One person (B-IGT) has impaired glucose tolerance. And the other person (C-DM) is diabetic, either insulin-dependent or non-insulin-dependent. You can see that the nondiabetic's body has removed most of the glucose from circulation within two hours. In the diabetic, whose glucose levels were already too high, the glucose level shot even higher than at first, and three hours later, the levels had not yet begun to drop. The person with impaired glucose tolerance has a curve similar to that of the nondiabetic, except that it is somewhat higher. Also, at the end of two hours, this person's glucose level had dropped only slightly, whereas the nondiabetic's blood-glucose level had returned to normal.

Figure 1. Blood Glucose Tolerance Test Results.

although it is subject to error, is usually used by patients to monitor their own condition. A simple, painless, reliable, valid, and inexpensive test would be a boon both to diabetics and to their physicians (financial considerations aside, in the case of the physicians).

Types of Diabetes

There are two basic types of diabetes mellitus, not very informatively named Type I and Type II. Type I and Type II diabetics are differentiated on the basis of insulin dependence. Type I diabetics need to take insulin in order to survive, and hence are referred to as insulin-dependent diabetics. Type II diabetics are referred to as insulin independent, because they do not need insulin to survive. Type I diabetics are also referred to as juvenile diabetics, and they account for 15% to 20% of the diabetic population. They usually are diagnosed as children who make very little insulin, although a person may be diagnosed as a Type I diabetic at any age. Most Type I diabetics are thin.

In Western societies, 60 to 90 percent of non-insulin-dependent diabetic patients are obese (National Diabetes Data Group, 1979). This is significantly more than in the general adult population; the United States Public Health Service estimates that

25-45% of the American population over the age of 30 is more than 20% overweight. Typically people who are heavy have plenty of insulin; in fact they have more than they need. It just doesn't work. Type II diabetics usually become diabetic between the ages of 30 and 50. New evidence (Speckart, personal communication) suggests that insulin works by fitting into receptor sites on cells and "firing" them. Each cell has hundreds of receptors, and under certain conditions receptors close down. The evidence suggests that exercise and body weight can affect the number of receptors. Infections decrease the number of insulin receptors.

In some Type II diabetics, their own antibodies attack their insulin receptor sites. Like, et al., (1982) found that performing thymectomies reduced the frequency of spontaneous diabetes mellitus in selected rats from 27% to 3 %. Incomplete thymectomies reduced diabetes to 9%. Since the thymus produces antibody cells, these findings are consistent with the hypothesis that Type II diabetes is caused by a defect in the autoimmune system. They also account for the relationship between infection and receptor site decrease, since more antibodies are produced to combat infections, and these antibodies might attack receptor

sites. An immediate implication of this finding is that an important goal of behavioral interventions should be to teach the diabetic to avoid and control infections. In the long run, Type II diabetes may be curable through making specific antibodies to attack the antibodies attacking the insulin receptor sites, using hybridoma techniques.

Incidence

Diabetes Mellitus and its complications are the third leading cause of death in the United States, after heart disease and cancer. Classical diabetes occurs in 3-5% of all adults, or nearly one in twenty in the general population. Diabetes is a chronic condition that can be controlled, but not cured, at the present time.

Surwit, Feinglos, and Scovern (1983) attribute 300,000 deaths per year to diabetes, and estimate that there are one million insulin-dependent diabetics, four million non-insulin-dependent diabetics, and five million undiagnosed diabetics.

Complications of Diabetes

Complications arise when blood glucose is not controlled. These complications shorten 80% of diabetics' life spans. Diabetics are 25 times as likely to be blind, 20 times as likely to have gangrene, 17

times as likely to have kidney disease, and twice as likely to have heart disease or stroke, as the normal population (Davidson, 1981). Although the complications of diabetes are severe, they are slow to appear. Thus the diabetic may not see clearly the link between his or her own behavior and its disastrous consequences. Bringing about behavioral changes in diabetics has something in common with producing changes in smokers, obese persons, and alcoholics. In all these cases, the undesirable behaviors have immediate payoffs, while the payoffs for desirable behaviors are remote and intangible.

Eye Problems

Diabetes is the major cause of blindness in the world. High blood sugar causes the vision to be blurred. Sugar accumulates in the lens, and diabetics have an early appearance of cataracts. Changes in the retina also occur because the vessels weaken and hemorrhaging may occur. If hemorrhaging does occur, a whole section may lose sight when the retina is damaged.

Circulatory Problems

Diabetics are at a greater risk of heart disease and hypertension. Adults with diabetes have a greater chance of developing nerve problems and poor circulation

in their lower legs and feet. Poor circulation and increased glucose (sugar) in the tissues also increase the possibility of infection and slow down the healing process. Atherosclerosis (hardening of the arteries) is a major cause of heart disease and poor circulation in the legs. Although this condition occurs more frequently in diabetics than in non-diabetics, scientists are unsure why. Gonen et al. (1982) discovered that glucose attaches to low-density lipoprotein (LDL), which carries cholesterol through the blood, and that the cholesterol in glucose-laden LDL was not efficiently used by body cells. They suggest that this may cause cholesterol levels in the blood to increase dangerously and lead to complications.

Panzram and Zabel-Langhenning (1981) gathered the records of all newly-diagnosed diabetics who had been registered in the Erfurt district in 1966. They studied this population for a ten year period. Out of 2560 diabetics, 1054 had died during the 10-year follow-up period. Cardiovascular causes accounted for 63% of the deaths. Excess mortality was present in most age classes and was evident within the first year after diagnosis.

Kidney Disease

Diabetics are prone to kidney disease. Kidney

diseases usually develop over a period of years, and are more common in Type I diabetics than in Type II diabetics. Kidney disease in a diabetic is characterized by progressive thickening of the glomerular and tubular basement membranes. The function of the glomeruli is to separate waste materials from the blood. These waste materials are passed out as urine. When the membranes of the glomeruli are thickened, the filtering function is impaired. Studies have indicated that diabetics tend to have higher concentrations of albumin in their kidneys (Michael and Brown, 1981). Why diabetics are more prone to kidney diseases, and whether or not there is an interaction of albumin and glucose, is not known at the present time.

Nerve Changes

Nerve problems may decrease a diabetic's ability to feel pain from blisters, bad fitting shoes, small cuts, or splinters. If the injury goes unnoticed, a serious infection or ulcer can occur. Gangrene may follow (Crofford, 1976), and for this and other reasons amputations are 20 times more frequent in diabetics than in the general population.

Effects on Pregnancy

Out of 100 pregnant insulin-requiring, Type I, diabetics, 40 will have a miscarriage, as compared with

4% for the normal population. Out of 100 diabetic women that carry the full term, 15-20% can expect to have dead babies, and 40% of those left will have babies with some disease (Speckart, personal communication). Although this evidence seems very frightening, with very strict monitoring of diet and control of her diabetes, 90-95% of pregnant diabetic women can go home with healthy babies.

Correlates of Diabetes

Although the exact cause(s) of diabetes are not known, there are several factors that are known to be correlated with the development of diabetes. A knowledge of these correlates helps the medical psychologist to describe the population of interest, and thus to tailor behavioral interventions to the population of interest. For example, it will become apparent that a majority of diabetics are female and above the population median in age.

Heredity

The incidence of diabetes is higher if other family members have diabetes. The closer the genetic relationship, the more likely it is that the relative of the diabetic will also have diabetes; this is as it should be if heredity plays a part in diabetes.

Barnett et al. (1981) studied 53 pairs of

non-insulin-dependent diabetic (NIDD) twins. The twins were recruited from a variety of sources, some from the authors' own clinic, some from other physicians and hospitals, and some through advertisements on radio and television. They found that in 48 pairs both twins developed diabetes, and the interval between diagnosis in NIDD co-twins was short. In 35 of the 48 pairs (73%) the second twin became diabetic within five years of the first. Of the remaining 13 pairs, 11 pairs had both developed diabetes within ten years, and the remaining two pairs became concordant 11 and 12 years after the diagnosis in the first twin. In the five cases remaining from the original 53, the affected twin had been diagnosed only within the last three years, and all of the remaining twins showed early metabolic changes characteristic of diabetes.

Other observations that could indicate a hereditary component are: women are twice as likely as men to have Type II diabetes, and in one particular group of females (Pima Indians over 40), the incidence of diabetes is 50% (Bennett, 1982). Of course none of these observations demonstrate conclusively that heredity is the dominant factor in diabetes, since environmental differences are confounded with hereditary differences in every case. It does seem likely that genetic factors are important,

but it is also certain that environment is important, as we see in the case of obesity.

Obesity

As mentioned previously, 60 to 90 percent of non-insulin-dependent diabetic patients are obese (National Diabetes Data Group, 1979). Obesity causes continuous stress to the body because of the increased demand on the pancreas to produce more insulin.

Age

Most new cases of Type I diabetes occur before the age of 20 (Kaplan and Atkins, 1985). For Type II diabetes, the proportion of new cases, as identified in population surveys, increases with age for both adult men and women (Barett-Connor, 1980).

Sex

After age 45, diabetes occurs twice as often in women. In a recently reported study (Kissebah, 1982), women between 20 and 40 years old were tested for cases of diabetes that had not been previously diagnosed. It was found that obese women whose fat was concentrated on the upper body were 30 times likelier than other women to have undiagnosed diabetes. Obesity from the waist up tends to involve enlarged individual fat cells; these enlarged cells are less able to process glucose, so diabetes is more likely. Obesity below the waist is

typically caused by too many regular-sized fat cells. Type of obesity, like diabetes itself, may be related both to heredity and to environment. It is thought that overeating while young leads to an increased number of fat cells, while overeating later leads to the enlargement of individual cells.

Stress

Increasing evidence (Sanders, Mills, Mattin and De La Horne, 1975; Grant, Kyle, Teichman and Menchels, 1974) indicates that lingering stress may cause or worsen the development of many illnesses; included in these illnesses is diabetes (Danowski, 1963). This is of great interest in the present context because stress is presumably amenable to reduction through behavioral manipulations. Physical stress ranging from illness, such as a heart attack, through drugs such as steroids, to pregnancy may cause a temporary state of diabetes. When the stresses are removed, these individuals recover their normal glucose tolerance, but are subject to the same dangers of hyperglycemia and hypoglycemia as chronic diabetics during their diabetic episodes.

Grant, Kyle, Teichman, and Mendels (1974) investigated whether or not a relationship could be demonstrated between life events - many of which are stressful - and the course of illness in a group of

diabetic patients. Patients filled out Schedules of Recent Events so that an evaluation of both positive and negative life changes could be made. Scores on this schedule were correlated with a "Global Rating" of the patients' physical well-beings. There was no significant overall correlation between life events and well-being; however, 26 of 37 individual correlations were positive, and 24 individuals had positive correlations between negative life events and their diabetic condition.

Unfortunately, the study was beset with methodological and statistical errors, so it provides only the weakest of support for the contention that stressful life events correlate directly with diabetic condition. It is possible that a subjective evaluation of the degree to which the diabetic is stressed would correlate better with condition. There is, in any case, adequate reason to believe that stress and diabetes are related, and more of this evidence will be presented later.

Benefits of Compliance

A major study begun in the early 60's helped to increase interest in behavioral manipulations for diabetic patients. The study was conducted by the University Group Diabetes Project from 1961 to 1971. The study involved 823 patients in twelve clinical

centers. They were instructed in a diet intended to achieve or to maintain normal body weight. Then they were randomly assigned to one of four groups. Two groups received insulin, one on a regular dosage schedule and one on a variable dosage schedule. Another group received tolbutamide, and yet another group received a placebo that they believed was an oral medication. Patients were monitored for eight years and 10 months. Then the life-death status of 818 of the original patients was determined. The results indicated that patients that received tolbutamide had a higher probability of dying due to cardiovascular diseases than the control group. The groups receiving insulin did not differ from the control group. The authors concluded that tolbutamide and diet were less effective in controlling Type II diabetes than was diet alone (plus placebo pills).

The UGDP has been criticized for several reasons. The main criticisms have centered on the clinical design and the statistical analyses. Feinstein (1979) has pointed out that 95 of the patients in the study did not fulfill the minimum standards of glucose intolerance that had been established as a diagnostic criterion for diabetes mellitus. These patients were included because of poor communication between the collaborators in the

study.

Some investigators have charged that the randomization failed to allocate to the treatment groups patients who were generally comparable with respect to baseline risk factors. This criticism seems justified, since the excess mortality was confined to only a few of the twelve clinics. In defense of the UGDP, the Biometric Society upheld the statistical analyses of the original UGDP report, and rejected a number of widely publicized arguments against its conclusions (Sussman and Metz, 1975). Although this study was controversial, it has inspired the reexamination of methods of controlling diabetes. At the very least, it provides evidence that behavioral manipulations alone are often no worse than medication (in this case, tolbutamide).

Components of Medical Regimes

Diet

Since 1970, poor dietary habits and lowered physical activity are often cited as contributory to maturity-onset diabetes. It is possible that social behaviors and habits are partially responsible for an increased incidence of diabetes (Saltin et al. 1979). A ten-year follow-up study recently published reports that people with impaired glucose tolerance can prevent diabetes with tolbutamide and diet regulation. Sartor et

al. (1980) assigned 267 men who had impaired tolerance to oral glucose, but did not have manifest diabetes, to one of five groups. One group received diet regulation and 0.5g tolbutamide, another group received diet regulation and one placebo tablet. The third group received diet regulation only, and the fourth group received no treatment. These four groups all received an annual oral glucose tolerance test (OGTT). The fifth group did not receive any treatment; only a pre- and post- (after ten years) OGTT were taken . At the ten year follow-up, 29% of those without diet regulation and medication had developed diabetes. Of those that received diet regulation, but without active medication, 13% had diabetes. None of the men that received tolbutamide and diet regulation had developed diabetes. Further, no individual with initially normal OGTT developed either diabetes or an abnormal OGTT. Sartor et al. suggest that people with impaired glucose tolerance may be prevented from, or may postpone, developing diabetes by treatment with the combination of diet regulation and tolbutamide. While the results of this study are impressive, they do not by themselves tell us whether or not the tolbutamide alone can produce the results, since there was no group that received tolbutamide alone. Sartor's results are thus somewhat

at odds with the findings of the UGDP study discussed above, in which the evidence seemed to indicate that tolbutamide was not helpful to diabetics. Perhaps it helps to prevent diabetes, but does little once the disease has developed.

Other research has focused on changing and varying the eating habits of diabetics. Fibre has been found to improve carbohydrate tolerance, which is an important factor to be considered in the dietary management of non-insulin-dependent diabetics. One such study (Kay et al., 1981) examined the influence of low and high fibre diets on carbohydrate tolerance in five maturity-onset, non-insulin-dependent diabetics. Subjects were put on a diet rich in natural fibre for a 14-day period, and then they were put on a low fibre diet for 14 days. The results indicated that subjects' carbohydrate tolerance improved when they were put on the diet rich in natural fibre.

De Bont et al. (1981) were interested in comparing the effects of low-fat diets in the management of diabetic women to the effects of conventional low carbohydrate, high fat, diets. They found that patients in the low-fat group had reduced their fat intake from 41% to 31% of total energy, while the carbohydrate percentage of total energy intake increased from 38% to

46%. Body weight fell for all groups. Mean plasma total cholesterol fell in the low-fat group compared with the controls. Adherence to the low-fat diets occurred without any worsening of the diabetes and with benefit for weight and total cholesterol.

It should also be noted that methods found useful in bringing about weight loss in a general obese population would also be applicable to diabetics, since the problems with weight control in the two cases are very similar. Diabetics would be expected to have somewhat more motivation to lose weight.

Exercise

As mentioned earlier, physical activity has been found to augment insulin sensitivity associated with enhanced insulin binding to receptors (Cahill, 1971). For these reasons, many studies have attempted to increase the amount of exercise a diabetic receives. Since approximately 60 to 90% of non-insulin-dependent diabetics are obese when they are diagnosed, it is obvious why compliance to exercise programs is essential. Most studies that have attempted to increase the amount of exercise a diabetic receives have also included diet as part of the manipulation. Since most diabetics are obese, the goal has been to achieve and/or maintain ideal body weight through both diet and

exercise.

Some researchers have investigated whether blood glucose levels improve more when information is given on diet, exercise or both. The question is whether it is more important to stress diet or exercise, or whether they are both equally important. Saltin et al. (1979) randomly assigned men between the ages of 47 and 49 that had had two consecutive pathological OGTTs to one of three groups. One group of men received dietary advice, one received physical training, and the other received physical training plus dietary advice. Improvement on the OGTT was greatest for the group receiving both physical training and dietary advice. However, the OGTTs improved for all three groups.

Physicians sometimes hand an exercise program to a patient and tell them that exercise is important and that they should follow the program. Rice (1981) felt that greater involvement and compliance could be achieved if priority were given to the clinical characteristics of the patient population when developing an exercise. She designed an exercise program emphasizing general flexibility, conditioning and toning activities, along with walking. She had diabetic patients participate in a six-part program: 1) exercise videotape; 2) illustrated take-home booklet; 3)

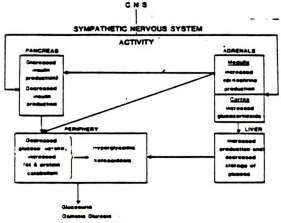
individual sessions with a dietitian; 4) individual goal contracting; 5) reinforcement phone calls; 6) post-program evaluation. Patients preferred the other exercises to walking, and believed that the program was beneficial. Sixty-five percent of the exercise goals were accomplished, and 95% of the patients continued exercise at the end of their programs. Hence both greater involvement and greater compliance were accomplished. While the results seem impressive, the dependent variables did not include glucose tolerance tests or other variables demonstrating that the exercise improved the diabetics' pathological condition.

Stress Reduction

Surwit, Feinglos, and Scovern (1983) emphasize the benefits of stress reduction for diabetics. Figure 2 reproduces their simplified model of the effects of the sympathetic nervous system on glucose metabolism. If stress overactivates the sympathetic nervous system, and is thus responsible for exacerbation of the diabetic condition, there is a priori reason to believe that stress reduction would help the diabetic.

A number of studies have indicated that this a priori promise can be realized empirically. Daniels (1939) reported that Bauch in 1935-1936 had used relaxation techniques to cut patients' exogenous insulin

Effects of Sympathetic Nervous System on Glucose Metabolism



Schematic diagram summarizing the major effects of the sympathetic nervous system (SNS) on glucose metabolism. The diagram oversimplifies the process involved in order to provide a general overview of how behavioral manipulation of the SNS can influence glucose metabolism in the normal and diabetic individual. It should be noted that the important contributions of the hypothalamic-pituitary axis and the parasympathetic nervous system have been omitted for the sake of simplicity. CNS = central nervous system.

Figure 2. Model of Effects of Sympathetic Nervous System on Glucose Metabolism.

requirements by 10 to 60 units. Several case studies have reported similar results, and Surwit and Feinglos (1983) showed in a controlled trial conducted in a hospital that six patients given progressive relaxation training improved their glucose tolerance, while six patients not given the training actually deteriorated during the same 9-day period.

Kaplan and Atkins (1985) point out that the apparently exciting Surwit and Feinglos results must be interpreted with caution. Despite random assignment of patients to treatment and control groups, it turned out that half of the treatment group had fasting plasma glucose values less than 140 mg/dl prior to the intervention. Only one control was below the 140 mg/dl criterion. Further, the treatment group had greater glucose-stimulated insulin secretion prior to treatment.

These results are useful as an indication of the possible promise of behavioral techniques with hospitalized diabetics, but relaxation techniques may not apply so well to the stresses encountered in the diabetic's everyday life outside the hospital. It will be suggested in a later section of this paper that techniques like assertiveness training may be more effective in helping patients to relieve everyday

stresses.

Good General Health Practices

It seems indisputable that the diabetic will benefit from following a program of good health habits. Because of the possible complications listed above, diabetics should be unusually conscientious about daily foot care, preventive mouth care, and protection and care of the skin. They should have adequate rest and avoid high stresses of all kinds. They should have regular examinations by doctors (eye doctors in particular) and dentists.

Medication

Even with good programs of diet and exercise, some diabetics will need medication; Type I diabetics all need exogenous insulin, and many Type II diabetics also take insulin and/or other medications. It is essential that medications be taken as prescribed.

The behavioral requirements for the insulin-dependent diabetic are quite stringent. Careful regulation of caloric intake and exercise in relation to insulin dosage is necessary in order to maintain the delicate balance between hyperglycemia and hypoglycemia (Karam, 1981).

Degree of Compliance to Medical Regimes

The proportion of patients who fail to adhere to

physicians' orders was estimated by Davis (1966) as ranging from 15 to 94%, and by Gillum and Barsky (1974) as ranging from 33% to 50%. Different studies have used different criteria for compliance, but it seems to be clear that the problem of noncompliance is a serious one. However, Davis reports that most doctors claimed that all of their patients complied. It seems that physicians are unrealistic in estimating the amount of compliance.

Perhaps because of its chronic nature and the long latency of its serious complications, conformity with diabetic regimens seems to be particularly poor. Watkins, Williams, Martin, Hogan, and Anderson (1967) said that 75% of diabetic patients fail to follow their diets, and that 45% perform urine tests incorrectly. Hulka, Cassel, Kupper, and Burdette (1976) found that 80% of those they studied made errors in insulin administration. Cerkoney and Hart (1980) reported that 33% of patients with insulin-dependent diabetes failed to conform to all aspects of their program.

Skyler (1981) points to serious problems with the very concept of compliance, which may account in part for the "unsatisfactory" degree of compliance observed. He says:

Compliance implies that a patient behaves according

> to a physician's prescription, regardless of the relevance, understanding, or practicality of that prescription. Rather, it seems that the patient, family, and health providers must negotiate an acceptable, pragmatic plan. The definition of such plans and the implementation of such negotiations seem worthy areas of study. The providers may need as much study and intervention as the patients (p. 657).

Factors Related to Compliance

Table 1, taken from Janis (1983), who adapted it from Kirscht and Rosenstock (1979), presents a very useful summary of the variables which are, or might be, related to compliance to medical regimes. Checking the nature of diabetes and the characteristics of the diabetic population against the relationships portrayed in this table helps us to see why compliance presents such a severe problem for diabetics.

On the negative side, we find every applicable factor under situational demands. That is, symptoms, which are positively related to conformity, are typically missing in the early stages of diabetes; remember that it is estimated that half of the diabetics in this country aren't even diagnosed! Factors which are negatively related to conformity are all present in

Determinants of Adherence to Recommendations of Health Experts

Variable	Following prescribed regimen	Staying at treatment	Prevention
1. Social characteristics			
(a) Age	0	+	–
(b) Sex	0	0	+(f)
(c) Education	0	0	+
(d) Income	0	0	+
2. Personality dispositions			
(a) Intelligence	0	0	0
(b) Anxiety	–?	–	?
(c) Internal control	0?	0	+
(d) Psychic disturbance	–	–	?
3. Other psychological dispositions			
(a) Beliefs about threat to health	+	+	+
(b) Beliefs about efficacy of action	+	+	+
(c) Knowledge of recommendation and purpose	+	+	+
(d) General attitudes toward medical care	0	0	0
(e) General knowledge about health and illness	0	0	–?
4. Situational demands			
(a) Symptoms	+	+	NA
(b) Complexity of action	–	–	–
(c) Duration of action	–	–	–
(d) Interference with other actions	–	–	–
5. Social context			
(a) Social support	+	+	+
(b) Social isolation	–	–	–
(c) Primary group stability	+	+	+
6. Interactions with health care systems			
(a) Inconvenience	–	–	–
(b) Continuity of care	+	+	+
(c) Personal source of care	+	+	+?
(d) General satisfaction	0	0	0
(e) Supportive interaction	+	+	?

Note. Adapted from Kirscht and Rosenstock, 1979, p. 215. The entries show whether the evidence from all pertinent studies generally supports a positive association (+), a negative association (–), no definite association (0), uncertainty (?), or is not applicable (NA). Kirscht and Rosenstock point out that "the entries are judgmental and oversimplified but are intended to convey a view of the current status of knowledge concerning adherence." Many of the 0 entries represent inconsistent findings; in the case of education, for example, there are positive relationships to medication compliance in several studies and no relationships in many others.

Table 1. Factors Affecting Compliance to Medical Regimes.

diabetes; the actions demanded are often complex, certainly have a long duration, and do interfere with other actions (like being lazy, and eating all one wants).

Alogna (1980) performed one of the studies designed to find what specific characteristics of individual diabetics might be related to conformity. Fifty non-insulin-dependent diabetics were classified as compliant or non-compliant. They were considered compliant if they had lost 20 to 50 pounds in one year, and had lost 10% of their initial weight each year for up to three years, and had a plasma glucose level less than 195 mg/dl. Patients in the noncompliant group had lost less than 10% of their initial weight for the period of up to three years (or showed a weight gain), and had a plasma glucose level of 250 mg/dl or greater.

The only demographic variable which distinguished the two groups was age, with the compliant group significantly older. Compliant subjects viewed their illness as significantly more severe than did the noncompliant subjects. There was a trend in the direction of more internality on the health locus of control scale by the compliant subjects, but the observed difference was not statistically significant. The author concluded that patient education programs

should increase their emphasis on the seriousness of the disease.

Hayes (1976), in a review of the compliance literature, noted that there is an inverse relationship between the amount of behavioral change required by a medical regimen and the extent to which patients comply to the regimen. One possible implication of this finding is that educational programs and behavioral approaches should try to achieve goals gradually so that the patient will never have cause to be either discouraged or rebellious. Of course there is a question of balance involved; it may be impractical to break up a total set of behavioral objectives into too many subsets, making patients rebellious because, every time they achieve a goal, they are presented with an additional goal which is more difficult to achieve. Experimentation may be needed to determine the balance between making goals easier by breaking them into steps, versus having too many steps. There is the further problem that the optimal step size probably depends on the individual patient.

Shelton and Levy (1981) summarized the reasons for noncompliance under three headings. First, the client/patient may lack the necessary skills and knowledge to complete some or all of the tasks in the

assignment. Second, the client/patient may have cognitions that interfere with completion of the assignment. Third, the client/patient's environment may elicit noncompliance. The Shelton and Levy formulation fits neatly with the proposition that a training program for diabetics should include behavior modification approaches, perhaps including assertiveness training and social networking as aids, in addition to the traditional educational component.

On the positive side, we do find some characteristics of the diabetic population; that is, the majority are female and older, factors which are related positively to conformity. Diabetics do not differ clearly from the general population of those dealing with "health experts" with respect to the remaining relevant factors.

Educational Approaches to Increasing Compliance

Many hospitals are aware of the research indicating that education increases compliance, and these hospitals feel a responsibility to inform their patients. Typically they teach newly diagnosed patients about their disease as quickly as they can. Unfortuately, many patients who are newly diagnosed are traumatized by the disease, and later report that they were not well informed on how to care for their diabetes. In response

to this problem, some hospitals offer new classes every few months. Usually family members are encouraged to attend the classes with the diabetic person. In many cases the materials used for the classes are furnished by the American Diabetes Association.

The American Diabetes Association (ADA) stresses four major areas for any educational program: diet, medication, activity/exercise, and good general health practices. The ADA assumes that a normal, active life is usually possible for people with diabetes, if the four areas emphasized in the educational program are handled adequately.

In a special report, the ADA (1979) stated that the education of a diabetic person is the key to achieving an effective diet. This involves a continuing process. The report states that "pre-printed handout" meal plans will not achieve the desired objectives, and they are strongly discouraged. Appropriate family members should understand, and be able to implement, the diabetic's daily meal plans, should that be necessary. Every effort should be made to work with family members so that meal plans do not create conflicts within the family or disrupt the usual family activities. Education is, therefore, a family matter.

The concerns of the ADA about the nature of the

educational process seem to be very well founded. A National Health Survey of a respresentative sample of diabetics living in the United States found that 22% of them "...stated that they were never given a diet for their diabetes;" another 25%"... had received a diet but said they didn't follow it;" and 53% indicated that they did follow a prescribed diet (Holland, 1968). Even when an optimistic interpretation is put on these data, it is clear that more effective programs of education and/or behavior modification are badly needed.

Green (1979), in a review of educational strategies for increasing health care compliance, stated that methods which provide social support in both the clinic and the home environments should be most effective in maintaining health behaviors over long periods of time, as is necessary in the case of diabetes. Cohen (1982) developed a community-based program following this suggestion. Unfortunately, a fatal error in the design of Cohen's study makes it impossible to draw any conclusions from it. Cohen's experimental group consisted of 10 patients who had been attending the clinic for at least five months, and were still attending. The control group had attended for at least five months, but had stopped. Thus the experimental manipulation was completely confounded with whatever

factors determined group membership. Was the experimental group more motivated? Was their diabetes less well controlled? Had they learned the lessons of the clinic less well, so that they needed to continue in attendance? This is a small sample of the possible sources of confounding, and none of them can be either accepted or rejected.

Even if the confounding could be ignored, the results were unimpressive, to say the least. The "control" group, which was completely inactive during the twelve weeks that the experimental group was being treated, actually did better on portion sizes and general knowledge. The experimental group was better on foot care, and the groups did not differ on many other measures (performing urinanalysis or identifying proper foods). There were no significant differences in weight loss. Whatever the results had been, the study can tell us nothing about the effects of adding social supports to a program of education.

Sulway (1980) made another attempt to improve patient education, adding individualized instruction, family involvement, support groups, and group projects. Although patients reported high satisfaction with the program, no data were reported showing any connections with the diabetics' health.

As these studies illustrate, the attempts to increase compliance rates in diabetics through education have met with mixed, limited, or uninterpretable results (Hayes & Sackett, 1976). It could be that one reason that results are not more encouraging is that those who seek out and participate in such programs tend to be those whose disease is most out of control. Certainly if patients are taken "as they come" no conclusions are possible. Even if available subjects are randomly assigned to experimental and control conditions, the results may apply only to those with less controlled diabetes, rather than to the total population.

In summary, it is clear that the evidence that educating patients alone will increase compliance rates is extremely weak. The educational approach must, at the least, be supplemented with other approaches. In the next section behavioral approaches will be reviewed. Little of the research on the use of behavioral approaches to increase compliance has been done with diabetics. Thus research with a variety of populations will be included in order to increase the coverage of types of intervention.

A Comparison of Alternative Strategies

Dunbar, Marshall, and Hovell (1979) distinghished between three types of interventions for increasing

compliance: (1) Educational interventions, which rely most heavily on transmission of information and instructions as a means of changing behavior, (2) Organizational interventions, which focus primarily on clinic and regimen convenience, and (3) Interventions which focus on behavioral techniques. Heitzmann, Kaplan, Wilson, and Sandler (1985) recently completed a study which concentrates on the third type of intervention. They compared the effectiveness of cognitive and behavioral interventions for training patients to cope with diet and exercise programs. They randomly assigned Type II diabetics to one of four groups: behavior modification, cognitive modification, cognitive-behavior modification, and a control condition. Participants met with the experimenter for 7 sessions. The experimental groups also received home visits.

The behavior modification group concentrated on self-control procedures and participants were asked to keep a log book of their weight, food consumed, exercise, and events surrounding eating and exercising. The cognitive modification group discussed the important role that cognition play in developing control over behaviors and the making of positive and negative self-statements. Subjects in this group also kept a log

book; however, they recorded their self-statements during eating and exercise. People in the cognitive-behavior modification group were asked to monitor their diet and exercise behavior, in addition to their self-statments. The control group was exposed to progressive muscle relaxation training to help them cope with stress. All three of the experimental groups were given dietary advice and a prescribed exercise regimen.

Follow-ups were conducted at three, six, twelve, and eighteen months following the onset of the projects. They found that subjects in the behavior modification group lost significantly more weight than subjects in the cognitive-behavior modification and control groups. However, people in this group also weighed the most when they entered the study. An analysis of percent body fat, controlling for initial body fat showed the same effect as for weight. However, when relative weight was controlled for, using The Quetelet Index, there were no significant differences between groups.

Interestingly, men in the behavior modification group lost 29 pounds and maintained a weight loss of nine pounds over 18 months. No differences were found in the glyco-hemoglobin assay, nor were differences in the expected direction during the first year. However,

at the eighteen-month follow up subjects in the behavior modification group (those that had the greatest weight loss) had the highest decrease in their glyco-hemoglobins, followed by the control, the cognitive-behavior, and the cognitive modification groups.

Suggestions for future studies

Assertiveness Training in Behavior Modification Programs

Assertiveness training is a behavioral technique that has been used to reduce anxiety in a variety of populations. The training includes any therapeutic procedure aimed at increasing the client's ability to engage in assertive responding. Behavioral goals include an enhanced ability to express negative feelings (anger, resentment) and positive feelings (joy, love, praise) (Rimm and Masters, 1979). As Wolpe has pointed out, one benefit to assertiveness is its ability to inhibit anxiety reciprocally. He assumes that assertive responding is very similar to deep muscle relaxation (Rimm and Masters, 1979). Another benefit of assertive behavior is that an assertive person will be able to communicate openly and honestly and will be rewarded by others for this behavior. Although assertiveness training has not been used with diabetics, it has been used in a wide variety of situations with diverse

populations as a stress reduction technique, for example with alcoholics (Hirsch, 1975), those in marital counseling (Alberti and Emmons, 1978), blacks (Cheek, 1976), and phobics (Hardy, 1978).

McMillian (1977) reports that assertiveness training can be a powerful adjunct in any weight control program, regardless of the treatment modality used. The ultimate task in weight control can be regarded as learning to say "no" to oneself and others when there is a temptation to consume excess food.

Social Support

For the past two decades there has been considerable interest in social support for patients with chronic problems. However, no definition of support has been agreed upon in the literature. Further, different studies of social support have used different criteria for determining the effectiveness of the support.

Types and Sources of Social Support. Social supports may be divided into three classes determined by the source of the support: family, friends and existing social groups, and special groups of people sharing the same problem. It is likely that different sources of support play different roles in ameliorating or exacerbating problems.

The type of support received is even more variable than the source. Included are feedback about behavior, encouragement, cueing, modeling of appropriate behaviors, financial support, education, love and affection, group activities, attention, and many others. With respect to an individual's problem, these types of support may affect the values the person puts on his or her health and continuing existence, hence the individual's intentions with respect to carrying out behaviors relevant to the problem, and finally the individual's abilities to carry out the behaviors.

Since the source of support and the type of support received are so variable, it is difficult to reach intelligible general conclusions about the effectiveness of something so global as "social support." The difficulty is increased by the fact that so many studies have been correlational, so that it is not possible to reach firm conclusions about the probable efficacy of interventions intended to supply the social support that, for other people, occurs naturally.

General Research Findings in Social Support. Despite these caveats, it should be noted that social support, as variously defined by several authors, has been reported to be important with many populations. It reduced the perceived severity of psychological and

health-related problems that accompany unemployment (Gore, 1978) and the stress connnected with graduate school (Goplerud, 1980); it assisted with post-divorce adjustment (Raschke, 1977).

Stout, Morrow, Brandt, and Wolfe (1964) observed an unusually low rate of death from myocardial infarction in a close-knit Italian-American community in Pennsylvania. The community was characterized by unusually warm social support. Most of the incidents of infarction that did occur were in people who were marginal, or who had left the area. Correlational studies such as this were precursors to the recent interest in developing support networks to improve health status.

Nuckolis, Cassel, & Kaplan (1972) examined the effects of social support on women experiencing many life changes before and during pregnancy. Fewer complications were reported for women with high levels of social support. Social support has also been shown to aid in the coping process and in factors related to self-esteem for women who have undergone mastectomies (Bloom, 1979).

Since most of these studies have been naturalistic rather than experimental, they cannot answer questions like "Can experimental efforts to increase social

support improve the adjustment of diabetic patients?" It could be that (to give one example of possible confounding) the personal and/or demographic characteristics of certain persons lead both to higher levels of social support and to better adjustment.

Nevertheless, there are many indications that social support has a significant effect on patients suffering from chronic illnesses. For example, Goodman and Labianca (1981) gathered data from the medical and social records of 73 patients with non-insulin-dependent diabetes mellitus. The data included information on: (1) the temporal pattern of hospitalization, (2) changes in marital, residential, and employment status, and (3) the social service department's rating of available social support. Those diabetics rated as having weak supports had 80% more readmissions than did those with strong supports. Further, when social changes decreased social supports, readmissions increased; but when social changes did not involve decreased social supports, there were no effects on health.

Social Support and Adherence to Medical Regimes. Some studies have attempted to manipulate social support to increase compliance or adherence to medical regimes. Such studies are critical if it is to be demonstrated that active interventions, in contrast to

naturally-occurring differences in support, will affect medical problems. Some studies have used home visits in an attempt to increase support and compliance in hypertensive patients (Earp & Ory, 1979; Levine, Green, Deeds, Chualow, Russell, and Finaly, 1979). Other studies have focused on educating the spouse or "significant other" in an attempt to produce increased understanding and support (Caplan, 1976). Some studies have trained the partners of patients in various reinforcement techniques (Pearce, LeBow, & Orchard, in press; O'Neill, Currey, Hirsch, Riddle, Taylor, Malcolm & Sexauer, 1979; Weisz & Bucher, 1979). These studies have produced mixed results. A major problem with these studies (Levy, 1983) is that "no data are presented on how (or if) these support manipulations were conducted" (p. 1332). Some studies of compliance incorporated other, non-support, manipulations to increase compliance; in these studies the possibility of confounding cannot be ruled out. Thus the studies have varied as to the source of support studied (family or "friends"), and neither the manipulations nor the type of support received has been well described.

Other techniques for increasing social support (again, with the nature of the support not well specified) have been used by groups such as Alcoholics

Anonymous, Weight Watchers, and Gamblers Anonymous. These organizations have helped to spark an interest in the effects of getting people with similar problems together (our third category under "sources of support"). Such groups try to get people with similar problems to support each other on a daily basis, as well as to get people to discuss problems and generate solutions to the problems that are proposed. While such groups report great success in getting their members to refrain from specific behaviors, these claims must be evaluated with caution. Colletti and Kopel (1979) have pointed out, with respect to one such group, that "there are two reasons why it is difficult to interpret reported weight losses from these groups: nearly all information has been collected from questionnaires, and attrition from these groups is very high" (p.36).

Ziesat (1978) has examined the effects of such special group support on a hypertensive population. He assigned patients to receive regular medical treatment or to a group designed to increase interaction. He found that systolic blood pressure decreased significantly more for the patients that were assigned to the group interaction condition than for those that received regular medical treatment.

Other investigators have obtained similar results

with arthritic patients. Kaplan & Kosin (1981) examined the effect of group counseling and education on a group of patients with rheumatoid arthritis. Patients were randomly assigned to groups (1) receiving education plus group counseling or (2) just education. Patients that received education plus group counseling showed increases in their self-concept scores, as well as improvements in knowledge scores.

Social Support and Diabetes. Few studies have investigated social support with people that had diabetes. One was the Goodman and Labianca (1981) study mentioned previously, and another was a recently completed study (Heitzmann, 1983) that investigated the effects of social support on weight and glycosylated hemoglobins (both of which are affected by conformity to medical regimes) in Type II diabetic adults. Half the subjects were female, and half used insulin. Each subject was given the Social Support Questionnaire (SSQ) mentioned above. Each subject was randomly assigned either to a behavior therapy regimen designed to enhance diabetic control and weight loss, or to a control group. Experimental subjects lost significantly more weight than control subjects.

The effects of social support interacted with the sex of the subject. Male subjects who had strong social

supports were less in control of their diabetes, as measured by the glyco-hemoglobin assay, than were females with high levels of support.

While the results of this study are interesting, conclusions must be drawn with caution. The subjects making up the experimental and control groups were not matched on social support before being randomly assigned because of the demands of a larger study of which this one was a part (the Heitzmann et. al. study mentioned above). Further, subjects merely reported on their social support; no intervention was used to change degree of social support, so we are again faced with a correlational study.

Problems in Doing Research on Social Support. A major problem in the studies that have investigated the effect of support groups is the method of evaluating support. Studies have used outcome measures such as blood pressure and assumed that any differences that are observed can be attributed to the intervention (support group). Only one of the studies reported in a recent review of the social support and compliance literature reported group process measures (Levy, 1983). As Levy points out "several assumptions of group processes . . . are made without any data to back them up." That is, we cannot know what aspects of the supposed social

support produced the observed results unless these aspects are measured.

Group Process

Whenever practitioners conduct an intervention involving groups, it is important to measure group processes. This consideration applies to the proposed intervention. Before proceeding, however, it is necessary to distinguish between two aspects of group processes. The first aspect is the "surface" side of the group process; that is, what activities does the group engage in, especially with respect to the problems of the individual members? The second is the "deeper" side of the group process. This can be expressed as three questions: (1) How cohesive is the group? (2) What degree of agreement exists as to its goals? (3) How much mutual support is derived from the group? To clarify what is meant by this distinction, imagine that there are two groups of alcoholics, equal on the "deeper" side; that is, they are equally cohesive, supportive, and in agreement about goals. On the surface side, however, the first group's activities involve acquiring alcohol, arranging parties, and getting inebriated as often and as long as possible. The second group's activities are all designed to insure abstinence and to substitute non-alcohol-related

activities for drinking.

Thus what we have described as the deep side or group process refers to properties of the group per se, what we might also characterize as the structural properties of the group, while what has been described as the surface side refers to the content of group activities. It is clear that it is important to manipulate and measure both aspects of group process if the nature and usefulness of group support is ever to be fully understood. It is particularly important to measure the deep features of group process when groups are to be used for victims of chronic disease, for groups, if they are to be maximally effective, must last as long as the disease with which group members must cope. Let us examine the three aspects of deep group processes as they relate to group effectiveness and longevity.

Cohesiveness. Cohesiveness is generally described as the degree to which group members are attracted to each other, or the extent to which members "hang together" (Shaw, 1976). It seems reasonable that some degree of cohesiveness must be present for individuals to function as a group. Researchers have found: a relationship between cohesiveness and communication (Lott & Lott, 1961); that cohesiveness facilitates

verbal interaction (Moran, 1966); and that organized groups are more cohesive than unorganized groups (French, 1941). In addition, group cohesiveness is related to social influence in the group. When group members are attracted to the group (they want to belong) they are more likely to go along with decisions that promote or prolong the group's functioning (Festinger, Schachter, and Back, 1950).

Researchers have also shown that group members who are attracted to the group will work harder to achieve group goals. Van Zelst (1952) found a relationship between the amount of cohesiveness and productivity in a group of carpenters and bricklayers. In the first study, carpenters and bricklayers were asked to list three choices of teammates. Men that were allowed to work with the teammates they preferred showed a five percent savings in total production costs. In a second study, sociometrically constructed work groups were compared with control groups during a three-month period. Van Zelst found that the sociometrically constructed work groups were superior to the control groups on turnover rates, on an index of labor cost, and on an index of materials cost.

In summary, research evidence has indicated that the cohesiveness of a group may affect a number of

outcomes. Cohesiveness should be fostered and measured when any intervention involves a group. The most common measure of cohesiveness is a sociometric questionnaire; one will be constructed for the present study.

Group Goals. In a "typical" group there is at least one goal that is accepted by the majority of members. Shaw (1976) defines a group goal as "an end state desired by a majority of the group members" (p.297). It can be identified by observing the activities of group members or, usually, by asking the members of the group to specify it. Shaw states that the activities of group members are directly related to immediate goals, but only indirectly related to long-range goals.

Zander & Newcomb (1967) demonstrated that when group members accept group goals they are more likely to initiate activities that they think will achieve group goals. In the present study, we will try to insure that group goals include fostering good individual health-related behaviors. Agreement about goals is no doubt an important determinant of the length of time a group is maintained after an "official" intervention is terminated. Group cohesiveness, group goals, and group support are not independent factors; they are dependent on one another. Group goals affect group cohesiveness.

Support is affected by group cohesiveness and group goals. In the present study, scores on a sociometric scale, and the length of time the group members stay in contact with each other, will be dependent measures.

In conclusion, it must be said that the bulk of the evidence indicates that the global variable, "social support," is important in many contexts, including the context of chronic disease. There is insufficient research to indicate whether the most effective place to intervene is at the level of family, friends and existing social networks, or special groups. There is even less research analytic enough to indicate what aspects of social support deserve the most stress, and there are certainly many features of such support, ranging from education through increased feelings that life is worthwhile. Finally, it is clear that the effectiveness of groups is related to properties of groups per se, regardless of context.

Conclusions

Diabetes is a severe and widespread health problem, affecting nearly one person in twenty. Older obese women are particularly at risk. One risk factor is clearly genetic. A complete or partial cure may eventually be found for diabetes, since it is a disease of the metabolic system. Meanwhile, however, the best

hope for the diabetic is careful compliance to a regime of diet, exercise, and, where necessary, drugs. Cognitive and behavioral methods may help in achieving both the necessary compliance to medical regimes and the independence needed to resist social pressures not to comply.

Patients in short-term therapy sometimes comply well. On the other hand, many techniques intended to increase compliance have been tried with patients suffering from chronic diseases, without notable success. Thus a major question in the area of compliance research remains unanswered, to wit "How do you get patients to comply with medical programs over long periods of time?"

Some techniques have showed promise in some areas of compliance. Possibly the integration of advocacy training with educational materials will help diabetics to apply their knowledge better in their daily lives, and may help them to reduce both objective sources of stress and their subjective reactions to those that are unavoidable. In particular, advocacy training may help participants to interact more effectively with their physicians. The doctor may then be better informed about the effects of medications; the patient may demand better understanding of the treatment regimen by asking

more questions, and may be better able to demand better or more practical alternative treatment regimens when a current regimen is not working.

Proposed Study

The purpose of the present study was to compare the efficacy of two different interventions that were designed for diabetic patients. The first intervention was intended to teach patients self-advocacy and social networking. The second program provided subjects with the same information; however, the information was presented in a manual. Diabetics who had received some educational instruction about their disease were eligible to participate in the study. Patients were randomly assigned to one of the two experimental conditions. All subjects were required to participate in assessments at their entry into the study (pre-assessment), at the end of the intervention (post-assessment), and at a later follow-up.

An additional objective of the present study was to consider other variables that might be important mediating variables affecting the following of a medical regime. These variables include duration of disease, number of complications experienced, health beliefs, internal locus of control, group cohesion, and participant satisfaction. Hence, this research project

measured multiple outcomes and process dimensions.

Hypotheses

Hypothesis One

Patients that participate in the self-advocacy and social networking group will have significantly more weight loss than patients assigned to the manual condition. This hypothesis will be assessed by comparing the weight changes at all measurement times.

Hypothesis Two

Patients who participate in the self-advocacy and social networking group will have higher compliance rates than those assigned to the manual condition. Compliance will be assessed directly via verbal reports (the health indicator scale) and indirectly by the glyco-hemgoblin assays.

Hypothesis Three

People assigned to the experimental group will have lower blood pressure at post and follow up assessments than people assigned to the manual group.

Hypothesis Four

People in the experimental group will have higher scores on the health belief scale at post measurement periods.

Hypothesis Five

Diabetics in the self-advocacy and social

networking group will be better self-advocates, at all post measurement periods, than those in the manual condition. This hypothesis will be assessed via the patients' Rathus Assertivenss scores.

Hypothesis Six

People who participate in the self-advocacy and social networking group will become more internally controlled by the post measurement periods. The measure of participants' degree of internal-external control will be the Health Locus of Control Scale.

Hypothesis Seven

Participants in the self-advocacy and social networking group will be more cohesive than those in the manual condition. This cohesiveness will be maintained in follow-up measures. Differences between conditions in amount of cohesiveness will be assessed by chooser and popularity scores derived from a sociometric questionnaire.

Hypothesis Eight

People in the self-advocacy and social networking group will be more thorough in keeping their log books than people in the manual group. Differences between the two groups in the amount of thoroughness will be assessed by completeness and precision scores derived from the log books.

Hypothesis Nine

Participants in the experimental group will evaluate the program more favorably than will those in the manual condition.

METHOD

This study employed the Experimental Social Innovation (ESI) approach to experimentation created by Fairweather (1967). The ESI approach requires examining the relationships between outcomes, participants and the social situation. In the present study two approaches were examined. The first was the traditional approach, which involved educating people with diabetes by giving them reading materials. The second was a more innovative approach; people with diabetes were given information, but also were given special training in self-advocacy, and the opportunity to meet similar people and to develop a support group. In this chapter the details of the programs, the subjects, the instruments, and the procedures are presented.

Subjects

Recruitment

Recruiting was started at Lansing General Hospital. When patients showed up for their first educational class, they were told about the study. On the last day of class each person was asked if he or she would be interested in participating in the study. After 3 weeks only five subjects from the hospital had

volunteered. It was clearly necessary to try other recruiting methods, so the study was publicized. Local newspapers were contacted and sent a summary of the study. The following papers published a story about the study: The Lansing State Journal; a free local community newspaper called The Towne Courier; and The Detroit News. In addition, community service announcements were aired on several local television and radio stations. It was not possible to monitor all such announcements, and thus the identity of all stations making the announcement is unknown. Display ads were placed in the Lansing State Journal four times, and in two free papers once (the Wheeler Dealer and the Shopping Guide). Forty-nine subjects were recruited from these advertisements, announcements, and newspaper articles, and three additional patients were recruited from the local hospital, for a total of 57 subjects. A copy of the display ad and two of the newspaper stories are presented in Appendix A.

After a subject agreed to participate in the study, an appointment was made to conduct the pre-assessment. The subject was given the choice of having an interviewer come to his or her home or office, or to meet an interviewer at one of the three local laboratories that were doing the blood tests.

Demographic Characteristics

The subjects were 57 diabetics; 33 were diagnosed as type II, 13 as type I, and 11 "did not know." Twenty-seven were men and 30 were women. The sample had the following characteristics:

1. The age range was from 20 to 77 years; the mean age was 50.21.

2. The educational level ranged from four to 19 years, with a mean of 14.12, equivalent to 2 years of college.

3. The duration of diabetes ranged from one month to 376 months, with a mean of 119.26 months, or 9.94 years.

4. Seven of the subjects controlled their diabetes by diet only; 11 controlled their diabetes by taking oral agents; 39 were insulin dependent.

5. Thirty-two participants had a family history of diabetes.

6. Forty participants had a medical condition besides diabetes, which included one stroke, six cases of heart disease, two eye problems, two kidney problems, 23 cases with high blood pressure, seven with arthritis, one case of colitis, and five cases with allergies.

7. Thirty-eight participants had experienced some complication from their diabetes. Nineteen had

experienced hyperglycemia, hypoglycemia, or insulin reactions; 11 had experienced acidosis; 19 had circulatory problems; 18 had eye problems; 7 had heart problems; 4 had kidney problems; and 15 had experienced impotence from their diabetes.

Measuring Instruments

Several paper and pencil measures, together with medical measures and content analyses of tape recordings and self-report measures, were used to assess the effects of the interventions. Assessments were conducted three times. The paper and pencil measures are in Appendix B.

Historical Questionnaire

The historical questionnaire was used for gathering demographic information on each participant. The questionnaire was administered by a person on the research team as soon as the administrative agreement was signed.

The items chosen were based on three sources of information. The first emphasizes participant variables that may affect the outcomes of experimental social innovations (Fairweather and Tornatzky, 1977). The second emphasizes variables that have been shown to affect conformity to medical advice (Janis, 1983). The third involves information related to the conditions of

the study, or normally collected by hospitals and physicians because it is related directly to the patients' diabetic condition. Representative items included details of the participants' personal history, diagnosis, condition, and medical history.

Before a potential participant was interviewed, he or she was told as much as possible about the details of the present program. This information concentrated on the requirements for the participants, and it was clearly explained that the study was not medically based in the sense of manipulating a patient's medical regime. If the individual showed an understanding of the requirements, agreed to participate, and signed an administrative agreement, he or she progressed to the interview proper. The questionnaire was administered individually to participants so that ambiguous responses could be clarified.

During the post- and follow-up assessments medical history information was updated. This included: new medical conditions, new complications, hospitalizations, and any changes in a participant's medical regime.

Physiological Measures

Height and Weight. All subjects were measured with a measuring tape; height in inches was recorded by one of the interviewers. Heights were taken only at the

first assessment. Height was taken so that a weight/height ratio could be calculated. Subjects were weighed at each measurement period. A standard spring scale, calibrated against a physician's balance scale, was used. Weight was recorded in pounds. Weights were an important measure in the present study, since most type II diabetics are obese, and it has been shown that some patients' diabetes is weight dependent. Weight loss is a recommended component of treatment for nearly all type II diabetics.

Quetelet's index (weight divided by the square of height) was calculated for each participant. This ratio has been found to correlate best with skinfold thickness for all age-race-sex groups (Killeen, Vanderburg, and Harlan, 1978).

Glyco-hemoglobin assays. This assay measures a type of hemoglobin found in the red blood cells, and reflects the average blood sugar level over an extended period of time (approximately three months before the test). One advantage of this test is that the results are not determined solely by recent diet and exercise; it is thus a very stable measure. The patient can neither obtain a good result by conforming for a brief period, nor lie effectively about his or her average conformity level.

Trivelli (1971) found that adult diabetics (n = 75) had a mean reading of 11.1%, with a standard deviation of 2.9. Juvenile diabetics (n = 25) had a mean reading of 12.4%, with a standard deviation of 3.1; normals (n = 20) had a mean of 6.5, with a standard deviation of 1.5. Although attention has focused on the ranges of different groups, reliability studies on the test itself have been rare, if not non-existent.

The pre-intervention readings for the diabetic subjects were surprisingly low. The researchers inquired about the values and were assured that they were accurate. The mean glycohemoglobin reading was 7.86 (the normal range was considered between 4 and 8% by the labortatory used.) When the second glycohemoglobin readings were taken about 17 weeks later, the average readings were substantially higher for both experimental and control groups. The first post-test readings were on the average three percentage points higher, with a few four percentage points higher, than the pre-test readings. This was true for all groups. This led the researchers to question the reliability of the test in more depth. No reliability studies could be found.

While exploring the nature of the assay, we found that it is a very complex test. The test requires at

least ten distinct steps. The following sample of steps shows how complex the test is: The blood must be centrifuged; washed in 5 volumes of 0.9 per cent sodium chloride; luped in two volumes of distilled water and saturated with carbon monoxide; then hemoglobins Ala, Alb, Alc, and A are separated by column chromatography. These are just a few of the steps. Some of the steps require that graphs be read by human technicians. With such a complex test one should not assume high reliability.

To test how reliable the glycohemoglobin test could be, forty-three of the post-test glycohemoglobin tests were duplicated so that the reliability on the measure could be assessed. (Not all of the blood samples from participants could be recovered.) The Pearson correlation coefficient between two evaluations of the forty-three blood samples was 0.90. This involved two <u>different</u> tests of the <u>same</u> blood sample for the forty-three individuals. It is not known whether or not the second test was done "blind;" that is, the technicians may have known the first score when they produced the second.

Even assuming that the correlation of 0.90 was obtained in a completely legitimate manner, problems remain. There were nine cases in which there were

extreme differences between pre and post samples, and no satisfactory explanation could be given. For these samples the test was replicated four, five, or six times. In four of the nine cases the standard deviation was greater than one. For example, one sample was replicated six times; the values were 11.2, 7.8, 8.3, 9.1, 9.3 and 11.7; the mean was 9.57 with a standard deviation of 1.56. It should also be noted that these measures were made on the same sample of blood, and probably with the same reagents and by the same technicians. Changes in any of these factors would be expected to decrease reliablility. It is also possible that reliability would be lower if the measures were made under unalerted conditions.

Blood Pressure. Blood pressure was taken on both arms at all three measurement times. This measure was relevant because many of our participants were hypertensive. An aneroid sphygmomanometer, placed on the left upper arm, and a stethoscope were used to determine each subject's blood pressure.

Health Beliefs Scale

This scale was designed to assess participants' beliefs about the consequences of diabetes, about the probable effects of different health practices, and about the ability of the participant to carry out

effective health practices. Past research has shown that patients comply better to medical regimes when they believe that the consequences of their condition are serious. The health belief model (a special case of the self-efficacy model) has as its two components patients' beliefs about (1) the effects of health-related behaviors and (2) their ability to carry out the behaviors. If the patient believes that a health plan will be effective in ameliorating the consequences of the disease, and that he/she can carry out the health plan, then it is more likely that the patient will comply to an effective plan.

The goal of the two experimental programs was to provide the participants with support and with confidence in themselves. It was necessary to find out whether or not patients' expectancies change over time as a function of the type of intervention. Therefore this measurement of expectancy was administered at each measurement time.

Most items were rationally derived after reviewing the diabetes literature and trying to decide what beliefs about following good health practices might be most important. The whole scale consists of 25 items, of which three are related to beliefs about the consequences of diabetes (Part I), six to beliefs about

consequences of health practices (Part II), and 16 to the patient's ability to follow good health practices (Part III). The subjects were asked to fill in percentages that would best describe their beliefs or behaviors. High percentages indicate more favorable and hopeful expectancies about diabetes and the possibility of controlling it through individual action. Low scores thus have their natural meaning for this scale; that is, they indicate less favorable and hopeful expectancies about diabetes and the possibility of controlling it through individual action.

To assess the reliability of this scale it was administered to 20 diabetic people twice. All the diabetics that filled out the scale were members of the American Diabetes Association in two chapters, Kalamazoo and Jackson. The people that filled out the scale had the following characteristics:

1. Nine were males and 11 were females.

2. The age range was from 21 to 76 years old, with a mean of 49.94.

3. Three people were single, 15 were married and 3 were widows or widowers.

4. All twenty people were white.

5. The educational background ranged from 10 years to 18 years, with a mean of 13.82.

6. Five of the twenty individuals were covered by Medicare or Medicaid.

7. The duration of diabetes ranged from 2 months to 240 months. with a mean duration of 116.9 months, or 9.74 years.

8. There were 5 Type I diabetics, 9 Type II diabetics and 6 people who did not know what Type they were.

9. Two people took no medication; four were taking oral agents and the remaining 6 people were on insulin.

10. The following complications were described:

a. Six had experienced eye problems.

b. Two had experienced circulatory problems.

c. One person had experienced kidney problems.

d. One person had experienced slow healing.

11. Twelve people had at least one other medical condition besides diabetes. These included:

a. Five people had heart disease.

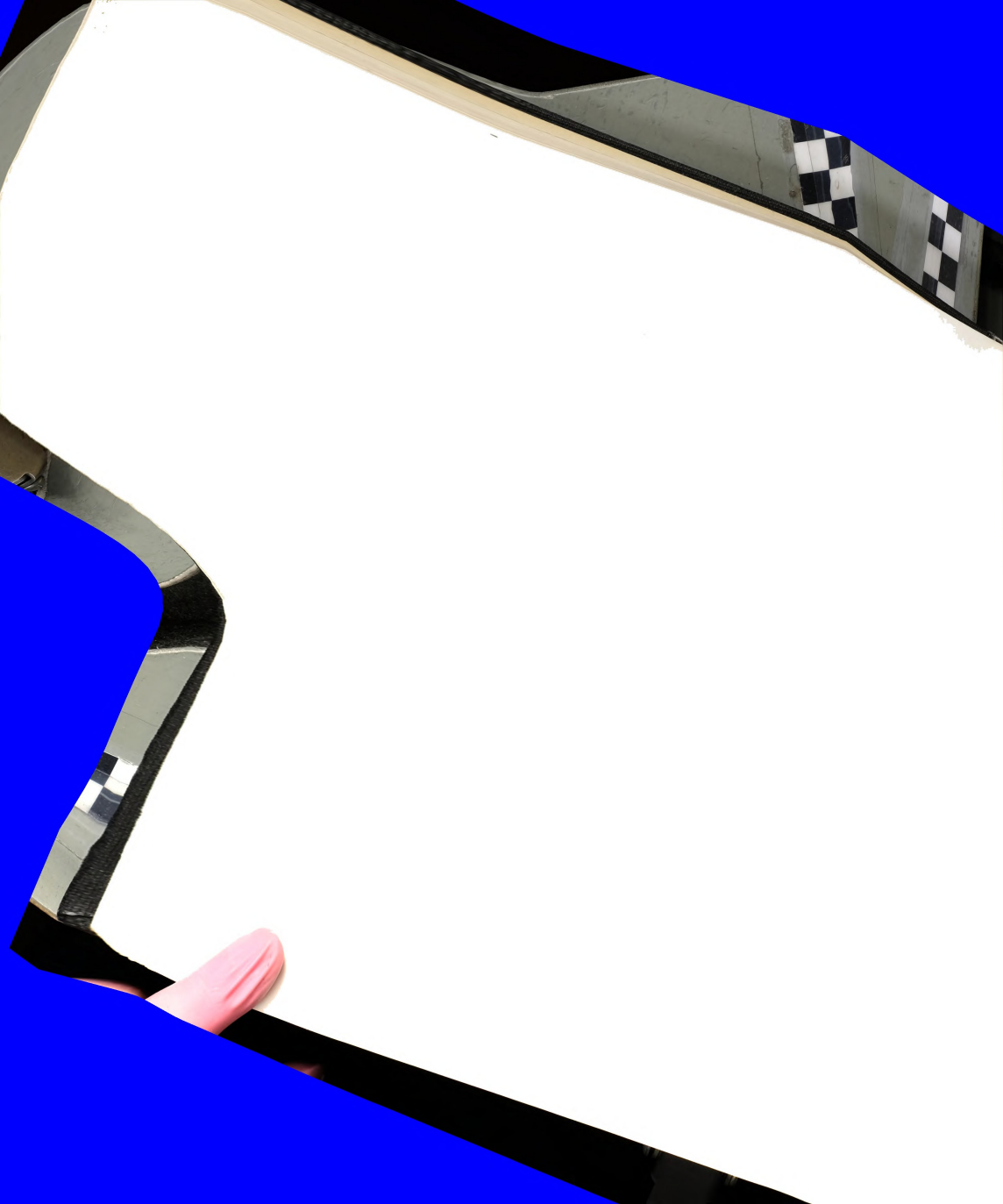
b. One person had eye problems that were not a result of diabetes.

c. One person had kidney problems that were not a result of diabetes.

d. Five people had high blood pressure.

e. One person had scoliosis.

f. Three people had arthritis.



g. There were six other problems.

12. Eleven people had a family history of diabetes.

Test-retest reliability for the first of the three subscales was 0.65, indicating moderate reliability. The second subscale also showed moderate reliability, with a coefficient of 0.61. The coefficient for the third subscale was only 0.22.

One possible reason for the low reliability of the third subscale was that there was considerable missing data. One example was given for each dimension; participants were asked to estimate the amount of ability, time, money, and will power they had available to carry out good medical care, diet, exercise, and good health practices. Possibly the directions were unclear, because many of the participants only filled in four of the sixteen blanks. However, in an attempt to clarify any ambiguities, all of the scales were read to people participating in the present study.

Indicators of Health Behaviors

This health behavior indicator scale was designed to assess any changes that occur in participants' behaviors in carrying out their medical regimes. Assessing these behaviors is important in part because changes in attitudes may lead to changes in behavior, and in part because the relationships between attitudes

and behavior may also vary as a function of the type of intervention. For example, the patients in the active group may be better able than those in the manual group to implement the behaviors that should follow from their attitudes.

The items for this scale were rationally derived after reviewing the literature on diabetes, attending classes on diabetes with diabetics at Mercy Hospital in San Diego, and interviewing a physician who specializes in the treatment of diabetics.

The scale consists of 12 items. There are four sub-scales of three items. The four sub-scales examine health behaviors in the following areas: medications, diet, exercise, and general. The subject is asked to report the percent of time that he or she performs the behaviors that are stated.

Low numerical scores on each of the four sub-scales constitute operational definitions of poor adherence to a medical regime. Conversely, the higher the numerical score, the higher the compliance rate. Items on each of the four scales were selected so that information about different aspects of the regime could be assessed.

Instructions to respondents are given at the top of the scale, and were designed and pilot-tested to minimize the need for verbal supplementation by anyone

administering the scale. However, the directions and items were read to each participant.

Test-retest reliability of this scale was determined by administering the scale to the same group of diabetics used to test the reliability of the health beliefs scale, described immediately above.

Test-retest reliability of the first subscale, which was intended to tap compliance to medication regimes, was 0.93. The reliability for the second, diet, subscale was unsatisfactory, 0.12. The third subscale, which was concerned with compliance to the patient's exercise regime, was moderately reliable ($r = 0.74$). The fourth and final subscale had a reliability of 0.89; the items on this subscale were constructed to tap a patients' adherence to generally good health practices.

Rathus Assertiveness Scale

The Rathus Assertiveness Scale is a self-report measure designed to assess an individual's level of assertiveness (Rathus, 1973). The device consists of 30 statments, e.g., "I have avoided asking questions for fear of sounding stupid." Test-retest reliability over a two-month period in one study was 0.78. Odd-even reliability in another study was nearly the same ($r = 0.77$). In one validity study, the Rathus score

correlated 0.70 with the mean of two judges' ratings of the assertiveness of 47 women's responses to interview questions about what they would do in situations wherein assertive reponses could be used with profit. The Rathus has also been shown to correlate negatively with ratings of "niceness," and to correlate with Semantic Differential ratings of assertiveness.

Although the reliability of the Rathus is not particularly impressive, and the validity studies less than completely convincing, its ease of administration is such that it is a cost-effective component of an evaluation program. This scale was administered at all three assessment periods.

Health Locus of Control (HLC) Scale

The health locus of control concept is derived from social learning theory and seeks to measure a person's belief that his or her health is or is not determined by his or her behavior (Wallston, Wallston, & DeVellis, 1978). Individuals who believe that their health is determined by their personal traits or behavior (self-determined) are termed "health-internals." Those who believe that health is determined by external factors, such as chance, fate, luck, or powerful others, are termed "health-externals." The HLC further divides the "health external" group into "chance-externals" and

"powerful-other externals" (Wallston, Wallston, Kaplan, & Maides, 1976).

The scale consists of 11 items in Likert-type format, ranging from "Strongly Disagree" (scored as one) to "Strongly Agree" (scored as six), for the externally worded items and reverse scored for the internally worded items. The scale score can range from 11 to 66.

The validity and reliability of the HLC scales have been documented (Wallston et al., 1976). Alpha reliabilities ranged from 0.40 to 0.54. The expected correlations with other meaures of HLC were found, and predictive validity was demonstrated.

In theory, health locus of control may predict health-related behaviors. A number of studies have suggested that health locus of control measures are correlated with health behavior and outcomes; these are reviewed by Wallston et al., (1978). Furthermore, these authors have found that health locus of control beliefs can be changed by psychosocial interventions. The relationship of health locus of control beliefs, using the HLC scales, to the outcomes of patients with diabetes was examined to determine whether or not the advocacy training and social support interventions alter the HLC.

Sociometric Questionnaire

The sociometric questionnaire was used to determine the cohesiveness of the experimental group. Cohesiveness may be related to the effectiveness of a program, especially as reflected in the diabetics' feelings of well being and overall health. This measure was of special interest because both of the interventions emphasize social networking.

The items used to make up the sociometric scale were intended to sample a range of intimacy, and thus should indicate a range of tendencies of individuals to share with and support each other. The statements range from "To whom would you say hello if you saw them outside of class?" to "Whom would you consider a close friend?" The questions in this scale were independently ranked by two judges from least intimate to most intimate, which was intended to produce a Guttman-like scale.

All participants in the study were given a list of the names of all members of their group at both post and follow-up assessments. They were asked to list in order the names of the people with whom they would feel comfortable in the various activities listed. No minimum number of choices was required, so the number of choices made was the measure of group cohesivenss.

Two scores for each individual were computed at each measurement time. First, a "chooser" score was computed by dividing the number of people the person chose by the number of people he or she could have chosen. Second, a "popularity" score was calculated by dividing the number of times the participant was chosen by the number of times the person could have been chosen by others. These scores operationally define the roles of individuals as "preferrers" and as social objects (Fairweather, 1964).

Log Books

Each participant in the study was asked to keep a log book. Patients were asked to record: medication taken, all food consumed, physician visits, hospital visits, daily urine test results, and any contacts they had with other members of the group. In addition, participants were asked to record the details of situations in which they thought that they should have been a self-advocate and were not, and each situation in which they were a self-advocate.

The log book was shown to each participant, and instructions on how to fill out the log book were given. Two log books were given to each participant. One was given when the subject entered the study. It was collected at the post-assessment interview. At the

post-assessment interview the second log book was given to the participant. It was collected at the follow-up assessment.

Not all of the data collected in the log books could be used. Very few people recorded each time that they spoke to another member of their group. In addition, few of the people who participated in the study saw a physician during the period in which they were in the study; and not all of those who did see a physician recorded the visit. Fewer than five people were hospitalized during the study. For that reason, these data were not used. People in the study used many different methods of measuring their blood and urine results, and the methods that were used are not standardized. In addition, some people used several different methods, which makes comparisons between groups and over time impossible.

However, six scores for each subject were derived from the log books. These included: a score for completeness for meds and diet; a score for precision for meds and diet; and a positive and negative advocacy score. A description of how each score was obtained is in the next section.

Each time a participant filled out his/her log book for meds, he or she was given three points. The

completeness score for meds was then calculated by dividing the number of days the participant filled out the log book, times three, by the total number of days patients should have filled out their log book, times three. A mean precision score was also calculated for each participant. If a participant only listed the name of the medication he/she was taking, a value of one was given for that day. If the exact quantity of the medication was listed, a value of three was assigned for that day. To calculate a precision score for medications, the total number of precision points was divided by the number of days the patient filled out the log book, times three.

A completenss score for diet was calculated for each participant at post- and follow-up assessments. One point was given for each meal a participant recorded. A completeness score was then calculated by adding all the completeness points and dividing them by the total number of days the patient should have filled out the log book, times three.

A precision score was also given for filling out the diet section of the log book. A score of one was given when something was recorded for the meal, but it was vague. A score of two was assigned when quantitative terms were used (e.g. small or large). A

score of three was assigned when numbers were recorded for the food items (e.g. 3 ounces of chicken, 1 apple). Mention of singular items was not interpreted as implying a clear quantity, and was rated as one (e.g., "sandwich"). If the person specified a number for one item, full credit was given for the meal (i.e. 4 Oz. orange juice, bacon, & eggs was given a score of three). Precision points for diet were given for each day the patient filled out the log book. If the patient filled out three meals and was assigned a score of three for each meal, a precision score of three was given for that day. If a patient filled out one meal and the precision score was three, the score for the day was still three. To derive a precision score for diet the total precision points were added together and divided by the total number of days the patient filled out the log for diet, times three.

A positive advocacy score was given to each participant. One point was given for each day the patient filled out something in the section "Situation in which you were a good self advocate." The positive advocacy score was generated by dividing the number of positive advocacy points by the number of days the patient was supposed to fill out the log book.

A negative advocacy score was also calculated for

each participant. One point was given for each day the patient filled out something in the section "Situation in which you were not a good self advocate." The score was calculated in the same way that the positive advocacy score was calculated.

Knowledge Questionnaire

This scale contained ten items which were designed to test the participants' knowledge of the materials presented on advocacy training in sessions they attended, or that were presented in a manual that was given to them. One true-false question was constructed from material presented in each session. These questions were administered to all participants during the post assessment. The participant could score between 0 and 10, depending on how many of the questions were answered correctly.

Program Evaluation

This questionnaire was designed to measure the participants' satisfaction with the program. It was administered during the post-assessment period. The items for this questionnaire were rationally derived after relevant literature was reviewed.

The questionnaire had a total of 14 questions, with three of the questions having multiple parts. The participants were asked: the number of sessions

attended, to rate the program on a five-point Likert scale, to rate the purposes and goals (unclear to very clear), the length of time for each meeting (too short to too long), the number of group sessions (too few to too many), the pace of each program (too slow to too fast), the discussions and materials presented (not useful to relevant and useful), the opportunity to participate and contribute in the program (poor to excellent), the practicality of applying the information learned (not helpful to very helpful), and the ease of using techniques taught (not easily to very easily). Another question had the participant rate the handouts, discussions, exercises, and role playing on a five-point scale (not useful to very helpful). Another question had the participant rate the organization, clarity, and interest of the program on a five-point scale (not at all to very much). Participants were asked the probability of recommending this program to a friend (not likely to very likely), and their rating of the program (poor to excellent). The last three questions were open-ended. The participants were asked what they liked most, least, and what they most recommended.

Since manual participants did not attend sessions, some of the questions were not relevant for them; participants were asked to omit these questions.

Participants were given the questionnaire and asked to fill it out on their own. In a few cases participants asked for an interviewer to read the questions, and the request was granted.

Since the participants in the manual group did not answer some of the questions, comparisons between the groups were not possible for these questions. Responses from the questions: what did you like most, what did you like least, and what would you recommend to improve this program, were content analyzed.

Tape Recordings

The experimental groups were tape recorded during the second (support section) part of the group meetings. After the self-advocacy section of the program ended, the tape recorder was started. A member of the group was asked to change the tape, if necessary, and to shut off the tape when the group was finished and to give it to the experimenter.

The total amount of time the group met was recorded by a research team member. Tapes were later coded by members of the research team. They were scored on the following dimensions: the number of problems discussed by the group, the number of solutions discussed by the group, the time the group spent discussing group tasks, time spent in silence, amount of time with one person

talking, amount of time with more than one person talking, amount of time spent discussing topic presented in part 1, time spent discussing the overall study, number of positive statements about the study, number of negative statments about the study, number of offers of help, number of arguments, number of self-disclosures, number of people attending, and the total support group time.

Sections of different tapes were used to train members of the team in scoring of the tapes. Thirty-two tapes were scored, twenty from the first experimental group's sessions, and twelve from the second group's sessions.

Procedures

Interviewing Procedures

Four undergraduate females assisted with the project for course credit. One was a nurse. Each student was required to accompany the experimenter and observe assessments until the student felt prepared to do her own assessments, at which time the experimenter conducted a reliability check by recording a complete assessment jointly with the student. If the percent agreement was 90 percent or above, the student was allowed to do assessments on her own. After three or four additional assessments, another joint assessment

was conducted to insure continued reliabilty. All reliability checks on all measures produced a percent agreement of 90 or above. Twenty-seven of the assessments were conducted by the writer alone, ten interviews were joint interviews, and twenty were conducted by the undergraduate interviewers alone.

Experimental Setting

The self-advocacy and social networking group met in a conference room in the Psychology Research Building at Michigan State University. The manual group had no meetings. Assessments were sometimes carried out in participants' homes and sometimes at a laboratory of clinical medicine. Several post assessments, for experimental group members only, were conducted in the Psychology Research Building.

Self-advocacy and Social Networking Group

Each meeting was broken into two periods. During the first period of each meeting material on self-advocacy was presented. This material is included in a trainer's manual (Appendix C).

In the second period of each meeting, which was devoted to the development of social support, no experimenter was present; only the diabetics participated. Before each social support session was started, the group was given a list of tasks to be

completed. These tasks are included in the training manual.

This group was an open group which could be joined at any time by new participants. The materials were prepared in the form of modules which could be used repeatedly, so that members who missed a particular module could pick it up when the same materials were again presented when the lesson was repeated. This method of presentation made it practical for patients to enter the group at will.

Patients were asked to attend ten consecutive sessions which lasted approximately two hours a night, twice a week. Once patients completed their sessions, they were free to discontinue the group meetings. However, if a patient wanted to continue participating in the group he/she was free to do so.

Two groups were run. One group which eventually involved 14 members met on Monday and Wednesday evenings. This group was the first group to start. Since recruitment in the beginning was slow, twenty group sessions were held in order to give the group time to build to a viable size. The second group, which had 15 members, was held on Tuesday and Thursday evenings for a total of twelve sessions.

Manual Group

Subjects in this condition were not asked to meet. They were given a manual that included all of the information presented in the previous condition. This manual was a modified version of the trainers' manual used for the experimental group and presented in Appendix C, and is available upon request. Participants in the manual group were asked to read the materials and to participate in all of the assessment periods. The subjects assigned to this condition received a list of members who were in the same group. They were given the same social support instructions and told that they were free to contact other members of their group.

Design

The experimental design for the study was a two by three repeated measures design. The between variable, with two levels, was the group to which a participant was assigned: (a) the advocacy and social networking group condition, and (b) the manual condition. The within variable, with three levels, was the time at which the assessment was made: (a) when the participant entered the study, (b) when the manipulation ended, about five weeks after the beginning of the study, and (c) approximately twelve weeks after the second assessment was conducted.

RESULTS

Both comparative and associative analyses were performed. The comparative analyses were primarily time trend analyses of variance, and the associative were cluster analyses. Comparative analyses were performed for each of the nine major hypotheses in the study. The alpha level was set at 0.05 for the tests of significance. The comparative analyses are discussed first.

Since the two manual groups had received identical treatments, they were combined for the analyses. Thus three groups were compared, the manual group and the two experimental groups.

Analysis of Hypothesis One

Hypothesis one stated that patients who participated in the self-advocacy and social networking group would have significantly more weight loss than patients assigned to the manual condition. A three (group) by three (time) repeated measures analysis was performed on the mean Quetelet's index. There were no significant differences as a function of groups, time, or their interaction. Table 2 shows the results of this analysis. Table 3 shows the mean Quetelet's index over the three time periods for each of the three groups.

Analysis of Hypothesis Two

Hypothesis two was that patients who participated in the self-advocacy and social networking groups would have higher compliance rates than those assigned to the manual condition. The glycohemoglobin level scores presumably constitute an indirect measure of compliance, since greater compliance should lead to lower scores. The three (group) by two (time) repeated measures analysis of variance of these scores revealed a significant time effect, as shown in Table 4. Glyco-hemoglobin levels increased for all three groups for the follow-up test. No main effect for group, or interaction between group and time, was found. Table 5 shows the means for the three groups over time.

The health indicator scale scores are a more direct, although less objective, indicator of compliance. In order to standardize these scores and to eliminate negative scores, raw scores were converted to T scores before analysis. There were four subscales in this instrument. Each of the four subscales was analyzed individually. A 3 (group) by 3 (time) repeated measures analysis of variance was performed on each of the four subscales. The results of these analyses are shown in Tables 6, 8, 10, and 12. No significant differences were found for any of the subscales.

Table 2: Repeated Measures Analysis of Variance of Quetelet's Index

Source	DF	MS	F	Prob
Condition	2	0.00010	0.32	0.7279
Error	46	0.0031		
Time	2	0.0000	0.30	0.7403
Condition by Time	4	0.0000	0.79	0.5159
Error	92	0.0000		

Table 3: Three Means of Quetelet's Index for Conditions

Time	Manual	Group 1	Group 2	Mean of Means
Pre	0.04	0.04	0.04	0.04
Post	0.04	0.04	0.04	0.04
Follow up	0.04	0.04	0.04	0.04
Mean of Means	0.04	0.04	0.04	0.04

Table 4: Repeated Meaures Analysis of Variance of Glyco-hemoglobins

Source	DF	MS	F	Prob
Condition	2	776.83	1.03	0.3663
Error	47	757.16		
Time	1	2409.6	5.20	0.0272
Condition by Time	2	489.6	1.06	0.3558
Error	47	463.5		

Table 5: Two Means for Pre and Post Glyco-hemoglobin Readings

Time	Manual	Group 1	Group 2	Mean of Means
Pre	7.49	7.53	7.88	7.60
Follow up	7.75	9.28	8.95	8.46
Mean of Means	7.62	8.40	8.41	8.03

Table 6: Repeated Meaures Analysis of Variance of Reported Compliance to Medication Regime

Source	DF	MS	F	Prob
Condition	2	2300.895	0.44	0.6451
Error	47	5200.932		
Time	2	655.017	2.33	0.1024
Condition by Time	4	65.511	0.23	0.9189
Error	94	280.543		

Table 7: Mean T Scores for Reported Compliance to Medication Regime

Time	Manual	Group 1	Group 2	Mean of Means
Pre	140.76	136.69	126.33	132.78
Post	144.68	143.74	136.69	140.60
Follow up	145.46	143.89	131.66	138.43
Mean of Means	143.63	141.44	131.56	137.27

Table 8: Repeated Meaures Analysis of Variance of Reported Compliance to Diet

Source	DF	MS	F	Prob
Condition	2	1349.640	1.14	0.3270
Error	47	1178.795		
Time	2	26.614	0.13	0.8781
Condition by Time	4	179.040	0.88	0.4816
Error	94	204.432		

Table 9: Mean T Scores for Reported Compliance to Diet

Time	Manual	Group 1	Group 2	Mean of Means
Pre	140.97	149.82	153.03	149.06
Post	145.62	145.86	154.23	149.81
Follow up	141.69	154.74	151.94	150.00
Mean of Means	142.76	150.14	153.06	149.62

Table 10: Repeated Meaures Analysis of Variance of Reported Compliance to Exercise

Source	DF	MS	F	Prob
Condition	2	1923.541	1.67	0.1998
Error	47	1153.782		
Time	2	13.731	0.07	0.9366
Condition by Time	4	108.185	0.52	0.7237
Error	94	209.445		

Table 11: Mean T Scores for Reported Compliance to Exercise

Time	Manual	Group 1	Group 2	Mean of Means
Pre	143.73	151.31	150.24	148.82
Post	138.16	156.73	152.64	149.94
Follow up	141.87	154.77	151.82	150.00
Mean of Means	141.25	154.27	151.57	149.59

Table 12: Repeated Meaures Analysis of Variance of Reported Compliance to General Health Practices

Source	DF	MS	F	Prob
Condition	2	818.514	1.29	0.2854
Error	47	635.567		
Time	2	2.738	0.02	0.9773
Condition by Time	4	83.241	0.70	0.5951
Error	94	119.213		

Table 13: Mean T Scores for Reported Compliance to General Health Practices

Time	Manual	Group 1	Group 2	Mean of Means
Pre	149.54	156.15	146.05	149.58
Post	154.56	151.91	146.72	150.11
Follow up	150.08	155.13	147.17	150.00
Mean of Means	151.39	154.40	146.65	149.90

Tables 7, 9, 11, and 13 show the means for each subscale for each of the three groups at each assessment period. Hypothesis two thus receives no support.

Analysis of Hypothesis Three

The third hypothesis was that people who were assigned to the experimental group would have a lower blood pressure at post- and follow-up assessments than those assigned to the manual group. Blood pressure was taken on both arms, except for one man who had impaired circulation resulting from a stroke. His blood pressure was taken only from his unaffected left arm. Mean arterial pressure was used for statistical analysis; it is defined as systolic pressure plus diastolic pressure divided by two. Two three (group) by three (time) repeated measures analyses of variances thus were performed on the data, one for each arm. For the right-arm mean arterial pressure there was a significant main effect for group and for time. No group by time interaction was found. Table 14 shows these differences. Examination of the means indicated that blood pressure decreased over time for all three groups. The pre- blood pressure for Experimental Group 1 was 8 points higher than for either of the other groups. Blood pressure was lowest at the follow-up reading for all three groups. These means are shown in

Table 15. The Fisher LSD post hoc comparison revealed a significant difference between the pre blood pressure readings and the follow-up blood pressure readings ($p < 0.05$), but no significant difference was found for groups. Kirk (1982) points out that this apparently anomalous situation, with the F test showing a significant overall effect, and the Fisher LSD indicating no specific group differences, is not either unusual or unreasonable. However, the difference between one of the experimental groups and the other two groups narrowly missed being significant according to the Fisher LSD.

The left mean arterial blood pressure differed as a function of group, time, and group by time, as shown in Table 16. Again, blood pressure decreased over time for all three groups. Experimental group one's blood pressure increased for the second assessment, but decreased for the third or follow-up assessment. Experimental group two's blood pressure decreased by the second assessment, and stayed very near that level for the follow-up assessment. The left arterial blood pressure decreased for the manual group over time. Table 17 shows the left mean arterial blood pressure readings for the three groups at each assessment period. The Fisher LSD test yielded a significant

Table 14: Repeated Meaures Analysis of Variance of Right Mean Arterial Blood Pressure

Source	DF	MS	F	Prob
Condition	2	1626.66	3.54	0.0371
Error	46	459.09		
Time	2	501.38	5.39	0.0061
Condition by Time	4	102.59	1.10	0.3604
Error	92	93.08		

Table 15: Means of Right Mean Arterial Blood Pressure

Time	Manual	Group 1	Group 2	Mean of Means
Pre	110.00	118.46	109.19	111.86
Post	106.08	120.79	102.81	108.82
Follow up	104.96	111.17	101.54	105.57
Mean of Means	107.01	116.81	104.51	108.75

Table 16: Repeated Meaures Analysis of Variance of Left Mean Arterial Blood Pressure

Source	DF	MS	F	Prob
Condition	2	2871.52	6.73	0.0027
Error	47	426.72		
Time	2	354.42	4.73	0.0111
Condition by Time	4	274.98	3.67	0.0123
Error	94	74.97		

Table 17: Means of Left Mean Arterial Blood Pressure

Time	Manual	Group 1	Group 2	Mean of Means
Pre	108.33	118.54	107.27	110.71
Post	102.15	124.35	100.85	107.58
Follow up	104.04	112.00	101.54	105.46
Mean of Means	104.84	118.30	103.22	107.92

difference between the pre blood pressure readings and the follow-up blood pressure readings ($p < 0.05$). Again, the Fisher LSD test did not indicate a significant difference between groups, but, when applied to the interaction, showed that there was a significant difference between group 1's pre-, post-, and follow-up readings and the manual and group 2's post and follow-up readings.

Hypothesis Four

Hypothesis four was that patients who were in the experimental groups would have higher scores on the health belief scale at post measurement periods. The health belief scores were converted to T scores to standardize them and eliminate negative scores. Each of the three subscales was analyzed separately. The subscales were designed to tap differences in a participant's beliefs about the consequences of diabetes, the consequences of health practices, and ability to follow health practices. A 3 (group) by 3 (time) repeated measures analysis of variance was performed on each of the three subscales. The results of the three analyses are shown in Tables 18, 20, and 22. No significant differences were found as a function of groups, time, or groups by time in any of the subscales. Tables 19, 21, and 23 show the mean t scores

Table 18: Repeated Meaures Analysis of Variance of Beliefs About the Consequences of Diabetes

Source	DF	MS	F	Prob
Condition	2	339.144	0.45	0.6413
Error	47	756.107		
Time	2	4.735	0.02	0.9809
Condition by Time	4	98.768	0.40	0.8068
Error	94	245.678		

Table 19: Mean T Scores for Beliefs About the Consequences of Diabetes

Time	Manual	Group 1	Group 2	Mean of Means
Pre	150.25	147.48	149.75	149.29
Post	147.48	146.53	153.30	150.03
Follow up	153.16	144.79	151.11	150.00
Mean of Means	150.30	146.27	151.39	149.77

Table 20: Repeated Meaures Analysis of Variance of Beliefs About the Consequences of Health Practices

Source	DF	MS	F	Prob
Condition	2	1459.608	1.07	0.3526
Error	47	1369.373		
Time	2	192.347	0.29	0.7514
Condition by Time	4	413.171	0.62	0.6524
Error	94	671.029		

Table 21: Mean T Scores for Beliefs About the Consequences of Health Practices

Time	Manual	Group 1	Group 2	Mean of Means
Pre	298.51	293.74	301.58	298.74
Post	297.58	283.48	302.82	296.43
Follow up	304.72	293.62	296.73	298.00
Mean of Means	300.27	290.28	300.38	297.72

Table 22: Repeated Meaures Analysis of Variance of Beliefs About the Ability to Follow Health Practices

Source	DF	MS	F	Prob
Condition	2	16582.73	0.94	0.3975
Error	47	17626.36		
Time	2	1102.90	0.30	0.7422
Condition by Time	4	2256.46	0.61	0.6552
Error	94	3688.22		

Table 23: Mean T Scores for Beliefs About Ability to Follow Health Practices

Time	Manual	Group 1	Group 2	Mean of Means
Pre	767.93	801.32	805.00	794.40
Post	772.60	799.60	810.38	797.76
Follow up	777.37	828.75	796.69	800.00
Mean of Means	772.63	809.89	804.02	797.39

for each of the scales for each group at each of the three measurement times.

Analysis of Hypothesis Five

Hypothesis five was that diabetics who participated in the self-advocacy and social networking groups would be better self-advocates, at all post measurment periods, than patients in the manual condition. A 3 (group) by 3 (time) repeated measures analysis of variance was performed on the total Rathus Scores. The results are shown in Table 24. There were no signifificant effects. Table 25 shows the means of each group at each time.

Analysis of Hypothesis Six

The sixth experimental hypothesis was that people who participated in the self-advocacy and social networking groups would come to believe that their health is determined by their personal traits or behavior (self-determined), by the post measurement periods. The three (group) by three (time) repeated measures analysis of variance again indicated no significant differences. Table 26 shows the results of the analysis, and Table 27 shows the means of each group at each of the time periods.

Analysis of Hypothesis Seven

Hypothesis seven was that diabetics who participated in the self-advocacy and social networking groups would be more cohesive than those who participated in the manual condition. This support would be maintained in follow-up measures. These differences in cohesiveness were to be assessed by chooser and popularity scores derived from the sociometric questionnaire. The chooser score was derived by dividing the number of people that were chosen by the number of people who could have been chosen. A three (group) by two (time) repeated measures analysis of variance was performed on these scores. There was a significant main effect for group, and a significant main effect for time. No group by time interaction was found, as shown in Table 28. Participants in both experimental groups had much higher chooser scores at both post- and follow-up assessments. All three groups had lower chooser scores at the follow-up assessment than at the post-assessment. The Fisher LSD Test revealed a significant difference between the manual group and each of the experimental groups ($p < 0.05$). The experimental groups did not differ significantly. There was also a significant

difference between the post- and follow-up scores ($p < 0.05$).

The popularity scores were calculated by dividing the number of times the participant was chosen by the number of times the person could have been chosen by others. The analysis indicated a significant main effect for group and a significant main effect for time; these results are shown in Table 30. The interaction was not significant. Again, people in the experimental groups were chosen significantly more often than those in the manual group. In all three groups the number of times that a person was chosen decreased at the follow-up assessment. Table 29 shows the mean chooser scores for each group at each time period, and Table 31 shows the mean popularity scores. The Fisher LSD test again revealed a significant differences between the manual group and the experimental groups ($p < 0.05$), and again there was no difference between the experimental groups. The difference between the post and follow-up scores was again significant ($p < 0.05$).

Analyses of the tape recordings of the social support section of the group were performed to examine group process variables. The dimensions that were scored included: the number of problems discussed by the group, the number of solutions discussed by the group,

Table 24: Repeated Meaures Analysis of Variance of Rathus Assertiveness Scores

Source	DF	MS	F	Prob
Condition	2	2336.866	0.92	0.4068
Error	47	2548.521		
Time	2	1156.708	0.98	0.3802
Condition by Time	4	668.811	0.56	0.5840
Error	94	1183.742		

Table 25: Mean Rathus Assertiveness Scores Over Time

Time	Manual	Group 1	Group 2	Mean of Means
Pre	108.29	97.62	107.00	105.18
Post	110.04	106.69	110.85	109.38
Follow up	127.75	101.00	114.23	117.28
Mean of Means	115.36	101.77	110.69	110.61

Table 26: Repeated Meaures Analysis of Variance of Health Locus of Control Scores

Source	DF	MS	F	Prob
Condition	2	1.876	0.02	0.9809
Error	47	97.283		
Time	2	4.716	0.20	0.8162
Condition by Time	4	28.256	1.22	0.3078
Error	94	23.172		

Table 27: Mean Health Locus of Control Scores Over Time

Time	Manual	Group 1	Group 2	Mean of Means
Pre	32.29	35.39	34.08	33.56
Post	34.92	33.77	34.92	34.62
Follow up	34.79	33.31	34.15	34.24
Mean of Means	34.00	34.15	34.39	34.14

Table 28: Repeated Meaures Analysis of Variance of Chooser Scores for the Three Conditions

Source	DF	MS	F	Prob
Condition	2	4185.841	13.33	0.0001
Error	46	314.069		
Time	1	1305.892	15.13	0.0003
Condition by Time	2	9.756	0.11	0.8934
Error	46	86.299		

Table 29: Mean Chooser Scores for the Three Conditions Over Time

Time	Manual	Group	Group	Mean of Means
Post	16.88	30.31	37.50	25.49
Follow up	8.25	22.39	31.08	17.59
Mean of Means	12.56	26.35	34.29	21.54

Table 30: Repeated Meaures Analysis of Variance of Popularity Scores for the Three Conditions

Source	DF	MS	F	Prob
Condition	2	3267.341	30.02	0.0001
Error	46	108.828		
Time	1	1186.633	86.66	0.0001
Condition by Time	2	22.467	1.64	0.2050
Error	46	13.692		

Table 31: Mean Popularity Scores for the Three Conditions Over Time

Time	Manual	Group 1	Group 2	Mean of Means
Post	14.63	30.31	31.83	23.00
Follow up	7.63	21.00	26.25	15.74
Mean of Means	11.13	25.65	29.04	19.37

the time the group spent discussing group tasks, the time spent in silence, the amount of time one person was talking, the amount of time more than one person was talking, the amount of time spent discussing the topic presented in the self-advocacy section, the time spent discussing the overall study, the number of positive statements about the study, the number of negative statements about the study, the number of arguments, the number of self-disclosures, the number of people attending, and the total support group time. Neither group spent enough time discussing the topic that was presented in the self-advocacy section of the group, nor enough time in arguing, to allow this data to be analyzed, so all discussion of these variables is omitted.

Since the unit of analysis for the tape data was the group (no individual data were scored from the tape), and because each group had a different number of sessions, the data was analyzed separately for the two experimental groups. The Cox-Stuart Test for Trend was performed on the remaining thirteen different dimensions for each group. No significant trends were found on any of the dimensions. These trends can be seen in Figure 3 through 15.

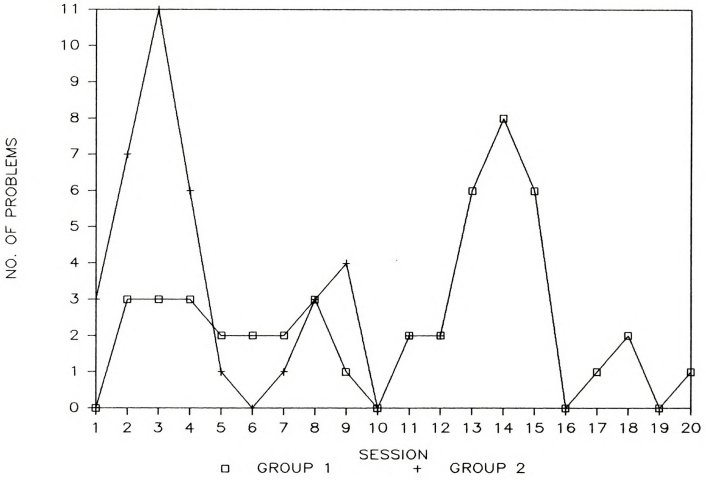


Figure 3. Number of Problems Raised per Session for Each Group.

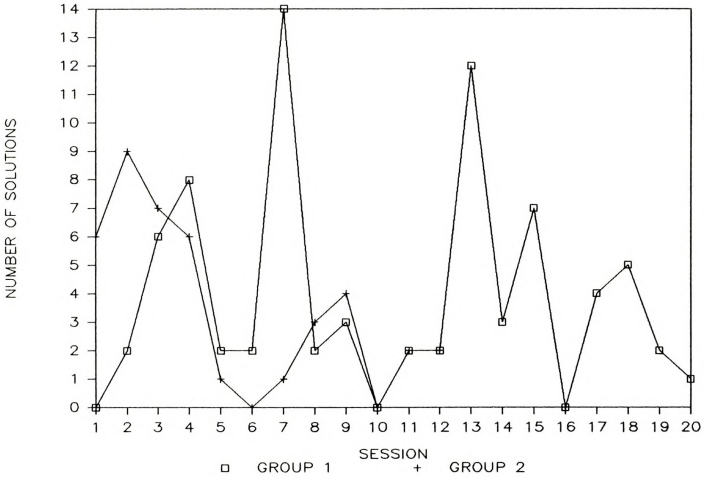


Figure 4. Number of Solutions Suggested per Session by Members of Each Group.

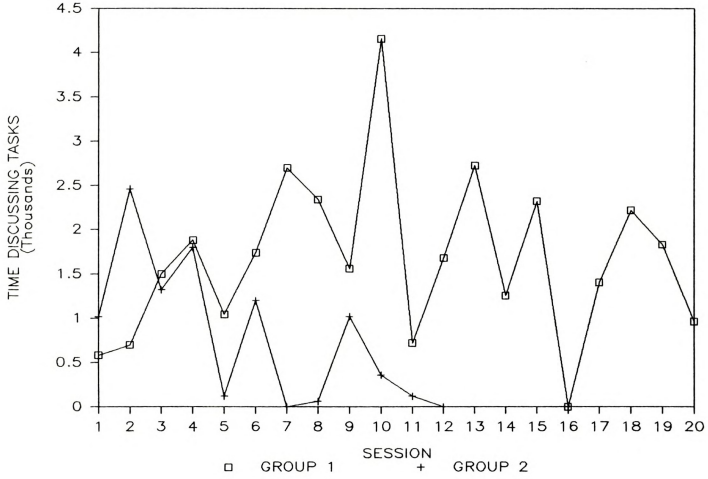


Figure 5. Time Spent Discussing Group Tasks per Session for Each Group.

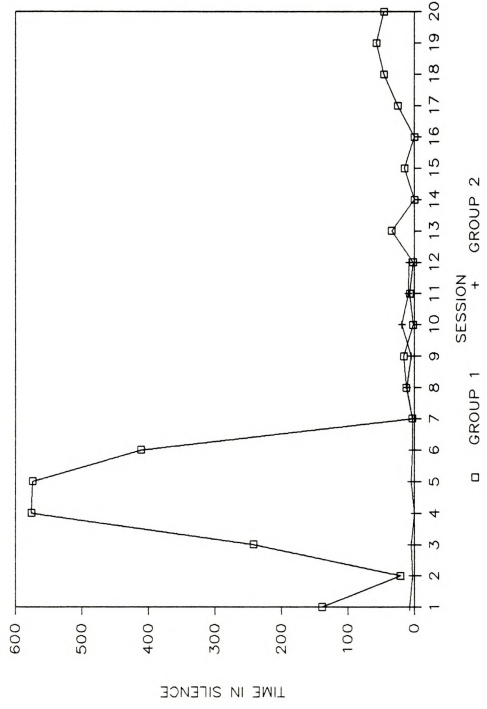


Figure 6. Time Spent in Silence per Session for Each Group.

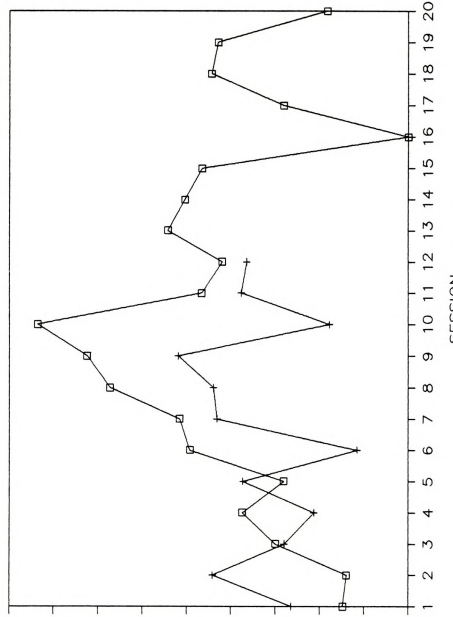


Figure 7. Amount of Time One Person Talking per Session for Each Group.

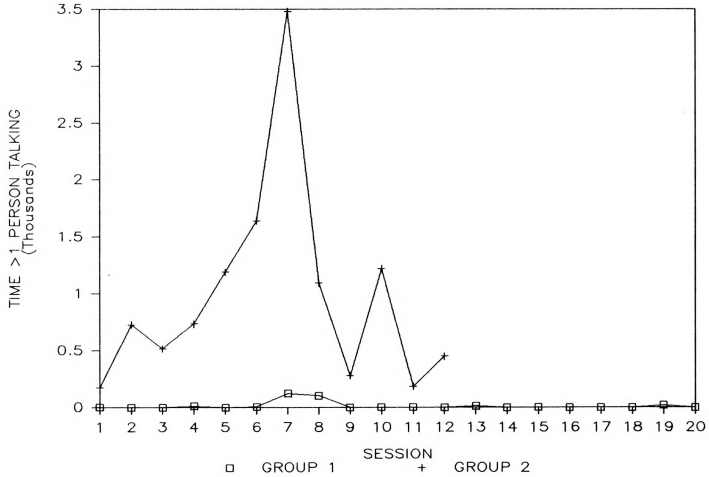


Figure 8. Amount of Time More than One Talking per Session for Each Group.

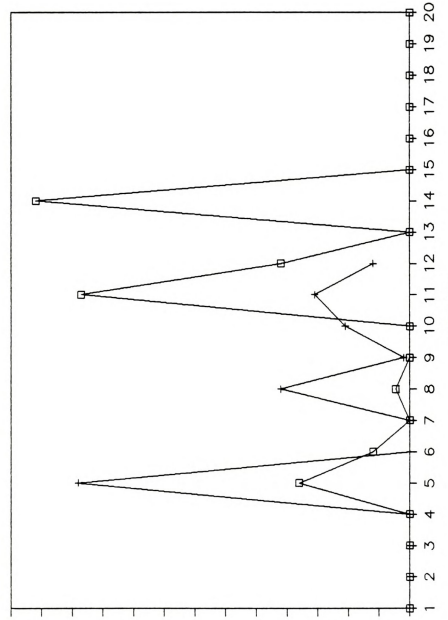


Figure 9. Time Discussing Overall Study per Session for Each Group.

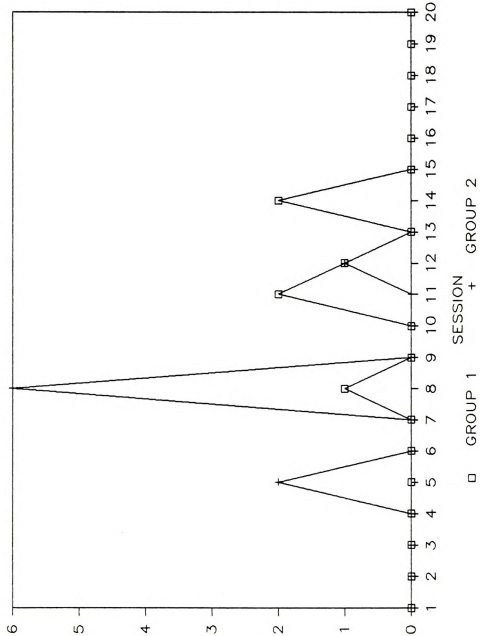


Figure 10. Number of Positive Statements per Session for Each Group.

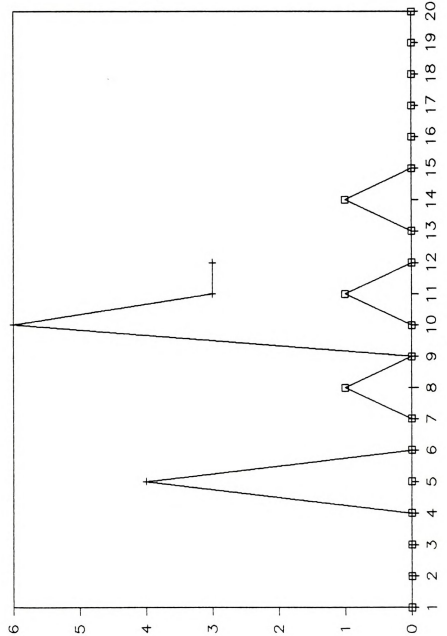


Figure 11. Number of Negative Statements per Session for Each Group.

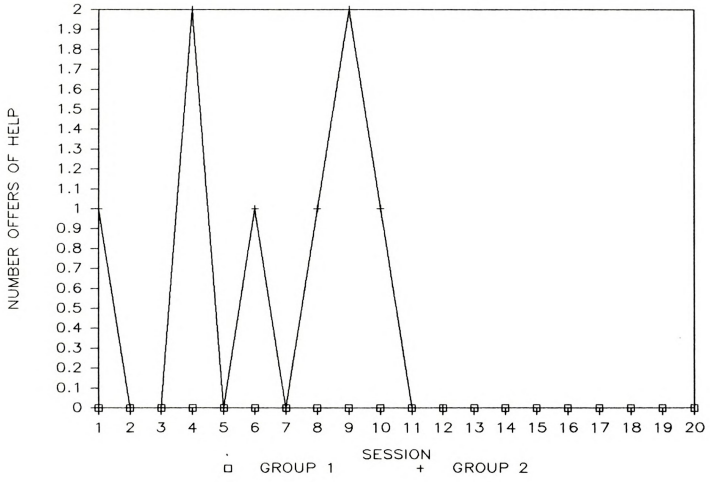


Figure 12. Number of Offers of Help per Session for Each Group.

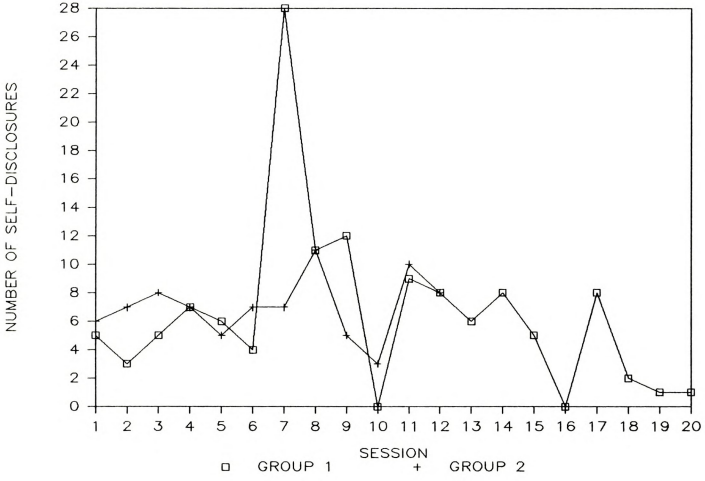


Figure 13. Number of Self-disclosures per Session for Each Group.

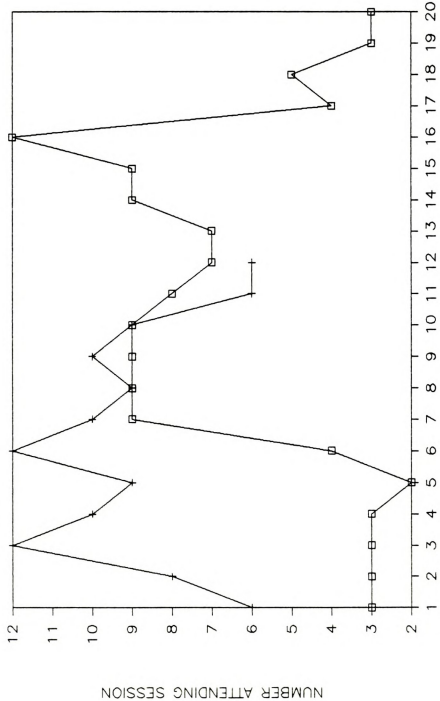


Figure 14. Number of People Attending each Session for Each Group.

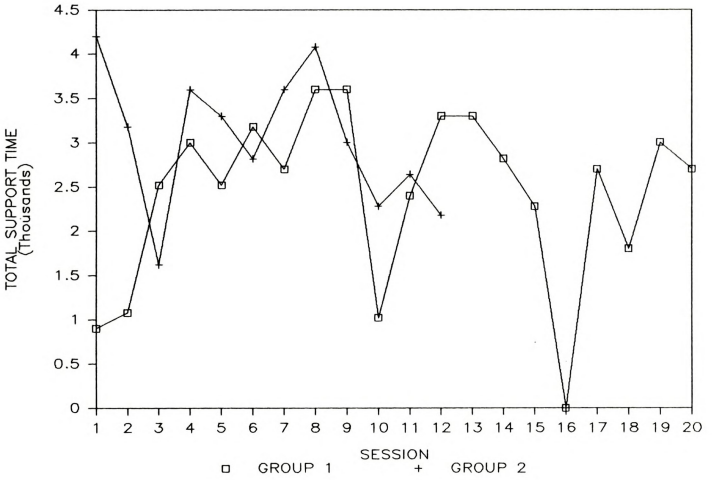


Figure 15. Total Group Support Time per Session for Each Group.

Analysis of Hypothesis Eight

The eighth hypothesis was that diabetics who participated in the self-advocacy and social networking groups would be more thorough in keeping their log books than people who were assigned to the manual group. Six 3 (group) by 2 (time) repeated measures analyses of variance were performed on information collected in the log book. The first analysis was performed on the mean completeness scores for meds for each of the three groups at both post- and follow-up assessments. Only time produced a significant effect; the results of this analysis are shown in Table 32. Not surprisingly, the completeness scores decreased at the follow-up assessment. Thus participants filled out their medication records more completely between the pre- and post-assessments than between the post- and follow-up assessments. The mean completeness scores for each of the three groups at each of the three assessment periods are shown in Table 33.

The results from the analysis of variance performed on the mean precision scores, reflecting the exactitude of what patients wrote in their log books, indicated that the only significant effect was for time. Table 34 shows the results from the analysis of variance. As shown in Table 35, participants were more precise in

describing their medication regimes during the first part of the study.

Results from the analysis on the mean completeness score for diet indicated, again, that there were no significant differences between groups. The only significant difference was over time; this is shown in Table 36. Table 37 shows that participants gave less complete descriptions of their eating behaviors during the last part of the study.

The results of the analysis of variance on the precision scores for diet indicated only a main effect for time. Precision scores for diet decreased over time. The results of the analysis are shown in Table 38; Table 39 shows the mean log book precision scores for diet.

Analysis of the positive advocacy scores revealed no significant differences between groups; the only significant difference was between post- and follow-up assessments. The results are shown in Table 40. As shown in Table 41, more situations were recorded between the pre and post asssessments then between the post- and follow-up assessments. As shown in Table 42, analysis of the negative advocacy scores indicated only a significant time effect. Again, participants recorded fewer situations between the post- and follow-up periods

than between the pre- and post-assessement periods, as shown in Table 43.

In summary, all of the data from the log books indicated no significant differences between groups. In each case only a significant time effect was found, indicating that people are less apt to record various events over a period of time, despite interventions intended to affect such recording.

Analysis of Hypothesis Nine

The final hypothesis was that patients in the experimental groups would evaluate the program more favorably than patients in the manual condition. A one-way between-subjects analysis of variance was performed on the mean program ratings for the three groups. As shown in Table 44, the analysis of variance indicated that there were significant differences among the means. The means for the three groups are shown in Table 45. A Newman-Keuls specific comparison test was performed to determine where the significant differences could be found. Experimental group 2 evaluated the program significantly lower than either experimental group 1 or the manual group ($p < 0.05$ in each case).

Table 32: Repeated Meaures Analysis of Variance of Log Book Completeness Scores for Medications

Source	DF	MS	F	Prob
Condition	2	3718.178	1.63	0.2073
Error	43	2277.698		
Time	1	25528.297	29.92	0.0001
Condition by Time	2	1271.813	1.49	0.2366
Error	43	853.173		

Table 33: Mean Log Book Completeness Scores for Medication

Time	Manual	Group 1	Group 2	Mean of Means
Post	48.59	64.83	73.58	59.35
Follow up	24.77	15.50	42.67	27.02
Mean of Means	36.68	40.17	58.13	43.19

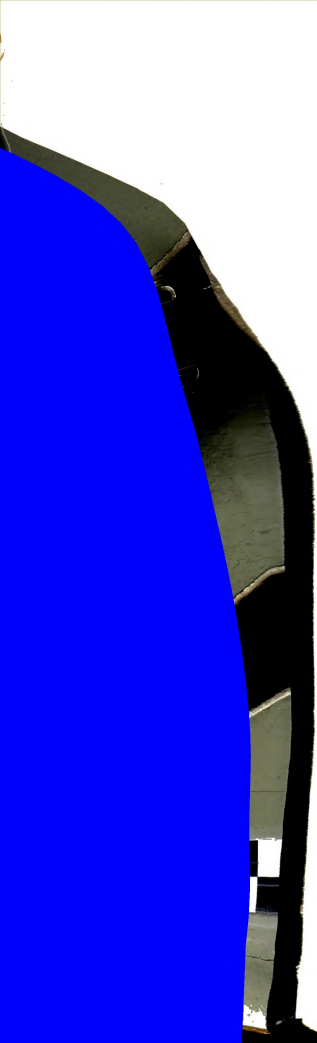


Table 34: Repeated Meaures Analysis of Variance of Log Book Precision Scores for Medications

Source	DF	MS	F	Prob
Condition	2	3890.800	1.53	0.2270
Error	43	2534.791		
Time	1	14866.516	12.22	0.0011
Condition by Time	2	978.457	0.80	0.4541
Error	43	1216.902		

Table 35: Mean Log Book Precision Scores for Medication

Time	Manual	Group 1	Group 2	Mean of Means
Post	69.73	86.08	81.75	77.13
Follow up	38.73	50.00	69.42	49.67
Mean of Means	54.23	68.04	75.58	63.40

Table 36: Repeated Meaures Analysis of Variance of Log Book Completeness Scores for Diet

Source	DF	MS	F	Prob
Condition	2	5105.886	2.43	0.0993
Error	47	2103.862		
Time	1	24878.516	39.06	0.0001
Condition by Time	2	686.308	1.08	0.3487
Error	47	636.971		

Table 37: Mean Log Book Completeness Scores for Diet

Time	Manual	Group 1	Group 2	Mean of Means
Post	50.96	57.92	75.08	59.04
Follow up	25.25	14.49	45.69	27.74
Mean of Means	38.10	36.15	60.39	43.39

Table 38: Repeated Meaures Analysis of Variance of Log Book Precision Scores for Diet

Source	DF	MS	F	Prob
Condition	2	4410.009	2.09	0.1347
Error	47	2107.057		
Time	1	7852.814	11.94	0.0012
Condition by Time	2	400.641	0.61	0.5481
Error	47	657.786		

Table 39: Mean Log Book Precision Scores for Diet

Time	Manual	Group 1	Group 2	Mean of Means
Post	54.67	62.08	76.69	62.32
Follow up	40.79	35.08	62.15	44.86
Mean of Means	47.73	48.58	69.42	53.59

Table 40: Repeated Meaures Analysis of Variance of Log Book Positive Advocacy Scores

Source	DF	MS	F	Prob
Condition	2	42.943	0.28	0.7585
Error	47	154.476		
Time	1	1359.270	9.70	0.0031
Condition by Time	2	36.640	0.26	0.7711
Error	47	140.153		

Table 41: Mean Postive Advocacy Scores

Time	Manual	Group 1	Group 2	Mean of Means
Post	9.83	9.77	5.77	8.76
Follow up	0.63	1.08	0.62	0.74
Mean of Means	5.23	5.42	3.19	4.75

Table 42: Repeated Meaures Analysis of Variance of Log Book Negative Advocacy Scores

Source	DF	MS	F	Prob
Condition	2	2.946	0.09	0.9150
Error	47	33.101		
Time	1	269.862	9.08	0.0042
Condition by Time	2	3.149	0.11	0.8997
Error	47	29.721		

Table 43: Mean Negative Advocacy Scores

Time	Manual	Group 1	Group 2	Mean of Means
Post	4.25	3.08	3.85	3.84
Follow up	0.21	0.23	0.46	0.28
Mean of Means	2.23	1.65	2.15	2.06

Table 44: Between-Subjects Analysis of Variance of Program Rating

Source	DF	MS	F	Prob
Condition	2	3.1227	3.856	0.0278
Error	49	0.8097		

Table 45: Mean Overall Ratings of The Program

	Manual	Group 1	Group 2
	4.12	4.21	3.33
Number of cases	26	14	12

Method of Associative Analysis

Cluster Analysis (Tryon, 1939) is a statistical technique which groups together variables on the basis of their correlations. This type of analysis allows researchers to determine what associative relationships exist among multiple variables.

In the present study over 100 measures were taken. The number of variables was reduced to a manageable number by using a combination of rational and empirical processes. Variables in which there was little or no variance were eliminated. This reduced the number of variables to 81. A V-analysis (cluster analysis of variables) was performed on these 81 variables. Eleven clusters resulted from the first analysis. Variables with factor loadings less than 0.40 were eliminated. Since the glyco-hemoglobin assays were considered the most important outcome measure, it was then pre-set for cluster 1 and a pre-set cluster analysis was performed.

Results of the Cluster Analysis

The pre-set analysis identified twelve empirical dimensions that characterized the data set. These clusters were:

I. Blood

II. Beliefs and Reported Compliance

III. Physical Condition

IV. Cohesiveness

V. Insulin Dependent Diabetes (IDD)

VI. Compulsivity

VII. General Advocacy

VIII. Specific Advocacy

IX. Medication Compliance

X. External Health Control

XI. Medical Histories

XII. Health Practice Concern

The variables that made up each of the pre-set clusters are presented in Table 46. The correlations between the oblique clusters are presented in Table 47. Each of the twelve clusters is described below.

Blood (I)

This cluster was named blood because the follow up glyco-hemoglobin was pre-set as the primary variable in cluster I to see which variables would cluster with it. This cluster correlated most (0.26) with cluster 5, the insulin dependent diabetes (IDD) cluster. Participants with high glyco-hemoglobin assays readings tended to be IDDs. This makes sense since, as reported earlier, IDDs tend to have higher glyco-hemoglobin readings than do adult onset diabetics. This cluster did not correlate highly with any other clusters.

Table 46: The Twelve Pre-set Clusters

Cluster	Loading
Cluster 1: Blood	
1. Reported compliance to good health practices, T1	.70
2. Glyco-hemoglobin assay, T1	.49
3. Glyco-hemoglobin assay, T3 (D)	.49
4. Kidney Problems	.43
5. Occupation	-.41
Cluster 2: Beliefs and Reported Compliance	
1. Reported compliance to good health practice, T3	1.00
2. Reported exercise compliance, T3	.93
3. Beliefs about the ability to follow health practices, T2	.92
4. Beliefs about the ability to follow health practices, T3	.92
5. Beliefs about the consequences of following health practices, T3	.91
6. Reported diet compliance, T3	.87
7. Beliefs about the consequences of diabetes, T3	.86
8. Reported compliance to good health practice, T2	.81
9. Reported diet compliance, T2	.73
10. Beliefs about the consequences of following health practices, T2	.73
11. Reported exercise compliance, T2	.73
12. Knowledge about advocacy	.72
13. Beliefs about consequences of diabetes, T2	.57
Cluster 3: Physical Condition	
1. Left mean arterial pressure, T2	.91
2. Left mean arterial pressure, T1	.85
3. Right mean arterial pressure, T2	.83
4. Right mean arterial pressure, T1	.81
5. Left mean arterial pressure, T3	.81
6. Quetelet's index, T2	.76
7. Quetelet's index, T1	.70
8. Right mean arterial pressure, T3	.69
9. Quetelet's index, T3	.67
10. Has high blood pressure	.53

Table 46 (cont'd)

11.	Has medical condition besides diabetes	.44
12.	Group 1	.43

Cluster 4: Cohesiveness

1.	Manual	-.85
2.	Chooser Score, T3	.82
3.	Popularity Score, T3	.81
4.	Popularity Score, T2	.79
5.	Group 2	.65
6.	Chooser Score, T2	.64
7.	Recommended- would like to have group meetings	-.61
8.	Liked social support section of the program	.53

Cluster 5: Insulin Dependent Diabetes (IDD)

1.	On insulin	.88
2.	Has experienced hyper or hypoglycemia	.82
3.	Number of times hospitalized for diabetes	.64
4.	Total number of diabetic complications experienced	.54
5.	Duration of diabetes	.51
6.	On oral medication	-.49
7.	Beliefs about the consequences of diabetes, T1	.49
8.	Has experienced acidosis	.46

Cluster 6: Compulsivity

1.	Log book completeness score for diet, T3	.88
2.	Log book completeness score for meds, T3	.85
3.	Log book precision score for diet, T3	.77
4.	Log book precision score for meds, T3	.74
5.	Log book completeness score for diet, T2	.73
6.	Log book completeness score for meds, T2	.68

Cluster 7: General Advocacy

1.	Rathus assertiveness score, T1	.88
2.	Rathus assertiveness score, T2	.64

Table 46 (cont'd)

Cluster 8: Specific Advocacy

1.	Negative advocacy, T2	.93
2.	Positive advocacy, T2	.75
3.	Completeness score for meds, T2	.63
4.	On the same medication as time 2, T3	-.52

Cluster 9: Medication Compliance

1.	Reported medication compliance, T2	.91
2.	Reported medication compliance, T3	.79
3.	Diabetes controlled by diet	-.75
4.	Reported medication compliance, T1	.62
5.	On the same medication as time 1, T2	.53

Cluster 10: External Health Control

1.	Health locus of control score, T1	.83
2.	Health locus of control score, T3	.77
3.	Health locus of control score, T2	.70
4.	Education	-.53
5.	Sex	.45

Cluster 11: Medical Histories

1.	Total number of complications experienced from diabetes	.76
2.	Heart problems - diabetes related	.73
3.	Eye Problems	.61
4.	Has heart problems - not necessarily diabetes diabetes related	.52
5.	Family Income	-.52
6.	Circulatory problems	.49
7.	Has been hospitalized since Time 1, T2	.46

Cluster 12: Health Practice Concern

1.	Log book precision score for medication, T2	.84
2.	Reported compliance to good health practices, T2	.78
3.	Log book precision score for diet, T2	.66
4.	Has been hospitalized since time 1, T2	-.51
5.	Reported exercise compliance, T1	.50

Table 47: Correlations Between the Oblique Cluster Domains

CLUSTER	1	2	3	4	5	6
1	---	.09	.03	.07	.26	.02
2		---	-.16	.09	.07	-.02
3			---	-.12	-.14	-.11
4				---	.09	.27
5					---	-.03
6						---
7						
8						
9						
10						
11						
12						

CLUSTER	7	8	9	10	11	12
1	.01	.05	.04	.04	.05	.12
2	-.17	.25	.33	.08	-.13	.35
3	-.06	-.10	.04	.07	.22	-.10
4	.05	.15	.14	-.11	-.15	.15
5	.04	.34	.08	-.15	.16	.04
6	.05	.33	.24	.08	-.30	.27
7	---	.01	.03	-.44	-.07	-.07
8		---	.04	.04	-.07	.31
9			---	-.08	-.03	.05
10				---	.08	-.01
11					---	-.38
12						---

Beliefs and Reported Compliance (II)

This cluster was named beliefs and reported compliance because of the large number of belief and compliance variables that made up the cluster. It appears that recent experience during the study affects beliefs and compliance. The belief and compliance variables that make up this cluster were measured at the post- and follow-up assessments. This cluster correlated most (0.33) with Clusters 9 (medication compliance), 12 (Health Practice Concern, 0.35), and 8 (Specific Advocacy, 0.25). Both clusters 9 and 12 have reported compliance variables in them; cluster 8 is made up of measures of care in keeping a log book. It is to be expected that people who were compliant in following their diet and exercise regimes would also be compliant with their medications. In addition, people who are compliant with a medical regime would probably be more compliant with a request to keep a log book. This cluster did not correlate highly with the blood cluster (cluster 1).

Physical Condition (III)

This domain was termed physical condition because it is primarily made up of physiological measurements. The variables that make up this cluster, blood pressure and weight, have repeatedly been reported to be highly

correlated. This cluster negatively correlates with seven of the twelve clusters. It correlates best (0.22) with medical histories (cluster 11). Although this is not a high correlation, it tends to confirm the reasonable expectation that physical condition would correlate with medical histories.

Cohesiveness (IV)

This cluster was named cohesiveness because most of the variables in this cluster are the measures that were constructed to measure cohesiveness. Being in the manual condition negatively correlated with the cohesiveness measure. Since manual members did not tend to interact with other manual members, they showed lower cohesiveness. In addition, the recommendation "would like to have group meetings," also negatively loaded on this cluster. This recommendation was made only by participants in the manual group. "Liked the social support section of the program," positively loaded, was a comment made only by group members. Being in experimental group 2 positively loaded in this cluster. This is consistent with the finding that experimental group 2 had higher cohesiveness than experimental group 1 at both measurement periods.

Insulin Dependent Diabetes (V)

This domain was termed insulin dependent diabetes because the factors in this cluster were characteristic of people with Type I diabetes (juvenile onset diabetes). As previously mentioned, this cluster postively correlated with the "blood" cluster. This cluster correlated highest (0.34) with the Specific Advocacy cluster; hence, people with IDD diabetes tend to be more concerned with getting proper medication through the use of advocacy skills.

Compulsivity (VI)

This dimension was termed compulsivity because the variables that loaded on this domain were scores that participants received for filling out their log books. This cluster correlated highest (0.27) with the cohesiveness cluster. People who are "compulsive" tended to be people in the experimental groups. Thus, although the analysis of variance did not reveal a significant group effect for any of the log book variables taken singly, there does seem to have been some effect of group membership on keeping a log book.

General Advocacy (VII)

This domain was termed general advocacy because the variables that make up this cluster are scores on the Rathus Assertiveness Scale, which was designed to

measure assertiveness in a variety of situations. This cluster negatively correlated (-0.44) with the external health control cluster.

Specific Advocacy (VIII)

This domain was termed Specific Advocacy because the variables that loaded on this cluster involved advocacy and a change in medications between the post- and follow-up assessments. This cluster correlated most strongly (0.25) with the Belief and Reported Compliance cluster, with the Compulsivity cluster (0.24), and with the Health Practice Concern (0.31).

Medication Compliance (IX)

This domain was termed Medication Compliance because the variables that loaded the highest were the participants' reported compliance to medication. The more compliant a person reported being with medications, the less likely he/she was to change medications between the first and second assessments. This cluster positively correlated with beliefs and reported compliance (0.33).

External Health Control (X)

This domain was termed External Health Control because the three health locus of control measures correlated positively. Education negatively correlated with this domain, with less educated people reporting

that they had less control over their health. Also females reported that they had less control than males. General advocacy negatively correlated (-0.44) with this cluster. This makes rational sense; people who feel that they have less control over their health are less assertive.

Medical Histories (XI)

This domain was termed medical histories because the variables that make up this cluster are items that have to do with a person's medical history. Family income correlates negatively with this domain. People with a lower income would be less likely to concern themselves with preventive health care. This cluster negatively correlates with the Health Practices cluster (-0.38).

Health Practice Concern (XII)

This dimension was termed Health Practice Concern because the variables that make up this cluster indicate concern about one's health. The variable "has been hospitalized since the pre-assessment" negatively loaded on this cluster. This cluster correlated positively with clusters 2 (0.35) and 8 (0.31), and correlated negatively with cluster 11 (-0.38).

Typological Analysis

The typological analysis (Tryon & Bailey, 1970) is a statistical method whereby objects or persons can be grouped into clusters on the basis of their similarities or differences. The similarities or differences are based on scores on the defining variables from a pre-set analysis. This procedure provides a way in which typologies or "types" based on similar profile scores on a given set of variables or dimensions can be constructed.

For the final O-Type analysis presented below, only three clusters were used. The reason is that there were only forty-nine people that had complete data on all measures. If the original twelve clusters that resulted from the pre-set analysis were used for the O-Type analysis, the number of people within any type would have been very small.

This is illustrated by the first O-Type analysis attempted, which used five of the twelve clusters: blood, health beliefs and reported compliance, physical condition, cohesiveness, and general advocacy. This analysis produced thirteen O-Types. Only one of the resulting types had more than five people, and it had only six. Since the O-Types did not vary as a function of health beliefs and reported compliance, nor as a

function of general advocacy, these variables were dropped and another O-Type analysis was performed using the blood, physical condition, and cohesiveness clusters. This analysis produced 10 typologies for the forty-nine people. However, eight of these ten O-Types were dropped from further analysis because they contained five or fewer individuals. With five or fewer indivudals within a type, it is difficult to determine the underlying characteristics of the group. The two remaining types accounted for 19 of the 49 individuals. The resulting O-types are presented graphically in Figure 16.

O-Type 1

This type of diabetic person scored average on the assays reading, average on the physical condition dimension, and low on the cohesiveness dimension. When individuals in this O-type are examined, it turns out that every one of them was in the manual group. Thus the cluster analysis has simply isolated a subset of people in the manual condition who have similar characteristics, and their chief distinguishing characteristic is simply that they had low cohesiveness - which is to say that they were average members of the manual group.

O-Type 2

This type of diabetic person scored lowest on the blood dimension, average on physical condition and highest on cohesiveness. These are people in the experimental groups, three from group 1 and six from group 2, who became highest in cohesiveness, and whose blood level and physical condition were improved somewhat. It is possible that these people are precisely those who benefit most from associating with other diabetics. Group membership may reinforce them for whatever they have been doing to keep in shape, and encourage them to engage in additional health-related activities.

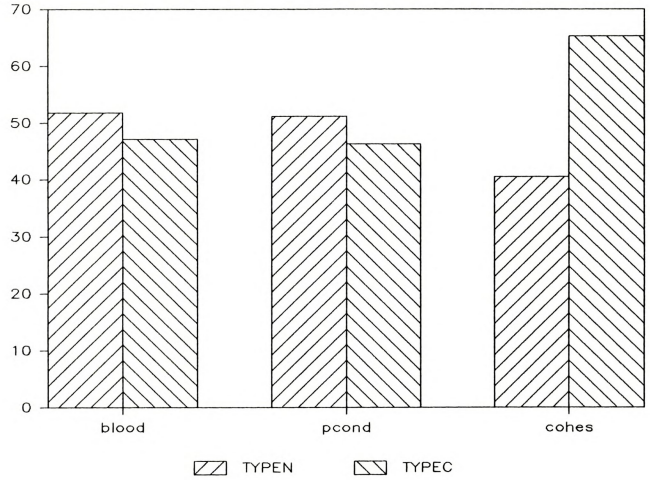


Figure 16. Scale Values for Cohesive and Noncohesive O-types.

DISCUSSION

The fundamental issue to be approached is the minimal verification of the experimental hypotheses. Only the most inevitable of the predicted consequences, that subjects in the experimental group would develop higher cohesiveness, received clear confirmation. This leaves two primary subordinate issues. First, how can one account for the apparent failure of the study to verify its hypotheses? Second, does the study give any clear indications of how future interventions might be designed so as to increase their probability of success? The results do seem to be highly suggestive with respect to both of these interrelated subordinate issues.

Failure to Confirm Experimental Hypotheses

Reliability of Measures

One possible explanation of the failure of the study's predictions is that the reliability of the instruments employed was not great enough to detect differences that occurred as a result of the intervention. It has become a truism that experimental and statistical tests have to be much more powerful if effects are to be detected with measurements of low reliability. This point has been made specifically with respect to the kinds of variables involved in the

present study. Heitzmann & Kaplan (1983) pointed out that it may be difficult to detect relationships between social support and health outcomes with measures having low reliability. For example, these authors show in one of their simulations that, if the true correlation between a scale and an outcome measure were 0.5, the observed correlation would be only 0.28 if the test-retest reliability of one scale were 0.32 and that of the other were 0.97.

Thus it is possible that, in the present study, changes did occur but were not detected because the instruments used to measure the differences were not reliable enough. The methods and results sections have already detailed various questions about the reliability of the measures; clearly the outcome measure which seemed most promising at the outset of the study, the glyco-hemoglobin assay, does not have a reliability approaching 0.97!

However, a consideration of the overall pattern of results, including the cluster analysis, indicates that low reliability is unlikely to be the primary reason for failures to reject the null hypothesis. The measures used intercorrelated consistently and in accord with reasonable expectations. They simply did not differ significantly as a function of membership in an

experimental versus the manual group. There were several significant differences as a function of time; if the primary problem had been unreliability of the measures, no significant differences should have appeared. Thus low reliability could have contributed in some cases to the failure of a hypothesis, but could not account for the general failure to find differences.

Weaknesses in the Experimental Manipulations

A more likely "meta-hypothesis" is that the experimental manipulations were lacking in one or more respects. The dependent variables measured did not show a broad range of beneficial effects. Thus either the wrong dependent variables were being measured, or the independent variable(s) manipulated had weak effects. Probably both of these things contributed to some extent. The independent variable side will be discussed first.

Type of Social Support

Only one type of social support was provided in this study. As pointed out in the introduction, sources of social support can be divided into three classes: family, friends and existing social groups, and special groups of people sharing the same problem. It seems likely that different sources of support play different

roles in ameliorating or exacerbating problems. It may be necessary to manipulate all the types of support, rather than relying exclusively on adding one new special type of support.

Targeting one type of support may actually create problems with the other support systems. One woman in the study illustrated this possibility. She was an obese women of about 50 who had never worked outside the home. She started attending the groups and seemed to enjoy them and to perceive some need for self-advocacy training. However, attending the group in the evening took time away from her husband and family. After a few weeks, her husband made her drop out of the study; he did not like the idea of his wife getting involved with other people.

Possibly if family and friends were included in the support group a more effective total support system could be developed. People involved in the support system could see the benefits and problems with each component of the system. Any problems among and between the people in the support system could be addressed and minimized.

Lack of Situational Specificity of Treatment

A problem that researchers in the field of learning have been addressing for decades has been the problem of

transfer of training. Researchers typically train subjects in some limited range of skills and assume that other behaviors or attitudes will also change. However, this seldom happens. Fairweather, Moran, and Morton (1956) found that attitudes, fantasies, and behaviors are only marginally related. Further, Fairweather (1964) found that patients' perceptions of themselves, of their treatment programs, and of others are relatively unrelated to their behaviors in the community.

In the field of diabetes the problem has been how one gets people to transfer their knowledge about diabetes into practice. The present study was successful in creating cohesiveness among group members. People participating in the experimental groups were more cohesive than people who were assigned to a manual group. However, the hoped-for results of increasing cohesiveness did not occur. That is, people who were cohesive did not show changes in their physiological measures, beliefs, feelings of control, or assertiveness. Hence, the hypothesis that cohesivenss would affect these measures was not substantiated.

Another example of this problem was the indication that there was no time effect for general advocacy. That is, participants did not report becoming generally

more assertive after they received training. However, the cluster analysis revealed that there was a more specific effect for advocacy. People who recorded more positive and negative advocacy situations had a greater probability of having a medication change between the post and follow-up assessments. This finding did indicate that there was a specific advocacy effect in one area. Examples of diabetics who were having difficulties with physicians or with their medications were used in the group as well as in the manual. This may have encouraged participants to demand a change in medication. Thus it may be necessary to target specific behaviors to be changed and to specify particular methods to change the behaviors, rather than relying on the teaching of general skills.

A further indication that this might be a desirable change was that, when participants were asked for recommendations, several people recommended that the advocacy training be more closely tied to the problems one might experience as a diabetic.

The practical question of how one bridges the gap between providing social support and changing behaviors remains. One possibility may be to incorporate support groups into the educational classes. The focus could be on how one can use the educational information for

changing one's maladaptive behaviors. Another focus could be on how those in a support system can help to change behaviors.

Content of the Intervention

The question of optimizing the content of support meetings also must be addressed. The results indicated that the process, or form of the support manipulation was effective. People in the experimental groups were more cohesive than those in the manual group. The groups continued to meet after the study was completed. Some of the control group subjects joined in the meetings. Thus it seemed clear from simple observation that the study had achieved some of its goals, even though this did not show up in the form of traditional hypothesis evaluation.

It is much less clear that advocacy training was the best content, or vehicle, for furthering the goals of the study or the goals of the groups. Many participants expressed a preference for studying medical, rather than psychological, information. One man dropped out of the study two hours after he was assigned to the manual group. He finished the assessment and went home and started to read the manual he was given. He called up the experimenter and said he wanted medical information, and if the manual was all

that he was getting, he wanted to drop out of the study.

A major problem with diabetics seems to be that they are not aware of the limitations of purely medical solutions. People are always looking for the easy way out. This was quite apparent in the experimental group meetings. Both groups were very interested in getting medical people to speak to them about their disease; they were especially interested in the latest research findings. They seem to believe that there is something magical about the medical profession, that with time there will be a cure. Why put a lot of effort into counteracting the effects of diabetes now, when there may be a cure tomorrow? This problem is not limited to people with diabetes; it seems to be a problem with most chronic diseases. It appears that educators, physicians, and researchers need to dispute the beliefs that people have about the magic of medicine. It may be that any social support manipulation is doomed to failure unless it first disposes of this issue. This may require continuing the educational training over a much longer period of time while incorporating existing support systems with new social supports. After people incorporated the limitations of medical solutions into their belief systems, they might be more open to more

realistic - although more effortful - approaches.

Duration and Timing of the Intervention

The duration of the intervention may have been insufficient to bring about the desired effects. The mean duration of diabetes for the participants in the study was over nine years. It may have been overoptimistic to believe that a five-week program could have a major impact on behaviors formed over a decade. Participants had been living with diabetes continuously for about 500 weeks, and this study was trying to overcome the inertia developed over that period with 20 hours of contact. That may be too much to ask.

A brief manipulation might have more chance of success if it were begun soon after diagnosis. Then the patients' "diabetic life styles" would not yet be set, and more adaptive habits might be possible. But any intervention begun at that time should be continued, ideally for as long as the person lived. It has already been said that patients require some time to adapt to diabetes, and presumably to other chronic diseases, and may not be receptive to some ideas right after diagnosis. Thus it appears that intervention should begin immediately after diagnosis, and should be as chronic as the disease itself.

Experimenter Effects

The characteristics of the experimenter and the other students working on the project were an important part of the intervention. All of them were young females. Almost half of the participants in the study were males. Several of the males in the study protested because they were being taught advocacy. They claimed that they did not have any problems in advocating for themselves, and that this was a problem that females had, not males. Their views may have been affected by the fact that they were in a group being facilitated by a female.

The contention that experimenter characteristics may have been important is supported by the observation that some males made sexist remarks involving the experimenter and/or the students working on the project. These remarks were not directed toward aspects of the study, but toward personal characteristics of the people working on the project. One man offered to have sex with the experimenter "so that she could experience sex with a diabetic who had had a penis implant." It is not possible to determine what effect(s) the experimenter had on the outcomes of the study. However, these effects cannot be ruled out as contributing factors, particularly when it is well known in social

psychology that experimenter characteristics like prestige may be powerful variables.

Cluster Analysis

In this section the cluster analysis will be discussed in more detail, both as it relates to the experimental hypothesis and as it sheds light on the relationships between the dependent variables. The reasonableness and consistency of the outcomes of the cluster analysis are striking. For example, the cluster of glyco-hemoglobin readings correlates positively with reported good health practices, and negatively with kidney problems; the whole cluster correlates with the "insulin dependent diabetes" cluster, and the pattern indicates that those with juvenile diabetes are prone to have kidney problems, to have been conforming better at the beginning of the study, and to have high glyco-hemoglobin readings. It should be noted that this is discouraging in the sense that better initial conformity was not related to lower blood readings, nor did reported conformity at any stage cluster with these readings. They seem to have been related exclusively to disease type.

The cluster analysis gives some comfort to advocates of the health belief model, but it is a cold type of comfort. Measures of health beliefs and

reported compliance to medication, diet, and exercise regimens were in the same cluster. This supports the prediction from the health belief model that beliefs should affect compliance. However, all of these measures were verbal, and had no relationship to glyco-hemoglobin levels or other measures of physical condition. In fact, beliefs and reported compliance correlated negatively with the following clusters: physical condition, compulsivity, general advocacy, and medical histories.

It thus appears that beliefs about the seriousness of one's disease can affect a number of variables, but none are positively related to health status. It could be hypothesized that the direction of causation is the opposite of what might be implied by the health belief model; that is, serious medical problems lead to belief in the seriousness of the consequences of diabetes, and, perhaps through rationalization, to the belief that good health practices can be followed and will be effective. However, the present study does not support the belief that better reported compliance leads to better physical condition.

Janis (1983) reported that people who do not believe that their medical condition is serious, or do not believe that they can do much about it behaviorally,

are not very likely to follow a prescribed regimen or take any preventive measures. It may be that the doubters are realistic. Future research needs to examine very carefully the cost/benefit ratios involved in following a medical regime. If those ratios are extremely high, noncompliance is an optimal strategy.

The insulin dependent diabetes cluster correlated with the specific advocacy cluster, and, as pointed out in the previous section, people with higher scores on the specific advocacy dimension were more apt to have medication changes. This relationship lends support to the assertion that the advocacy manipulation was somewhat effective. In addition, it appears that some people wanted to learn advocacy skills. Since the insulin dependent diabetes cluster correlated with the specific advocacy cluster, it is likely that people who felt uncomfortable with their medical regimes decided to try out the advocacy techniques after reading examples of their usefulness. It is also interesting that the specific advocacy cluster correlated with the health practice concern cluster. This again indicates that those who scored highest on the specific advocacy cluster were those who were most concerned about their health.

The External Health Control cluster also contained a reasonable combination of five variables; three were the health locus of control scores (at the three measurement times), one was education and one was sex. This cluster correlated with the General Advocacy cluster, indicating that differences in external locus of control and assertiveness may be a result of differential socialization of males and females, as well as dependent upon education. Males seem to be more confident of their ability to control their health and be assertive.

The O-Types analysis lent some credence to the hypothesis that high cohesiveness could affect physiological outcome measures. All people making up the first O-Type were in the manual group. Half of them had juvenile onset diabetes. They were very interested in meeting other juvenile onset diabetics. Some had been diabetic for years and did not know anyone else who had diabetes. The other five people in this O-type were adult onset diabetics; all were either currently overweight or had been overweight in the past. The ten people in this O-type were half males and half females. They were all interested in starting a support group. Two of the people that made up this cluster had tried to get a support group going; one was a juvenile diabetic

and the other was an adult onset diabetic. Both were women. All of them were disappointed that they were not assigned to the experimental groups. They rated the overall program slightly above "somewhat good" (above four on a five point scale). These people scored high-average on the blood and physical condition clusters, and very low on the cohesiveness cluster (necessarily, since they were in the manual group).

People comprising the second O-Type had been in the experimental groups. Six of the nine people were from the second experimental group. Four of the nine people were females. They had been active in their groups. All attended at least 8 of their sessions (the mean number of sessions attended was 9.67). Two of these people had juvenile onset diabetes; the other seven had adult onset diabetes. These people on the average were heavier than the people that made up the first type. Although these people were very active within the "official" groups, and continued after the "official" groups were terminated, they rated the overall program just slightly over average. They scored lower on the blood cluster, lower on the physical condition cluster, and higher on the cohesiveness cluster than the people who made up the first type.

To summarize, the cluster analysis produced impressively reasonable results. The dependent variables clustered in ways that seemed rational in terms of a priori theoretical considerations, or post hoc analysis, or even both. Although the results of the experimental component of the study were discouraging, those of the "naturalistic" component are interpretable, suggestive, and perhaps encouraging for future interventions.

General Observations

Perhaps some of the more interesting findings were not those obtained through the use of traditional experimental methodology. For instance, two people in the study (both from the same group) met through the study, and by the follow-up assessment had developed an intimate relationship. The female was obese, so much so that we were not able to weigh her at any of the assessment periods. The male was bulimic. Both of the people said that they thought the relationship was a "good" thing for them.

One woman who was very involved in developing the group dropped out. Before the "official" group ended, participants who were interested in recruiting new members were asked to check with potential members to be sure that they were not already participating in the

study. The woman who dropped out was very upset by this request. She thought that it was unethical to limit their group. She thought that her group would be a "life-saving activity" too important to limit. She decided that the experimenter was unethical and refused to participate in the post- and follow-up assessments. She continued to be very active in the group. She found a meeting place for her group, designed flyers to advertise the group, and started new activites for group members.

Both of the incidents that were reported above took place in the same group (group 2), which had only twelve sessions. Members of this group also shut off their tape recorder at various times. They did not like the idea of being tape recorded; they thought that they had the right to shut off the tape whenever they wished. This group also decided that they wanted more "medical" information. They asked a dietician to come to a meeting and give a talk on nutrition. The group invited her to come and speak during the time that was scheduled for their support group. They also asked one of the participants, who worked in the library and who knew a lot about diabetes, to give a presentation on research that had been done on diabetes.

By the time of the follow-up assessment, group 2 had started a swim night, an aerobics night, had picnics, and scheduled several speakers. They had a meeting place, held group meetings twice a month, and had recruited new members. None of these events were assessed via the formal dependent variables of the "official" study.

Group 1 was also interesting. It started with three members. It was not until the beginning of the third week that new members were recruited. New members came into the group until the eleventh session. Some members had finished their commitment to the study when new members started. This group was much more low-keyed than the other group. However, they did rebel. They wanted more medical information. They were told that the group was theirs and they could do anything they wanted, provided that the decision was made by the group as a whole, rather than by one or a few individuals. The group then asked the experimenter to try to get a physician to come and give a presentation on the glyco-hemoglobin assay. They wanted to know more about the test that they were having done as part of the study. The sessions were typically two hours long. The group elected to have the physician come after half an hour, so that they could still have half of the advocacy

presentation, have the physician speak for an hour, and then have a half hour to ask questions.

Then a few members of the group decided that it would be more interesting and more informative for them to schedule speakers than to have more information on advocacy training presented. The group members were again told that it would be fine as long as the group (not an individual) made the decision. The group never made a decision on this matter. A few of the members enjoyed the presentations on advocacy and would not agree to give up the presentations. This group, which had twenty "official" meetings, was continuing when the follow-up assessments were conducted.

All participants in the study were told about mid-way through the study that when the study was over a pot-luck dinner would be organized. The pot-luck dinner would give all the people in the study a chance to meet others who had participated, as well as giving people in the manual group a chance to get involved in an ongoing group, if there were one. Group 1 spent a lot of time helping to get ready for the pot-luck. They got permission to have the pot-luck at the church where they were holding their meetings. By the time of the pot-luck dinner they had a flyer made up and had retained a speaker for their next meeting.

Each group had flyers for the pot-luck dinner. Each member brought a dish that people with diabetes could eat; they were also asked to bring the recipe. Family and friends were also invited. About 45 people attended, few of whom were from the manual group. Each group elected a member of their group to give a short presentation about their group and their future plans. Members of both groups spoke to each other about their experience in the study.

There is thus evidence that this study succeeded in ways not reflected in statistical analyses. The participants were empowered, as demonstrated by their rebellions. They formed cohesive groups, as demonstrated by the continuation of the groups after the study was finished. There were few dropouts from the study, with 49 of the original 57 completing all of the study; we have seen that one dropped out as an ultimate rebellion, and another dropped out because of pressure from her husband. Thus the rather mediocre verbal evaluations of the intervention may be compromised by rebellion, and at any rate are probably comparable with much higher ratings by studies with the usual high dropout rates. Our general observations, then, suggest that part of the apparent failure to confirm that the intervention was effective is related to an

inappropriate, or at least incomplete, choice of dependent variables.

Suggestions for Future Research

The present study suggests several directions for future research. One important direction is having people with diabetes decide on the independent and dependent variables that should be manipulated and measured. In the present study some of the important findings were not "measured," but directly observed. The people involved are the subject of interest, and they will affect the findings of research and be affected by the changes that occur. Possibly more changes will occur if the people who are the object of the research decide what variables are important to measure.

The word conformity becomes important here. Conformity implies that the patient is following the advice of a physician or other health care provider. Researchers then measure the degree to which the patient follows this advice. From the physician or health care provider's perspective the patient is simply told what to do. Choice is not an option. In working from this medical perspective, variables such as glyco-hemoglobins, weight, blood pressure, and health beliefs are important. These variables may indeed be

important in sustaining life. But from a patient's point of view the most important variable may be his/her quality of life. Patients may not be interested in physiological measures. The choice of the focus of change or treatment is not one that should be made by the physician or health care provider, but one that should be made by the person affected. If the patients are allowed to define the goals, and possibly even the methods to reach the goals, more satisfaction and progress are likely. For example, a physician may decide that a patient is too heavy, that his or her glyco-hemoglobin readings are too high. The patient makes no contact with glyco-hemoglobin readings, and may not care much about either variable. The patient may be more interested in whether or not he or she can drink beer on Friday night. Maybe drinking beer on Friday night is worth dying sooner for. In summary, researchers need to consider the goals of patients as well as those of physicians. The key word may then become cooperation between the experimenter and the subjects, rather than conformity to the wishes of medical personnel. Such an approach may make the experimental manipulations appear to be much more powerful than is now the case.

Social support appeared to be an important variable. However, it seems clear that if support systems are going to make a difference in the lives of people with diabetes, research needs to include all types of support, as described above.

Educational information for a person with diabetes is a must. It seems important for the process to begin soon after a person is diagnosed. If they are begun early, before the "diabetic life styles" are set, it is more likely that they will be effective. It is clear that these educational classes need to be extended over a longer period of time. An important component of these classes should be the discussion of the limitations of medical solutions. This may motivate people to make changes in their lives.

It also seems important for these classes to target specific behaviors that are to be changed. The educational classes need to be more action-oriented, making the support group activities less intellectual and social and more oriented toward bringing about changes in appropriate behaviors.

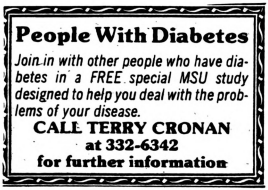
Chronic disease research also needs to be longitudinal in nature. Since the topic of the research is long-term, researchers in the field need to set up long term research programs that are able to measure

long term effects of different interventions. For example, Wilson, Kaplan, Heitzmann, & Sandler (1985) conducted a study of weight loss programs with diabetics. they found that, although weight changes did occur during the study, the glyco-hemoglobin assay did not show changes until the 18 month follow-up period. This supports the need for more long-term research.

Finally, future research needs to be based on a careful distinction between the two types of diabetes. The two types are medically different, and the present study provides some evidence that the two types of diabetic people may respond differently to psychological interventions, as well; the cluster analysis showed a relationship between specific advocacy and insulin dependent diabetes. Proposed interventions should consider the different needs and goals of the two kinds of diabetic people.

APPENDIX A

APPENDIX A


People With Diabetes
Join in with other people who have diabetes in a FREE special MSU study designed to help you deal with the problems of your disease.
CALL TERRY CRONAN
at 332-6342
for further information

Metro Roundup

Disabled vets installed

The Lansing chapter of Disabled American Veterans, and its Auxiliary chapter have installed new officers for the 1984-85 year.

Elected by the D.A.V. Capital City Chapter #3 were James Wlodarczak, commander; Richard Casler, senior vice commander; Winston Morgan, junior vice commander; Nicholas Corey, chaplain; William Higgins, treasurer; Dale Kempher, adjutant; Ramond Light, hospital chairman; and Bernard Cochran and James Pizzo, service officers.

Auxiliary officers are: Patricia Light, commander; Phyllis Rowlee, senior vice commander; Beverly Rowlee, junior vice commander; Genevieve Pizzo, chaplain; Shirley Casler, treasurer; and Lucille Mosher, adjutant.

Nancy greets Kiwanis

Two Lansing Kiwanis Club members were among the 15,000 Club leaders and guests who were greeted by First Lady Nancy Reagan at the 69th annual convention of Kiwanis International in Phoenix, Ariz.

Lansing Kiwanis president Richard Hacker and 1st vice presedent Howard L. Ganong Jr. represented one of the 8,100 Clubs from 78 nations around the world at the convention, which was held June 24 to 27.

The Club's agenda included community service reports for the past year and the election of international officers. Kiwanis boasts of having 311,000 members, its highest membership count in its history.

EMERGENCY HOTLINES

Housing: 487-6051
(9 a.m.-5 p.m.)

Housing: 484-7461
(Evenings, overnight)

Food: 372-6330
(8 a.m.-5 p.m. Mon-Fri)

Energy: 1-800-292-5650
(8 a.m.-5 p.m. Mon-Fri)

Ingham Rural Emergency Outreach: 676-1065
(1-4 p.m. Mon-Fri)

Study needs diabetics

Terry Cronan, a Michigan State University doctoral student, is seeking people interested in participating in her study to improve health-related behaviors of diabetics.

Cronan would like to enlist at least 60 adult volunteers who have received some educational instruction about diabetes. The study has been approved by the human subjects committees at MSU, Lansing General Hospital and Ingham Medical Center.

She has a grant from the Michigan Department of Public Health to help finance the study. Anyone interested may phone Cronan at 332-6342.

The Detroit News

Comics / Celebrities / Weather

Thursday, July 19, 1984

Science 222-2300

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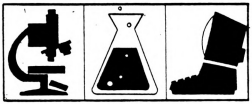
SCI/TECH



BRIEFING

MEDICINE

Diabetic research

A doctoral student at Michigan State University is seeking 60 diabetics willing to participate in a research project that will evaluate education programs for those who suffer from the disease. The volunteers must be from the Lansing area and must have previously had some education about their disorder. The program will provide educational materials to all participants. Some will also attend meetings for five weeks, when they will have access to counseling and a support group.

Student Terry Cronan's research is supported by the university, Lansing General Hospital and Ingham Medical Center. It is financed partly by the Michigan Department of Public Health.

Participants will receive free blood sugar tests. Those interested can call Ms. Cronan at 517/332-6342.

APPENDIX B

APPENDIX B

Self-Advocacy and Social Support for the Diabetic

Dear Potential Participant,

I am a researcher from Michigan State University. I am studying programs that might improve health behaviors in people who, like you, have diabetes. We would like to find out whether or not more training will help you cope with your disease better. This training is not further educational information about diabetes. The training is intended to help you to use the information and to help you deal with your diabetes on a daily basis.

We are trying to get people to participate in this study. The study will last five weeks. If you agree to participate in the study, we will assign you to one of two different programs.

If you are assigned to one group, we will ask you to meet twice a week for a total of five weeks. The classes will be held from _____ TO _____. The classes will be two hours per evening.

If you are assigned to the second group, you will be given information intended to help you cope with the problems associated with diabetes, but you will not be asked to attend classes. However, you will be asked to provide the same information to us that is provided by the other group. We will be asking you questions three times during the study: once before you start, after five weeks, and again three months after the five week period ends. If you are not assigned to attend the classes, we will give your name and phone to other people that are assigned to the same group. You will also receive the names of the people in your group.

Participant Agreement

We will be asking all participants to:

a. agree to be randomly assigned to one of the two programs.
b. complete the program to which you are assigned; however, participants may withdraw at any time without penalty.
c. participate in a follow-up evaluation.
d. keep daily log books on your daily activities.
e. allow program staff access to your medical records. The information we will get from the records includes: number of hospitalizations, complications, blood tests results, other medical problems, which will include: psychological or social service records, substance abuse, treatment records, date of diagnosis of diabetes, and any other relevant medical information about your diabetes.

I agree to:

a. keep all of your information anonymous in all discussions or reports and confidential at all times.
b. provide instructions.
c. provide information about the results upon completion of the program.
d. pay for blood work which will be done for the purpose of this research project.

Signed _____ Date _____

_____ _____
Participant

_____ _____
Project Director

_____ _____
Witness

Code No. _____

Historical Questionnaire

Name _____

Address _____

Telephone number _____

Sex Male _____ Female _____ Date of Birth _____

Marital status: ___ single ___ married ___ widow or widower
___ separated ___ divorced ___ remarried

Ethnic origin: ___ White ___ American Indian ___ Black
___ Arabic ___ Asian ___ Hispanic
___ Other (please specify) _____

Occupation _____

Number of hours worked per week _____

Education, highest grade completed: _____

Do you have health insurance? ___ No ___ Yes

If yes, please specify the name of the company.

_____

Date of diabetic diagnosis _____

Blood glucose level at diagnosis _____

Diagnosed Type II (non-insulin-dependent, adult) No ___ Yes ___

Your blood glucose level at last examination was _____

Are you taking any medication? No _____ Yes _____

If so, what is it? _____ How much are you taking? _____

_____

When did you begin taking it? Date _____

Have you ever received any educational instructions on diabetes? If so, please specify:

Where _____ When _____

Total number of hours of instruction _____

What was included in the instruction? Please describe briefly.

_____

_____

Have you ever been hospitalized? If so, please list the reason and dates

_____

_____

_____

_____

Have you experienced any complications from your diabetes? If yes, please specify, when the complication occurred and whether you are experiencing any symptoms presently.

_____

_____

Do you have any medical condition besides diabetes? If so, please specify:

_____

_____

Please specify the relationship to you of any member of your family who have diabetes: _____

Family Income:

Below $10,000 ____ $20,001 - $25,000 ____

$10,000 - $15,000 ____ $25,001 - $30,000 ____

$15,001 - $20,000 ____ above $30,000 ____

Physician's Name _____

Weight _____ lbs. Height _____ inches

Blood Pressure: Left:_____ Right: _____

Code Number _____

Health Belief Scale

For each statement below, write in the blank space on the left the number that you think best fits the statement.

For example:

__80%__ I believe that I am responsible for _____ percent of my own medical care.

The person who filled in the statement believed that he or she was responsible for 80% of his or her own medical care.

Part 1. Beliefs about consequences.

_____ 1. I believe that the life expectancy of the average person with UNTREATED diabetes would be shortened by _____ years.

_____ 2. The quality of life of the average person with UNTREATED diabetes would be reduced to _____ percent of what it would be without diabetes.

_____ 3. There are _____ chances out of 100 that the average person with UNTREATED diabetes would have serious complications (like eye problems, circulatory problems, and kidney problems).

Part 2. Beliefs about the consequences of health practices.

_____ 4. The average person with diabetes who got good medical treatment would gain back _____ years of life expectancy from the treatment alone.

_____ 5. The average person with diabetes who followed good health practices would gain back an additional _____ years of life expectancy.

_____ 6. The quality of life of the average person with diabetes who got good medical treatment would be _____ percent of what it would be if they did not have diabetes.

_____ 7. The quality of life of the average person with diabetes who got good medical treatment and followed good health practices would be _____ percent of what it would be if they did not have diabetes.

_____ 8. The average person with diabetes who got good medical treatment would decrease the chances of serious complications to _____ out of 100.

_____ 9. The average person with diabetes who got good medical treatment and followed good health practices would decrease the probability of serious complications to _____ chances out of 100.

Part 3. Beliefs about Ability to Follow Health Practices. In order to follow the health practices needed to counter the effects of diabetes, you have to have the necessary ability, and be willing to spend time, money, and will power. Please estimate below what percentage of perfection you think you can achieve in each case. Let's look at an example in each of the four areas covered in the table below.

1. In the area of medical care, a person with 100% of the ideal ability would know just how to find the best medical care available. They would have the ability to find the best doctors, pharmacists, hospitals, and other health care professionals as needed. If you felt that you had three-fourths as much ability as the ideal in that area, you would write 75 (for 75 per cent) in the top left blank in the table.

2. In the area of diet, the "ideal patient" would be able to spend as much time as necessary to plan and prepare perfect diabetic meals. If you can only afford half as much time as the ideal, you would write a 50 in the second blank down, second blank over.

3. In the area of exercise, it might be desirable to purchase equipment, club memberships, or professional help to insure that you get the ideal amount of exercise. If you can afford as much of this as the ideal, you would write "100" in the third blank down, third blank over.

4. Finally, if you have only a quarter of the will power necessary to engage in ideal health practices, you would write a 25 in the bottom right blank.

Now go ahead and fill in your best guess at the percentage of the ideal that you think you can bring to caring for your diabetes. Fill in all 16 blanks below with your best estimate.

	Percentage of Each			
	Ability	Time	Money	Will Power
Medical Care	_____	_____	_____	_____
Diet	_____	_____	_____	_____
Exercise	_____	_____	_____	_____
Good Health Practices	_____	_____	_____	_____

Indicators of Health Behaviors

For each statement below, please indicate the percent of the time that you perform the behavior described in the statement.

For example, if you were on insulin you might answer as follows:

__90__ I take my insulin _____ percent of the time.

You would just put the percentage of time you take your insulin in the left blank.

If you are not on medication do not answer the medication questions. Go to the diet questions.

Medications

_____ 1. I follow my medication program _____ percent of the time.

_____ 2. I take my medication within 30 minutes of the correct time _____ percent of the time.

_____ 3. I am _____ percent sure that I always take the correct amount of medication.

Diet

_____ 4. _____ percent of the food I eat is on my diet plan.

_____ 5. I eat _____ percent more food than I should.

_____ 6. I eat _____ percent of my food at regular meal times.

Exercise

_____ 7. On the average I exercise _____ days a week.

_____ 8. On the average I exercise for _____ minutes a day.

_____ 9. When I exercise, I work _____ percent as hard as I should.

General

_____ 10. I test my urine daily _____ percent of the time.

_____ 11. I check my feet daily _____ percent of the time.

_____ 12. I consult my physician on the average every _____ days.

ASSESSING ASSERTIVE BEHAVIOR

Name _____ Date _____

Directions: Indicate how characteristic or descriptive each of the following statements is of you by using the code given below.

+3 very characteristic of me, extremely descriptive
+2 rather characteristic of me, quite descriptive
+1 somewhat characteristic of me, slightly descriptive
-1 somewhat uncharacteristic of me, slightly nondescriptive
-2 rather uncharacteristic of me, quite nondescriptive
-3 very uncharacteristic of me, extremely nondescriptive

_____ 1. Most people seem to be more aggressive and assertive than I am.
_____ 2. I have hesitated to make or accept dates because of "shyness."
_____ 3. When the food served at a restaurant is not done to my satisfaction, I complain about it to the waiter or waitress.
_____ 4. I am careful to avoid hurting other people's feelings, even when I feel that I have been injured.
_____ 5. If a salesman has gone to considerable trouble to show me merchandise which is not quite suitable, I have a difficult time in saying "No."
_____ 6. When I am asked to do something, I insist upon knowing why.
_____ 7. There are times when I look for a good, vigorous argument.
_____ 8. I strive to get ahead as well as most people in my position.
_____ 9. To be honest, people often take advantage of me.
_____ 10. I enjoy starting conversations with new acquaintances and strangers.
_____ 11. I often don't know what to say to attractive persons of the opposite sex.
_____ 12. I will hesitate to make phone calls to business establishments and institutions.
_____ 13. I would rather apply for a job or for admissions to a college by writing letters than by going through with personal interviews.
_____ 14. I find it embarrassing to return merchandise.
_____ 15. If a close and respected relative were annoying me, I would smother my feelings rather than express my annoyance.
_____ 16. I have avoided asking questions for fear of sounding stupid.
_____ 17. During an argument I am sometimes afraid that I will get so upset that I will shake all over.
_____ 18. If a famed and respected lecturer makes a statement which I think is incorrect, I will have the audience hear my point of view as well.
_____ 19. I avoid arguing over prices with clerks and salesmen.
_____ 20. When I have done something important or worthwhile, I manage to let others know about it.
_____ 21. I am open and frank about my feelings.
_____ 22. If someone has been spreading false and bad stories about me, I see him (her) as soon as possible to "have a talk" about it.
_____ 23. I often have a hard time saying "No."
_____ 24. I tend to bottle up my emotions rather than make a scene.
_____ 25. I complain about poor service in a restaurant and elsewhere.
_____ 26. When I am given a compliment, I sometimes just don't know what to say.
_____ 27. If a couple near me in a theatre or at a lecture were conversing rather loudly, I would ask them to be quiet or to take their conversation elsewhere.
_____ 28. Anyone attempting to push ahead of me in a line is in for a good battle.
_____ 29. I am quick to express an opinion.
_____ 30. There are times when I just can't say anything.

Code Number _____

Health Locus of Control Scale

Please evaluate on a 6 point scale the extent to which you believe each of the following statements. The scale values are as follows.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

_____ 1. If I take care of myself, I can avoid illness.

_____ 2. Whenever I get sick it is because of something I've done or not done.

_____ 3. Good health is largely a matter of good fortune.

_____ 4. No matter what I do, if I am going to get sick I will get sick.

_____ 5. Most people do not realize the extent to which their illnesses are controlled by accidental happenings.

_____ 6. I can only do what my doctor tells me to do.

_____ 7. There are so many strange diseases around that you can never know how or when you might pick one up.

_____ 8. When I feel ill, I know it is because I have not been getting the proper exercise or eating right.

_____ 9. People who never get sick are just plain lucky.

_____ 10. People's ill health results from their own carelessness.

_____ 11. I am directly responsible for my health.

Code No. _____

Date _____

Post Assessment Medical History Questions

Name _____

Address _____
Street City State Zip

Telephone number _____

Date of Birth _____

Your blood glucose level at last examination was _____

Are you taking the same medication? No _____ Yes _____

If new, what is it? _____ How much are you taking? _____

_____

When did you begin taking it? Date _____

Have you been hospitalized in the past couple of months? If so, please list the reason and date(s):

_____

_____

Have you experienced any new complications from your diabetes? If yes, please specify, when the complication occurred and whether or not you are experiencing any symptoms presently.

_____

_____

Do you have any new medical condition besides diabetes? If so, please specify:

_____

_____

Physician's Name _____

Weight _____ lbs. Height _____ inches

Blood Pressure: Left:_____ Right: _____

Code Number _____

Date _____

Sociometric Questionnaire

On the attached sheet you will find the names of all of your group members. For each of the activities listed below, please fill in the names of the people from your group with whom you would feel comfortable; arrange the names in order of preference, from left to right, and write as many names as you wish on each line (you may use initials to save time and space).

1. To whom would you say "hello" if you saw them outside of class?

_____

2. With whom would you carpool to group meetings?

_____

3. Whom would you invite to share in a social activity?

_____

4. With whom would you discuss you medical program?

_____

5. If you were experiencing problems with your diabetes, whom would you call?

_____

6. Whom would you invite to a party you were giving?

_____

7. Whom would you call for a chat?

_____

8. If you were experiencing marital or family problems, with whom would you discuss them?

_____

9. Whom would you consider a close friend?

_____

Code Number_____

Date_____

Questions about the Manual

T F 1. Assertiveness means to stand up for your own rights, to express your anger, to reach out to others, to express your affection, to be more direct.

T F 2. An aggressive person violates his/her own rights by failing to express honest feelings, thoughts, and beliefs, and consequently permits others to violate him/her.

T F 3. Empathic assertions involve clearly describing how the other person's words contradict his/her deeds.

T F 4. Progressive relaxation is designed to increase a person's awareness of the internal sensations associated with tension or anxiety and at the same time to provide an active coping skill for relaxing away such reactions.

T F 5. When setting goals you need to define your goals, concentrate on subgoals, write them down, and seek out models.

T F 6. Internal dialogues are the ways you talk to other people.

T F 7. Negative self-statements are self-defeating.

T F 8. Social fears help people respond assertively.

T F 9. When dealing with difficult situations, nonassertion creates an angry behavior cycle.

T F 10. People never respond negatively when you respond assertively.

Code Number _____ Date _____

Evaluation

The following questionnaire is designed to assist in the evaluation of this program. Please respond to the following items based upon your feelings and perceptions about the program. Your comments will be helpful in the planning of future programs.

1. How many sessions did you attend? _____

2. The purpose and goals of the program were:

1	2	3	4	5
never explained (unclear)	little explanation (not very clear)	somewhat explained (somewhat clear)	explained pretty well (clear)	Fully explained (very clear)

3. The length of time for each meeting was:

1	2	3	4	5
too short	somewhat too short	satisfactory	somewhat too long	too long

4. The number of group sessions was:

1	2	3	4	5
too few	somewhat too few	satisfactory	somewhat too long	too many

5. The pace of each program was:

1	2	3	4	5
too slow	somewhat too slow	just right	somewhat too fast	too fast

6. The discussions and materials presented in this program were:

1	2	3	4	5
not useful for me	somewhat unuseful	neither useful or not useful	somewhat useful	relevant and useful for me

7. The opportunity to participate and contribute in the program was:

1	2	3	4	5
poor	not very good	neither poor nor good	pretty good	excellent

8. Do you think that applying what you learned in this program to your daily life can be:

1	2	3	4	5
not helpful at all to me	not very helpful	neither helpful nor unhelpful	pretty helpful	very helpful to me

9. Do you think that you could make use of the techniques used/taught in this program in the future?

1	2	3	4	5
not easily	somewhat uneasy	maybe	pretty easy	very easily

10. On a scale of 1 through 5, please evaluate the following:

	Not useful	Somewhat unuseful	Neither useful or unuseful	Pretty helpful	Very helpful
a. Handouts	1	2	3	4	5
b. Discussion	1	2	3	4	5
c. Exercises	1	2	3	4	5
d. Role Playing	1	2	3	4	5

11. Was the program:

a. Organized in presenting material?

1	2	3	4	5
Not at all	not very	somewhat	pretty much	Very much

b. Clear in conveying information?

1	2	3	4	5
Not at all	not very	somewhat	pretty much	Very much

d. Interesting?

1	2	3	4	5
Not at all	not very	somewhat	pretty much	Very much

12. Would you recommend this program to a friend?

1	2	3	4	5
not likely	somewhat unlikely	somewhat	pretty likely	very likely

13. How would you rate this program overall?

1	2	3	4	5
poor	somewhat poor	average	somewhat good	excellent

3 PROGRAM EVALUATION

14. Please include any comments which may help in the future planning of this program.

a. What did you like most about the program?_____

_____

_____

b. What did you like least?_____

_____

_____

c. What would you recommend to improve this program?_____

_____

_____

THANK YOU!

APPENDIX C

APPENDIX C

SELF-ADVOCACY AND SOCIAL SUPPORT FOR THE DIABETIC

By

Leah K. Gensheimer and Terry Cronan

SELF-ADVOCACY AND SOCIAL SUPPORT FOR PEOPLE WITH DIABETES

Preface

This manual is a guide for group leaders who wish to help diabetic people become more assertive and develop social support. It was not designed to be a "cookbook" which one could follow in detail to guaranteed successful outcomes. Such a product probably cannot be written. This manual is offered in the hope that it will be of some help to diabetic people who would like to become more assertive and to develop the social support that they may need.

Much of the material which follows was taken from three primary sources: Your Perfect Right (Alberti & Emmons, 1982), Don't Say Yes When You Want to Say No (Fensterheim & Baer, 1975), and Responsible Assertive Behavior (Lange & Jakubowski, 1976). Concepts, philosophies, exercises, etc., originated by these experts in the area of assertion training, were read, sorted, and organized to produce an introductory manual for diabetic people. An attempt was made to identify specific sources, to give appropriate credit and to provide the user of this manual direction on where to locate further information/details.

Session 1: Introduction

Objectives

1. Establish rapport between self and participants.

2. "Break-the-ice" and have group members introduce themselves.

3. Provide participants with a clear understanding of the goals of the group. Define the way the group will be run.

Self-advocacy Training

1. Increase participants' awareness of what is meant by assertive behavior, highlight major obstacles which interfere with appropriately asserting oneself, and discuss society's impact on one's behavior. Emphasize the learning process involved in any form of behavior.

2. Begin to develop in members an assertive belief system. Help participants identify and accept their own personal rights as well as the rights of others.

3. Discuss with the participants how the second part of the group will be structured.

Social Support Section

1. Get the group started. Give the participants the first set of tasks to be completed.

Handouts:

ACTIVELY BECOMING MORE ASSERTIVE

MYTHS

BASIC HUMAN RIGHTS

Means to Objectives

Introduction

1. Rapport Building

a. Greet group members as they enter the room. Introduce yourself and ask members their names as they arrive. Make small talk if time permits.

b. Provide a formal introduction. This should include the purpose of the group and what is expected of the group members.

2. Breaking-the-Ice: Introduction

Have group members introduce themselves in a manner that will demonstrate the facilitative processes which will later be used in the group (covert rehearsal, modeling, behavior rehearsal).

Instruct members to close their eyes and think of two or three statments they will use as a means of introduction. Tell them that they are to state their names and four words which they feel best describe themselves. Allow one or two minutes for group members to think of their responses (covert rehearsal). Then begin by stating your name and four words you've chosen as characteristic of yourself. In this manner, the facilitator serves as a model, demonstrating the type of response requested, and assisting those group members who may not have been clear on what was expected of them. This is also intended to ease anxiety or tension among those who may be apprehensive about speaking out.

Continue around the group until all members have introduced themselves. This provides behavioral rehearsal of those statments previously rehearsed in the trainees' minds).

Note: This exercise may facilitate spontaneous discussion among group members, who may question one another on their choice of words to describe themselves. Welcome such spontaneity, especially since the nonassertive individual is often reluctant to talk out among new individuals or within a group setting. Care, however, whould be taken to prevent some members from feeling excluded or becoming bored.

3. Procedures and goals of the group

All the sessions will be tape recorded. Only members of the research team will be allowed to listen to the tapes. The reason that we will be recording the sessions is that we want to follow what is happening in the group. This might help us in future groups.

The sessions will be divided into two parts. The first part of the session will be more directive. The purpose is to learn self-advocacy skills. I will present materials each meeting on ways to become a self-advocate. We can discuss as a group the materials that are presented. We have asked each one of you to keep a log book. One of the things we have asked all of you to record in the log book is situations in your life in which you were an effective self-advocate and events in which you were not an effective advocate for yourself, but would like to have been. In the first part of each meeting we will discuss these events. We hope that such discussions will help you as well as other group members.

The Goals of the Group

The goals of this group are:

1. To teach you the distinction between nonassertive, assertive, and agressive responses to specific situations.
2. To help you develop an assertive belief system which involves sincere concern for individual rights by assisting you in identifying and accepting your own personal rights, as well as the rights of others.
3. To reduce existing cognitive (thought) and/or affective (emotional) obstacles that may keep you from acting assertively.
4. To suggest ways for you to find different resources that are available in your community.
5. To suggest ways for you to meet other people who are similar to you.

Goal number three should be clarified by providing examples of cognitive and affective obstacles which may inhibit assertive responding; e.g. irrational thinking, excessive anxiety, feeling of guilt and/or anger. Briefly explain the behavior cycle involved which facilitates assertive responding:

The less anxious one is,

the more confident one becomes
in situations that require assertive behavior;

the more confident one is,
the more likely one is to engage in the behavior;

the more practice one gets,
the more successful outcomes there will be.

In clarifying goal number 4, stress the fact that becoming more assertive is an "active" learning process which will require motivation and effort on the part of the person trying to change his/her behavior. Explain how the previous introduction exercise (thinking of what one will say, listening to others introduce themselves, and then actually introducing oneself) was an "active practice method," which will be one technique used in the classes.

Tell the group that assertion training is not intended to teach people how to manipulate others, nor is it a miraculous cure-all for everyone's problems or difficulties. Rather, it is a way to increase one's ability to express one's feelings, beliefs, and rights openly and honestly, as well as a way to help one consider the rights of others. It increases one's confidence and self-esteem. The extent to which a person will benefit from these classes will depend on how much effort he or she takes in practicing the skills and techniques taught.

Self-advocacy Training

1. "Assertiveness" - What Is It?

a. Question group on what "assertiveness" means to them. Shape their responses to coincide with the definition presented on their handout, ACTIVELY BECOMING MORE ASSERTIVE. List key elements on the board. Stress how engaging in assertive behavior is

one way to become the person they want to be, and thus to come to feel good about themselves and increase their confidence and self-respect, as well as their respect for others.

Point to those items outlined on the board and comment on how "great" being assertive sounds. With this, pose the question: "Why, then, are some people nonassertive?"

b. In response to the above question, comment on the three significant barriers to self-assertion identified by Alberti & Emmons (1982):

1. Many people do not believe that they have the right to be assertive.
("Do I have the right to tell my boss I can't work later tonight?")

2. Many people are highly anxious or fearful about being assertive.
("I know how to do it, but I'm afraid!")

3. Many people lack the social skills for effective self-expression.
("But I don't know how to start a conversation with those I don't know well.")

c. Discuss how these barriers to personal power and healthy relationships stem from the influence of society on one's behavior.

Distribute MYTHS handout and allow members to comment on the assumptions set forth. Tie discussions and comments together by stating that these and similar beliefs tend to be perpetuated by our own social structures.

To help demonstrate how nonassertive behavior has been instilled in us by our culture (and the learning process involved), conduct a brief lecture on how the basic structures of the family, educational, business, political, and religious systems squelch assertive behavior and reinforce nonassertiveness. The following outline was derived from material presented by Alberti and Emmons (1982, p. 5-11, 14-15) and is presented here to provide some ideas to guide lecture or discussion.

The Civil Rights Movement:

-Women, children and members of ethnic minorities have often been taught that assertive behavior is the province of the white male adult. This also makes things difficult for the nonassertive, white male.

-The women's movement: The ratification of the Equal Rights Amendment has met great resistance from various special interest groups, legislators, and the President. Further, women's new efforts at self-assertion have faced opposition from employers, husbands and, in some instances, from women themselves.

In the Family:

-The individual (typically the child or adolescent) who states his/her thoughts, beliefs or feelings, or decides to speak up for his/her own rights is often ignored or promptly censured. Wives or husbands may sometimes be treated in the same way.

-Examples:
  -"Don't you dare talk to me that way."
  -"Children should be seen and not heard."
  -"Never let me hear you say that again."
  -"Why don't you grow up?"

In the Educational System:

-The quiet, well-behaved child who does not ask excessive questions and passively obeys the teacher is looked upon favorably. Those who complain, raise questions, and "buck the system" are usually dealt with via disciplinary action.

In Business:

-One learns not to "rock the boat" in an organization, and that becoming a "company man" means maintaining things as they are and not questioning the system.

-The boss is "above" and others are "below" in some hierarchical order, and those below are obliged to go along with whatever is expected of them by those above, even if such expectations are clearly inappropriate.

In the Church:

-The teachings seem to imply that being assertive is not the "Christian" thing to do.

-Emphasis is placed on fostering such qualities as humility, self-denial, and self-sacrifice, even at the expense of personal gains or satisfaction.

All of these behaviors are learned somewhere along the line. They can also be unlearned; new, more effective and self-enhancing means of responding can be learned to take the place of previously self-defeating or stifling behaviors.

2. Building an Assertive Belief System:

Begin to develop in members an assertive belief system. The purpose here is to merely introduce the group to basic rights every human being is entitled to. Throughout the course of the workshop, this belief system will be further developed.

a. Distribute BASIC HUMAN RIGHTS handout. Read sheet aloud, clarify and discuss the materials presented.

b. To demonstrate how these abstract statements relate to their everyday lives, instruct group members to brainstorm all possible personal rights they can think of, stemming from those outlined on the handout. List their responses on the board.

Examples:

-The right to get what you paid for.
-The right to ask about prescriptions we're taking.
-The right to make mistakes.
-The right to dislike your relatives.
-The right to ask "Why?"
-The right to ask for help.
-The right not to laugh at jokes.
-The right to ask questions about our health.
-The right to refuse food or drink that we should not have.
-The right to take a nap.
-The right to question our medical treatment.

3. Discuss with the participants how the group meetings will be structured.

The second part of the session will be structured to encourage cooperation among group members. People define groups differently, but overall we can say that a group is made up of people that work together, that people want to be a part of the group and the group wants them to be a part of it. When people are put together a group can form, but there is no guarantee that this will occur. One reason that groups form is that they allow people to meet other people who have common interests and concerns. In this group all members have something in common; all of you have diabetes. Some of your interests and concerns are probably similar.

People who have worked with groups in the past have found that, when an outside person was present, the group was very different than when no outsider was present. The reasons for this are not completely clear. What we do know is that if group members work together without having an outside group leader from the onset, the group seems to last longer. Also, many people report that they are more satisfied with the group. So, for the second part of each session I won't be here. I will be available if you would like to consult with me on an occasional basis.

Before you begin the second part of each session, I will give you a list of tasks or questions that I would like the group to discuss and make some decisions about. I would like you as a group to write down your decisions. When you are finished, before you go home, I would like you to give me a copy of what you decided to do.

SOCIAL SUPPORT SECTION

Give the group participants the following tasks. Make sure members have the necessary recording materials.

1. Elect a chairperson and a secretary of the group.

2. Discuss what these people should do. Certainly the secretary will need to keep minutes of the meetings.

3. Since there will be new members coming into the group each week, you need to decide on a way to allow new members to feel welcome. The way to do this is by forming a welcoming committee:

   a. Decide who will be on the committee.
   b. Decide what they will do.
   c. Ask the committee to establish a procedure for welcoming new members.

4. Decide on a temporary method that will allow people to get in touch with other members of this group should they need to do so.

ACTIVELY BECOMING MORE ASSERTIVE

Group Leader:_____ Time:_____

Assistant:_____ Location:_____

What Is Assertiveness?

"It is a means to stand up for your own rights, to express your anger, to reach out to others, to express your affection, to be more direct. Most importantly, it is one means to become the person you want to be, to feel good about yourself, and to demonstrate your respect for the rights of others."

(Alberti & Emmons, 1978)

What are the Overall Goals of This Workshop?

The goals of the workshop are:

1. To teach you the distinction between nonassertive, assertive, and aggressive responses to specific situations.

2. To help you develop an assertive belief system which has high positive regard for one's rights by assisting you in identifying and accepting your own personal rights as well as the rights of others.

3. To reduce existing cognitive (thoughts) and/or affective (emotional) obstacles that may inhibit you from acting assertively.

4. To develop in each one of you a wider repertoire of effective and appropriate assertive skills through active practice methods.

MYTHS

Society often evaluates human beings on scales which make some people "better" than others.

1. Adults are better than children.
2. Bosses are better than employees.
3. Men are better than women.
4. Physicians are better than plumbers.
5. Teachers are better than students.
6. Government officers are better than voters.
7. Generals are better than privates.
8. Winners are better than losers.

Taken from: Alberti, R. E. and Emmons, M. L. A guide to assertive living, Your Perfect Right. San Luis Obispo, California: Impact Publishers, 1982, p. 4.

BASIC HUMAN RIGHTS

Assertive Philosophy:

"Everyone is entitled to act assertively and to express honest thoughts, feelings, and beliefs."

Basic Assertive Rights:

1. We all have the right to respect from other people.
2. We all have the right to have needs and to have these needs be as important as other people's needs. Moreover, we have the right to ask (not demand) that other people respond to our needs and to decide whether we will take care of other people's needs.
3. We all have the right to have feelings - and to express these feelings in ways which do not violate the dignity of other people (e.g., the right to feel tired, happy, depressed, sexy, angry, lonesome, silly).
4. We all have the right to decide whether we will meet other people's expectations or whether we will act in ways which fit us, as long as we act in ways which do not violate other people's rights.
5. We all have the right to form our own opinions and to express these opinions.

Taken from: Lange, A.J. and Jakubowski, P. Responsible Assertive Behavior: Cognitive/Behavioral Procedures for Trainers. Champaign, Illinois, Research Press, 1976, p. 36.

Session 2: Discussing Problems and Solutions

Objectives

Introduction

1. "Break the ice" and have group members introduce themselves. Include any welcoming procedures decided on by the committee on the previous week.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Teach participants the distinction between nonassertive, assertive, and aggressive responses, including verbal and nonverbal behavior associated with each.

2. Provide a rationale for homework assignments (self-monitoring procedures) and demonstrate the recording of assertive situations.

Social Support Session

1. Have each member of the group discuss some of the problems that he/she faces. Have group members generate solutions to each member's problems.

Handouts:

DEFINITIONS

A COMPARISON OF NONASSERTIVE, ASSERTIVE AND AGGRESSIVE VERBAL BEHAVIORS

ASSERTION EXERCISE

A COMPARISON OF NONASSERTIVE, ASSERTIVE AND AGGRESSIVE NONVERBAL BEHAVIORS

Means to Objectives

Introduction

1. Breaking-the-Ice-: Introductions

Turn the meeting over to the welcoming committee, which will take over introductions from this point on.

2. Group Goals and Procedures:

Review the materials presented in session 1.

3. Recap Previous Session:

a. Briefly review major topics discussed during last session. Specifically highlight: what is meant by assertiveness; how everyone has the right to appropriate expression of feelings, beliefs, and thoughts as well as the right to stand up for their own personal rights.

b. Review the log books. Question participants as to whether thy have used any of the assertion techniques discussed in the previous sessions. If so, what were the results? You may suggest role-playing recorded situations in which a member(s) indicated dicontent in how s/he responded. Allow other group members to offer corrective feedback and suggest alternative means of handling the situation.

Self-Advocacy

1. The Distinction Between Nonassertive, Assertive, and Aggressive Behavior:

a. The Basic Components

Distribute DEFINITION handout, read and discuss. Elaborate on the definitions by adding the following comment obtained from Lange and Jakubowski (1976, p. 7-10).

Nonassertive:
-Person violates his/her own rights by failing to express honest feelings, thoughts, and beliefs and consequently permits others to violate him/her.

-Expressing one's thoughts and feelings in an apologetic, timid manner causing other to disregard them easily.

-The Basic Message communicated:
"I don't count, you can take advantage of me."
"My feelings don't matter - only yours do."
"My thoughts aren't important - yours are the only ones
worth listening to."
"I'm nothing, you're superior."

A nonassertive person shows lack of respect for his or her own needs. We can summarize the goal of nonassertion as the desire to appease others and to avoid conflict at any personal cost.

Aggressive
-Involves directly standing up for one's rights and expressing thoughts, feelings, and beliefs in a way that is often dishonest, usually inappropriate, and that always violates the rights of others.

-The goals of an aggressive person are domination and winning, forcing the other person to lose.

-Winning is insured by humiliating, degrading, belittling or overpowering other people so that they become weaker and less able to express and defend their needs and rights.

-The basic message communicated is:

"This is what I think - you're stupid for believing
otherwise."
"This is the way it is - forget your way."
"This is what I want - what you want isn't important."
"This is how I feel - your feelings don't count."

Assertive:
-Involves "respect" for oneself and for others.

-Involves standing up for personal rights and expressing thoughts, feelings, and beliefs in direct, honest, and appropriate ways which do not violate another person's right.
The basic message communicated is:
"This is what I think."
"This is what I feel."
"This is how I see the situation."

Compare these behaviors in terms of:
-Characteristics of the behavior.
-Your feelings when you engage in this behavior.
-The other person's feelings about him/herself when you engage in this behavior.

Distribute a COMPARISON OF NONASSERTIVE, ASSERTIVE AND AGGRESSIVE BEHAVIOR handout. This will help facilitate the discussion.

b. Nonverbal Components

Distribute ASSERTION EXERCISE sheet. Allow several minutes for group members to complete the form. Go over and discuss.

Under the nonverbal behaviors we have "shaking a fist in someone's face." This is a pretty aggressive behavior. Looking at the floor while talking to someone is a nonassertive behavior. A relaxed, non-slouched body position is an assertive nonverbal behavior. Number 4 is nonassertive, number 5 is aggressive, number 6 is assertive, numbers 7 and 8 are aggressive, number 9 is nonassertive, numbers 10 and 11 are aggressive, and number 12 is nonassertive.

Under the verbal behaviors numbers 1, 5, 8, and 10 are assertive behaviors. Numbers 2, 4, 7, 9, and 12 are aggressive behaviors. Numbers 3, 6, and 11 are nonassertive behaviors. If you missed any of these, go back over them and try to decide why the behaviors would be classified as they are. If you are unsure after re-reading the behaviors, go back over them when you are through reading this manual. The answers should be clear then.

Have group members fill in A COMPARISON OF NONASSERTIVE, ASSERTIVE AND AGGRESSIVE NONVERBAL BEHAVIOR sheet. Point out the role of nonverbal behaviors and the impact of such actions (body language) on statments being made.

c. Explain reason for filling out log books.

When you agreed to participate in these classes we gave you a log book; the reason for this was that we wanted you to keep a self-assertion log. The reason we asked you to do this was that keeping a log of your assertive behaviors will increase your understanding of the behavior; the log provides a more objective view of how you behave in real-life situations; it is a way for

you to see whether or not you are becoming more assertive. It also helps to identify common patterns or problem areas that you may want to work on. Lastly, it is a record of your progress and personal growth and it may motivate you to continue your efforts at changing your behavior. Please don't forget to fill out the log sheets.

Social Support

Present the group with the following:

Groups like Alcoholics Anonymous have found that their members need to find out just what kinds of problems each individual member faces, and how members meet and conquer their problems. Diabetics, like everyone else, are bound to have problems and to have found ways to solve them. Tonight the group has learned the distinction between assertive, nonassertive, and aggressive behavior and responses. When you discuss each member's problems, try to generate assertive responses. After each solution is suggested, members should ask themselves whether the situation is one in which the person should be advocating for themselves, and whether the response is assertive, not aggressive. The group should try to come to a majority agreement on a decision.

In order to decide what this group can do, you need to identify these problems and solutions. Therefore, tonight the group should:

1. Have each individual member of the group state some problem that has been presented in his or her life by diabetes. The secretary should record very carefully each different problem. Repeat problems need not, of course, be recorded separately.

2. After each member has had a chance to state a problem, each member should state a solution, if one has been found, to a problem. It might be the person's own problem, or a problem presented by someone else. The group should get a consensus on each members' problem. Again, the secretary should record each solution so that no suggestion will left out.

3. For example, a problem might be:

> Linda has received several dinner invitations, which she would like to accept. The problem is that most of the invitations for dinner are for late meals. Linda needs to have her dinner fairly early. On one hand, Linda feels upset because she would like to accept the invitations; on the other hand Linda is afraid of what might happen.

People in the group might suggest a solution such as:

> Eat your snack at dinner time and this might get you through until dinner. Or, ask the person extending the invitation to make the dinner earlier and explain why.

DEFINITIONS

Nonassertive - That type of interpersonal behavior which enables an individual's rights to be violated in one of two ways: (a) the person violates her/his own rights when s/he permits her/him to ignore personal rights which are actually very important to her/him or (b) the person permits others to infringe on her/his rights. Involves letting someone else take away your rights.

Assertive - That type of interpersonal behavior in which an individual stands up for her/his legitimate rights in such a way that the rights of another are not violated. Assertive behavior is a direct, honest, and appropriate experssion of one's feelings, opinions, and beliefs. High quality assertion also includes an empathic component which shows consideration and respect for the other person.

Aggressive - That type of interpersonal behavior in which an individual stands up for her/his rights in such a way that the rights of another person are violated. The purpose of aggressive behavior is to dominate, humiliate, or "put the other person down" rather than to simply express one's honest emotions or thoughts. Involves demanding your rights without respecting the rights or others.

A COMPARISON OF NONASSERTIVE, ASSERTIVE, AND AGGRESSIVE BEHAVIOR

	Nonassertive Behavior	Assertive Behavior	Aggressive Behavior
Characteristics of the behavior.	Emotionally dishonest, indirect, self-denying. Fails to express honest feelings, thoughts, beliefs. Does not achieve goals. Inhibited and withdrawn. Allows others to choose for them.	Appropriately emotionally honest and direct. Socially expressive. Protects own rights and the rights of others. Achieves goals without hurting others. Chooses for self.	Inappropriately emotionally honest and direct. Violates rights of others. Takes advantage of others. Achieves goals often at the expense of others.
Your feelings when you engage in this behavior.	Hurt, anxious at the time and possibly angry later. Frustrated, unhappy.	Confident, self-accepting at the time and later. Feels good about self.	Righteous, superior, depreciatory at the time and possible guilty later. Defensive.
The other person's feelings about herself when you engage in this behavior.	Guilty, annoyed, superior.	Valued, respected.	Hurt, humiliated.
The other person's feelings about you when you engage in this behavior.	Irritation, pity, disgust.	Generally, respect (but also possibly resentment).	Anger, desire for revenge, resentment. Unpredictably hostile and angry.

Adapted from: Lange, A. J. and Jakubowski, P. Responsible Assertive Behavior, Cognitive/Behavioral Procedures for Trainers. Champaign, Illinois: Research Press, 1976, p. 53.

ASSERTION EXERCISE

Identify the following as either nonassertive (NA), assertive (A), or aggressive (AG).

NONVERBAL

_____ 1. Shaking fist in someone's face.

_____ 2. Looking at the floor while talking to someone.

_____ 3. Relaxed, non-slouched body position.

_____ 4. Inaudible voice (extremely quiet; cannot hear what's being said).

_____ 5. Loud shouting.

_____ 6. Direct eye contact.

_____ 7. Standing very close to someone while telling them off.

_____ 8. Giving someone the finger.

_____ 9. Sitting sideways, looking out the window while talking to your professor.

_____ 10. Staring fixedly or squinting.

_____ 11. Excessive clearing of throat.

_____ 12. Covering mouth when speaking.

VERBAL

_____ 1. "I'm sorry I can't do that, I have too much to do."

_____ 2. "Get the hell out of here."

_____ 3. "I'm sorry I brought the idea up, your idea is better."

_____ 4. "Don't give me any stuff. Just do it the way you're told!"

Assertion Exercise
Page 2

_____ 5. "I need your opinion on this if you have the time."

_____ 6. "It's hard for me to tell you how I feel."

_____ 7. "You are totally unreliable and I will never lend you anything again."

_____ 8. "I'm really sorry to interrupt, but do you think it would be at all possible for you to turn your stereo down a little? I'm having difficulty reading next door."

_____ 9. "I won't wait a minute. You're going to listen to me NOW!"

_____ 10. "I know what I did was wrong, but could you please let me tell my side of the story?"

_____ 11. "Oh, well, um, huh, I guess I could stay late to complete the project. No, it won't be any problem. I'll phone and tell my husband to cancel our reservations."

_____ 12. "You made three typing errors on this form! Next time be more careful!"

A COMPARISON OF NONASSERTIVE, ASSERTIVE, AND AGGRESSIVE NONVERBAL BEHAVIORS

Nonverbal Behavior	Nonassertive	Assertive	Aggressive
Eye Contact	Evasive eye contact Rapid blinking, excessive shifting of head and eyes	Direct eye contact Firm but not a stare down	Stare down and dominate the other person Squinting
Body Posture (Distance)	Keeps distance from person being confronted Steps backwards from person as assertive remark is made Hunched shoulders	Appropriate distance from person being confronted Straight stance	On top of person being confronted Leaning forward Rigid
Gestures	Nervous gestures, e.g. tinkering with jewelry, adjusting clothing Shifting weight from one foot to the other Covering mouth with hand	Body gestures denoting strength Appropriate hand use	Parental body gestures, e.g. excessive finger pointing (Giving the finger)
Facial Expressions	Laughs, wrinkles Raising of the eyebrows Winks (tics-e.g., eye)		Pursed tight-lipped mouth
Voice (Tone, inflection, volume)	Sing-song Overly soft (inaudible)	Appropriately loud to situation Emphasis placed on key words	Sarcastic or condescending tone Strident voice that doesn't fit the situation
Timing	Frequent swallowing Hesitant and filled with pauses Frequent clearing of the throat Excessive wetting of the lips	Spontaneous, yet enough thought attached	Automatic, impulsive, immediate without thought
Content	Conveys weakness, anxiety, pleading, self-effacement Nonverbal behavior reduces the impact of what's being said	Nonverbal congruent with the verbal message and supports, strengthens and emphasizes what's being said	May display idiosyncratic nonverbal behaviors

A COMPARISON OF NONASSERTIVE, ASSERTIVE, AND AGGRESSIVE NONVERBAL BEHAVIORS

Nonverbal Behavior	Nonassertive	Assertive	Aggressive
Eye Contact			
Body Posture (Distance)			
Gestures			
Facial Expressions			
Voice (Tone, inflection, volume)			
Timing			
Content			

DISCRIMINATION EXERCISE ON: ASSERTIVE, AGGRESSIVE, AND NONASSERTIVE BEHAVIOR

The following self-check discrimination exercise consists of 60 interpersonal situations. The responses to these situations are aggressive, assertive, or nonassertive. Twenty judges rated each of these responses reaching 90 percent to 100 percent agreement on classifying each situation.

Carefully read each situation and classify each response as either assertive (+), aggressive (-), or nonassertive (N).

Examples:

Situation	Response
1. Husband gets silent, instead of saying what's on his mind. You say,	I guess you are uncomfortable talking about what's bothering you. I think we can work it out if you tell me what's irritating you. _____
2. A friend has asked you for the second time this week to babysit her child while she runs errands. You have no children of your own and you respond,	You're taking advantage of me and I won't stand for it! It is your responsibility to look after your own child. _____

Situation	Response	A or N
3. An attendant at a gas station you frequently stop at for gas neglected to replace your gas cap. You notice this and return to inquire about it and you say,	One of you guys here forgot to put my gas cap back on! I want it found now or you'll buy me a new one.	____
4. You'd like a raise and say,	Do you think that, ah, you could see your way clear to giving me a raise?	____
5. Someone asks for a ride home and it is inconvenient because you're late, have a few errands, and the drive will take you out of your way. You say,	I am pressed for time today and can take you to a convenient bus stop, but I won't be able to take you home.	____
6. Student enjoyed the teacher's class and says,	You make the material interesting. I like the way you teach the class.	____
7. Your husband promised you that he would talk to your daughter about her behavior at school. The promise has not been carried out. You say,	I thought we agreed last Tuesday that you would have a talk with Barb about her behavior at school. So far there's been no action on your part. I still think you should talk to her soon. I'd prefer sometime tonight.	____
8. A committee meeting is being established. The time is convenient for other people but not for you. The times are set when it will be next to impossible for you to attend regularly. When asked about the time, you say,	Well I guess it's OK. I'm not going to be able to attend very much but it fits everyone else's schedule.	____
9. In a conversation, a man suddenly says, "What do you women libbers want anyway?" The woman responds,	Fairness and equality.	____
10. You've been talking for a while with a friend on the telephone. You would like to end the conversation and you say,	I'm terribly sorry but my supper's burning, and I have to get off the phone. I hope you don't mind.	____
11. A married man persists in asking you out for a date, saying, "Come on honey, what harm can it do to go to lunch with me just this once?" You respond,	I like our relationship the way it is. I wouldn't feel comfortable with any kind of dating relationship—and that includes lunch.	____
12. At a meeting one person often interrupts you when you're speaking. You say,	Excuse me. I would like to finish my statement.	____
13. You are in a hard-sell camera store, and you have been pressured to purchase an item. You say,	Well, OK, I guess that's pretty much what I was looking for. Yes, I suppose I'll get it.	____

Situation	*Response*	*O or N*
14. A blind person approaches and asks you to purchase some materials. You respond,	You people think that just because you're blind, people have to buy stuff from you. Well, I'm certainly not going to.	
15. Teenager is asked to do laundry. As the child puts laundry in the washer, parent says,	Don't forget to balance the load. Make sure you push the right buttons. You just never do things right!	
16. You have been pestered several times this week by a caller who has repeatedly tried to sell you magazines. The caller contacts you again with the same magazine proposition. You say,	This is the third time I've been disturbed and each time I've told you that I'm not interested in subscribing to any magazine. If you call again, I'll simply have to report this to the Better Business Bureau.	
17. Kids upstairs are making a lot of noise. You bang on the ceiling and yell,	Hey you! Knock off the noise!	
18. An acquaintance has asked to borrow your car for the evening. You say,	I don't know . . . Well, it's not worth getting into a fuss about it. You can borrow it, but I should warn you that I've been having trouble with the brakes.	
19. Wife tells husband she'd like to return to school. He doesn't want her to do this and says,	Why would you want to do that? You *know* you're not capable enough to handle the extra work load.	
20. An employee makes a lot of mistakes in his work. You say,	[illegible]	
21. Husband expects dinner on table when he arrives home from work and gets angry when it is not there immediately. You say,	I know you are tired and hungry and would like to have dinner immediately, but I have been doing some sculpting which is important to me. I will have dinner ready soon.	
22. You've taken a suit to the cleaners that you plan to wear for a coming special occasion. When you go to pick it up, you find that there's a hole in it. You say,	I planned to wear that tonight. Aren't you people responsible enough to do something about it.	
23. You are having trouble writing a paper and don't know exactly what further information you need. You say,	I really must be dumb but I don't know where to begin on this paper.	
24. Roommate about to leave for work tells you that a friend of his needs a ride that afternoon and he has volunteered your services. You say,	You've got your nerve committing me without asking first! There's no way I'm going to the airport today. Let him take a cab like everybody else does.	
25. A friend promised to come to a special party and then failed to show up. You call and after a few minutes of social conversation, you say,	I understood that you were coming to my party but you didn't come. I feel bad about not having you there. . . . What happened to you?	

Situation	Response	or
26. A good friend calls and tells you she desperately needs you to canvass the street for a charity. You don't want to do it and say,	Oh gee, Fran, I just know that Jerry will be mad at me if I say "yes." He says I'm always getting involved in too many things. You know how Jerry is about things like this. . .	___
27. You are at a meeting of seven men and one woman. At the beginning of the meeting, the chairman asks you to be the secretary. You respond,	No, I'm sick and tired of being the secretary just because I'm the only woman in the group.	___
28. You are team teaching but you're doing all the planning, teaching, interacting and evaluating students. You say,	We're supposed to be team teaching and yet I see that I am doing all the work. I'd like to talk about changing this.	___
29. The bus is crowded with high school students who are talking to their friends. You want to get off but no one pays attention when you say "Out please." Finally, you say,	What is the matter with you kids? I'm supposed to get off at the next corner!	___
30. Student comes late to class for the third time. Teacher responds,	When you're not here at the beginning of my lecture, I have to repeat parts of my lecture and that takes extra class time. I'm getting bothered by your tardiness.	___

31. Man asks you for a date. You've dated him once before and you're not interested in dating him again. You respond,	Oh, I'm really so busy this week that I don't think I will have time to see you this Saturday night.	___
32. The local library calls and asks you to return a book which you never checked out. You respond,	What are you talking about? You people better get your records straight—I never had that book and don't you try to make me pay for it.	___
33. You are in a line at the store. Someone behind you has one item, and asks to get in front of you. You say,	I realize that you don't want to wait in line, but I was here first and I really would like to get out of here.	___
34. Parent is talking with a married child on the telephone and would like the child to come for a visit. When the child politely refuses, the parent says,	You're never available when I need you. All you ever think about is yourself.	___
35. Employer sends a memorandum stating that there should be no more toll business calls made without first getting prior permission. One employee responds,	You're taking away my professional judgment. It's insulting to me.	___
36. Your husband expects dinner on the table when he arrives home from work and gets angry when it is not there immediately. You respond,	I feel awful about dinner. I know you're tired and hungry. . . It's all my fault. I'm just a terrible wife.	___

Situation	*Response*	% or N
37. Plans to vacation together are abruptly changed by friend and reported to you on the phone. You respond,	Wow, this has really taken my by surprise. I'd like to call you back after I've had some time to digest what's happened.	
38. Parent is reprimanding the children when they haven't cleaned up their room and says,	You've got to be the worst kids in the whole city! If I had known parenthood was going to be like this, I would never have had any kids at all!	
39. Your roommate habitually leaves the room a mess. You say,	You're a mess and our room is a mess.	
40. Your husband wants to watch a football game on TV. There is something else that you'd like to watch. You say,	Well, ah, honey, go ahead and watch the game. I guess I could do some ironing.	
41. Parent is annoyed that school counselor has not done anything about son's conflict with a teacher. Parent says,	I have asked the school to investigate the situation in my son's classroom and it concerns me that nothing has been done. I must insist that this situation be looked into.	
42. Supervisor has just berated you for your work. You respond,	I think some of your criticisms are true, but I would have liked your being less personal about telling me about my shortcomings.	
43. Your ten-year-old child has interrupted you three times with something that is not urgent. You've assertively asked her not to interrupt you. The child has now again interrupted you. You say,	I can't listen to you and talk on the phone at the same time. I'll be on the phone a few more minutes and then we'll talk.	
44. It is your turn to clean the apartment, which you have neglected to do several times in the last month. In a very calm tone of voice your roommate asks you to clean up the apartment. You say,	Would you get off my back!	
45. You're the only woman in a group of men and you've asked to be the secretary of the meetings. You respond,	I'm willing to do my share and take the notes this time. In future meetings, I'd like us to share the load.	
46. A fellow teacher always tries to get out of doing his turn of team teaching and asks you again to take his turn. You say,	Well . . . I guess that'd be OK even if I do have a splitting headache.	
47. An acquaintance has asked to borrow your car for the evening. You say,	Are you crazy! I don't lend my car to anyone.	
48. Loud stereo upstairs is disturbing you. You telephone and say,	Hello, I live downstairs. Your stereo is loud and is bothering me. Would you please turn it down.	

Situation	Response	+, −, or N
49. You have set aside 4:00 to 5:00 for things you want or need to do. Someone asks to see you at that time. You say,	Well, uh, I can see you at that time. It's 4:00 Monday then. Are you sure that's a good time for you?	
50. Wife gets silent instead of saying what's on her mind. You say,	Here it comes. The big silent treatment. Would it kill you to spit it out just once?	
51. Husband has criticized your appearance in front of your friends. You say,	I really feel hurt when you criticize my appearance in front of other people. If you have something to say, please bring it up at home before we leave.	
52. A friend often borrows small amounts of money and does not return it unless asked. She again asks for a small loan which you'd rather not give her. You say,	I only have enough money to pay for my own lunch today.	
53. A neighbor has been constantly borrowing your vacuum sweeper. The last time, she broke it. When she asked for it again, you reply,	I'm sorry, but I don't want to loan my sweeper anymore. The last time I loaned it to you it was returned broken.	

54. A woman is being interviewed for a job, in the process of which the interviewer looks at her searingly and says, "You certainly look like you have all the qualifications for the job." She responds,	I'm sure I am quite capable of doing the work here.	
55. Your mate wants to go out for a late night snack. You're too tired to go out and say,	I really don't feel like going out tonight, I'm too tired. But I'll go with you and watch you eat.	
56. You're walking to the copy machine when a fellow employee, who always asks you to do his copying, asks you where you're going. You respond,	I'm going to the Celtics ball game. . . Where does it look like I'm going?	
57. Parent is talking with a married child on the telephone and would like child to come for a visit. The parent says,	I had a funny dream last night. I dreamt that the grandchildren came to visit me.	
58. Your best friend has recently divorced. She confides that she is currently sleeping with several men and is not happy with this situation. She says that she's not sure how to handle it. You respond,	Well, I guess it's true about what they say about divorcees being an easy mark.	

59. Each night your roommate consistently slams the bathroom and bedroom doors, either keeping you awake or even if you're not sleeping, annoying you. You say,	Please don't slam the doors--it's annoying to hear that late in the night. It wakes me up and I can't get back to sleep.	_____
60. You are asked to serve on a committee. You respond,	I'm sorry. I'm not available to serve on that committee.	_____

Taken from: Lange, A.J. and Jakubowski, P. Responsible Assertive Behavior : Cognitive/Behavioral Procedures for Trainers. Champaign, Illinois, Research Press, 1976.

Session 3: Evaluating Solutions

Objectives

Introduction

1. Have welcoming committee conduct introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Introduce the various assertion techniques: basic, empathic, escalating, confrontative, and I-language.

2. Provide an opportunity for members to practice the techniques through role playing. Explain what role playing is, and the procedures involved.

Social Support Session

1. Have group members evaluate the previous solutions. Present members with the tasks to be completed during this session.

Handouts:

TYPES OF ASSERTION

HOW TO GIVE FEEDBACK

Means to Objectives:

Introduction.

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for explanations of the goals of the group, and the definiton of procedures that will be used in the group.

3. Recap Previous Session:

a. Briefly review major topics discussed during last session. Specifically highlight: what is meant by assertiveness; how everyone has the right to express their feelings, beliefs, and thoughts appropriately, as well as to stand up for their own personal rights; and the distinction (verbal and nonverbal) between nonassertive, assertive, and aggressive behaviors.

This last point can be covered conveniently by quickly reviewing the DISCRIMINATION EXERCISE ON ASSERTIVE, AGGRESSIVE, AND NONASSERTIVE BEHAVIOR assigned as homework last session.

b. Review the log books. Question participants as to whether they have used any of the assertion techniques discussed in the previous sessions. If so, what were the results? You may suggest role-playing recorded situations in which a member(s) indicated discontent with how s/he responded. Allow other group members to offer corrective feedback and suggest alternative means of handling the situation.

Self-Advocacy Training

1. Assertion Technique:

Distribute TYPES OF ASSERTION handout. Inform participants that there are many different ways to act assertively, and these are just some techniques designed to help them assert their rights in an appropriate and effective manner. Stress that the information provided on the handout is merely intended to serve as a guide, suggesting alternative ways to respond, from which one can select (and also modify) the method most appropriate to the situation at hand.

Read handout over with participants, elaborating and

clarifying the techniques outlined.

Skill Practice:

Provide an opportunity for participants to practice the various assertion techniques by having them role play personal examples.

2. Role Play Introduction

Ensure that the group clearly understands the role play technique. Ask participants if they have ever role-played before, or if they know what is meant by the term. Explain what role play is:

> A learning method in which an individual is asked to take a "role" of another person or him/herself, and enact (act out) the situation at hand as if they were that character. Through role play, one can observe and receive feedback on the effect of his/her behavior and can practice new ways of responding.

Inform participants that role-play procedures will be employed throughout the course of the workshop in order to provide a chance to practice the techniques and skills taught, to receive feedback from the trainer and other group members on their behaviors, ane to observe others role play and provide them with constructive feedback.

Outline the basic role playing procedures that will be followed. (Write key words on board).

1. A situation requiring an assertive response will be described by either the participants or by the group leader.

2. Group members will be asked to volunteer to act out the roles involved.

3. Those role playing the situation are to apply the skills and techniques they have learned in training, while the remaining group members observe.

4. Following the enactment, each member of the group will provide feedback on what s/he observed. Comments are to be directed at the actor's behavior, taking into account the actor's application of skills and techniques. Corrective feedback should be provided, if applicable, along with praise and approval for

appropriate and effective responses.

(At this point, it would be appropriate to distribute and read over the FEEDBACK handout to provide trainees with a clear set of guidelines for giving useful feedback).

5. Following feedback, the person receiving the feedback should rephrase the feedback to ensure accurate understanding. The receiver may then replay the situation (behavior rehearsal), applying suggestions made during feedback, or may request another group member to role play and model a more effective response.

NOTE: The above is designed only to serve as a guide. Often variations in these procedures are called for. This is left to the discretion and expertise of the trainer, who should base specific procedures on the needs of the participants. Role reversal procedures may also be effective in certain situations.

Role Play Assertion Techniques

Attempt to diminish trainees' possible reluctance to participate by stating that at first they may feel a bit silly or awkward. However, the more they do it and the more they put themselves in the role (by adding personal touches which represent their individual style), the more realistic the situation will be, and the less awkward they will feel.

Start by giving an example. With the help of an assistant, or an eager volunteer, role play the appropriate application of an assertion technique described in the handout.

Have members role play the various assertion techniques, suggesting that they select an incident recorded in their logbooks. If no one volunteers, or the group overall appears reluctant to engage in such self-disclosure at this time, employ hypothetical situations. These descriptive situations should be prepared prior to the session, and their content should reflect assertive situations of common concern to the particular training group.

Social Support Session

During this meeting each member of the group should discuss the problem(s) that were brought up in the last meeting. This should be an open session. Every member should be free to offer both problems and solutions. If you disagree with a solution that is offered, tell everyone why you disagree. This should be a good time to practice your self-advocacy skills. Every member should present his or her problem and discuss the solution(s) tried. Attached is a list of the problems and solutions that were discussed in the last meeting.

Present the group with the following questions?

1. Discuss the solutions that were suggested by members last week.

a. Were the solutions that were discussed last meeting tried out? Was(were) the solution(s) effective? Did any members use any of the assertion techniques discussed earlier?

b. What solutions were not effective? Discuss possible reasons.

2. What new solutions can be offered for unsolved problems? Could the various assertion techniques be used?

3. Write down solutions for each problem that is presented.

Types of Advocacy

1. Basic Assertion:

There are many different ways to act assertively. A basic assertion involves standing up for one's rights, beliefs, feelings, or opinions.

Examples:

When being interrupted:
"Excuse me, I'd like to finish what I'm saying."

When being asked an important question for which you are unprepared:
"I'd like to have a few minutes to think that over."

When returning an item to a store:
"I'd like to have my money back on this dress."

When refusing a request:
"No, this afternoon is not a good time for you to come and visit."

When you would like something re-explained:
"I'm sorry I do not understand what you are staying; would you please explain it in simpler terms?"

Basic assertion also involves expressing affection and appreciation toward others.

Examples:

"Thank you for picking up the papers."
"I like you."
"I feel better after having discussed this matter with you."
"You're truly special to me."
"I really appreciate what you did."

2. Empathic Assertion:

There are also empathic assertions. Empathic assertions involve making a statment that shows you have listened to the other person and recognize that person's situation or feelings. This is followed by another statment which stands up for your rights.

Examples:

When two people are chatting loudly while a meeting is going on: "You may not realize it, but your talking is starting to make it hard for me to hear what's going on in the meeting. Would you please keep it down?"

When having some furniture delivered: "I know it's hard to say exactly when the truck will arrive, but I'd like a ball park estimate of the arrival time."

When you don't understand the directions for taking your medication: "I realize that you are very busy, and that there are other people waiting to see you; however, I do not understand how to give myself these injections. I would like you to give me a little more time, so that when I have to give them myself, I'll feel more comfortable."

Empathic assertions are particularly good when dealing with angry or upset individuals and/or superiors.

Example:

When telling a parent you don't want advice: "I know that you give me advice because you don't want me to get hurt by mistakes I might make. However, at this point in my life, I need to learn how to make decisions on my own even if I do make some mistakes. I appreciate the help you've given me in the past and now you can help me by not giving me advice."

3. Escalating Assertion:

Another assertion technique is called escalating assertions. They involve increasing the assertiveness of a response in order to obtain a desired goal. First you start with a minimal assertive response, intended to accomplish your goal with a minimum amount of effort and negative emotion and a small possibility of a negative consequence. If the other person fails to respond to the minimal assertion and continues to violate your rights, you gradually escalate the assertive response, becoming increasingly firm without becoming aggressive. If the other person continues to violate your rights and fails to respond appropriately, you can offer a contract option. This involves presenting your original demand in an "IF" - "THEN" statement, clearly identifying the

consequence for noncompliance.

Example:

The speaker is in a theater sitting where it is clearly marked "NO SMOKING" next to an individual who is smoking a cigarette.

Minimal Assertive Response: "Would you please put out your cigarette? This area is designated as no smoking."

Escalating Assertion: "I asked if you would put out your cigarette."

Contract Option: "If you do not put out your cigarette, I will bring the matter to the attention of the manager."

4. Confrontative Assertion

It is to be used when the other person's words contradict his/her deeds. Confrontative assertion involves clearly describing what the other person said s/he will do, and what s/he actually did, after which you express what you want. Your statments should be made in a "matter-of-fact," nonevaluative way.

Examples:

"I said it was O.K. for you to drink some of my diet cola as long as you checked it out with me first. Now, I see you drinking the cola without having asked me. I'd like to know why you did that?"

"Last week we decided we'd discuss and arrive at a mutual agreement before giving the children permission to stay out late on certain occasions. Earlier today, Joshua informed me that you have allowed him to go to that concert Friday night. Next time, I want to discuss such matters beforehand, as we had agreed. If there is a problem in doing this, then let's discuss it now."

5. I-Language Assertion

This is a useful technique when asserting or expressing difficult negative feelings. It is helpful in bringing about an empathic reaction.

Use the following formula:

When you ....(clearly describe the other person's behavior)

The effects are ....(describe how the other person's behavior affects your life or feelings)

I feel ....(describe your feelings)

I'd prefer ....(describe what you want)

Examples:

"When you borrow my things without telling me, I don't know whether or not I've misplaced them, lost them, or whether someone stole them. I start to feel upset and angry. I'd prefer that you ask me before you borrow my stuff."

"When you don't call to tell me you'll be late for dinner, the food either gets cold or gets overcooked. I feel annoyed and mad. I'd prefer you call and tell me if you are going to be late, so I can plan accordingly."

Information taken from: Lange, A. J. and Jakubowski, P. Responsible Assertive Behavior, Cognitive/Behavioral Procedures for Trainers.

FEEDBACK

What is Feedback?

Feedback is a way of helping another person change his/her behavior. It is communication with another person providing information about his/her targeted behavior. Feedback helps an individual see how his/her behavior is interpreted by others, and better equips the individual with means to achieve his/her goals.

Criteria for Useful Feedback:

1. Be descriptive rather than evaluative! Give observations and descriptions, not opinions and judgments.

2. Be specific! Describe the specific verbal and nonverbal behaviors in detail; e.g., eye contact, body position, voice volume, he said: "I can't," etc.
   Remember to focus on the behavior, not the person.

3. Avoid stating "how I would do it." Give information, not instructions. By doing this, you allow the trainee to make the choice on what to do. Remember feedback is for the benefit of the receiver, not the giver.

4. Give feedback soon after behavior.

5. Person getting feedback should try to rephrase the feedback to clarify thoughts.

Session 4: The Role of Anxiety

Objectives

1. Turn over meeting to welcoming committee for introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-Advocacy Training

1. Continue to help members develop an assertive belief system.

2. Help participants recognize how anxiety serves as a barrier to self-assertiveness.

3. Provide participants with a way to overcome anxiety through relaxation training. Include a rationale behind using relaxation, and describe the procedures involved in progressive deep muscle relaxation.

Social Support Session

In this session participants should discuss whether or not anxiety is a barrier to their self-assertiveness. Each member should discuss the degree to which he/she feels anxiety. In what situations does each person experience the most anxiety? These situations may not be specific to diabetes; they could be situations at work, with family members, with friends, with physicians, etc. Present group with the tasks to be completed.

Handouts:

TENETS OF AN ASSERTIVE PHILOSOPHY

HOW SOCIALIZATION MESSAGES MAY NEGATIVELY AFFECT ASSERTION

PROGRESSIVE RELAXATION OUTLINE (and CARTOON)

Means to Objectives: Introduction

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session:

a. Briefly, review major topics discussed during last session. Specifically the distinctions (for verbal and nonverbal cases) between nonassertive, assertive, and aggressive behaviors.

b. Review the log books. Question participants as to whether they have used any of the assertion techniques discussed in the previous sessions. If so, what were the results? You may suggest role playing recorded situations in which a member(s) was not content with how s/he responded. Allow other group members to offer corrective feedback and suggest different ways to handle the situation.

Self-Advocacy Training

1. Building an Assertive Belief System: (The Basic Philosphy of Assertiveness Training)

a. Continue to help group members develop positive beliefs about assertion.

Distribute TENETS OF AN ASSERTIVE PHILOSOPHY HANDOUT. Read aloud and discuss the handout briefly.

b. Help group members to accept their assertive rights by challenging typical internal messages which deny them their just rights and, in turn, inhibit their assertive responding.

Distribute HOW SOCIALIZATION MESSAGES MAY NEGATIVELY AFFECT ASSERTION handout. Read over and discuss briefly.

2. The Role of Anxiety

Discuss how some people become so anxious when they think about a certain situation that they, in effect, become paralyzed, unable to respond in the most effective manner, even when they know what to do. Fear or anxiety may inhibit the application of assertion

skills or techniques. To prevent the unpleasant feelings associated with anxiety, people often avoid such anxiety-provoking situations and rarely or never engage in assertive behavior; thus, they continue to deny themselves their just rights. For example, a person may be entitled to a raise but, because he/she is so anxious around the boss, s/he never asks for the raise. Other people feel very anxious around their doctors. They have questions that they really want or need to ask, but because of the anxiety they don't ask. Other people have side effects or symptoms they are concerned about, but do not tell the physician what the symptoms are. You are paying a physician or any other health provider for his or her service; you are entitled to ask questions. By asking the physicians or other health care provider questions or telling them your symptoms, you are also helping them. If you can tell a physician your symptoms, he or she may be able to change the medication or another part of the treatment program. If the symptoms are normal, you can put your mind at ease.

Give an example of what can happen if you aren't assertive enough to ask questions, for instance:

> A woman about 40 years old was diagnosed as diabetic; this was a very tramatic experience for the woman. Shortly after she was diagnosed, while she was still in the hospital, she was given an exchange list and a sample diet. She read over the diet, and while doing so she wondered if she could ever eat anything that was not on the list. She never bothered to ask the nurses or dieticians. Six months later I saw her in a class for diabetics. After about three classes she asked if she was ever going to be able to eat anything besides what was on the sheet. If she had been more assertive, she would not have had to eat the same things for six months! She later said the reason she hadn't asked before was that she was nervous and didn't want anyone to think she was dumb.

Ask if anyone can identify a situation in which anxiety acts as an obstacle, inhibiting them from asserting themselves. If no one responds, provide a personal example to facilitate disclosure.

Learning to be more assertive can help reduce anxiety; however, sometimes a person's anxiety is so great that it is necessary to deal with it directly. One such way

is through relaxation training. It is very difficult to accomplish a task when you are in a state of arousal or under stress (e.g., have you ever tried to thread a needle after you just noticed a split seam in your pants and you see the headlights of your ride coming up the driveway?)

When your body and mind are in a relaxed, unaroused state you are better able to focus on the situation at hand. You can increase your ability to select an appropriate and effective course of action. You are also more likely to dispel irrational beliefs or fears which may inhibit more appropriate means of responding, and that in turn increases the likelihood that you will engage in assertive behavior, and achieve more satisfying results.

3. Progressive Relaxation

a. Present Rationale is designed to increase a person's awareness of the internal sensations associated with tension or anxiety, and at the same time to provide an active coping skill for relaxing away such reactions.

Inform participants that by placing their bodies and minds in a relaxed, unaroused state they:
-are better able to focus on the situation at hand
-increase their abilities in selecting an appropriate and effective course of action.
-dispel irrational beliefs/fears which may inhibit more appropriate means of responding and, in turn,
-increase the likelihood that they will engage in assertive behavior, which is likely to produce more satisfying results.

b. Introduce Progressive Relaxation Technique
Inform participants that this procedure is designed to increase their awareness of the internal sensations associated with tension or anxiety and at the same time to provide an active coping skill for relaxing away such reactions.

Provide participants with PROGRESSIVE RELAXATION OUTLINE (and CARTOON), and request that they follow along while you explain the procedure and model the appropriate behavior. Make sure trainees know where each muscle group is.

Provide participants with a means of self-assessing their levels of anxiety. Describe and explain the "SUDS Scale," which is simply rating one's physical feelings

of anxiety on a scale of 0 to 100. "SUDS" is an acronym for "Subjective Units of Disturbances."

Draw the following diagram on the board to further clarify this scale:

0	25	50	75	100
no tension completely relaxed	very relaxed		very tense	extremely tense (maximum level)

Carry out relaxation exercise. Have participants evaluate their level of tension before and after the exercise, both subjectively (by employing the "SUDS Scale") and objectively (pulse rate). Following exercise, obtain feedback on how participants felt about the exercise.

-"Did you enjoy the exercise?"
-"How did you feel?"
-"What physiological reactions did you notice?"

Encourage group members to practice the relaxation exercise at home. Stress the importance of practice. For relaxation to become an effective coping skill, it needs to be practiced so that it can become as automatic as those reactions associated with tension or fear, which are often induced by an anxiety- provoking situation.

Make an analogy: with learning any new skill, practice is required; e.g., driving a car, dancing, playing tennis.

Homework

Distribute SELF-ASSERTION DATA SHEET, instructing the group to continue to self-monitor their nonassertive, assertive, and aggressive behaviors. Request that they begin to identify particular obstacles which tend to interfere with their asserting themselves. Some examples of obstacles are anxiety, wrong beliefs, lack of skills, or resistance from significant others.

Instruct participants to practice relaxation at home and to practice using the different types of assertion techniques discussed in the beginning of the session, whenever the opportunity avails itself.

Social Support Session

In this session participants should discuss whether or not anxiety is a barrier to their self-assertiveness. Each member should discuss the degree to which he/she feels anxiety. In what situations does each person experience the most anxiety? These situations may not be specific to diabetes; they could be situations at work, with family members, with friends, with physicians, etc.

Present the group with the following questions:

1. Discuss the situations that produce anxiety for each member in the group. The secretary should write down each anxiety-producing situation. Are there situations that are anxiety-producing for several members of the group?

2. Discuss how anxiety relates to being assertive for each member.

3. How can the anxiety be reduced for each person in the group? Can progressive muscle relaxation be used for some of these situations? What other solutions might be effective? The secretary should write down all anxiety-producing situations and the solutions that are suggested for each member. Make sure that each member contributes to both the problem identification and the solution. Each member's anxiety-producing situations should be addressed.

TENETS OF AN ASSERTIVE PHILOSOPHY

Assertion - rather than manipulation, submission, or hostility - enriches life and ultimately leads to more satisfying personal relationships with people.

Beliefs:

1. By standing up for ourselves and letting ourselves be known to others, we gain self-respect and respect from other people.

2. By trying to live our lives in such a way that we never hurt anyone under any circumstances, we end up hurting ourselves and other people.

3. When we stand up for ourselves and express our honest feelings and thoughts in direct and appropriate ways, everyone usually benefits in the long run. Likewise, when we demean other people, we also demean ourselves and everyone involved usually loses in the process.

4. By scarificing our integrity and denying our personal feelings, relationships are usually damaged or prevented from developing. Likewise, personal relationship are hurt when we try to control others through hostility, intimidation, or guilt.

5. Personal relationships become more authentic and satisfying when we share our honest reactions with other people and do not block others' sharing their reactions with us.

6. Not letting others know what we think and feel is just as selfish as not attending to other people's thoughts and feelings.

7. When we frequently sacrifice our rights, we teach other people to take advantage of us.

8. By being assertive and telling other people how their behavior affects us, we are giving them an opportunity to change their behavior, and we are showing respect for their right to know where they stand with us.

Taken from: Lange, A. J. and Jakubowski, P. Responsible Assertive Behavior, Cognitive/Behavioral Procedures for Trainers. Champaign, Illinoise: Research Press, 1976, p. 55-56.

How Socialization Messages May Negatively Effect Assertion

Socialization Message	*Effect on Rights*	*Effect on Assertive Behavior*	*Healthy Message*
Think of others first; give to others even if you're hurting. Don't be selfish.	I have no right to place my needs above those of other people's.	When I have a conflict with someone else, I will give in and satisfy the other person's needs and forget about my own.	To be selfish means that a person places his desires before practically everyone else's desires. This is undesirable human behavior. However, all healthy people have needs and strive to fulfill these as much as possible. Your needs are as important as other people's. When there is a conflict over need satisfaction, compromise is often a useful way to handle the conflict.
Be modest and humble. Don't act superior to other people.	I have no right to do anything which would imply that I am better than other people.	I will discontinue my accomplishments and any compliments I receive. When I'm in a meeting, I will encourage other people's contributions and keep silent about my own. When I have an opinion which is different from someone else's, I won't express it; who am I to say that my opinion is better than theirs?	It is undesirable to build yourself up at the expense of another person. However, you have as much right as other people to show your abilities and take pride in yourself. It is healthy to enjoy one's accomplishments.
Be understanding and overlook trivial irritations. Don't be a bitch and complain.	I have no right to feel angry or to express my anger.	When I'm in a line and someone cuts in front of me, I will say nothing. I will not tell my girlfriend that I don't like her constantly interrupting me when I speak.	It is undesirable to deliberately nitpick. However, life is made up of trivial incidents and it is normal to be occasionally irritated by seemingly small events. You have a right to your angry feelings, and if you express them at the time they occur, your feelings won't build up and explode. It is important, however, to express your feelings assertively rather than aggressively.
Help other people. Don't be demanding.	I have no right to make requests of other people.	I will not ask my girlfriend to reciprocate babysitting favors. I will not ask for a pay increase from my employer.	It is undesirable to incessantly make demands on others. You have a right to ask other people to change their behavior if their behavior affects your life in a concrete way. A request is not the same as a demand. However, if your rights are being violated and your requests for a change are being ignored, you have a right to make demands.

Socialization Message	*Effect on Rights*	*Effect on Assertive Behavior*	*Healthy Message*
Be sensitive to other people's feelings. Don't hurt other people.	**I have no right to do anything which might hurt someone else's feelings or deflate someone else's ego.**	**I will not say what I really think or feel because that might hurt someone else. I will inhibit my spontaneity so that I don't impulsively say something that would accidentally hurt someone else.**	It is undesirable to deliberately try to hurt others. However, it is impossible as well as undesirable to try to govern your life so as to *never* hurt *anyone*. You have a right to express your thoughts and feelings even if someone else's feelings get occasionally hurt. To do otherwise would result in your being phoney and in denying other people an opportunity to learn how to handle their own feelings. Remember that some people get hurt because they're unreasonably sensitive and others use their hurt to manipulate you. If you accidentally hurt someone else, you can generally repair the damage.

Reproduced from: Lange, A. J. and Jakubowski, P. Responsible Assertive Behavior, Cognitive/Behavioral Procedures for Trainers. Champaign, Illinois: Research Press, 1976.

PROGRESSIVE RELAXATION OUTLINE

A. General Guidelines

1. Find a location with minimal distractions. (Optimal conditions: quiet room, alone, easy chair, dim light)

2. Sit in a comfortable position.

3. Close eyes.

4. Tense only one muscle group at a time.

5. Tense muscle to 70%-80% capacity. (90%-100% capacity may cause muscles to cramp or body to tremble, an indication of too much tension.) If you experience pain while tensing, stop immediately.

6. Tense each major muscle group for 5-8 seconds.

7. When you hear the word "RELAX" or "NOW" immediately release the tension in that muscle. (Say these words to yourself.)

8. Wait 10-15 seconds, focusing your attention on the sensations associated with the relaxed state, e.g., looseness, warmth, heaviness, tingling in the muscle.

9. Breathing pattern should coincide with tense/release cycle. Inhale upon tensing and deeply exhale during release stage.

10. Progress systematically throughout the major muscle groups. Take care not to tense muscle previously relaxed.

11. Repeat tense/release cycle twice for each muscle group.

12. Once all muscles have been relaxed, sit quietly for a minute or two, remaining with your eyes closed focusing on the pleasant sensation of being totally relaxed.

13. Come back to normal condition by counting backward, from 10-0, becoming more and more aware of your surroundings and body as you approach zero.

14. Evaluate your physical state.

    a. Rate level of tension/relaxation before and after exerci
    Use a ten point scale.

    1 2 3 4 5 6 7 8 9

    Extremely relaxed — Highly te
    (Melting away) — (Uptight

    b. Take pulse rate before and after exercise and compare differences.

Progressive Relaxation Outline

B. Order of Muscle Groups

1. Make a fist with right hand (hand and lower forearm).
2. Make a fist with left hand (hand and lower forearm).
3. Tense biceps muscles of right arm.
4. Tense biceps muscles of left arm.
5. Raise forehead muscles up toward ceiling (forehead, scalp).
6. Frown (forehead, scalp).
7. Squint eyes together (upper face muscles).
8. Clench teeth together (jaw, lower face muscles).
9. Pull chin downward toward chest while preventing it from touching the chest (neck muscles).
10. Pull back shoulder blades attempting to make them touch, taking a deep breath and holding it as you do so.(chest, shoulders and upper back).
11. Tighten stomach muscles as if in anticipation of a punch to the stomach (abdominal muscles).
12. Pull right toes toward head (calf and lower leg).
13. Pull left toes toward head (calf and lower leg).
14. Push down with right toes to arch foot (foot).
15. Push down with left toes to arch foot (foot).

I'm sorry he can't come to the phone right now . . . he's practicing his muscle relaxation exercises!

Session 5: Obstacles to Self Development

Objectives

Introduction

1. Introduce welcoming committee and have them welcome new members.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Provide participants with a set of basic goal-setting procedures.

Social Support Session

Have each individual in the group think about specific goals they would like to achieve. Have members discuss obstacles which prevent them achieving the goals they would like to. Present members with specific tasks to be completed.

Handouts:

WHY GOALS ARE IMPORTANT

SETTING GOALS

GUIDELINES FOR ASSERTIVE GOAL SETTING

Means to Objectives

Introduction

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session:

a. Briefly review major topics discussed during last session, especially how anxiety serves as a barrier to self-assertiveness. In addition, review progressive deep muscle relaxation.

b. Review the log books. Question participants as to whether they have used any of the assertion techniques discussed in the previous sessions. If so, what were the results? You may suggest role-playing recorded situations of which a member(s) indicates discontent in how s/he responded. Allow other group members to offer corrective feedback and suggest alternative means of handling the situation.

Self-Advocacy Training

1. Goal Setting

a. Stress the need for individuals to develop specific goals if one is to become more assertive.

Distribute WHY GOALS ARE IMPORTANT handout. Read aloud and briefly discuss.

b. Teach participants the basic procedures involved in goalsetting (either long or short-term goals), and have them begin to consider personal goals they would like to work toward as these relate to assertive behavior.

Distribute SETTING GOALS and GUIDELINE FOR ASSERTIVE GOALSETTING handouts. Read aloud and discuss, clarifying the procedures involved.

Comment on several additional points:

-Initial attempts at being assertive should have a high likelihood of success. (You want the individual's successful outcome to serve as reinforcement for assertive behavior.)

-Goals are not absolute. As often as one implements strategies working toward initial goals, situations change and it becomes necessary to reevaluate the situation and modify or set new goals.

-Remember that there will always be some failure in one's striving to be more assertive. One cannot realistically expect 100% sucess; however, the more attempts are made at being assertive, the greater the number of successes one can expect.

Social Support:

Give the group members the topics to be covered tonight along with the appropriate recording materials.

1. Each person in the group should be asked to write a list of things that keep them from doing what they would like to do. When these lists are finished, every person in the group should be given a chance to point out these obstacles in the group itself, in the family, or in interactions outside the family.

2. When these items have been discussed, arrange to have someone assemble the items and omit those that overlap.

3. Have a group discussion of what can be done to remove these obstacles.

a. Analyze goals that are being frustrated. Were the procedures for setting goals appropriately considered in choosing these goals?

c. In the case of each goal for which difficulties have been encountered, would it be better to reconsider the goal or persist in removing obstacles to reaching the goal?

d. What obstacles can group members help to remove? For instance, if transportation or finances are a problem for some people, can members of the group do anything to help each other out? If anxiety is a problem, can principles of self-advocacy be used to remove obstacles? The secretary should keep records of suggested solutions for future reference.

WHY GOALS ARE IMPORTANT

To be assertive, you must develop goals.

- Goals direct. Without them, you lack a sense of purpose in life.

- Goals motivate. When test animals run through a maze, the closer they get to a goal, the faster they hasten toward it. When you take a trip, you become more impatient as you near your destination. If you set a goal, as you approach it, you gain greater motivation to succeed.

- Goals reinforce self-esteem. Achievement of goals strengthens your desire to achieve other goals. As a result, you attain a feeling of movement through life and a higher sense of self-worth.

Taken from: Fensterheim, H. and Baer, J. Don't Say Yes When You Want To Say No. New York: Dell Publishing Co., Inc., 1975, p. 56.

SETTING GOALS

1) DEFINE YOUR GOALS: To do this ask yourself some questions.

   a) What are your goals?

   b) How can you accomplish them?

   c) How do you deal with obstacles?

   e.g. You want to move up the ladder at work, the next logical position requires some knowlege of marketing which you now lack. Can you learn this on your present job? Should you take a course? How can you get help?

2) CONCENTRATE ON SUB GOALS: Ask yourself what do I want out of life? Then divide your life into sub goals. That means, what do I want to accomplish today?

3) MAKE IT EASIAR ON YOURSELF: Once you have formulated your goals.

   a) Write them down.

   b) Make the list concrete and specfic.

4) SEEK OUT MODELS: Talk with friends who have managed to achieve goals you want and see how they have handled problems you anticpate that prevent you from even attempting the goals.

5) DON'T LET OTHERS SET YOUR GOALS: There are many people who love to tell you how to run your life -- when to leave a party, what school to choose for your children, what to serve at a party, who to invite, what you should or shouldn't eat , just to name a few examples. Remember it's your life.

GUIDELINES FOR GOALSETTING

1. Describe the behavior you want to change. (Be specific!)

2. Identify any obstacles which may interfere with achieving your goals (e.g., anxiety, cognitions, lack of skill/knowledge, another person):

3. Check your goal to make sure it is:
   -realistic
   -measurable
   -can be broken down into smaller subgoals

4. List your subgoals:

5. Specify strategies for achieving each subgoal listed above:

6. Set up a time schedule for completing subgoals:

7. How will you evaluate/determine success?

8. How will you reward yourself for achieving goals? What will you do if goals aren't achieved?

Session 6: Buddying Up

Objectives

Introduction

1. Ask welcoming committee to do introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Discuss how one's cognitions (thoughts) can act as a barrier to self-assertiveness. Identify the role of cognitions and their impact on one's behavior.

2. Introduce participants to cognitive restructuring as a way to challenge their irrational beliefs.

Social Support Session

1. Have members choose other group members that they would like to interact with. Determine convenient times for conversations to take place, and useful topics to be discussed.

Handouts:

TEN IRRATIONAL IDEAS

A-B-C THEORY OF EMOTIONAL DISTURBANCE

Means to Objectives

Introduction

1. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session:

a. Briefly review major topics discussed during last session. Specifically highlight goal-setting procedures.

b. Review the log books. Ask participants whether they have used the assertion techniques discussed in the previous sessions. If so, what happened? You may suggest role playing situations in which members were not pleased with how they responded. Allow other group members to offer corrective feedback and suggest alternative means of handling the situation.

Self-Advocacy Training

1. The Role of Cognitions:

Briefly discuss how one's beliefs, attitudes, and feelings influence one's behavior. Emphasize how one's cognitions (thoughts) can inhibit, direct, guide, and facilitate actions.

Discuss with the participants the need to: recognize faulty internal dialogues which often lead to debilitating effects on one's behavior; develop effective coping skills for handling faulty think; and practice such skills in order to gain mastery of their use and maximize their effectiveness in real-life situations.

2. Rational Emotive Procedures (Cognitive Restructuring):

Provide group members with a means of challenging some of their irrational beliefs that may be the root factors contributing to their nonassertive behavior.

a. Distribute TEN IRRATIONAL IDEAS handout. Read each irrational belief aloud, discuss how such thoughts can contribute to unassertive behaviors, and discuss various rational alternative cognitions intended to foster an assertive belief system. (The group leader is directed to Lange and Jakubowski (1976) p. 127-140 for further details which will help guide group discussions.)

b. The A-B-C Paradigm

Distribute A-B-C THEORY OF EMOTIONAL DISTURBANCE handout. Describe Ellis' approach to the relationship between thinking, feeling, and behavior (Activating experience > Belief about the experience > emotionally upsetting Consequence). Extend the theory to points D (Determining the irrational beliefs involved and then Disputing or challenging them) and E (substitute irrational beliefs with new more adaptive emotional consequences or Enjoy new emotions). Use handout to help clarify the theory and process involved.

Provide group with several specific situations (Activating experiences) and have a volunteer go through Ellis' process; and/or have volunteer/s share personal Activating experiences about which they have formulated irrational beliefs. Have them restructure their cognitions by applying the extended A-B-C approach. Provide feedback and invite other group members to do the same.

Social Support

The trainer should give the group the following information:

So far in this group we have not suggested that you interact with other group members outside of the session. Group members may enjoy this and it may be very beneficial for some.

1. Many people have said that they could benefit from having daily support from other diabetics. Since the problems of diabetics are often similar, it would be beneficial to communicate with other group members on a day-to-day basis.

a. Divide the group into sets of two to four people, each of whom will agree to contact each other on a daily basis.

b. Work out a way and a time that each member of a set can contact other members as near to every day as possible. Discuss each other's schedules and available times.

c. Discuss what members of each set might do together that would be fun and help the other person or persons. Examine the possibility of practicing self-advocacy skills and methods of reducing anxiety. Write down what you decide so that it can be shared with other members of the total group.

d. About what problems (one or more) would you like consultation from other group members. Each person in the group should discuss their problem, including a history of the when the problem(s) started. This could be a specific problem such as dieting, or it could be a more general topic such as practicing advocacy skills, or just chatting. Each member should decide what type of interaction he or she could benefit most from; write each person's choices down.

e. After everyone has had a chance, gather the whole group together and share what was discussed in the smaller groups. This might allow people to feel less inhibited or shy in the future.

f. Finish planning a permanent directory arrangement so that all members of the group can contact each other if necessary. Decide how new members will be included in small sets and have their information included in the directory.

TEN IRRATIONAL IDEAS

1. You must - yes, must - have sincere love and approval almost all the time from all the people you find significant.

2. You must prove yourself thoroughly competent, adequate, and achieving, or you must at least have real competence or talent at something important.

3. You have to view life as awful, terrible, horrible, or catastrophic when things do not go the way you would like them to go.

4. People who harm you or commit misdeeds rate as generally bad, wicked, or villainous individuals and you should severely blame, damn, and punish them for their sins.

5. If something seems dangerous or fearsome, you must become terribly occupied with and upset about it.

6. People and things should turn out better than they do and you have to view it as awful and horrible if you do not quickly find good solutions to life's hassles.

7. Emotional misery comes from external pressures and you have little ability to control your feelings or rid yourself of depression and hostility.

8. You will find it easier to avoid facing many of life's difficulties and self-responsibilities than to undertake more rewarding forms of self-discipline.

9. Your past remains all-important and because something once strongly influenced your life, it has to keep determining your feelings and behavior today.

10. You can achieve happiness by inertia and inaction or by passively and uncommitedly "enjoying yourself."

Taken from: Lange, A. J. and Jakubowski, P. Responsible Assertive Behavior, Cognitive/Behavioral Procedures for Trainers. Champaign, Illinois: Research Press, 1976, p. 127-140.

IRRATIONAL IDEAS

1. IF I'M ASSERTIVE, PEOPLE WILL BE ANGRY AT ME.

   Combat this irrational idea by saying to yourself:

   A. If I assert myself, people may or may not get angry. They may
      feel closer to me
      like that I asserted myself
      have more respect for me
      help me to solve the problem

   B. If I assert myself and they do get angry, this
      does not mean that I will fall apart
      does not mean that the relationship is necessarily destroyed
      does not mean that I am a bad person
      does not mean that I am responsible for the other's anger

2. IF I'M ASSERTIVE, I WILL HURT OTHER'S FEELINGS.

   Combat this irrational idea by saying to yourself:

   A. If I assert myself, others may or may not feel hurt.

   B. If they are hurt, I am not responsible for their feelings.

   C. If they are hurt, they are usually not so fragile that they will fall apart.

   D. If they are hurt, it does not necessarily mean that the relationship is over forever and ever.

3. IF I ASSERT MYSELF AND SAY "NO" TO A LEGITIMATE REQUEST, THIS MEANS I'M BEING SELFISH AND PEOPLE WILL THINK I'M A TERRIBLE PERSON

   Combat this irrational idea by saying to yourself:

   A. My needs are as legitimate as the other's requests and I have the right to assert them.

   B. It is okay for me to sometimes put my needs before those of others.

   C. People will not necessarily think I'm a terrible person for asserting myself. If they do, that may be their problem.

   D. I can only maintain control over my own life by not trying to please all the people all the time.

Session 7: Group Project

Objectives

Introduction

1. Have the welcoming committee do introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Provide participants with a set of effective cognitive-behavioral intervention procedures to help facilitate assertive responding, specifically: self-induced relaxation, thought stopping, self-statements, and reality testing.

Social Support Session

1. Members of the group should think about all of the resources they might have. The group should combine all of the groups resources, and decide on most efficient way to put the materials together for other diabetics. Present the group with the specific tasks.

Handouts:

COPING SKILLS

EXAMPLES OF SELF-STATEMENTS

Means to Objectives:

Introduction

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session:

a. Briefly review major topics discussed during the last session. Cover how thoughts can act as a barrier to self assertiveness and how cognitive restructuring can be used to challenge their irrational beliefs.

b. Ask participants whether they have used any of the assertion techniques discussed last session and, if so, what were the results of their use. You may suggest role playing recorded situations in which a member(s) was not content with how s/he responded. Allow other group members to offer corrective feeback and suggest alternative means of handling the situations.

Self-Advocacy Training

1. Cognitive-Behavioral Intervention Procedures:

Demonstrate and teach participants several cognitive-behavioral techniques designed to halp facilitate assertive behavior. Explain how these techniques are classified as "coping skills" and are designed to help one handle maladaptive thoughts and anxiety which may inhibit assertive responding.

Distribute COPING SKILLS handout and explain the techniques outlined.

a. Self-Induced Relaxation (Brief Relaxation Techniques):

Brief relaxation techniques are useful in handling anxiety or stress, or the physiological reactions associated with these states. One of the best indicators of increasing stress is your body reaction. When most people are under stress their heart rate increases; they start perspiring; some people feel shaky. To help cope with this increased stress you

might use deep muscle relaxation training. Through practice you could learn how to identify signs of negative arousal and learn how to relax these responses away. During an anxious or stressful situation, however, it may be impossible or impractical to tense and relax each muscle group. In such instances, brief relaxation techniques are useful. These techniques are based upon remembering the sensations and feelings associated with the state of total relaxation.

Techniques:

1. Deep Breathing:

Have group members close their eyes as you read the following script in a slow, smooth tone:

> "See yourself taking a slow deep breath, slowly filling your chest cavity. Good. Now exhale slowly. As you see yourself exhaling, note the feeling of relaxation and control you have been able to bring forth. Next you simply stop the image and just relax. (Gambrill, 1977).

Obtain feedback on how participants felt.

2. Imagery:

This technique also requires closing your eyes. Once you have closed your eyes, picture the sensations associated with total relaxation - for example, floating on a calm sea under the warm sun, melting into the chair.

Tell participants that merely by visualizing a soothing, calm, pleasant scene they will be able to combat the physiological reactions associated with the anxious or aroused state.

3. Conditioned Relaxation:

Remember the progressive relaxation technique we discussed a few sessions ago. This was when you tensed and relaxed each muscle group. What cue word did you use for releasing tension? Well, "conditioned relaxation" refers to the pairing of a word (for example, relax, calm, release) with the relaxed state. Through repeated practice, the word becomes a cue for relaxation. It simply involves remembering what you felt before, so that after a while just saying the word brings on the relaxed state.

Remember that with practice the application of any of the above techniques will help to reduce levels of anxiety, and return your body to a calmer, more relaxed state, and thus enable to to gather your thoughts and respond in the most effective and appropriate manner.

a. Thought Stopping

Have group members close their eyes and silently think about some disturbing experience or thoughts they would like to extinguish. Make several general comments or statments to help participants imagine the arousing situation. After one or two minutes, abruptly shout "STOP" and question members as to what became of their thoughts.

The participants should report that their thoughts abruptly ended. Discuss with the participants how one can gain control over his/her thoughts in a similar way. After the negative thoughts have left, you should immediately substitute pleasant thoughts. Or you could use any of the previously described brief relaxation techniques to replace the disturbing, unwanted thoughts. You may not want to shout "STOP" aloud because this may prove to be embarrassing when you are in public; however, you can do so silently, in your head, and obtain the same results. Again, emphasize that this technique also requires practice. With repeated application every time the thoughts occur, the time between reoccurring thoughts will become longer and longer, and the duration will become less and less, until they no longer exist.

c. Self-Statements:

1. Negative Self-Statements:

Many individuals engage in self-defeating, negative self-statments.

Examples: "No one will be interested in what I have to say."
"I'm not absolutely sure if I'm right."
"My opinion isn't important anyway."

Such thoughts help convince us not to take action or to respond assertively. These thoughts are merely self-defeating, and it is necessary to change these negative self-statements into positive ones that will

help convince us to be assertive and to take action, rather than sit back and remain fearful of standing up for our rights.

Positive Self-Statements:

A positive self-statement procedure involves developing complimentary statements about yourself that you memorize and repeat regularly. The purpose is to build self-confidence. Read over the following examples (Alberti & Emmons, 1982, p. 57).

Examples:

I am respected and admired by my friends. I am a kind and loving person. I have a job. I handle anger well. I got through school successfully.
(Alberti & Emmons, 1982, p. 57)

Suggest to the group that they generate their own personal list of positive self-statements and place the list where it will be readily available, reminding them of their importance and value (e.g. on the refrigerator door, on a mirror, in wallet).

Demonstrate how positive self-statments can be used in conjunction with the thought-stopping procedure previously described. Once you have abruptly stopped those undesired thoughts, positive self-statements can be immediately susbstituted. With practice, the positive self-statments can replace the undesirable ones. Discuss with the participants how once they have practiced the positive self-statement procedure for a while, you should then begin to take definite steps toward acting in a manner which is consistent with your thoughts.

Provide an example

Example:

You initially feel that your statements and opinions are unimportant. You begin by reminding yourself that your opinion is important. After practicing the self-statement: "My opinion is important" to the point where you are comfortable with it and believe it to be true, you then take steps to begin to act as you think. If you are at a group meeting, and the floor is open for opinions or comments, you may start

off by agreeing with what another speaker has stated and, as your confidence increases, gradually work up to stating your own opinion because you now know that "my opinion is important!"

2. Coping Self-Statements

Comment on the use of other types of self-statments that can be used whenever thoughts or feelings interfere with one's effectively or appropriately handling a given situation. Coping self-statements are such self-statements. Self-statments can be used to help guide and direct behavior before, during, and after a situation. Using such a procedure can help:

-rationally focus on the particular situation at hand.
-challenge irrational/self-defeating cognitions.
-reduce levels of anxiety.
-consider appropriate courses of action.
-assist in evaluating our behavior.

Distribute EXAMPLES OF SELF-STATEMENTS handout. State that coping self-statments can be generated and employed for handling any type of situation such as anger, stress, anxiety, etc. Invite group members to comment on situations in which they would like to employ this technique. Have group generate a list of applicable self-statements for the situations mentioned.

d. Reality Testing:

This technique is very similar to the procedures involved in cognitive restructuring that we talked about earlier. It is important to assess the reality of a given situation by challenging irrational thoughts. Provide an example.

Example:

"Just because my boss asked to see me after work doesn't necessarily mean I'm going to be fired. There are a number of alternative reasons...."

Social Support Session

Present the group with the following questions:

1. Decide what resources each person in the group has access to, or that he or she could use personally. In this process define "resources" and list examples of types of resources including medical services, services, food sources, financial aids, exercise facilities, and transportation. Also include suggestions for techniques or thoughts each person has found effective in dealing with diabetes.

2. Decide on a way of putting together all of the different resources so that other new diabetics in this group or other members of this group could have a permanent catalog.

3. Elect a committee to put together all the materials.

4. Set forth the procedures that will be necessary to complete the task.

5. How could you give other diabetics access to this information?

Session 8: Evaluating the Network

Objectives

Introduction

1. Have welcoming committee conduct introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Identify some common fears which inhibit assertive responding. Help participants to develop basic communication skills.

Social Support Session

1. Members should work out any problems that have come up regarding the resource project.

2. Review the materials for the resource project. Is the information correct? Are there any new resources that should be added?

3. Finalize the plans for putting the resources together.

4. Each member should evaluate the network that is developing.

Handouts:

COMMON SOCIAL FEARS

BASIC COMMUNICATION SKILLS

Means to Objectives:

Introduction

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session:

a. Briefly review major topics discussed during last session. Specifically highlight the coping skills of self-induced relaxation, thought-stopping, self-statement and reality testing.

b. Question participants on their use of the various assertion techniques and the coping skills taught up to this point. Probe to discover outcomes of their applications and resolve any problems which members may have encountered in their use.

Have group members role play recorded situations, allowing other members to offer corrective feedback and suggest alternative means of handling the situation.

Self-Advocacy Training

1. Developing Basic Communication Skills:

A. Common Social Fears:

Comment on two important facts of social life identified by Fensterheim and Baer (1975):

B. Basic Communication Skills:

a. Discuss the importance of "small talk," which functions as a finding-out process. It helps to explore common grounds and areas of interest for further conversations.

b. Things don't just happen. Interesting people, activities or occasions don't just happen to appear suddenly out of the blue. To be interesting, a good friendship, a funny occasion, etc., requires skills and active involvement on your part.

Distribute COMMON SOCIAL FEARS handout. Read aloud and obtain participants' reactions.

2. Basic Communication Skills:

Comment on how many nonassertive individuals avoid, or experience difficulties in, carrying on a conversation because they lack the basic communication skills involved. These skills can help reduce the anxiety that many people experience in a variety of situations.

Distribute BASIC COMMUNICATION SKILLS handout. Describe and demonstrate the three basic skills involved in initiating and maintaining a social conversation as identified and explained by Lange and Jakubowski (1976, p. 77-80):

a. Ask open-ended questions.

This maximizes the other person's opportunity to respond more fully. The responsibility of carrying on the conversation is not left to any one individual. Such questions equalize the flow of the conversation and increase the likelihood of receiving more free information to which one can further respond.

b. Responding to free information elicited by open-ended questions. Respond to free information with your own opinions, disclosures and knowledge to facilitate further discussions (maintain the conversation).

c. Paraphrase to continue a conversation when you don't know anything to add. This technique allows you to continue a conversation when you don't have anything to say in response to someone else's free information. This shows that you are listening, interested, and would like to hear more.

Each of these techniques can be used in any situation. They are very helpful when you just meet someone and would like to get to know the person.

Social Support

Present the group with the following tasks:

1. Have the committee selected the previous week report on progress up to this time. Work out any problems that have come up with respect to reproducing materials. Decide how reproduction and distribution are to be carried out and paid for.

2. Have the resource list and description read aloud to the group. Each person should make sure that the information is accurate, especially the information he or she has provided. Everyone should make sure that the information is complete enough so that the resource could be used without any information besides what is present in the resource list. Necessary changes should be recorded by the secretary and by the committee chair.

3. Any additional resources that have come up should be added to the list. Everyone will have to be careful not to add resources of limited use that might make the list too long.

4. Plans should be finalized to complete and copy the resource list before the next meeting. People with access to word processors or copy machines should not hesitate to come forward! Plans should include some extra copies for future group members.

5. Group members should look at the network that is developing among group members. Evaluate the network. Each member should have a chance to say what they think.

   a. Who called who?
      How often did you talk to one another?

   b. What topics did you talk about?

The secretary should record all of the information.

COMMON SOCIAL FEARS

People have a whole set of social fears which tend to inhibit assertive responding.

Honestly ask yourself - Do you fear:

- People will think you're stupid, so you avoid talking.

- Looking foolish. You don't say anything that is different or individual, so your conversation becomes stuffy and conventional. Often you bore yourself.

- Rejection. You tend to stick to people you know and with whom you feel relatively safe. Then you complain you're in a rut.

- Closeness. You keep everything at a small-talk level on a superficial basis. You don't follow up with new people or allow new personal relationships to develop.

Fears identified by: Fensterheim, H. and Baer, J. Don't Say Yes When You Want To Say No. New York: Dell Publishing Co., Inc., 1975, p. 100.

Open-ended vs. Closed Questioning:

Closed Questioning:

Janet: Hi, are you a patient here?
Mark: Yes.

Janet: Are you a diabetic patient?
Mark: Yes.

Janet: How long have you been a diabetic?
Mark: One year.

Pause.....

Janet: Do you live around here.
Mark: No.

Janet: Do you live close to Lake Michigan?
Mark: No.

Janet: Would you like to live closer to Lake Michigan?
Mark: Yes.

Open-ended Questioning:

Janet: What are you doing here?
Mark: I'm waiting for my regular check-up.

Janet: How do you like your doctor?
Mark: I have only been seeing her for three months, but so far I think she's really good. She takes time to explain things to me.

Janet: What did you think of the diabetic classes here?
Mark: I think they were really informative. The most surprising thing that I learned was ....(and so on).

Responding to Information in an Open-ended Question.

Take advantage of your opportunity to respond to information with your own opinions, disclosures, and knowledge to maintain the conversation.

Example.

Janet: What do you do for a living?
Mark: I work at Fisher auto body. I am responsible for ordering different products we need. I also supervise a few people in the office.

Janet: Oh, I work for the phone company. I install telephones in homes and in businesses. I've worked for the company for 15 years. I'm hoping to get a promotion to a supervisor in a few months. I won't meet as many people, but I'll be making more money.

Paraphrase to Continue a Conversation When You Don't Know Anything to Add.

This technique allows to continue a conversation when you don't have anything to say in response to someone else's free information. This shows that you are listening, interested and would like to hear more.

Example:

Janet: What do you do for a living?
Mark: I work at Fisher auto body. I am responsible for ordering different products we need. I also supervise a few people in the office.

Janet: So you do ordering and supervise people too?

Mark: Yeah, it gets to be quite a job. You wouldn't think it would involve so much keeping track of things, but it does. I like a challenge, though.
Janet: So what is it that you like about challenges?

Session 9: Examining the Group's Relationship to Other Groups

Objectives

1. Have welcoming committee conduct introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define procedures which will be employed.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Provide participants with ways to handle difficult situations, specifically: dealing with anger, dealing with putdowns, and saying "no."

2. Help participants recognize the importance of expressing warm feelings - an often overlooked mode of assertive responding.

Social Support Session

1. Members should decide as a group whether or not the group should establish relationships with other groups. If members feel that the group should relate to other groups, how will this be done? Present the group with their tasks for the evening.

Handouts:

DEALING WITH ANGER

PUT-DOWNS

EXERCISE IN SAYING NO

DIRECT OBSERVATION OF ROLE PLAY SITUATIONS

SOFT ASSERTION

Means to Objectives:

Introduction

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session

a. Briefly review major topics discussed during last session. Specifically highlight: common fears which inhibit assertive responding; basic communication skills.

b. Question participants on their use of the various assertion techniques and the coping skills taught up to this point. Probe to discover outcomes of their applications and resolve any problems which members may have encountered in their use.

Have group members role-play recorded situations, allowing other members to offer corrective feedback, and suggest alternative ways to handle the situation.

Self-Advocacy Training

1. Handling Difficult Situations:

a. Dealing with Anger:

Distribute DEALING WITH ANGER handout. Comment on the fact that there are bound to be instances in all of our lives when we will be forced to deal with another person's anger or aggression. It is important to maintain an assertive position. Mention the likely consequences of nonassertion and aggression in response to an aggressor.

Nonassertion - reinforces the other person's aggression.

Aggression - creates an angry behavior cycle.

Inform participants that the handout they have received outlines some assertion techniques designed to help them maintain an assertive position while confronted with another's anger. Stress that the information provided on the handout is merely intended to serve as a guide, providing alternative ways to handle such situations other than resorting to being nonassertive or aggressive.

Read handout over with participants, elaborating and clarifying the techniques outlined. Invite group members to provide further examples. Based on group's need/common level of interest, model and role play appropriate use of the techniques outlined.

b. Dealing with Put-downs:

Make some general comment regarding put-downs as a means of an introduction to this session. Obtain information on how various group members respond to put-downs (Do they passively accept them? Do they beocme aggressive? Do they feel hurt? Do they feel resentful?)

Distribute PUT-DOWNS handout. Read aloud and discuss. Have group members provide futher examples. Based on group's need/common level of interest, model and role play further examples.

c. "Don't Say Yes When You Want to Say No" (Fensterheim & Baer, 1976, p. 75-79).

Comment on how people will always make requests or place demands on others. Some people find it very difficult to say "no" to these requests. If you are like these people, you could spend your life doing things that others request. This is not to say that it is not right or good to do things for other people. The point to be made here is to say "no" when you do not want to do something. Invite participants to share situations in which this is true for them.

Stress the importance of being able to stand up for oneself and say "no" when you want to. Identify some negative consequences of being unable to say "no." Ask group for contributions and list consequences on the board. Include:

-It leads you into activities you don't respect yourself for doing.

-It distracts you from what you really want to accomplish.
-Because you allow other people to exploit you continually, the resentments build up and, sometimes after years of the "yes" rountine, you lose your temper in an inappropriate outburst.
-It produces a lack of communication between you and others."

(Fensterheim & Baer, 1976)

State the basic principles one should follow in saying "no." (Write on the board):

1) be specific
2) be clear
3) be firm
4) be honest
5) Answers should be short, to the point and start with the word "no" to prevent ambiguities.

Distribute EXERCISE IN SAYING NO (Fensterheim & Baer, 1976). Read Situations aloud and model appropriate responses.

Provide participants with an opportunity to practice saying no. Have them role play the situtions on the handout and/or have them role play personal situations in which they have difficulty saying "no." Have group members provide feedback.

Optional: Distribute DIRECT OBSERVATION OF ROLE PLAY SITUATION and have group members complete the sheet to assist them in providing important feedback. Note: this sheet, or a modification of it, may be useful whenever feedback procedures are employed to help guide given responses.)

2. Soft Assertion:
(Alberti & Emmons, 1982, Chapter 11)

Comment on the difficulty experienced by many aggressive as well as non-assertive individuals in expressing positive, caring feelings. Question members as to why expressions of warmth, concern and caring are often inhibited by adults in our society (e.g., embarrassment, fear of rejection, ridicule, the irrational belief that being emotional is a sign of weakness).

Expressing positive, warm feelings is a highly assertive act. Generally, it is difficult to express warm feelings because it is considered to be a high risk act and because of the feelings of embarrassment often attached.

Comment on how people often assume that the other person fully understands your feelings toward them (e. g., "She knows I love her"). Emphasize the fact that we all need to know that someone cares, and we need and want to hear this.

Distribute SOFT ASSERTION handout. Have group members read it and allow for comments.

Social Support Session

Present the group with the following questions:

1. Discuss how the group should relate to: physicans, hospitals, health insurance groups, and other diabetic organizations.

a. Discuss whether or not the group should develop formal relationships with hospitals. Discuss whether or not the group should find a physician who would be willing to be a co-director of the group.

b. Discuss how the group would become an affiliate of the American Diabetes Association.

c. Write down the groups feelings and attitudes on these topic areas.

2. What ideas can this group use from other groups?

3. What ideas can the group give to other groups?

DEALING WITH ANGER

Reflection:

Reflection involves simply reflecting back what the aggressor is saying or feeling. This helps the aggressor to realize that his or her message has been received. Usually this causes the aggressor to start calming down, after which each person can react to what has been heard and can state a personal position.

Example

"I know that from your point of view it's completely unfair that you've received a small raise this year. Ideally, I would have liked to give you a large raise, but right now the company has severely limited raises. We're in financial trouble, and the only way I could give a larger raise to you - and to the other people who'd like larger raises - would be to let some employees go. That's unacceptable to the company and to me, too."

Caution: Take care not to give the impression that you are agreeing with the unwarranted aggressive criticisms.

Repeated Assertion:

Involves repeating the basic assertive message while taking into consideration any legitimate points which were made by the aggressor. The assertor should ignore all nonrelevant issues and provoking statements. This technique is appropriate when the other person overreacts, ignores, or discounts the asserter's thoughts, feelings, opinions, and wants. Do not counterreact by justifying personal feelings, opinions, etc.

Example:

A student social worker disagreed with the staff physician about the disposition of a client's case, and wanted to have a second evaluation given before a final decision was made about the kind of therapy the client would receive. The physician was sarcastic and refused to respond to the student's initial suggestion. The social worker again said, "I'd like a second opinion on this case," and finally the third time responded, "I realize that your decision is the final one, and I'm willing to abide by that, but I'd still like to have a second evaluation made of this client." The physician finally decided to act on the suggestion.

Note: Repeated assertion is not simply exact repetition.

Broken Record:

This technique involves repeating the same message (assertive response) in a calm, monotonous tone of voice. This is useful when the other person is extremely aggressive, disruptive, distractive, manipulative, or unfeeling.

Example:

"Please stay calm." (5 second pause)
"Please stay calm." (5 second pause)
"Please stay calm." (5 second pause)

Note: You are not to increase the tone or loudness of your voice or make any threatening gesture.

Pointing Out Implicit (Implied) Assumptions:

Pointing out implicit assumptions requires that the person carefully listen to what the aggressor is saying, hearing the implicit assumptions of the extreme position being taken, pointing out these assumptions, waiting for the aggressor's response, and then expressing one's own point of view. This technique helps to diffuse the aggression present and makes it easier to communicate.

Example:

A man was aggressively attacked by his wife for disagreeing with her on a minor issue. The husband responded, "The message I'm getting is that under no circumstances - regardless of what I think or feel - should I disagree with you. It's like I have no rights except to agree with you." The wife essentially agreed with this ridiculousness and continued her attack. After a short time, the man interrupted: "The way I see it, as long as I don't put you down, I have a right to express my opinion. Just because I have a different opinion than you doesn't mean that I think you're stupid. My opinions are my own, just as yours are. We can't always think the same way. I don't expect you always to agree with me or to have the same opinion I do, and I don't think it's fair for you to impose your opinions on me either."

Questioning:

The question technique simply involves questioning the aggressor on the reason behind his or her anger. This helps the aggressor to become aware of the unwarranted reaction.

Example

When asked to wrap a package, the clerk said nothing but looked extremely irritated and muttered almost inaudibly as he wrapped the package. The customer responded in a puzzled, nonsarcastic tone of voice, "You got mad because I asked you to wrap the package?"

Fogging:

This is a useful technique when you are being provoked by another person. It involves diffusing the other person's aggression by confusing him or her with agreement. You are not actually agreeing with the person, but rather you decide to turn things into a joke.

Example

Provoker: "You're a stupid jerk." Response: "You're right, I am." (turns around and walks away)

Note: You must be extremely careful when using this technique. Your response must come across assertively not aggressively.

(Information taken from: Lange & Jakubowski, 1976.)

Dealing with Put-Downs:

Most people have a difficult time dealing with put-downs. The manner in which a put-down is handled can have an effect on future interactions with the person; it will also have an effect on how you feel about yourself. Here are four common types of put-downs and suggestions on how to handle them.

1. The Direct Verbal Put-down:

Example:

As you walk down a crowded staircase, you accidentally push someone as you pass by. That person immediately responds in a hostile manner:

"Damn it! Why don't you watch where you're going! You idiot, you could have hurt me if I had fallen!"

What to do:

-Allow the person vent her/his feelings until s/he calms down a little.
-Admit it when you are wrong (even in the face of an insult).
-Acknowledge the other person's feelings.
-Assert yourself about the way s/he is reacting.
-Give a short statement to bring the encounter to an end.

Example:

"I apologize for pushing you. It was unintentional. You're obviously upset, but I do not like being called names or being yelled at. I can get your point without that."

2. The Indirect Verbal Put-down:

Example:

In response to your inquiry about your new outfit, a friend states: "You look nice. It fits you. You always wear something a bit weird."

What to do:

-Ask for more information to help clarify the person's true intent. -Your next response will depend on the other person's answer to your question. Your objective is to teach the other person to be more straightforward with you.

Example:

You: "What do you mean by that?"

Friend: "Oh, I think it looks really good. I like it."

You: "O.K., thank you. I was a bit confused by your first comment. If you don't like my style in clothes, I hope you can tell me directly."

3. The Nonverbal Put-down:

a. The Aggressive Nonverbal Put-down:

Examples:

-obscene gesture
-dirty look
-pouting
-silly grins
-smirks

What to do:

-Attempt to get the person to clarify her/his gesture with words. (Be prepared for a verbal put-down and respond accordingly.)

Examples:

"I have trouble understanding what you're feeling unless you tell me directly."

"Could you interpret that look for me?"

b. The Nonassertive Nonverbal Put-down:

Example:

As you make a request of someone, s/he begins to stare off into space or inappropriately grins.

What to do:

Attempt to get the nonverbal response out in the open to clarify its meaning (if any). Ask the person to explain.

Examples:

"I don't understand your expression."
"Did I do something you didn't like?"

4.
The Self-Put-down:

Examples:

Could be verbal and/or internal thoughts:

"My opinion isn't worth much."
"I'm a bore."
"I'm not smart enough to go back to school."

What to do:

-Be a fair judge of your own behavior.
(Be objective not subjective.)
-Catch yourself when you engage in such self-defeating behavior and substitute positive self-statements.
-Be assertive with yourself!

Examples:

"My opinion does count."
"I am important."
"I can do anthing I set my mind out to do."

(Taken from: Alberti & Emmons, 1982).

EXERCISE IN SAYING NO

Situation One:

Co-worker asks to borrow some coins for the coffee machine. Somehow he always does this and never repays the change. Co-worker says, "I have no silver. Would you lend me thirty-five cents for the machine?"

How would you say "No"?

Situation Two:

A friend had asked you to go with him "sometime soon" to select a new hi-fi set. You had assented. On the Saturday morning when you had been planning to catch up with house chores, he calls and says, "You promised to help me pick out that hi-fi set. Can you come with me this morning?" You really want to sort your bookshelves.

How would you say "No"?

Situation Three:

You have been working on the planning committee for a local organization's upcoming fund-raising event. You've already put in more time than anyone else. Now the president makes another demand, asking, "Joan, you're such a terrific worker. Can I count on you to collect tickets at the door?"

How would you say "No"?

Taken from: Fensterheim, H. and Baer, J. Don't Say Yes When You Want To Say No. New York: Dell Publishing Co., Inc., 1975, p. 79.

SOFT ASSERTION

When was the last time you've told someone you care for:

"Thank you."

"You're great!"

"I really understand what you mean."

"I like what you did."

Give a warm smile.

"I'm here."

Give extended eye contact.

"I believe you."

"I trust you."

"I love you."

"I believe in you."

"I'm glad to see you."

"You've been on my mind."

List of warm statements taken from:

Alberti, R.E. and Emmons, M.L. A Guide to Assertive Living, Your Perfect Right. San Luis Obispo, California: Impact Publishers, 1982, p. 90.

Session 10: Making Plans to Continue the Group

Objectives

Introduction

1. Have the welcoming committee perform introductions.

2. Provide participants with a clear understanding of the goals of the workshop. Define the procedures.

3. Briefly review the materials covered previously.

Self-advocacy Training

1. Caution participants on possible adverse reactions to their assertiveness, and offer suggestions on how to handle such reactions.

2. Provide participants with some suggestions on what to do when they assert themselves and end up being wrong.

3. Provide group members with some points to consider in deciding whether or not they should be assertive.

Social Support Session

1. Members should consider how they would like to deal with members that will be completing their committment to the project. A committee should be formed so that this area of concern can be taken care of at each meeting.

Handout:

WHEN TO BE ASSERTIVE

Means to Objectives: Introduction

1. Greet members as they enter. Make small talk. Turn the meeting over to the welcoming committee.

2. See session 1 for a description of the goals and procedures of the group.

3. Recap Previous Session:

a. Briefly review major topics discussed during last session. Specifically highlight: dealing with anger, dealing with put-downs, saying "no," and the act of expressing (asserting) warm positive feelings.

b. Question participants on their use of the various assertion techniques and the coping skills taught up to this point. Probe to discover outcomes of their applications and resolve any problems which members may have encountered in their use.

Have group members role-play recorded situations.

Self-Advocacy Training

1. Potential Adverse Reactions

Caution participants on possible adverse reactions by others to their assertiveness. Inform them that even when an individual appropriately asserts him/herself, there is no guarantee that one's honest, open, and direct expressions will be taken positively by others. At times, others may respond unpleasantly.

Identify some such reactions, provide examples, and offer suggestions for dealing with the reactions. The following outline is based on materials presentd by Alberti & Emmons (1982) pp. 124-125.

Write key words on the board and allow for discussion.

a. Backbiting - disgruntled, childish behavior, often involves indirect actions.

Example:

-Someone cuts in front of you in a line. You assert yourself, after which the individual goes to the back of the line but grumbles while passing you, "Big

deal," or "Who does he think he is anyway?"

What to do:

-Ignore the behavior.

b. Aggression - hostile actions taken toward asserter.

Examples:

-Yelling or screaming -Cursing -Obscene gestures -Physical actions (e.g., bumping, shoving, hitting)

What to do:

-Employ appropriate assertion techniques for dealing with anger discussed earlier (e.g., reflection, questions, etc.). Stress that it is important that one maintain an assertive position to avoid reinforcing the aggression or generating an angry behavior cycle.

c. Temper Tantrums -often occur when you assert yourself with someone who has had his/her way for a long time.

Examples:

-Individual may react by looking hurt -Cry, "You don't like me!" -Attempt to elicit pity from others -Attempt to make asserter feel guilty

What to do:

-Ignore the behavior.

d. Psychosomatic Reaction -actual physical illness experienced by some individuals.

Examples:

-Abdominal pains -Headaches -Feeling faint

What to do

-Be firm in the assertion. -Be consistent whenever the same situation reoccurs with the same individual. -Recognize the fact that the other person will eventually adjust to the new situation.

e. Overapologizing -extremely apologetic or humble to the asserter.

What to do

-Point out that such behavior is unnecessary.

f. Revenge -may occur if there is a continuing relationship with someone you have asserted yourself with.

What to do:

-Immediately take steps to squelch the person's actions. -Directly confront the individual about his/her behavior.

2. So You Make a Mistake:

Comment on how, especially during early attempts at assertions, they may discover that they have interpreted the situation incorrectly, poorly or incorrectly applied a technique, or offended another person. Instruct group members on how to handle such situations. Include:

-Be willing and honest enough to admit, and say to the person involved, that you were wrong. -Avoid getting carried away with apologies and becoming overapologetic. -Do not be apprehensive about future assertions if and when the situation calls for it.

3. a. When Not to be Assertive:

Make group members aware of the fact that there are some potential negative consequences inherent in assertiveness, aside from those adverse reactions identified previously.

Give an example.

Comment that, because of this, it is necessary for one always to consider the possible consequences of one's assertive acts. In some instances, the value of avoiding the negative consequences to an assertion will outweigh the benefits of engaging in the assertive response, in which case common sense should rule against being assertive.

Identify some circumstances in which one may choose nonassertion over assertiveness. Include and discuss the following, as explained in more detail by Alberti and Emmons (1982), p. 126-127:

Overly sensitive individuals

-those who are genuinely unable to accept even the slightest assertion.

Redundancy

-when a person who has taken advantage of your rights remedies the situation in an appropriate manner before one gets the chance to assert him/herself. In such instances, it is not appropriate for one to assert him/herself.

Being Understanding

-there may be extenuating circumstances causing an individual to have difficulties, in which case one may choose to overlook things that may be going wrong or postpone confrontation to a more productive time.

Manipulators and Incorrigible People

-those people who are just plain difficult, or are so unpleasant that it is simply not worth confronting them. The reactions of these individuals may be so negative that they outweigh the worth of asserting oneself.

b. When to be Assertive:

Distribute WHEN TO BE ASSERTIVE handout. Tell the group that these are just some questions they could ask themselves to help deterimine what actions they should take. Read questions aloud and provide a personal example to help clarify and model appropriate cognitions involved in this self-assessment procedure. Discuss.

Social Support Session

After tonight's meeting there will be members who have completed their committement to this project. The group needs to make some plans for these members. In the first session a welcoming committee was formed. It seems appropriate to form a committee for members that may be

leaving. There might be members that would like to continue in the group; there may also be members that might not want to continue with the group on a regular basis. Tonight's group should focus on these issues.

Have the group deal with the following problems:

1. Last week you discussed how the group would relate to other groups. In this meeting you should review and decide an actual course of action. In other words, what exactly are you as a good going to do?

2. What will happen to members completing ten sessions?

a. Form a committee to deal with this and select members.

b. Decide what they will do.

c. Ask the committee to establish a procedure for members that are leaving.

d. Determine whether members who are leaving wish to keep in touch with the group. If so, how? How will the experimenter be able to keep track of these people so that their progress can be followed up later?

3. Since some members will be leaving and might want to attend on an irregular basis, members need to address the following issues.

a. Make plans for continuing the group after a self-advocacy trainer is no longer involved.

b. Make plans for securing a meeting place.

4. Set a time for the committee to report back to other members.

5. Decide whether the assertiveness training could be done by a member of the group or would require finding a new person.

6. Select two people in the group that you will continue to have regular contact with. Call these people once a week. Select two additional people to contact in case you need other opinions or more support.

WHEN TO BE ASSERTIVE

Following are some questions to help you determine when to response assertively. (Self-assessment)

1. **How important is the situation to me?**

2. **How am I likely to feel afterwards if I don't assert myself in this situation?**

3. **How much will it cost me to assert myself in this situation? What are the potential consequences?**

REMEMBER: You have the individual choice to decide if, when, and how to be assertive.
This is your personal right!

Questions obtained from:

Lange, A.J. and Jakubowski, P. Responsible Assertive Behavior, Cognitive/Behavioral Procedures for Trainers. Champaign, Illinoise: Research Press, 1976, p. 84.

Potential Adverse Reactions

Even when an individual appropriately asserts him/herself, there is no guarantee that one's honest, open, and direct expressions will be taken positively by others. At times, others may respond unpleasantly. The following are some possible negative reactions and suggestions on how to handle them.

Backbiting - disgruntled, childish behavior, often involves indirect actions.

Example:

-Someone cuts in front of you in a line. You assert yourself, after which the individual goes to the back of the line but grumbles while passing you, "Big deal," or "Who does he think he is anyway?"

What to do:

-Ignore the behavior.

Aggression - hostile actions taken toward asserter.

Examples:

-Yelling or screaming -Curse -Obscene gestures -Physical actions (e.g., bumping, shoving, hitting)

What to do:

-Employ appropriate assertion techniques for dealing with anger discussed (e.g., reflection, questions, etc.). Stress that it is important that one maintain an assertive position to avoid reinforcing the aggression or generating an angry behavior cycle.

Temper Tantrums -often occur when you assert yourself with someone who has had his/her way for a long time.

Examples:

-Individual may react by looking hurt -Cry, "You don't like me!" -Attempt to elicit pity from others -Attempt to make asserter feel guilty

What to do:

-Ignore the behavior.

Psychosomatic Reaction -actual physical illness experienced by some individuals.

Examples:

-Abdominal pains -Headaches -Feeling faint

What to do

-Be firm in the assertion. -Be consistent whenever the same situation reoccurs with the same individual. -Recognize the fact that the other person will eventually adjust to the new situation in a short time.

Overapologizing -extremely apologetic or humble to the asserter.

What to do

-Point out that such behavior is unnecessary.

Revenge

-may occur if there is a continuing relationship with the person with whom you have been assertive.

What to do:

-Immediately take steps to squelch the person's actions. -Directly confront the individual on his/her behavior.

So You Make a Mistake:

Especially during early attempts at assertions, you may discover that you have interpreted the situation incorrectly, poorly or incorrectly applied a technique, or offended another person. Possibilities for handling these situations include:

-Be willing and honest enough to admit, and say to the person involved, that you were wrong. -Avoid getting carried away with apologies and becoming overapologetic. -Do not be apprehensive about future assertions if and when the situation calls for it.

When Not to be Assertive:

There are some potential negative consequences that may come with being assertive, aside from those negative reactions identified previously. In some instances, the value of avoiding the negative consequence to an assertion will outweigh the results of engaging in the assertive response, in which case common sense should rule against being assertive. Examples of some of these situations follow. (Alberti & Emmons, 1982).

Overly sensitive individuals -those who are genuinely unable to

accept even the slightest assertion.

Redundancy -when a person who has taken advantage of your rights remedies the situation in an appropriate manner before one gets the chance to assert him/herself. In such instances, it is not appropriate for one to assert him/herself.

Being Understanding -there may be extenuating circumstances causing an individual to have difficulties, in which case one may choose to overlook things that may be going wrong or postpone confrontation to a more productive time.

Manipulators and Incorrigible People -those people who are just plain difficult, or are so unpleasant that it is simply not worth confronting them. The reactions of these individuals may be so negative that they outweigh the worth of asserting oneself.

Some questions you might want to ask yourself to help you determine when to response assertively are:

1. How important is the situation to me?

2. How am I likely to feel afterward if I don't assert myself in this situation?

3. How much will it cost me to assert myself in this situation? What are the potential consequences?

Remember that you have the individual choice to decide if, when, and how to be assertive. This is your personal right!

LIST OF REFERENCES

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Alberti, R. E. and Emmons, M. L. (1978). Assertion training in marital counseling. In R. E. Alberti (Ed.), Assertiveness: Innovations, applications, issues. San Luis Obispo, Impact Publishers.

Alogna, M. (1980). Perception of severity of disease and health locus of control in compliant and noncompliant diabetic patients. Diabetes Care, 3(4), 533-534.

American Diabetes Association, (1979). Special Report: Principles of nutrition and dietary recommendations for individuals with diabetes mellitus: 1979. Diabetes Care, 2(6), 520-523.

Barnett, A.H. Eff, C. Leslie, R.D.G. & Pyke, D.A. (1981). Diabetes in identical twins. Diabetologia, 20, 87-93.

Barrett-Conner, E. (1980). The prevalence of diabetes mellitus in an adult community as determined by history or fasting hyperglycemia. American Journal of Epidemiology, 111, 705-712.

Bennett, P. H. (1982). The epidemiology of diabetes mellitus. In B. N. Brodoff and S. J. Bleicher (eds) Diabetes mellitus and obesity. Baltimore: Williams and Wilkins.

Bloom, J. R. (1979). Social support, coping, and adjustment to mastectomy. American Association for Cancer Research: Proceedings, 20, 360.

Cahill, G. F. (1971). The physiology of insulin in man. Diabetes, 20, 785-799.

Caplan, G. (1974). Support systems and communite mental health. Behavioral Publications, New York.

Caplan, R. D., Robinson, E. A. R., French, J. R. P. Jr., Caldwell, J. P., & Shinn, M. (1976). Adhering to medical regimens: Pilot experiments in patient education and social support. Ann Arbor: University of Michigan.

Cerkoney, K. A., & Hart, L. K. (1980). The relationship between the health belief model and compliance of persons with diabetes mellitus. Diabetes Care, 3, 594-598.

Cheek, D. K. (1978). Assertive behavior and black lifestyles. In R. E. Alberti (Ed.) Assertiveness: Innovations, applications, issues. San Luis Obispo, Impact Publishers.

Cohen, R. Y. (1982). The evaluation of a community-based group program for low-income diabetics and hypertensives. American Journal of Community Psychology. 10(5), 527-539.

Colletti, G. & Kopel, S. A. (1979). Maintinaing behavior change: an investigation of three maintenance strategies and attributional processes in the long-term reducation of cigarette smoking. Journal of Consulting & Clinical Psychology, 47, 614-617.

Cooper, G.R. (1980). Diagnosis diabetes. Diabetes Forecast, March/April, 38-39, 44-45.

Crofford, O. B. (1976). Report of the National Commission on Diabetes, Vol. 1: The long-range plan to combat diabetes. Publication no. (NIH) 76-1018. US Department of Health, Education, and Welfare. Public Health Service, National Institute of Health.

Daniels, G. F. (1939). Present trends in the evaluation of psychic factors in diabetes mellitus. Psychosomatic Medicine, 1, 527-552.

Danowski, T. S. (1963). Emotional stress as a cause of diabetes mellitus. Diabetes, 12, 183-184.

Davidson, M. B. (1981). Diabetes mellitus: Diagnosis and treatment. New York: Wiley.

Davis, M.S. (1966). Variations in patients' compliance with doctors' orders: Analysis of congruence between survey responses and results of empirical investigations. Journal of Medical Education, 41, 1037-1048.

de Bont, A.J. Baker, I.A., St. Leger, A.S., Sweetnam, P.M., Wragg, K.G., Stephens, S.M., & Hayes, T.M. (1981). A randomised controlled trial of the effect of low fat diet advice on dietary response in insulin independent diabetic women. Diabetologia, 21, 529-533.

Dunbar, J. M., Marshall, C. D., and Hovell, M. F. (1979). Behavioral strategies for improving compliance. In Hayes, B. R., Taylor B. W., and Sackett, D. L. (Eds.), Compliance in health care. Baltimore: Johns Hopkins University Press.

Earp, J. A. & Ory, M. G. (1979). The effects of social support and health professionals home visits on patient adherence to hypertension regimens. Preventive Medicine, 8, 155.

Fairweather, G. W. (ed.) (1964). Social psychology in treating mental illness: An experimental approach. New York: Wiley.

Fairweather, G. W. (1967). Methods for experimental social innovation. New York: John Wiley and Sons.

Fairweather, T. W. & Tornatzky, L. G. (1977). Experimental methods for social policy research. New York: Pergamon Press.

Fairweather, G. W., Moran, L. G., & Morton, R. B. (1956). Efficiency of attitudes fantasies, and life history data in predicting observed behavior. Journal of Consulting Psychology, 20, 58.

Feinstein, A. R. (1979). "Compliance bias" and the interpretation of therapeutic trials. In Hayes, B. R., Taylor, D. W., and Sackett, D. L. (Eds.), Compliance in health care. Baltimore: Johns Hopkins University Press.

Festinger, L., Schachter, S. & Black, K. W. (1950). Social pressure in informal groups. New York: Harper.

French, J. R. P., Jr. (1941). The disruption and cohesion of groups. Journal of Abnormal and Social Psychology, 36, 361-377.

Gillum, R. F. & Barsky, A. J. (1974). diagnosis and management of patient noncompliance. Journal of the American Medical Association, 41, 1563-1567,

Gonen, B. (1982). Sugar link to complications? Diabetes Forecast, March/April, 10.

Goodman, A. H., & Labianca, O. S. (1981). Social change, social support and hospitalization of adult onset diabetics. American Journal of Physical Anthropology, 54(2), 226.

Goplerud, E. N. (1980). Social support and stress during first year graduate school. Professional Psychologist, 11(2), 283-290.

Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.

Grant, I., Kyle, G, C. Teichman, A., Mendels, J. (1974). Recent life events and diabetes in adults. Psychosomatic Medicine, 36, 121-128.

Green, L. W. (1978). Educational strategies to improving compliance with therapeutic and preventive regimes: The recent evidence. In Hayes R. R., Taylor, D. W., and Sackett, D. L. (eds.) Compliance in health care. Baltimore: Johns Hopkins University Press.

Hardy, A. B. (1978). Assertiveness training in the treatment of pho- bias. In R. E. Alberti (Ed.), Assertiveness: Innovations, applications, issues. San Luis Obispo, Impact Publishers.

Hayes, R. B. (1976). A critical review of the "determinants" of patient compliance with therapeutic regimens. In D. S. Sackett and R. B. Haynes (Eds.). Compliance with therapeutic regimens. Baltimore: Johns Hopkins University Press.

Hayes, R. B., Sackett, D. L., Gibson, E. S., Taylor, D. W., Hackett, B. C., Roberts, R. S., and Johnson, A. L. (1976). Improvement of medication compliance in uncontrolled hypertension. Lancet, 1, 1265-1268.

Heitzmann, C. A. (1983). Effects of social support on weight and glycosylated hemoglobins in Type II diabetic adults. Unpub- lished Thesis, San Diego State University.

Heitzmann, C. A. & Kaplan, R. M. (1983). Assessment of methods for measuring social support. Presented to the American Psychological Association Convention.

Heitzmann, C. A., Kaplan, R. M., Wilson, D. K., Sandler, J. (1985). Sex differences in weight loss among adults with type II diabetes mellitus. To be presented at the American Psychological Association Convention, Los Angeles.

Hirsch, S. M. (1978). Assertiveness training with alcoholics. In R. E. Alberti (Ed.), Assertiveness: Innovations, applications, issues. San Luis Obispo, Impact Publishers.

Holland, W. M. (1968). The diabetes supplement of the National Health Survey. Journal of the American Diet Association, 52, 387-390.

Hulka, B. S., Cassel, J. C., Kupper, L. L., & Burdette, J. A. (1976). Communication, compliance, and concordance between physicians and patients with prescribed medication. American Journal of Public Health, 66, 847-853.

Janis, I. L. The role of social support in adherence to stressful decisions. (1983). American Psychologist, 38(2), 143-160.

Kaplan, R.M. & Atkins, C.J. (1985). The Behavioral management of Type II diabetes mellitus. In Kaplan, R. M. and Criqui, M. H. (Eds.) Behavioral epidemiology and disease prevention, New York: Plenum.

Kaplan, S. & Kozin, F. (1981). A controlled study of group counseling in rheumatoid arthritis. Journal of Rheumatology, 8, 91-99.

Karam, J. H. (1981). Diabetes mellitus, hypoglycemia and lipoprotein disorders. In M. A. Krepp & M. J. Chatton (Eds.), Current medical diagnosis and treatment. Los Angeles: Lange.

Kay, R.M. Grobin, W. & Track, N.S. (1981). Diets rich in natural fibre improve carbohydrate tolerance in maturity-onset, non-insulin dependent diabetes. Diabetologia, 20, 18-21.

Killeen, J. Vanderburg, D. and Harlan, W. R. (1978). Application of weight-height ratios and body indices to juvenile populations - The national health examination survey data. Journal of Chronic Diseases, 31, 529-537.

Kirk, R. E. (1982). Experimental design procedures for the behavioral sciences (Second Edition). Belmont, California: Brooks/Cole.

Kirscht, J. P., & Rosenstock, I. M. (1979). Patients' problems in following recommendations of health experts. In G. C. Stone, F. Cohen, & N. E. Adler (Eds.), Health Psychology. San Francisco: Jossey-Bass.

Kissebah, A. (1982). Top-heavy Fat Cells. Science, March, 10-11.

Levine, D. M., Green L. W. Deeds, S. G., Chualow, J. Russel, R. P. and Finlay, J. (1979). Health education for hypertensive patients. Journal of the American Medical Association, 241, 1700-1703.

Levy, R. L. (1983). Social support and compiance: a selective review and critique of treatment integrity and outcome measurement. Social Science & Medicine, 17(18), 1329-1338.

Like, A.A. Kislauskis, E. Williams, R.M. Rossini, A.A. (1982). Neonatal thymectomy prevents spontaneous diabetes mellitus in the BB/W rat. Science, May, 216, 644-645.

Lott, A. J. & Lott, B. E. (1961). Group cohesiveness, communication level, and conformity. Journal of Abnormal and Social Psychology, 62, 408-412.

McMillian, M. (1978). Assertiveness as an aid to weight control. In Alberti, R. E. (Ed.), Assertiveness: Innovations, applications issues. San Luis Obispo: Impact Publishing.

Michael, A.F. & Brown, D.M. (1981). Increased concentration of albumin in kidney basement membranes in diabetes mellitus. Diabetes, 30, 843-845.

Moran, G. (1966). Dyadic attraction and orientational consensus. Jouranl of personality and social psychology. 4, 94-99.

National Diabetes Data Group. (1979). Classification and diagnosis of diabetes mellitus and other categories of glucose intolerance. Diabetes, 28, 1039-1057.

Nuckolls, K. B., Cassel, J., & Kaplan, B. H. (1972). Psychological assets, life crises, and the prognosis of pregnancy. American Journal of Epidemiology, 95, 431-441.

O'Neill, P. M., Currey, H. S., Hirsch, A. A., Riddle, F. E., Taylor, C. I. Malcolm, R. J. & Sexauer, J. D. (1979). Effects of sex of the subject and spouse involvement on weight loss in a behavioral treatment program: a retrospecitve investigation. Addictive Behaviors, 4, 167-178.

Panzram, G. Zabel-Langhennig, R. (1981). Prognosis of diabetes mellitus in a geographically defined population. Diabetologia, 20, 587-591.

Pearce, J. W., LeBow, M.D. & Orchard, J. (In press). The role of spouse involvement in the behavioral treatment of obese women. Journal of Consulting & Clinical Psychology.

Raschke, H. J. (1977). The role of social participation in post separation and post divorce adjustment. Journal of Divorce, 1(2), 129-140.

Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. Behavior Therapy, 4, 398-406.

Rice, J. (1981). The importance of patient characteristics in the design of an exercise program. Paper presented at meeting Diabetes, Cincinnati, June.

Rimm, D. C. and Masters, J. C. (1979). Behavior therapy: Techniques and empirical findings. New York: Academic Press.

Saltin, B. Lindgarde, M, Houston, M. Horlin, R. Nygaard, E. & Gad, P. (1979). Physical Training and glucose tolerance in middle-aged men with chemical diabetes. Diabetes, 28, 30-32.

Sartor, G. Schersten, B. Carlstrom, S. Melander, A. Norden, A. & Persson, G. (1980). Ten-year follow-up of subjects with impaired glucose tolerance: Prevention of diabetes by tolbutamide and diet regulation. Diabetes, 20, 41-49.

Sanders, K., Mills, J., Martin, F. I. R., and De La Horne, D. J. (1975). Emotional attitude in insulin-dependent diabetics. Journal of Psychosomatic Research, 19, 241-246.

Shaw, M. E. (1976). Group Dynamics: The psychology of small group behavior. (2nd edition) New York: McGraw-Hill Book Company.

Shelton, J. L. and Levy, R. L. (1981). Behavioral assignment and treatment compliance: A handbook of clinical strategies. Champaign: Research Press.

Skyler, J. S. (1981). Psychological issues in diabetes. Diabetes Care, 4, 656-657.

Speckart, P.F. (1982). Personal communication, February 16.

Stout, C., Morrow, J., Brandt, N., and Wolfe, S. (1964). Unusually low incidence of death from myocardial infarction. Journal of the American Medical Association, 188, 845-855.

Sulway, M. (1980). New techniques for changing compliance. Diabetes Care, 3, 108-111.

Surwit, R. S., & Feinglos, M. N. (1983). The effects of relaxation on glucose tolerance in non-insulin-dependent diabetics. Diabetes Care, 6, 176-179.

Surwit, R. S., Feinglos, M. N., & Scovern, A. W. (1983). Diabetes and behavior: A paradigm for health psychology. American Psychologist, 38(3), 255-262.

Sussman, K. E. and Metz, R. J. S. (1975). Diabetes mellitus (4th ed.), New York: American Diabetes Association, Inc.

Trivelli, L. A. Ranney, H. M. & Lai, H. T. (1971). Hemoglobin components in patients with diabetes mellitus. New England Journal of Medicine, 284, 353-357.

Tryon, T. C. (1939). Cluster Analysis, Ann Arbor, Michigan: Edwards Brother.

Tryon, R. C. & Bailey, D. E. (1970). Cluster analysis, New York: McGraw-Hill.

The University Group Diabetes Program. (1970). A study of the effects of hypoglycemic agents on vascular complications in patients with adult-onset diabetes. Diabetes, 19, 747-815.

Van Zelst, R. H. (1952). Sociometrically selected work teams increase production. Personnel Psychology, 5, 175-186.

Wallston, K. A. Wallston, B. S. DeVellis, R. (1978). Development of the multidimensional health locus of control (MHLC) scales. Health Education Monographs, 6, 160-170.

Wallston, B. S. Wallston, K. A. Kaplan, G. D. Maides, S. A. (1976). Development and validation of the health locus of control (HLC) scale. Journal of Consulting and Clinical Psychology, 44, 580-585.

Watkins, J. D. Williams, R. F. Martin, D. A. Hogan, M. D. and Anderson, E. (1967). A study of diabetic patients at home. American Journal of Public Health, 1967, 57, 452-459.

Weisz, G. & Bucher, B. (1980). Involving husbands in the treatment of obesity: effects on weight loss, depression and maritial satisfaction. Behavior Therapy, 11, 634-650.

Wilson, D. D. Kaplan, R. M. Heitzmann, C. A. & Sandler, J. (In press). Correlates of weight reduction for patients with type II diabetes mellitus.

Zander, A. & Newcomb, T. Jr. (1967). Group levels of aspiration in United Fund campaigns. Journal of Personality and Social Psychology, 6, 157-162.

Ziesat, H. A. (1978). Behavior modification in the treatment of hypertension. International Journal of Psychiatry Medicine, 8, 257-265.