ED 023 379

JC 680 377

By Kruger, Norma J

Examination of Two Methods of Test Interpretation in Counseling Community College Students.

Note - 11p

EDRS Price MF \$025 HC \$065

Descriptors Counseling Effectiveness, Counseling Theories, Counselor Role, Group Counseling, Guidance Counseling, Junior Colleges, Student Interests, Vocational Counseling

To assist students with formulating goals commensurate with their interests and abilities, a study incorporating planned testing and group counseling was conducted at a community college in the West. From the 325 students who were identified as a community college in the West. From the 325 students who were identified as deficient in basic skills as evidenced by previous college and high school records, GPA, and college placement scores. 120 were selected at random for the study. Divided into groups of 40 each, the students were assigned to one of three conditions of counseling and testing (1) non-reinforcement counseling (Group A), in which the counselor assumed a laissez faire role. (2) reinforcement (Group B), in which the counselor verbally reinforced student responses, and (3) control group (Group C) which took the pretest and posttest. Students in groups A and B were encouraged to interact verbally with respect to their test profiles. Each student, using the Ryan Personal Inventory test, rated himself on a 5-point scale. The values were chi-squared for ten interest areas, social service, outdoor, mechanical, clerical, computational, persuasive, scientific, artistic, literary, and musical No significant change was detected in certain student interests at P 05 level. It was concluded that the study of integrated group counseling and testing produced no significant changes in student interests. (DG)



# U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS DF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

# EXAMINATION OF TWO METHODS OF TEST INTERPRETATION IN COUNSELING COMMUNITY COLLEGE STUDENTS

Norma J. Kruger

## University of Missouri

The purpose of this study was to seek a means by which community college students could explore interests, abilities, and personality factors in educational-vocational planning and establish a relevance to themselves.

If youths are to become productive members of society, they must be able to gather relevant information about themselves and the world of work. Perluss (1963) noted too few youths had enough knowledge about the world of work, while Russell (1965) stressed the importance of increased emphasis on developing in students basic strategies of inquiry and realistic decision-making. The problem of educational-vocational planning for post-high school youth has enlarged as the number and kind of choices required in our present society have become more complex (Ryan, 1965).

A need to develop ways and means for community college students to acquire basic knowledge and become proficient in making choices has been recognized. The responsibility of the school for helping students develop has been acknowledged. The problem is finding the means of implementing this responsibility.

Out of concern for helping community college students attain a meaningful experience from post-high school education, integration of planned
testing and group counseling was included in the curriculum of a community
college in the west. The objective was to help those students having
difficulty formulating goals commensurate with their interests and abilities of CALIF.

AUG 5 1968

LOS ANGELES

CLEARINGHOUSE FOR JUNIOR COLLEGE



The major theoretical base for the study was taken from research reported by Krasner (1962), Krumbolts (1964), Ryan (1964), and Krumbolts and Thoresen (1964). Under controlled conditions Thoresen found behavioral counseling increased information-seeking behavior of high school students. Ryan (1964) reported junior college students' decision responses increased when decision responses were reinforced in individual counseling.

Various methods of test interpretation have been explored by Dressel and Matteson (1950), Lane (1952), Rogers (1954), Goldman (1961), and Walker (1965). The literature reviewed did not reveal any studies reported using a combination of planned testing and reinforcement counseling in a group setting.

Thus the present study was concerned with the questions How do certain counselor behaviors during test interpretation influence change in student interests? Three hypotheses were stated: (a) There will be no significant change in interests of students in non-reinforcement counseling, group A, as measured by certain questions from the Ryan Personal Inventory; (b) There will be no significant change in interests of students in reinforcement counseling, group B, as measured by certain questions from the Ryan Personal Inventory; (c) There will be no significant change in interests of students in the control group C, as measured by certain questions from the Ryan Personal Inventory.

#### Method

The 120 subjects for the study were selected randomly from the 325 students enrolled in the community college who were defined as deficient in basic skills as evidenced by previous college and high school records, GPA



below 2.0, and college placement examination test scores below the 50th percentile. This classification was determined on the assumption that an educational or vocational goal related to the curriculum of the community college required at least average ability and achievement potential.

The experimental groups were assigned from this sample to one of the three conditions of counseling and testing. Each group of 40 was subdivided into small groups of eight for the testing and counseling sessions. Groups A and B met twice each week for ten weeks with the same counselor; group C (control) met once the first week and once the last week of the experimental period.

Three conditions of group counseling and testing were defined as follows: (a) Non-Reinforcement Counseling (A), that group which took tests and actively participate during test interpretation and discussion while the counselor assumed a <u>laissez faire</u> role. (b) <u>Reinforcement Counseling</u> (B) used identical testing and discussion procedure as group A, however, the counselor would verbally reinforce student responses which seemed to indicate self-understanding. Remarks used were "good," "fine," "yes," etc., as the student related test results to himself and seemed to indicate some self-understanding by his remarks. (c) <u>Control Group</u> (C) was that group which took the pretest and posttest. There was no counseling or testing during the experimental period.

Tests administered and interpreted were: (a) Brown-Holtzman Survey of Study Habits and Attitudes; (b) Kuder Preference Record, Personal (Form AH and AM); (d) Strong Vocational Interest Blank; (e) Minnesota Vocational Interest Inventory (males only); (f) Edwards Personal Preference Schedule.

Each student in groups A and B was provided with his test profile during test interpretation. Group interaction was encouraged in the discussion of test results.

The treatment variable in this study was the method of counseling during test interpretation. The controlled variables were group size, tests given, and number of meetings during the ten week experimental period. Variables not controlled were age, sex, marital status, group interaction, and previous educational experience.

The pretest, posttest used in this study was the Ryan Personal Inventory developed by T. Antoinette Ryan (1964). Ten questions from the inventory concerning interests were analyzed (Table 1). Each student in the study was asked to rate himself on a five-point scale (pretest and posttest).

The directions given were: answer the questions on the RPI by writing 1, 2, 3, 4, or 5, depending on your evaluation of yourself as compared to 100 other persons of your age group selected at random from the population in this part of the country.

The instrument was accepted on face validity.

These data were obtained from both experimental groups and the control group during the first group session and the last session of the ten week experimental period.

Chi-square with four degrees of freedom was used to analyze the data from pretest to posttest in each group.

#### Results

A summary of the Chi-square values for each group on the ten interest areas is shown in Table I. Analysis of these data has shown there was no



Kruger 5

significant change in certain interests of these community college students, at p .05 level. No analysis of data has been made to determine between group or individual interest change.

Insert Table 1 about here

### Discussion

The literature reviewed concerning interests noted that interests never become permanently fixed, although there was substantial correlation between test and retest results on the SVIB (Strong, 1955). Interest tests measure direction rather than strength. Therefore an implication for the counselor would seem to be to look at the direction of interest. Interest measurement is ambiguous but useable in counseling as a means by which likes as well as dislikes can be somewhat determined by the student. There seems to be a main dimension along which interests tend to arrange themselves; this would seem to be the clue to use in counseling (Tyler, 1961). Due to ambiguity of interests, the data of this study concerning interest change for a group may have been too general. However, there is a possibility individuals within the groups may have changed interests, since the data was not analyzed for individual interest change.

Information-seeking behavior as a result of reinforcement counseling reported by Thoresen (1964) and Ryan (1964, 1965) was measured by means other than self-evaluation; self-evaluation may have been a weakness in this study. Berdie (1954) suggested self-evaluation was least accurate in assessing change.



Walker (1965) found self-acceptance of test results significantly higher using individual test interpretation procedures, while Folds and Gayda (1966) noted no significant difference in self-understanding or decision-making regardless of method of grouping during test interpretation. Implications from this study seem to suggest as Walker (1965) states, that no one approach in test interpretation is satisfactory for all students.

Values, needs, and abilities of the individual, as well as occupational opportunities available, are all important factors. Research for this study investigated interest change. Possible sources of error could be related to factors not considered.

In summary, it was concluded that the study of integrated group counseling and testing reported found no significant changes in interests of these students. Further research could be undertaken to investigate change in (a) decision-making behavior; (b) educational-vocational planning; (c) self-understanding; and (d) academic achievement. Such investigations would make significant contribution to our understanding of educational-vocational planning behavior and help construct a more valid theory of vocational development.



#### References

- Berdie, E. Changes in self-ratings as a method of evaluating counseling. Journal of Counseling Psychology, 1954, 1, 49-54.
- Brown, F., and Holtzman, W. H. <u>Brown-Holtzman survey of study habits</u>
  and attitudes, form 1. (Rev. ed.) New York: The Psychological
  Corporation, 1956.
- Cronbach, L. J. <u>Essentials of psychological testing</u>. New York: Harper-Row, 1960.
- Dressel, L., and Matteson, R. W. The effects of client participation in test interpretation. <u>Educational and Psychological Measurement</u>, 1950, 10, 693-706.
- Edwards, A. Edwards personal preference survey. (Rev. ed.) New York:
  The Psychological Corporation, 1959.
- Folis, J. H., and Gazda, G. M. Comparison of the effectiveness and efficiency of three methods of test interpretation. <u>Journal of Counseling Psychology</u>, 1966, 13, 318-324.
- Ginzberg, E. Towards a theory of occupational choice. <u>Occupation</u>, 1952, 30, 491-494.
- Goldman, L. <u>Using tests in counseling</u>. New York: Appleton-Century Crofts, Inc., 1961.
- Greenspoon, J. Verbal conditioning and clinical psychology. In A. J. Bachrack (Ed.), <u>Experimental foundations of clinical psychology</u>.

  New York: Basic Books, 1962. Pp. 510-553.
- Holmes, E. Presentation of test information to college freshmen.

  Journal of Counseling Psychology, 1964, 11, 54-58.



Kruger 8

Krasner, L. The therapist as a social reinforcement machine. In H. H. Strupp and L. Luborsky (Eds.), Vol. II, Research in psychotherapy. Washington, D. C.: American Psychological Association, 1962.

- Krumboltz, J. D. Behavioral counseling: rationale and research.

  Personnel and Guidance Journal, 1965, 44, 383-387.
- Krumboltz, J. D. (Ed.). Revolution in counseling: implications of behavioral science. Boston: Houghton-Mifflin, 1966.
- Krumboltz, J. D., and Schroeder, W. W. Promoting career planning through reinforcement and models. Personnel and a idance Journal, 1965, 44, 19-26.
- Krumboltz, J. D., and Thoresen, C. E. The effect of behavioral counseling in group and individual settings on information-seeking behavior. <u>Journal of Counseling Psychology</u>, 1964, 11, 324-333.
- Kuder, G. <u>Kuder preference record</u>, <u>vocational</u> (<u>CH</u>, <u>CM</u>). Chicago: Science Research Associates, Inc., 1948.
- Kuder, G. <u>Kuder preference record</u>, <u>vocational</u> (<u>CH</u>, <u>CM</u>). Chicago: Science Research Associates, Inc., 1948.
- Lister, J. L., and McKenzie, D. H. Framework for the improvement of test interpretation in counseling. The Personnel and Guidance Journal, 1966, 45, 61-66.
- Lister, J. L., and Chlsen, M. M. Improvement of self-understanding through test interpretation. The Personnel and Guidance Journal, 1965, 43, 804-410.
- Mathewson, R. H. <u>Guidance policy and practices</u>. New York: Harper, 1955.
- Michael, J., and Meyerson, L. A. A behavioral approach to counseling

ERIC

Kruger 9

and guidance. Harvard Educational Review, 1962, 32, 382-402.

- Chlsen, M. M. Interpretation of test scores: the impact and improvement of school testing programs. The Sixty-Second Yearbook of the National Society for the Study of Education. Chicago: University Press, 1963.
- Chlsen, M. M. Research implications for test interpretation. National Association of Secondary School Principals Bulletin, 1965, 49, 11-22.
- Perluss, I. H. The product: how does it measure up? <u>Journal of</u>
  <u>Secondary Education</u>, 1963, 38, 110-115.
- Rogers, L. B. A comparison of two kinds of test interpretation interview. <u>Journal of Counseling Psychology</u>, 1954, 1, 224-231.
- Russell, J. E. <u>Change and challenge in American education</u>. Boston: Houghton-Mifflin, 1965.
- Ryan, T. A. Reinforcing decision-making behavior in counseling.

  Paper presented at APGA, San Francisco, 1964.
- Ryan, T. A. Using selected instructional approaches with average ability students. Phi Delta Kappan, 1965a, 48.
- Ryan, T. A., and J. D. Krumboltz. Effect of planned reinforcement counseling on client decision-making behavior. <u>Journal of Counseling Psychology</u>, 1964, <u>11</u>, 315-323.
- Strong, K., Jr. Strong's vocational inventory blank. Palo Alto, California: Consulting Psychologists Press, Inc.
- Strong, K., Jr. <u>Vocational interests eighteen years after college</u>.

  Minneapolis: University of Minnesota Press, 1955.

ERIC

Strong, S. R. Verbal conditioning and counseling research. Personnel

- and Guidance Journal, 1964, 42, 660-669.
- Super, D. et al. <u>Vocational developments</u> framework for research.

  Career Pattern Study Monograph I, 1957.
- Ullmann, L. P., Krasner, L., and Collins, B. Modification of behavior through verbal conditioning. <u>Journal of Abnormal Social and Psychology</u>, 1961, 62, 128-132.
- Walker, J. L. Four methods of interpreting test scores. The Personnel and Guidance Journal, 1965, 46, 402-404.



Table 1
Chi-Square Values For Experimental and Control Groups

Area of Interest	Non-Reinforced (A)		Reinforced (B)		Control (C)	
Social-Service	2.58	NS	3.22	NS	4.18	ns
Outdoor	2.90	NS	4.90	NS	1.84	NS
Mechanical	6.18	NS	9.43	NS	3.12	NS
Clerical	2.76	NS	2.15	NS	2.60	ns
Computational	1.11	NS	2.68	NS	6.82	NS
Persuasive	1.72	NS	1.92	NS	.82	NS
Scientific	•72	NS	2.36	NS	1.80	NS
Artistic	1.54	NS	4.52	NS	•78	NS
Literary	1.06	ns	1.68	NS	3.68	NS
Musical	2.54	ns	4.52	ns	1.42	NS

<u>x</u>2

4 df

P .05

ERIC Afull feet Provided by ERIC