THIS STUDY WAS DESIGNED TO DETERMINE THE RELATIONSHIP BETWEEN THE CONGRUENCE OF SELF AND IDEAL-SELF UTILIZING A Q-SORT AND OCCUPATIONAL CHOICES MADE BY POTENTIAL 4-YEAR COLLEGE STUDENTS IN COMPARISON TO POTENTIAL JUNIOR COLLEGE TERMINAL STUDENTS. POTENTIAL 4-YEAR COLLEGE STUDENTS AND POTENTIAL JUNIOR COLLEGE TERMINAL STUDENTS WERE IDENTIFIED BY STANDARDIZED APTITUDE TESTS. OF THE SAMPLE (N = 96), SIX OF THE 4-YEAR POTENTIAL COLLEGE STUDENTS MADE CHOICES IN THE INAPPROPRIATE OCCUPATIONAL AREA, WHILE 12 OF THE POTENTIAL JUNIOR COLLEGE TERMINAL STUDENTS MADE INAPPROPRIATE OCCUPATIONAL AREA CHOICES. SUBJECTS SHOWED A TENDENCY TO CHOOSE OCCUPATIONAL GOALS ABOVE THEIR APTITUDE AS OPPOSED TO SELECTING OCCUPATIONS BELOW THEIR APTITUDE LEVEL. THE RESULTS OF THE STUDY ARE INCONCLUSIVE AND DO NOT PROVIDE EVIDENCE AS TO WHETHER THE GREATER CONGRUENCE OF THE SUBJECT'S APPRAISED SELF AND IDEAL-SELF IS RELATED TO HIS ABILITY TO MAKE REALISTIC OCCUPATIONAL CHOICES. FURTHER RESEARCH IS INDICATED. THIS ARTICLE WAS PUBLISHED IN "THE PERSONNEL AND GUIDANCE JOURNAL," VOLUME 44, OCTOBER 1965. (AUTHOR/SC)
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The purpose of this study was to determine the relationship between the congruence of self and ideal-self utilizing a Q-sort and occupational choices made by potential four-year college students and potential junior college terminal students. To determine if there was a significant difference between the means of Q-sort scores for the groups, t's were calculated. The chi-square test of significance between the groups in their selection of realistic occupational goals indicated that a significantly greater number of the four-year college groups selected realistic occupational goals, .01 level. A greater number of subjects selected occupational goals above their aptitude level and in inappropriate occupational areas than the number of subjects who chose occupations below their aptitude level.

Among the problems of concern to many American high school students are the decisions they must make concerning their plans for post-high school education and their eventual entry into the world of work. They are faced with the problem of selecting (1) a field of occupation, (2) an educational program that will prepare them for their field, and (3) an institution that will provide the opportunity for them to achieve the necessary education.

Super (1951) has suggested that occupational choices are implementations of the self-concept. He postulated that the self-concept is the product of interacting heredity, physical factors, opportunity for various roles, and the extent of approval from superiors and peers. Compromises between the individual and environmental variables, between the self-concepts and reality demands, are made through role-playing opportunities in fantasy, counseling, school, or work.

Recent studies on the self-concept have yielded some evidence to indicate that there is a positive relationship between the congruency of self and ideal-self and the achievement of successful adjustment.
scores in the 37 and unrealistic 
toned self-referent measured by 
was the 
The dependent 
the following 
program 
The independent variable in this study was to determine the relationship between the congruence of self and ideal-self and occupational choices made by potential four-year college students and potential junior-college terminal students.

The hypothesis in this study was: There is a positive relationship between the congruence of self and ideal-self and the ability to make realistic choices of occupational goals.

Potential four-year college students and potential junior college terminal students were identified by standardized aptitude tests. A comparison of the two groups was made for the purpose of answering the following questions:

1. To what extent were the occupational goals selected by each group realistic?
2. Does a significantly greater number of potential four-year college subjects select realistic occupational goals than do potential junior-college terminal subjects?
3. Does a positive relationship exist between the degree of congruence of self and ideal-self and the selection of realistic occupational goals by the subjects in both groups?
4. Is there a significantly greater degree of congruence of self and ideal-self among the potential four-year college group than among the junior-college terminal group?

The independent variable in this study was the congruency of self and ideal-self as measured by a paper and pencil Q-sort similar to that devised by Engel (1959) and containing positively or negatively toned self-referent items.

The dependent variable was the realistic and unrealistic occupational choices of the subjects established by median percentile scores in the 37 occupational areas for which the Flanagan Aptitude Classification Tests (FACT) yield percentile scores (Flanagan, 1958, 1959). The publishers of FACT provide minimum median percentile scores for each occupational field. Part of the scoring procedure requires the examinee to rank in order of magnitude the percentile scores he has achieved in the tests that are essential for a given occupational field. If the median percentile score achieved by the examinee equals or exceeds the median percentile score established as essential for success in the occupational field selected, it is suggested that the examinee possess the aptitude necessary to succeed in that field. In this way the occupational choice made by an examinee may be judged realistic or unrealistic.

Sample

Subjects for the study were 96 students selected from the senior class of North Central High School, Spokane, Washington, for the school year 1961-62. The subjects were randomly selected from the senior homerooms. Fifty-one boys and 45 girls were selected. One subject was 16, 77 were 17, and 18 were 18.

The first step in the collection of the data for the study was to obtain a personal data sheet from each subject. The personal data sheet provided the following information pertinent to the study: (1) name, (2) homeroom number, (3) age, (4) date of birth, and (5) first and second choice of an occupation.

The FACT was then administered to the 96 subjects to provide the criteria for judging whether the subjects' occupational choices were realistic or unrealistic and to determine which subjects were to be designated as potential four-year college students and which subjects were to be designated as potential junior-college terminal students.

The Q-sort was administered following the subjects' completion of the FACT. The subjects were instructed to sort the self-referent items in a manner that would describe himself. This sort provided what was believed to be a measure of each subject's real self.

To prevent the subject's memory from influencing the second sort the student was not given the second sort until a period of
three weeks had elapsed. The subjects were then instructed to sort the self-referent items in a manner that would describe the kind of person each subject would like to be. This sort provided what was believed to be a measure of a subject's perception of the ideal-self.

The sorts were completed by having each subject place the items in 11 categories, ranging from least like himself to most like himself. By placing the items in the various categories for both the self and the ideal-self, each item yielded a score consisting of the difference between its placement in the "real self" sort and the "ideal-self" sort. These differences provided the basis for determining the degree of congruency between the perceived self and ideal-self of each subject.

Procedure for Identifying Groups

In order to test the hypothesis in this study, the subjects were divided into the following groups:

1. Subjects who had made realistic occupational choices
2. Subjects who had made unrealistic occupational choices
3. Potential four-year college students
4. Potential junior-college terminal students.

The criteria for determining whether the subjects' occupational choices were realistic were:

1. The level of occupational choice was attainable by the subject as determined by median percentile scores on the FACT
2. The field of occupational choice was attainable by the subject as determined by median percentile scores achieved in a specific field

A subject's occupational choice was judged unrealistic if he had chosen an occupational level above his measured aptitude, below his measured aptitude, or in an area in which he had not achieved a qualifying median percentile score as measured by the FACT.

Subjects were judged to be potential four-year college students or potential junior-college terminal students by the following criteria:

1. Subjects were judged to be potential four-year college students if they had achieved median percentile scores on the FACT equal to or above the median percentile scores in those occupational fields that required four or more years of college training.
2. Subjects were judged to be potential junior-college terminal students if they had achieved median percentile scores on the FACT in those occupational fields that required less than four years of college training.

To test the hypothesis in this study the following steps were taken:

1. The absolute difference between the self-sort and the ideal self-sort were computed for each subject. This absolute difference between sorts for each subject was treated as a Q-sort score.
2. From these Q-sort scores means were computed for both the realistic occupational choice group and the unrealistic occupational choice group.
3. A one-tailed t-test was applied to determine whether or not the difference between the group means was significant in favor of the realistic choice group.

This procedure was repeated to determine mean absolute difference on Q-sorts for potential four-year college students and potential junior college terminal students. A one-tailed t-test was applied to determine whether or not the difference between the group means was significant in favor of the potential four-year college group. The 95 per cent level of confidence was taken as a fiducial limit for accepting the hypothesis.

To determine if a significant difference existed between potential four-year college students and potential junior college terminal students in their selection of occupational goals, a chi-square test of difference between groups was computed. The rationale for the selection of chi-square was based on the procedure employed for dividing the subjects into groups.

RESULTS

The number of subjects making realistic and unrealistic occupational choices and the number of subjects identified as potential four-year college students and potential
TABLE 1

<table>
<thead>
<tr>
<th>Students</th>
<th>Number Making Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Realistic</td>
</tr>
<tr>
<td>Four-year college Male</td>
<td>18</td>
</tr>
<tr>
<td>Four-year college Female</td>
<td>19</td>
</tr>
<tr>
<td>Junior college terminal Male</td>
<td>11</td>
</tr>
<tr>
<td>Junior college terminal Female</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
</tr>
</tbody>
</table>

TABLE 2

<table>
<thead>
<tr>
<th>No. of Choices</th>
<th>No. of Choices in Inappropriate Areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Subjects Above Aptitudes</td>
<td>Male 7</td>
<td>12</td>
</tr>
<tr>
<td>Female 12</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>18</td>
</tr>
</tbody>
</table>

TABLE 3

<table>
<thead>
<tr>
<th>Students</th>
<th>Number Making Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Realistic</td>
</tr>
<tr>
<td>Potential four-year college students</td>
<td>37 (27.05)</td>
</tr>
<tr>
<td>Potential junior college terminal students</td>
<td>16 (25.94)</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 15.7 \ p < .01 \]

A chi-square test of significance between the potential four-year college students and potential junior college students in the selection of realistic and unrealistic occupational goals was calculated and is presented in Table 3.

The means and standard deviations of differences between self and ideal-self (Q-sort scores) for the unrealistic and realistic choice groups and for the potential junior college and potential four-year college groups are presented in Tables 4 and 5.

TABLE 4

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealistic</td>
<td>43</td>
<td>218.77</td>
<td>59.27</td>
<td>1.8</td>
<td>N.S.</td>
</tr>
<tr>
<td>Realistic</td>
<td>53</td>
<td>200.74</td>
<td>47.25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td></td>
<td></td>
<td>1.2</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

TABLE 5

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential junior college</td>
<td>47</td>
<td>215.83</td>
<td>55.63</td>
<td>1.2</td>
<td>N.S.</td>
</tr>
<tr>
<td>Potential four-year college</td>
<td>49</td>
<td>202.08</td>
<td>50.05</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td></td>
<td></td>
<td>1.2</td>
<td>N.S.</td>
</tr>
</tbody>
</table>
To determine if there were significant differences between the means of the differences of Q-sort scores of the groups, t's were calculated for the realistic versus unrealistic groups and for the potential four-year college versus potential junior college terminal groups.

In order to test if the assumption of the homogeneity of variances required for a t-test was met, an F ratio was obtained for the variances of the realistic occupational choice groups and the unrealistic choice groups. An F ratio of 1.5205 was found not to be significant at the .05 level.

An F ratio was obtained for the variances of the potential four-year college group and the potential junior college terminal group. An F ratio of 1.234 was found not to be significant at the .05 level.

From the t-values, the null hypothesis was accepted for the sample of the population tested. No significant difference was found in favor of the realistic occupational choice group in the congruence of self and ideal-self. No significant difference was found in favor of the potential four-year college group in the congruence of self and ideal-self.

**DISCUSSION**

Results of this study indicated that a greater number of subjects showed a tendency to choose occupational goals above their aptitude level and in inappropriate occupational areas than the number of subjects who chose occupations below their aptitude level. The tendency on the part of the subjects to choose occupations above their aptitude levels may be the result of the influence of their culture in which a great emphasis has been placed on the prestige and value of occupations that require college training. The tendency on the part of a number of subjects to choose occupations above their aptitude level or in inappropriate occupational areas may be a result of the subjects' perceptions of self. The inability of these subjects to realistically appraise their aptitudes and successfully relate them to the critical job tasks of occupations may contribute to the tendency to make inappropriate choices.

Further investigations are needed to find the relationship of the congruence of self and ideal-self to the realistic choice of occupations. The results of this study are inconclusive and do not provide evidence as to whether the greater congruence of the subject's appraised self and ideal-self is related to his ability to make realistic occupational choices. Random samples of subjects from different populations, the use of other instruments and techniques to establish self and ideal-self congruency, and the establishment of new criteria for judging the appropriateness of subjects' occupational choices may yield evidence that will further an understanding of this concept.

The dropout rate of junior colleges, the failure of students to transfer to four-year colleges who plan to transfer, the failure of junior colleges to provide curriculums appropriate to the needs of their students suggest that research investigating the needs and values of junior college students would be profitable to both the students and to those who would provide students with educational opportunities.

**REFERENCES**


School Scheduling by Computer

The Educational Facilities Laboratories, Inc., has published a report entitled School Scheduling by Computer: The Story of GASP (Generalized Academic Stimulation Programs). The report provides information about the operation and the degrees of success that school scheduling by means of GASP has had in several school systems. It offers evidence that automation can be used effectively in building a master school schedule, that it need not be prohibitively expensive, and that in numerous ways it can be a significant tool in planning new physical plants and avoiding costly errors. Information is provided about what data is needed, staff requirements, possible costs, and resources for appropriate computer equipment. Copies are available from Educational Facilities Laboratories, 477 Madison Avenue, New York 22, New York.