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GROUP COUNSELING AND BEHAVIOR MODIFICATION OF UNDERACHIEVERS, BEHAVIOR-PROBLEM, AND TEST-ANXIOUS STUDENTS

As we all know, the term "counselor" has been taken over by so many people, such as food counselors, fashion counselors, credit counselors, make-up counselors, weight and figure counselors, that it is perhaps necessary to spend a moment defining the use of the term "group counseling." My colleagues and I have worked with three categories of students: underachievers, students with conduct problems, and test-anxious students. In this group approach to behavior modification we have employed two types of techniques which are very different from each other.

On the one hand, we have used what has generally been called "group counseling" with underachievers and behavior-problem students. In this approach, most of our counselors were rather non-directive or client-centered. It is true that in every case the counselors had a goal in mind—the goal of improving the academic achievement of students or of reducing their acting out and interfering behavior in classrooms.

At the same time, the groups were largely self determining and explored thoughts and feelings of interest to their members. In this context our concept of "group counseling" includes *growth* in *self-understanding* on the part of the students, as well as the goal of better academic adaptation and performance.

In addition, however, we have undertaken group "behavioral counseling." This is a type of counseling where there is not only a *clear-cut goal,* but where the factor of student consciousness or self-understanding is minimized. Here the goal is solely to achieve changes in behavior directed towards greater academic achievement, or behavior which checks aggressiveness in the classroom, or behavior which reduces test anxiety.

I will therefore try to describe some research that we have done, using both types of techniques. Some of you may consider that we are stretching the concept of group counseling, and I recognize that perhaps I am taking some liberty in including behavioral modification under the heading of "group counseling."

The concept of underachievement, as you know, is a very knotty one and I do not think that anyone has really come up with a satisfactory definition of this concept. For example, the usual method for defining an underachiever is to convert the student's IQ and school grades into z-scores, and to subtract the *academic standing* from the IQ in terms of z-scores. This yields a difference score. When the difference score reaches one standard deviation, for example, the student can arbitrarily be considered an underachiever.

A number of assumptions, of course, are made in such a definition. One is that the IQ test which has been administered is highly reliable (which, of course, is not the case with group tests). Another assumption is that school grading itself is highly reliable, which is also not the case. In addition, it does not take into account the student's total interests, personality, or compensating factors. A student may, for example, be more inerested in music or sports than he is in academic matters. In addition, a student who has a very high IQ, but who receives grades of only 65%, could technically be defined as an underachiever. However, he may not regard himself in that way at all. He may consider that he is doing well enough to get as far as he wishes, including, perhaps, entrance to university or a technical college, and that to insist that he is an underachiever ignores his total needs and interests.

One of our concerns, then, is to try to arrive at a more satisfactory definition and to answer the following questions in relation to underachievement.

a What tests are both valid and reliable predictors of an individual's potential?

b What school material or subject matter should be used as measures of performance? Should standardized and/or classroom averages be used?

c Which group should be used as a comparison group for underachievement? For example, should we use all students in one high school, in one city; should males and females be dealt with separately?

d Should students with emotional or physical handicaps be classified as underachievers? In one study presently in progress, we found that 40% of those whom we had classified as underachievers by the usual criteria had at one time or another been classified in their school system as "perceptually handicapped." In another study, approximately 25% of the students were classified as "emotionally disturbed." It is quite apparent that the relationship between ability and performance is confounded with many other factors which have to be considered. Unfortunately, the schools, in many cases, do not have accurate records to provide this type of information.

e How do factors, such as age and cultural background, affect the ability-performance relationship? Many students appear to be quite content to sacrifice school marks to develop other skills, such as hobbies. Are they underachivers?

f Should an underachiever be defined *objectively,* or should the student's own perception of himself be considered as well. It is our contention that underachievers who *perceive* themselves as such may have different personality traits from underachievers who do *not* perceive themselves as such. This problem is presently being researched in a comprehensive testing program among all grade-9 students in the Scarborough, Ontario, school system.

To return to our research on group counseling of underachievers. We set aside the difficulties of definition, accepted the criterion of one standard deviation or higher on the difference score between the z-score for IQ and

the z-score for grades. In 10 schools, students who fitted this criterion were randomly assigned to two groups—one, a group that underwent group counseling and the other a control group.

The main problem, I believe, with this experiment last year was the lack of *experience* of our counselors. We set up an all-too-brief course consisting of four sessions, with people who had conducted individual counseling in secondary schools. However these counselors had previously not done any group counseling in an organized form. I believe that this was the single most serious weakness in the experiment.

We set up a similar project for students with conduct problems. In this case, we defined conduct-problem students in terms of the number of *detentions* that had been handed out by the teachers to the students. The students were selected on the basis of the greatest number of detentions that they had received by a certain date.

With the *conduct*-problem students, there seemed to be a tendency (although the results did not reach significance) for the students who had *received* group counseling to achieve somewhat better academically, and to reduce the number of detentions which they received for the rest of the year. However, we had only three groups, and it can be said that follow-up studies are worthwhile.

In the case of academic underachievers, there was no significant difference between the control group and the experimental group in terms of any change in academic achievement. It should be pointed out that the number of sessions averaged only 14, or a total of 600 minutes of counseling time. Interestingly enough, although there was no difference between the groups academically, there was a tendency for the students who had undergone group counseling, compared to those who were in the control group, to *exhibit higher manifest anxiety* at the end of the experiment. Our attention had been focused mainly on possible changes in academic achievement. Here there seemed to be no difference between the two groups, but there was a *rise* in the *anxiety level* of the students who had undergone group counseling. Since the duration of the group counseling was rather short, we tentatively suggested an hypothesis, which is by no means proven, that the group counseling had, up to this point, served mainly to *raise the anxiety of the students,* without affording them an opportunity of working through to greater self-understanding.

This hypothesis has been further explored in a study which we have done this year which has not yet been completed. This time the amount of group counseling has been increased. In one group, 30 sessions were planned, and 20 in another.

The issue of the minimum number of sessions in group counseling is an important one, as well as that of *experience* of the counselors. With inexperienced counselors, weekly supervision by careful auditing of tapes should be a minimum requirement.

BEHAVIORAL TECHNIQUES

In addition to the type of group counseling just described, we have conducted experiments both with academic underachievers and students with conduct problems—using entirely different techniques. With a group of

underachievers, for example, we have tried to use a behavioral model which was designed to augment achievement motivation by changing a student's risk-taking pattern. Students who tend to be underachievers appear to exhibit a peculiar pattern of risk-taking behavior such that in risk-taking situations they either take very high risks or very low risks. Generally, as compared to other students, they tend to avoid medium range risk-taking.

We have launched a program in grades 7 and 8 in 8 elementary schools in Toronto to overcome such a risk-taking pattern of underachievers. Twice per week, such students, in groups of three, play games of various types in which they learn that risk-taking in the medium range leads to a higher payoff. It is hoped that the experience in a game situation will generalize to other situations, including that of academic planning and performance.

In addition to opportunities to test out risk-taking and payoff associated with it, one half of the experimental students are also afforded an opportunity to enhance their achievement motivation by other means. They are asked to write stories in response to cards such as TAT cards, descriptions of various situations, in which their achievement-motivational responses are encouraged and enhanced. It is hoped that this would generalize to the academic situation.

CONDUCT-PROBLEM STUDENTS

We have also tried different techniques with conduct-problem students. One of the most interesting facets of our research with conduct-problem students is our difficulty in finding them. Although several school counselors displayed a keen interest in participation in our remedial programs, some claimed that there were few conduct problems in their school. This was especially true of one suburban school. This might lead one to believe that students who have difficulties with school authorities become what are commonly called "push-outs" or are streamed off into 4- or 2-year programs away from the Ontario 5-year program. Our discussions with several school counselors document this point of view. Many may have been streamed out of the 5-year program, into 4- and 2-year programs.

At first glance, the definition of a conduct problem would seem to be relatively simple. However, there are numerous difficulties. Many teachers are reluctant to label their students "conduct problems." They consider that it might be interpreted as an inability to control their classes. There is also a problem in choosing valid criteria that can be used to identify conduct-problem students. The *detention* system used in some schools is not consistent, and appears to vary from teacher to teacher. Some use detentions profusely; others use different means for coping with students' misbehavior. Furthermore, from a study which we completed last year, it appears that conduct-problem students should be classified into those who are predominantly *"active"* in their rebellion, and those who are *"passive."* Without spelling out the details of this classification system, it would appear at first hand that these two types of students are different from each other and should be treated differently.

An additional problem in researching conduct-problem students in the school has been in connection with devising a measure which can be used as a behavior barometer.

With conduct-problem students we have adopted two new models for study. One of these we have called a didactic or teaching-group technique. In this method, the students are taught about the *causes* (and consequences) of anti-social behavior. This is done in a combined lecture and discussion form and students discuss the issues in a small group. We will then compare the changes in behavior, if any, of those students who have participated in such a didactic group with those in a control group who did not undergo this kind of experience.

In addition, we have launched a group which operates on what we have called a *"behavior restraint model."* In this technique, the group of students who have been designated as students who exhibit conduct problems and who have customarily received detentions or other types of punishment for their misconduct, enter into an agreement with each other. They agree to try to restrain their misconduct in return for an undertaking that punishment will no longer be meted out by the teacher but by those students who belong to the group itself. Whenever a member of this group misbehaves, the group of conduct-problem students is convened after school to discuss the misdemeanor. This, of course, is not particularly popular with the students as this means staying after hours to consider one of their peer's misdemeanors. If the group feels that the student's behavior is a culpable offense, they then assign punishment. In some cases this has meant apologizing to the teacher. They understand that discipline will be in the hands of the *group* rather than administered by the teachers only as long as the *number* of misdemeanors is kept at a reasonable level. This is another form that we are trying out this year. We will compare what happens to those who have been in this experimental group with those who are in the control group. Differences will be measured in teacher ratings and other criteria, such as academic achievement.

BEHAVIORAL MODIFICATION IN TEST-ANXIOUS STUDENTS

Finally, I want to describe some research related to the behavioral counseling of test-anxious students in grades 9 to 13, in four secondary schools. This research project has been concerned with students who are very anxious in test situations, and who suffer seriously from the low grades which they receive. The approach here is strictly behavioral, and the attempt is to extinguish an anxiety response and replace it with one of relaxation in association with test conditions.

Past research has indicated that many high-anxious individuals emit defensive, self-oriented, and often ineffectual responses when they perceive a threat in the environment. Under non-threat conditions, they do not respond in this manner. Most evidence to date supports a negative relationship between an individual's level of test anxiety and his intellectual achievement; that is, high test anxiety seems to interfere with intellectual achievement. Numerous studies have investigated differences in reactions between high- and low-anxious students in situations posing personal threat or stress. (Sarason, Mandler, & Craighill, 1952). Typically, the stress has been created by means of verbal instructions. The bulk of evidence has suggested that *high-anxious* subjects are more *adversely* affected by high *motivating* conditions or *failure reports* than low-anxious subjects. In general *high-*

anxious subjects appear to be much more sensitive to experimental stress; and it seems that instructions which are highly motivating or ego-involving present a threat to the high-anxious individual. In contrast, when high-anxious subjects are given reassurance in an experimental situation they respond more positively than low-anxious subjects to such reassurance (Sarason, 1957).

Other evidence has been found which supports the interpretation that anxiety may be an indicator of sensitivity to implied personal threat. For example, Sarason et al (1952) showed that there are no differences between high-anxious and low-anxious subjects when they are tested under neutral and apparently non-threatening conditions. Both groups—high-anxious and low-anxious—are able to react with "task-relevant" responses under neutral conditions. However, when these *same* groups are placed in an *ego-involving* situation, *low-anxious* subjects perform *significantly better* than high-anxious ones.

Another factor to consider with regard to the dynamics underlying high-anxious subjects is that of the *need* for intellectual achievement. The following suggestion might be made on the basis of past research findings. First, in a stressful situation, there seems to be a relationship between *anxiety level* and *sensitivity* to implied personal threat. Secondly, the higher the anxiety level typically experienced by an individual, in a test situation, the stronger seems to be his need for intellectual achievement. Or, put differently, the more the individual feels he should achieve, the more likely will fear of failure be perceived as a threatening situation. The two factors of *sensitivity* to *implied* personal threat and the *need* for intellectual achievement are not mutually exclusive. They appear to combine forces to reduce the effectiveness of the subject's performance on a test to induce task-irrelevant responses. Typically individuals who manifest high test-anxiety react with "task-irrelevant," defensive responses; and this is often accompanied by feelings of inadequacy and attempts to leave the situation (Mandler & Sarason, 1952).

It might be hypothesized that for individuals without such irrelevant response-tendencies in their repertory, a *stimulating situation* would *raise* their general drive level and result in *improved* performance. Such a high-anxious person would react with *task-relevant* responses, since such responses would constitute the greater part of his response repertory.

In an attempt to promote task-relevant responses, the following hypothesis was formulated. *When an individual with a strong anxiety drive is consistently reinforced to conditions which encourage task-relevant responses, these responses will become dominant over the irrelevant responses.*

Since irrelevant responses seem to be caused by a high level of anxiety, extinguishing or reducing this type of anxiety would eliminate the problem. Our project has been concerned with the reduction or extinction of such *debilitating* anxiety.

The first premise of a remedial program was based on the evidence that high-anxious subjects perform as well as or better than low-anxious subjects in a neutral, non-ego-involving situation—that is, that under *certain conditions,* high-anxious subjects can *perform effectively*. Secondly, there has been some promising remedial work with high test-anxious *university* students.

It was our purpose to use these particular remedial measures and extend them to the secondary-school level.

The method evolved was that used by Wolpe in his treatment of certain phobias and other neurotic reactions—the technique of reciprocal inhibition (Wolpe, 1958). It is based on the following general principle: "If a *response* antagonistic to *anxiety* can be made to occur in the presence of anxiety-provoking stimuli so that it is accompanied by a complete or partial suppression of the anxiety responses, the bond between these stimuli and the anxiety responses will be weakened (p. 71)."

The purpose in our project has been to break down the bond between the testing situation and anxiety. Since it is a high level of anxiety that brings on the task-irrelevant responses, it is assumed that any *significant decrease in this anxiety* could enable the individual to respond in a more appropriate, constructive fashion. By substituting relaxation for anxiety, the student becomes gradually conditioned to a new bond. Relaxation is incompatible with anxiety and thus replaces it. The response of *muscular relaxation,* which can become a habit, is expected to produce a new behavior pattern which weakens the old anxiety-response habit, so that eventually the bond between muscular *relaxation* and test situations replaces the bond between *anxiety* and a test situation.

SELECTION OF SUBJECTS

The problem of selection of students who experience test anxiety is a fairly difficult one. In our study, we used the Alpert-Haber Test Anxiety Scale (1960). We were particularly concerned with the scores on the debilitating scale, but also on the facilitating scale. In addition, we tried to introduce an objective measure of test anxiety by administering two sets of IQ tests, one under fairly relaxed conditions, and the other under more stressful conditions. We tried to use a difference measure between two sets of scores on an IQ test, but the difference scores did not correlate with the measure of debilitating anxiety on the Alpert-Haber Test of test anxiety. For this reason we did not use the objective measure.

The criteria for selection of a student were thus the following:

1) students whose z-score was +1.00 or greater on the *debilitating* scale of the Alpert-Haber Test of Test Anxiety
2) students whose z-score was less than 0 on the *facilitating* scale of the Alpert-Haber Test of Test Anxiety
3) students whose score was 5 or more on a 1-item question related to test anxiety
4) students whose grades were below average.

The record of each student who fitted the above mentioned criteria was reviewed by a counselor. If there was no evidence of unusual exam tension in the student's history, his name was removed from the list. The remaining students were interviewed by one of our research assistants. The list was further reduced to those who felt that their problem was severe and were willing to participate in a remedial program. Each student who fitted into this classification was given a permission form to be signed by his parents. The response was good: over 50% of those students interviewed were willing

to participate—usually about 4% of the total population in a school. The majority of those who refused did so not out of disinterest, but because they felt they did not really have the problem of debilitating test anxiety.

REMEDIAL PROGRAM

To administer the remedial program, four counselors were hired on a temporary basis. They underwent an 8-day training program which aimed at acquainting them not only with the exercises involved but also with the dynamics associated with reciprocal inhibition. Several practice sessions were held with naive high-school students as subjects, and each session was observed through a one-way mirror. In each school, there were *three* groups: two experimental (*muscular relaxation* and *desensitization*) and a control group.

Muscular relaxation involves learning to relax without being paired with any aversive stimulus. The desensitization treatment involves learning to relax, and eventually pairing with items on an anxiety hierarchy. The schedule is as follows:

— Actual muscular tensing and relaxing: 2 days, both groups.

— "Mental" relaxation: concentrating on each of the vital areas and relaxing the muscles there but without first tensing them. This builds up the kinesthetic feedback. Two days, both groups.

— 4th day—desensitization group continued with half the session in relaxation, half with items from the anxiety hierarchy. Muscular relaxation continued with the "mental relaxation."

Each session lasts twenty minutes. The students have been encouraged to practice regularly at home. Students' response so far has been cooperative and conscientious.

Criteria for change will be:

1. Grades . . . and follow-up.
2. Same tests as before . . . including measures of anxiety.

FOLLOW-UP

More work needs to be done in setting up a dependable objective criterion for discovering test-anxious subjects. Paper-and-pencil measures are convenient, but *higher scores* will be obtained by particularly *frank* and *open* subjects, and also subjects who are especially perceptive of their own reactions (Sarason, 1960). Also, many true-false scales of anxiety have been found to correlate highly and negatively with measures of defensiveness, test-taking attitude, and the tendency to respond to personality tests in a socially desirable way (Edwards, 1957). Further research is needed to study the relationships here, especially between anxiety scales and test-taking attitude. Actually, there is an overall need to establish the relationship of *measures of anxiety* to many other *personality dimensions*. Certain evidence indicates that anxiety scales are tapping tendencies toward neuroticism, maladjustment, and self-dissatisfaction (Bendig, 1957).

One study did attempt to relate the high anxiety level of those who have a high need to achieve to a socioeconomic background (Mandler & Sarason, 1952). Father's occupation, scholarship grants, father's education, and the

student's previous schooling were all used as indices of the student's social and economic standing. It was suggested that *anxiety in a test situation is related to a strong need for intellectual achievement.* Such a condition is more prevalent among students from more *socially mobile classes*—such as *lower-middle* and *upper-lower* groups. So far, this is more speculation than fact. Other data should be incorporated into this type of study—such as family income, type of housing, and community affiliations.

There is a great deal more research to be done in integrating the *anxiety, motivational,* and *task* variables. Some of these have been mentioned —such as the anxiety measures themselves and the variable of need for intellectual achievement. This research will also have to be supplemented by establishing more precise data about other relevant factors such as individual physiological differences and the subject's socioeconomic background and personality dimensions. It is hoped that eventually the type and intensity of test anxiety can be more systematically related to these variables.

SUMMARY

We have worked with two types of techniques—a client-centered type of group counseling and a more behavioral type. Personally, I would not, at this point, say that one has more promise than the other, but that each probably has its advantages for particular problems and situations.

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