Self-concept, creativity, growth orientation, an integrated value system, and receptiveness to new experiences are considered to be crucial variables to the self-actualization process. A regular, year-long group counseling program was conducted with 85 randomly selected gifted secondary students in the Farmington, Connecticut Public Schools. A battery of instruments used as pretest indicators of the variables (including the Tennessee Self-Concept Scale, Torrence Test of Creativity, and the Rokeach Dogmatism Scale) were administered. Findings indicated significant differences in favor of the treatment group which had received the group counseling. (Author)
Self-actualization may be defined as an individual’s need to fulfill his human potential—his striving to become. Though the term "self-actualization" was first coined by Goldstein (1939), the theory of self-actualization has been most completely developed and publicized by Maslow (1954) and related to education and counseling by Rogers (1962, 1951), Kelly (1962), Combs (1962), and Maslow (1962). Maslow (1954) states, "What a man can be he must be." This "must be" is often interfered with by lower order human needs which cause dissonance, frustration, anomie, and inhibit the self-actualization process. The writings cited above indicate that five personality characteristics are related to the self-actualization process: self-concept, creativity, value system integration, receptivity to experience and growth orientation.

In terms of these five variables self-actualizing individuals may be thought of in the following terms:

1. SELF-ACTUALIZING PEOPLE HAVE A STRONG, POSITIVE SELF-CONCEPT. They have learned through successful growth experiences that they are

capable, liked, worthwhile humans. They have bounced their images off of others and their personal radar screens tell them they are good and worthy persons.

2. SELF-ACTUALIZING PEOPLE ARE CREATIVE. Their minds have been trained to find unique solutions to problems—whether these problems are interpersonal or concrete. Because of this problem solving skill, they can cope with change.

3. SELF-ACTUALIZING PEOPLE HAVE AN INTEGRATED VALUE SYSTEM. This value system is based upon human values—the worth of others. Their lives are lived in keeping with their values. They have a strong sense of right and wrong, yet the value system is open and new concepts can be tested and, if worthy, integrated.

4. SELF-ACTUALIZING PEOPLE ARE RECEPITIVE TO NEW EXPERIENCES. They are open rather than close-minded. They are willing to try new things, to take reasonable risks.

5. SELF-ACTUALIZING PEOPLE ARE GROWTH ORIENTED. They are conscious of the discrepancies between what they are and what they can be, and are motivated toward closing those gaps.
These five variables may be thought of as a system of variables with each individual having his own unique "floor" and "ceiling", or a minimum and maximum possible "score" for each. Growth in an individual's creativity may allow for increases in his self-concept. An increase in his self-concept may allow for greater receptivity to new experiences. The process of self-actualization becomes the function of the dynamic interplay of five interdependent variables. These five variables form an open system and interface with other personality subsystems such as the biological, anthropological, cultural, and social. Incremental growth in one variable may allow for, but not necessarily cause, growth in another variable. One could hypothesize a synergistic effect of increases in any one variable on the others.

Figure 1. shows the five variables as they may pertain to a particular individual and provide a profile of that person at a specific point in time. A myriad of environmental, biological, social and other factors may interfere with the growth of any one of these variables and prevent self-actualization, or they can place limits upon growth toward self-actualization.

There are as many "can be's" or pre-potencies for self-
actualization as there are individuals. A relative few reach their "must be" or self-actualizing state, though a tremendous effort toward that end is provided by the individual himself and by social institutions such as public schools through instructional programs, and guidance and counseling.

There is considerable confusion in the field of educational guidance and counseling with respect to purposes, philosophies, and objectives for public school counseling programs. Zaccaria (1969), has discussed seven major approaches to educational guidance, yet many school systems have no consistent approach to guidance and counseling nor do they have a philosophy or statement of guidance and counseling goals underlying their guidance programs. As a result, many counselors carry on a variety of unrelated educational, teaching, administrative and psychological activities in their everyday work which often makes them responsible for counseling 250-500 students.

Group counseling, counseling where the counselor meets on a regular basis with groups of 10-20 students, could be a means of facilitating growth in large numbers of students while self-actualization theory can provide the philosophical orientation of growth to a counseling
Figure 1. Self-actualization profile of an individual approaching maximal positions for each variable and for each self-actualization.
program.

This study explored relationships between growth oriented group counseling in a school setting and the self-actualization of students.

METHOD

Subjects

The eighty-five students used in this study represent the total population of "gifted students in grades 7 to 11--students with an Otis Quick-Scoring I.Q. of 125 or greater--in the Farmington, Connecticut Public Schools.

Procedures

These students were administered a battery of pre-post tests which could be thought of as indicators of each of the five self-actualization variables. The variables and the tests administered as indicators of each were:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Concept</td>
<td>Tennessee Self-Concept Scale</td>
</tr>
<tr>
<td>Creativity</td>
<td>Torrance Test of Creativity</td>
</tr>
<tr>
<td>Integrated Value System</td>
<td>Pupil Control Ideology Scale (adapted)</td>
</tr>
<tr>
<td>Receptiveness to New Experiences</td>
<td>Rokeach Dogmatism Scale</td>
</tr>
<tr>
<td>Growth Orientation</td>
<td>Ohio Occupational Aspiration Scale</td>
</tr>
</tbody>
</table>
After the pre-tests were administered, forty-four subjects who were to form the treatment group were selected at random from the total. The remainder were used as a control group.

The treatment group received regular bi-weekly group counseling sessions by a certified guidance counselor. These sessions were designed to help young adolescents in the self-actualization process. The counselor's role became that of assisting groups of from 10 to 20 students in the self-actualization process through planned, structured growth experiences in an open, receptive group counseling format. Examples of activities designed to nurture growth on the self-actualization variables which were used in the program are:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Counseling Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Concept</td>
<td>-- The now popular ILAC (I Am Lovable and Capable) story with follow-up activities which show students the impact they can have on others' self-concepts and that others can have on theirs.</td>
</tr>
<tr>
<td>Creativity</td>
<td>-- Brainstorming, verbal and non-verbal creativity exercises, and problem solving activities.</td>
</tr>
<tr>
<td>Integrated Value System</td>
<td>-- Value clarification exercises became integrated into the fabric of most group sessions.</td>
</tr>
</tbody>
</table>
8. Variable Counseling Activity

Receptiveness to New Experiences -- Discussions of such diverse opinions as those expressed on John Birch Society tapes and Dick Gregory records.

Growth Orientation -- Life Planning games and simulations showed the importance of the future and a growth orientation to counselees.

These are only suggestive and typical of the variety of growth activities used in the program. Each group attended approximately 50 sessions in the year long program. Formative evaluation of the process was carried on by the counselor in a variety of ways including thought-feel cards (What did you think about the session? How did you feel about it?) and I learned ... I felt ... statements.

Research Hypotheses

The testing provided 11 dependent variables:

Torrance Test of Creativity Sub Tests
- Figural Fluency
- Figural Flexibility
- Figural Originality
- Figural Elaboration
- Verbal Fluency
- Verbal Flexibility
- Verbal Originality
Research Hypotheses (continued)

Tennessee Self-Concept Scale
Pupil Control Ideology Scale
Ohio Occupational Aspirational Scale
Rokeach Dogmatism Scale

Three independent variables were considered: treatment/control, grade (7-8, 9-12) and sex.

Four major hypotheses were tested:

1. There are no three-way interactions among treatment/grade level, and sex.
2. There is no difference between treatment and control students.
3. There is no two-way interaction between treatment and grade level.
4. There is no two-way interaction between treatment and sex.

Each major hypothesis considered all the gain scores on the 11 dependent variables simultaneously and then separately, one by one.

FINDINGS

The data was analyzed using a multivariate ANOVA in an unbalanced design to determine if interaction existed among the independent variables of treatment, grade, level, and sex. The null hypothesis of no secondary interaction
between the independent variables of treatment, sex and grade was accepted.

Using a balanced design, achieved by randomly removing subjects from cells, the hypotheses were tested of no mean level difference between treatment and control groups, no treatment sex main effects or interaction and no treatment grade level main effects or interaction. A multivariate ANOVA was used to consider all dependent variables simultaneously and then separately, one at a time.

Table I shows that there were strong treatment effects significant beyond the .0001 level with significant univariate F's for the Torrance Test of Creativity subtests of Verbal Fluency, Verbal Flexibility, and Verbal Originality and for the Tennessee Self-Concept Scale.

The null hypothesis with respect to treatment sex main effects and interaction effects was accepted.

Although significant treatment by grade interactions were not found, the null hypothesis for treatment grades main effect was rejected. An F ratio of 2.85 with 11 and 26 df was found to be significant beyond the .0001 level. An examination of the univariate F's showed that one, the Torrance Test of Creativity, Figural Originality, was significant beyond the .0001 level.
TABLE I
MULTIVARIATE F RATIO AND UNIVARIATE F RATIOS TREATMENT MAIN EFFECT

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Univariate F</th>
<th>P less than</th>
<th>Step Down F</th>
<th>P less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torrance Test of Creativity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figural Fluency</td>
<td>0.3748</td>
<td>0.5439</td>
<td>0.3749</td>
<td>0.5439</td>
</tr>
<tr>
<td>Figural Flexibility</td>
<td>0.0028</td>
<td>0.9579</td>
<td>0.9353</td>
<td>0.3395</td>
</tr>
<tr>
<td>Figural Originality</td>
<td>0.1171</td>
<td>0.7340</td>
<td>0.0029</td>
<td>0.9576</td>
</tr>
<tr>
<td>Figural Elaboration</td>
<td>1.9960</td>
<td>0.1655</td>
<td>1.4473</td>
<td>0.2366</td>
</tr>
<tr>
<td>Verbal Fluency</td>
<td>22.0890</td>
<td>0.0001</td>
<td>23.4147</td>
<td>0.0001</td>
</tr>
<tr>
<td>Verbal Flexibility</td>
<td>17.2586</td>
<td>0.0002</td>
<td>1.8036</td>
<td>0.1880</td>
</tr>
<tr>
<td>Verbal Originality</td>
<td>25.5836</td>
<td>0.0001</td>
<td>2.2833</td>
<td>0.1401</td>
</tr>
<tr>
<td>Tennessee Self-Concept Scale</td>
<td>9.8154</td>
<td>0.0033</td>
<td>6.2604</td>
<td>0.0175</td>
</tr>
<tr>
<td>Pupil Control Ideology</td>
<td>0.1106</td>
<td>0.7412</td>
<td>0.7059</td>
<td>0.4071</td>
</tr>
<tr>
<td>Ohio Occupational Aspiration Scale</td>
<td>3.1891</td>
<td>0.0818</td>
<td>1.4794</td>
<td>0.2331</td>
</tr>
<tr>
<td>Rokeach Dogmatism</td>
<td>0.4215</td>
<td>0.5199</td>
<td>10.7553</td>
<td>0.0027</td>
</tr>
</tbody>
</table>

Multivariate F Ratio: 6.67 with 11 and 32 df, P less than .0001
SUMMARY AND DISCUSSION

This study identified five variables related to self-actualization, considered them as an open system of variables and hypothesized that regular group counseling could bring about growth on these variables toward self-actualization by secondary level public school students. The results of the study suggest that regular group counseling can make an important difference in self-actualization when compared to the alternative of no group counseling and that, though there are not significant differences between dependent variables and sex, there are significant differences between age groups (7th and 8th graders vs. 9th through 12th graders) in favor of junior high age students.

There are some important limitations placed upon the generalizability of the findings of this study. Though the counselor involved is in many ways like the typical New England counselor, O'Hara (1969), the treatment was not randomized. Secondly, the population used in this study was gifted (I.Q. 125 and over). Thirdly, the self-actualization variables in this study are, of course, debatable.

The most valuable contribution that this study could make is that of providing educational guidance and counseling
with a useful theoretical framework that is in harmony with
the expectations that many counselors, teachers, school ad-
ministrators, parents, and other sub-public groups hold for
school guidance. The study provides a viable alternative,
group counseling, to the current practice of individual
ounseling which, in terms of numbers of students to be
counseled, and current public school practices, confronts
the counselor with insurmountable numerical odds and
frustration and leaves most students with minimal, in-
adequate, or no counseling services. All students in the
specified population were counseled, not just those with
problems or personality difficulties. Thus, public school
counseling was placed in a positive growth nurturing role--
one that is somewhat unusual.

This study suggests several kinds of follow-up activi-
ties.

1. Refining the theory presented here through
a redefinition of variables, developing
propositions, ordering them in a system
and verifying them.

2. Identifying and testing implementation
strategies. The authors have developed
competency-based training regimens for
many of the counseling sessions used in the study.

3. Conducting exploratory studies similar to the one reported here with students of average and below average ability.

REFERENCES


