A comparison of the Kuder Occupational Interest Survey (KOIS) and the Strong Vocational Interest Blank (SVIB) was made by the General College of the University of Minnesota to determine which of the tests was more relevant to the vocational and occupational concerns of junior college students and more helpful from the counselors' point of view. Entering freshmen at the college were presented with their KOIS and SVIB profiles at seven group meetings. Some explanation of the results of the tests and short discussion periods, conducted by an experienced counselor, comprised the meetings. A questionnaire administered at the end of the meetings showed that 55 per cent of the students found the KOIS more helpful and 18 per cent preferred the SVIB; 27 per cent were undecided. The counselors found the KOIS more valuable in eliciting information from students, although they preferred the SVIB as a counseling tool. The results of the study do not clearly indicate the superiority of either test, and counselors generally found both useful. (Author/RC)
Among the educational problems generated by the rapid growth of the junior college as an important factor in higher education, there is one that is particularly troublesome to junior college counselors. Many of the existing testing instruments used to guide students in their academic careers were originally designed for the student in one of the traditional major fields. In the case of interest tests, for example, counselors find that students with clearly-defined professional or occupational goals can be adequately counseled on the basis of their responses to items in existing tests. On the other hand, most students in junior colleges do not have clearly-defined occupational-vocational objectives, nor are they, for the most part, destined for careers in the traditional business and professional fields. Thus, counselors in the junior colleges find themselves advising a clientele with occupational-vocational objectives often quite unrelated to those identified in traditional interest tests. An attempt to deal with this counseling problem is the subject of this issue of The General College Studies.

As the format of the study reported here indicates, the question of what interest test data is relevant to the occupational-vocational aspirations of junior college students is, in effect, the question of which of the existing tests is most appropriate for counselors to rely on in counseling the two-year student. In this case, the investigators found it necessary to gather data about the relative usefulness of the "Kuder" and the "Strong", two widely used interest tests. In the course of the project, data about the two tests was collected from two sources: students who took both interest tests and counselors who interpreted the results of such tests. Quite aside from the findings as they apply to the two-year student, the design of this study and the mode of its conduct over several academic terms should prove of interest to many counselors, administrators, and student personnel workers.

Professor King is a counselor in the General College Division of Student Personnel Services and an Associate Professor in the Division of Psychology, Philosophy, and Family Studies. Francis Bellezza is a Research Fellow in the General College Research Center.
A COMPARISON OF TWO VOCATIONAL INTEREST TESTS
USED WITH GENERAL COLLEGE STUDENTS

by
Leslie A. King
and Francis Bellezza

Students entering the General College of the University of Minnesota have for many years taken the Strong Vocational Interest Blank (SVIB) as part of a battery of tests administered during the two-day orientation-registration program. While counselors have found the SVIB helpful in working with some General College students, it has not been very useful for a substantial number of students. The SVIB is oriented largely toward the professions and high-level business occupations whereas most General College graduates do not enter such vocations. Most General College students spend less than four years in institutions of higher education. Relatively few of them enter the commonly recognized professions or attain executive or managerial positions in business.

Although the General College is a relatively uncommon two-year college, many General College students have characteristics typical of large numbers of junior college students in Minnesota and elsewhere in the country. Results of studies of General College students often can be generalized to other two-year college populations. Junior colleges are becoming a more and more important factor in American higher education as the number of junior colleges, and the number of junior college students, increases. Junior college counselors often express a desire for a vocational interest instrument that would focus less on occupations requiring above average ability and four or more years of college and that would concentrate more on occupations generally requiring average ability and less than four years of college.

The Kuder Occupational Interest Survey (KOIS), Form DD, was published in 1966 by Science Research Associates. While the 100 test items of Form DD are the same as those used in Form D of the Kuder Preference Record, the scoring is completely different and the results are given for 157 occupational and college-major scales instead of for 10 broad types of interests. Form DD provides scores for 79 occupations and 20 college-majors for men and 56 occupations and 25 college-majors for women. (Scores reported for women include scores on 32 scales developed on male subjects.) A Verification (V) Scale provides a check on the confidence that can be placed in a subject's answers.
PURPOSES:

This initial study of the KOIS and the SVIB in the General College was intended to acquaint counselors with the KOIS, to compare the two interest inventories from a counseling perspective, and to make a preliminary evaluation of the KOIS results obtained from General College students.

PROCEDURES:

During the two-day orientation-registration program for new students entering the General College Winter Quarter, 1968, the KOIS and the SVIB were included in the test battery. The tests were given in late December, 1967, a few days before the start of Winter Quarter classes. The SVIB was administered by the University's Student Counseling Bureau at 1:15 p.m. on the first day of the orientation-registration program. The SVIB takes the average General College entering freshman about 60 minutes to complete. When finished with the SVIB, students then completed the KOIS, which takes about 45 minutes, and the Minnesota Study Habits Blank (MSHB), which takes about 20 minutes. Either the KOIS or the MSHB could be taken after the SVIB. The students were given until 5:00 p.m. to complete all three tests, though all finished before that time. The practice of always administering the SVIB first was, in retrospect, a methodological mistake and any future study should correct this defect.

Early in the Spring Quarter, 1968, a letter was sent to each student registered for Spring Quarter inviting him to attend any one of seven group meetings. No follow-up for those students not responding to the letter was made, so that no student might possibly feel he was being forced into attending a group session. Each of the group meetings was conducted by the same experienced General College counselor. Each student was given his KOIS and SVIB profiles, plus a KOIS "Interpretive Leaflet" and an SVIB "Information Sheet." The SVIB "Information Sheet" was written by the counselor conducting the meetings.

The counselor started each meeting with remarks about the purpose of the session; he continued by giving some specific instructions and explanations intended to facilitate student use and understanding of the test results. The counselor was then available during the rest of the 50 minute period for answering questions and checking briefly with each student as he studied his profiles and completed the ranked scores portion of the "Interpretive Leaflet" and the "Ratings" section of the SVIB "Information Sheet."

Near the end of each meeting, students filled out a short questionnaire asking which test best reflected their interests and which test might be more helpful in making education-vocational decisions. Students kept their "Interpretive Leaflets" and SVIB "Information Sheets" but not their test profiles.
The above sorting procedure was recommended for students with V-scores below 45, but was applied to students with V-scores below 47 with the following results:

<table>
<thead>
<tr>
<th>Random Responding</th>
<th>Best Impression</th>
<th>No Clear Interests</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>4</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Percent</td>
<td>37.1</td>
<td>11.4</td>
<td>25.7</td>
<td>25.7</td>
</tr>
</tbody>
</table>

It was also found that students with V-scores below 47 had ability scores that were lower than the students with V-scores above 47. The following table shows the means of five scores for the two groups for those whose scores were available. A separate test was run for each pair of scores, though a separate sample was not drawn for each test.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Under 47</th>
<th></th>
<th>47 and over</th>
<th></th>
<th></th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>mean</td>
<td>n</td>
<td>mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSR (12th grade percentile)</td>
<td>31</td>
<td>24.6</td>
<td>126</td>
<td>30.0</td>
<td>less than .10</td>
<td></td>
</tr>
<tr>
<td>NPA - 1st quarter</td>
<td>31</td>
<td>5.8</td>
<td>133</td>
<td>7.1</td>
<td>less than .01</td>
<td></td>
</tr>
<tr>
<td>MSAT percentile</td>
<td>26</td>
<td>20.5</td>
<td>146</td>
<td>31.6</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>33</td>
<td>11.7</td>
<td>146</td>
<td>15.9</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>33</td>
<td>10.0</td>
<td>146</td>
<td>11.7</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

The fact that a majority of the students (63%) with low V-scores were either responding randomly, perhaps because of fatigue or boredom, or had no clear interests seems to coincide with the ability differences found between the high V-score and the low V-score students. Only 11% of the low V-scores can be suspected of being caused by "faking." Those students who tire easily or are antagonized by interest tests would probably perform similarly on ability tests. Also a low reading level could result in scores that are low on the ability tests and a low V-score on the KOIS. Similarly, uncrystallized interest patterns could be related to no clear interests on the KOIS and poor performance on the ability tests.

There is no V-type score for the SVIB. Therefore it is impossible to tell if any of the SVIB profiles were also invalid. But it seems reasonable to assume that if fatigue was not the crucial factor, then some of the SVIB profiles are probably invalid even though the SVIB was administered first.
Ten women (59\% of the 17 women attending the group meetings) stated that the KOIS better reflected their interests and might be more helpful in making educational-vocational decisions. Four women (24\%) stated preferences for the SVIB, and three (18\%) were undecided.

The reasons given by students for their opinion that the KOIS better reflected their interests and might be more helpful in making educational-vocational decisions were mainly that the KOIS:

a) Corresponded more closely with what the students thought their interests were.
b) Had a greater number of occupations.
c) Had occupations that were more up-to-date.
d) Had a broader range of occupations.
e) Had college major scales which were helpful.

The reasons given by students for finding the SVIB a better reflection of their interest and of possible greater assistance in making educational-vocational plans were chiefly that the SVIB:

a) Was easier to understand.
b) Corresponded more closely with what the students thought their interests were.
c) Had a broader range of occupations.

In neither case are the students' reasons given in order of importance, since relative importance was not determined.

The results clearly indicate that the students who participated in the group sessions thought that the KOIS better reflected their interests and might be of more help in making educational-vocational decisions than the SVIB.

Of the 27 men who attended one of the group meetings, seven (26\%) came for educational-vocational counseling interviews. These seven completed the same short questionnaire used at the end of the group session. Five men answered the questions essentially the same way as they had initially responded. One student switched from the SVIB to the KOIS as being more helpful in making educational-vocational decisions. A second student switched from an undecided position to one preferring the SVIB because it better reflected his interests and better helped him to make educational-vocational plans.

Of the 17 women who attended one of the group meetings, five (29\%) came for educational-vocational counseling interviews and completed the questionnaire a second time. Four of these women responded to the questions in basically the same way as they had the first time. One student changed from preferring the SVIB originally to thinking that the KOIS reflected her interests more and that it helped her better in making educational-vocational decisions.
The total number (12) of students who saw a counselor is too small a sample from which to draw definite conclusions. Perhaps with more intensive counseling students would change their reference about what test was more useful to them.

Considering the results from both the group sessions and counseling, one can conclude, at least for the relatively small number of students involved, that students felt that the KOIS gave a better reflection of their interests and was more helpful in making educational-vocational decisions.

From the results of Questionnaire 2, filled out by the counselors, not much information is obtained about the relationship between the result of each interest test and the individual student; however, Questionnaire 2 does supply some information about the counselors' individual attitudes toward the SVIB and the KOIS as counseling tools. These counselor reactions will be discussed along with those of Questionnaire 3.

Each of the four counselors who worked with those students having results from both the SVIB and the KOIS and a completed Questionnaire 3 (at the end of the study) were asked for an overall comparison of the SVIB and the KOIS. Because many of the responses of the four counselors to the questionnaire items were vague, because some items were entirely omitted, and because the counselors dealt with a total of only 12 students, only some of the results of Questionnaire 3 will be discussed.

In indicating which interest test gave the most information about the student, one counselor answered the KOIS, two the SVIB and one was undecided. All four thought that the KOIS elicited more information from the student during the counseling session.

From Item 6, Questionnaire 3, "What is the value or purpose of any interest test for educational counseling in General College?", the following answers were obtained:

a) Provides stimulus with a valid basis for starting a discussion of the problem.
b) Enables the student to be compared to norm groups.
c) Helps to point out and eliminate areas of low interest.
d) May point out areas of interest previously not considered.

The comments given about the SVIB and the KOIS are grouped and listed below:

Favorable to SVIB

a) Counselors are more familiar with it.
b) Results are more in line with student's vocational interests.
c) More realistic.
d) Occupational groupings are helpful.

Unfavorable to SVIB

None
Favorable to KOIS
   a) Major scales are very helpful.
   b) Gives new occupational possibilities.
   c) Students like it and were more influenced by it.

Unfavorable to KOIS
   a) Scores need to be grouped.
   b) Reflects the student's work history.
   c) Reflects personality variables.
   d) Has V-scores that are too low in many cases.
   e) Has vocational scores that are too low.
   f) Correlation scores are too difficult to interpret.

The relative importance of the various reasons given above was not determined.

A disproportionate number of General College students obtained low V-scores on the KOIS-DD, with a substantial number obtaining many low scores on the individual scales of the KOIS. About 19 per cent of the General College students tested had V-scores that were below 47 and therefore of dubious validity. This percentage is significantly above the average number of 2 to 8 per cent found in the groups used to develop the new form of the KOIS. Some of the possible reasons for students obtaining low V-scores are the following:

1. Because the students took the KOIS after the SVIB (and also in some cases after the Study Habits Blank), test-taking fatigue and boredom may have contributed to random responses.
2. Students may have responded randomly for reasons other than fatigue and boredom.
3. Students may have been trying to make a good impression; that is, some may have been "faking".
4. Individual students may have interest patterns that are so uncrystallized that there was nothing for this particular interest test to detect.

A suggestion by John W. Lombard of Science Research Associates for sorting low V-score people into various groups was followed; the sorting was done as follows:

(1) If the Men-Best Impression (Women-Best Impression) score is 07 or more greater than the Men (Women) score, then the student is "faking" or trying to make a good impression rather than indicating his real preference.
(2) If not (1) and the student has no occupational scores above 39 and only a few above 30, then the student has no clear interest patterns.
(3) If not (1) and (2) and most scores are between +10 and -10, the student probably answered randomly.
(4) The remaining students have low V-scores, not abnormally high best impression scores and many high occupational scores.
The above sorting procedure was recommended for students with V-scores below 45, but was applied to students with V-scores below 47 with the following results:

<table>
<thead>
<tr>
<th></th>
<th>Random Responding</th>
<th>Best Impression</th>
<th>No Clear Interests</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>Percent</td>
<td>37.1</td>
<td>11.4</td>
<td>25.7</td>
<td>25.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It was also found that students with V-scores below 47 had ability scores that were lower than the students with V-scores above 47. The following table shows the means of five scores for the two groups for those whose scores were available. A separate test was run for each pair of scores, though a separate sample was not drawn for each test.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Under 47</th>
<th>47 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>mean</td>
</tr>
<tr>
<td>HSR (12th grade percentile)</td>
<td>31</td>
<td>24.6</td>
</tr>
<tr>
<td>NPA - 1st quarter</td>
<td>31</td>
<td>5.8</td>
</tr>
<tr>
<td>MSAT percentile</td>
<td>26</td>
<td>20.5</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>33</td>
<td>11.7</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>33</td>
<td>10.0</td>
</tr>
</tbody>
</table>

The fact that a majority of the students (63%) with low V-scores were either responding randomly, perhaps because of fatigue or boredom, or had no clear interests seems to coincide with the ability differences found between the high V-score and the low V-score students. Only 11% of the low V-scores can be suspected of being caused by "faking." Those students who tire easily or are antagonized by interest tests would probably perform similarly on ability tests. Also a low reading level could result in scores that are low on the ability tests and a low V-score on the KOIS. Similarly, uncrystallized interest patterns could be related to no clear interests on the KOIS and poor performance on the ability tests.

There is no V-type score for the SVIB. Therefore it is impossible to tell if any of the SVIB profiles were also invalid. But it seems reasonable to assume that if fatigue was not the crucial factor, then some of the SVIB profiles are probably invalid even though the SVIB was administered first.
SUMMARY

General College entering freshmen were presented with their KOIS and SVIB profiles at seven group meetings. These meetings included some explanation of the results of the tests and a short discussion period. The same experienced counselor conducted each meeting. A questionnaire administered at the end of the meetings showed that 55% of the students found the KOIS more helpful to them and 18% found the SVIB more helpful. 27% of the students were undecided.

Because so few of the students signed up for additional counseling sessions, the counselors involved did not have adequate opportunity to familiarize themselves completely with the KOIS in a counseling situation. However, the four counselors thought that the KOIS was more valuable in eliciting information from the students, though they continued to prefer the SVIB as a counseling tool.

A relatively large number of students in this sample obtained Verification Scores that were below 47. It appeared that these low V-scores were the result of random responding and/or uncrystallized interests with a small amount of "faking" taking place. However, because the students took the KOIS immediately after taking the SVIB, the carelessness may have been due to fatigue or boredom. The students with low V-scores also had significantly lower ability levels.

The results of this study do not clearly indicate the superiority of either the SVIB or KOIS as vocational interest instruments for General College students. Counselors may find the use of both instruments helpful in working with some individual students.
Questionnaire 1

UNIVERSITY OF MINNESOTA

Name __________________________

1. Do you have a long range vocational objective?
   a. yes
   b. no
   If you do, what is it? (then answer questions 2 - 7)
   If you do not, what are the reasons? (then answer questions 5 - 7)

2. How certain are you about your choice?
   a. absolutely fixed choice
   b. reasonably certain
   c. fairly certain
   d. somewhat doubtful
   e. very uncertain

3. What relation do you see between the courses you have taken and your chosen vocation?
   a. very related
   b. reasonably related
   c. fairly related
   d. somewhat related
   e. not related

4. Are you satisfied with your choice of vocation?
   a. yes
   b. no

5. Briefly, what are your educational plans?

6. Which test best reflects your interests?
   a. Kuder Occupational Interest Survey
   b. Strong Vocational Interest Blank

7. Which test do you feel may be more helpful in making educational-vocational decisions?
   a. Kuder Occupational Interest Survey
   b. Strong Vocational Interest Blank

   What are some of your reasons?
1. Which test best reflects the student's vocational interests?
   a. Kuder Occupational Interest Survey
   b. Strong Vocational Interest Blank

2. Which test best reflects the student's educational interests?
   a. Kuder Occupational Interest Survey
   b. Strong Vocational Interest Blank

3. How certain is the student in his vocational choice?
   a. absolutely fixed choice
   b. reasonably certain
   c. fairly certain
   d. somewhat doubtful
   e. very uncertain

4. How certain is the student in his educational choice?
   a. absolutely fixed choice
   b. reasonably certain
   c. fairly certain
   d. somewhat doubtful
   e. very uncertain

5. What is the reason for the student's uncertainty in either of his choices?

6. What is the student's vocational choice?

7. What is the student's educational choice?

8. Which test helped you the most in counseling this student with regard to his vocational-educational decision? Why?

9. How many interviews have you had with this student?
Questionnaire 3

COUNSELOR REACTION TO STRONG AND KUDER

Name of counselor______________________________

Date__________

1. Which interest test gave you the most information about the students attempting to make an educational-vocational decision?
   a. Kuder Occupational Interest Survey
   b. Strong Vocational Interest Blank

2. Which interest test helped elicit more information from the students during the interview?
   a. Kuder Occupational Interest Survey
   b. Strong Vocational Interest Blank

3. Do you believe that the results of the Kuder influenced the educational-vocational decisions of the students being counseled?
   a. yes
   b. no
   How often and to what degree?

4. Do you believe that the results of the Strong influenced the educational-vocational decisions of the students being counseled?
   a. yes
   b. no
   How often and to what degree?

5. Which of the following would you choose for use in counseling students in General College?
   a. neither the Strong nor the Kuder
   b. only the Strong
   c. only the Kuder
   d. both the Strong and the Kuder

6. What is the value or purpose of any interest test for educational-vocational counseling in General College?

   Does either the Strong or the Kuder meet that purpose? How?

7. Please give any reactions to the Strong or the Kuder which you may have which were not covered above, such as effect on students, etc.