

DOCUMENT RESUME

ED 060 037

TM 001 120

AUTHOR Blai, Boris, Jr.  
TITLE Psychometrics at Harcum.  
INSTITUTION Harcum Junior Coll., Bryn Mawr, Pa.  
REPORT NO IRR-72-2  
PUB DATE Jan 72  
NOTE 7p.

EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*College Freshmen; Counseling Effectiveness; Critical Thinking; Decision Making; \*Females; \*Guidance Objectives; Personality Tests; \*Psychometrics; Standardized Tests; Student Attitudes; Study Skills; Teacher Attitudes; \*Testing Programs

IDENTIFIERS Gordon Personal Profile; \*Harcum Junior College; Survey of Study Habits and Attitudes; Watson Glaser Critical Thinking Appraisal

ABSTRACT

Results and usefulness of the educational and psychological tests annually given to Harcum freshmen as discussed. General guidelines for test interpretation are also included. (MS)



## HARCUM JUNIOR COLLEGE

BRYN MAWR, PENNA. 19010

Office of Research  
IRR 72-2

(Index = V)

### Psychometrics at Harcum

1. For several years (since 1962) a battery of psychological inventories have been administered to all Harcum freshmen during Orientation Week. The rationale for this program is discussed in detail in the attached memorandum (Appendix A) - "Test Interpretation Supports Learner-Oriented Education." Is this testing program worthwhile?
  
2. To obtain something more than a generalized answer to this question, responses from a 50% sample of the faculty revealed the following facts. They concern themselves with the current three tests/inventories which supplement the special skills Nelson-Denny Test that presently constitute (along with the College Board SAT and English Achievement tests) the total battery administered during Orientation Week. A summary of their answers follows:  
In my student counseling:  
(1) I do 80%  
do not 20% utilize the Gordon Personal Profile scores.  
Reasons
  - a. One more arrow in the bow
  - b. To understand the whole person in regard to progress and to help her in her guidance.
  - c. For my personal information and to help in sizing up the person.
  - d. To check own views of personality or to determine particular area of problem.
  - e. Do not have the proper time to evaluate individual students. Accomplish more by individual counseling as individual problems arise.
  - f. Helps especially with reference to assignment of responsibility and learning problems.
  - g. To understand specific problems - one indicator.
  - h. Indicator of adjustment difficulties.
  - i. Because I think the girls have a chance for a new record at college - do not care to "judge" from past records. Too many unknown factors either during testing - or their general "testing" facility.
  - j. To check personal observations to elicit data to account for unexplained behavior; to identify problem areas that can be watched and perhaps prevented.
  - k. In working with specific students - helping them become aware of their shortcomings.

ED 060037

TM 001 120

(2) I do 80%  
do not 20% utilize the Watson-Glaser Critical Thinking Appraisal scores.

Reasons

- a. Supportive data to help a student.
- b. To check own views of student's ability in this area - or to see where my own estimates may be in question.
- c. In social sciences this is one of the purposes of the courses - we try to help through directed thinking if they are not capable of undirected!
- d. Indicator of potential academic difficulty plus level of maturity and analytic thinking.
- e. Getting students to do their own thinking and I don't give them all the answers.

(3) I do 85%  
do not 15% utilize the Study Habits and Attitudes inventory scores.

Reasons

- a. If a student is not doing well or seems to be lacking in getting through assignments, I check to see how she scored on the test, and it helps to confirm my thoughts and gives me another fact to help me in counseling her.
- b. As they apply to the academic progress of individual students.
- c. I try to indicate, for those scoring low, how to study each subject.
- d. As an indicator of areas of potential difficulty.
- e. Helping students to achieve better study habits through group discussions on study habits.

General comments

- a. When I receive the results, I check them over in a cursory way and mark extremes with red pencil, then check for patterns revealed in pre-entrance data.
- b. In general, all three help in analyzing student difficulties with any course - reading ability for content; study habits for homework, critical thinking. Further these 3 tests give the teacher a clue to how serious our difficulties are. In other words, we should adapt our methods to alleviate some of these problems!
- c. Use all three for specific counseling situations.
- d. I do not utilize these as 75% of learning in my classes is done in class not in outside assignments - therefore I control the learning environment - if students aren't learning I am at fault not the students.
- e. I use the results of all of these tests as a guide to determine the level of ability of the student - and the class as a whole - so I can pace the work more accurately.

3. Based on the facts reported above, it is quite evident that in the judgment of a substantial majority of the sample queried, the freshman testing program is worthwhile.

4. It is further evident, in the following data, that a stable distribution of scores has applied to the various freshman classes in the particular dimensions measured by these psychometric instruments, the general trend being improvement over the years reported.

Gordon Personal Profile

This personality inventory provides a quick measure of four personality traits which are significant in the daily functioning of the normal person. The average performance of these classes is reported in relation to a normative group of 1300 college women.

	<u>1971</u>	<u>1970</u>	<u>1967</u>
Ascendancy =	50th	46th	50th
Responsibility =	49th	40th	41st
Emotional Stability =	51st	41st	42nd
Sociability =	50th	47th	46th

Survey of Study Habits and Attitudes

This self-evaluation instrument measures various student habits (promptness in completing academic assignments; freedom from wasteful delay; use of effective study procedures; how-to-study skills); attitudes (opinions of teachers' classroom behavior and methods; approval of educational objectives; practices and requirements); and readiness (combination of study habits and attitudes). The normative group with which these freshman class averages were compared consists of a sample of 3054 college freshman from nine colleges.

	<u>1971</u>	<u>1970</u>	<u>1969</u>	<u>1967</u>
Study Habits =	51st	40th	51st	38th
Study Attitudes =	51st	38th	50th	30th
Study Readiness =	50th	31st	50th	32nd

Watson-Glaser Critical Thinking Appraisal

This instrument consists of a series of test exercises which require the application of some important abilities involved in critical thinking, including - Inference, Recognition of Assumptions, Deduction, Interpretation, Evaluation of Arguments. The percentiles reported compare with a normative group of some 5297 freshmen. In comparison with this standardized population, Harcum freshmen distributed themselves as follows:

	<u>1971</u>	<u>1970</u>
Very High (94+) =	1%	1%
High (70-93%) =	7%	4%
Average (32-69%) =	16%	16%
Low (8-31%) =	51%	52%
Very Low (1-7%) =	25%	27%

6. "In summary - during the 10-year period 1962-1971, Harcum has utilized a variety of psychological and educational measuring devices in an effort to ascertain for its freshmen: (1) their academic potential, (2) academic achievement level, and

special academic skills; (3) reading; (4) critical thinking; (5) study habits and attitudes, and (6) personality characteristics associated with adjustment (accomodation to college-life. A sustained effort has been made to furnich faculty, staff, and students with comprehensive, accurate information to help them all in arriving at competent, considered decisions relating to educational progress of each Harcum student. It shall continue." (1)

*Boris Elai, Jr.*  
Boris Elai, Jr. Ed.D.  
Director of Research

January 1972

---

(1) IRR 70-48. "Psychometric Evaluation of Harcum Freshmen: 1962-1970"

## Research Memorandum

### Test Interpretation Supports Learner-Oriented Education

1. THE MEASUREMENT and interpretation of test information is a major element of the student learning experience. The concept of student choice or decision-making has become a major dimension of the educational process. The guidance process as currently conceived at Harcum, focuses on assisting students, individually and in groups, to assume responsibility for making their own educational and vocational career decisions. Guidance so conceived enables the student to make reasonable sensible decisions relating to educational-vocational choices.
2. IN THIS framework it becomes essential that comprehensive and accurate information be available to each student to form the considered basis for her educational-vocational decisions and choices. Today it is generally acknowledged that each student should have available comprehensive, accurate information to serve as a platform for competent decisions relating to educational and vocational choices.
3. AS A first step in the accumulation of test information to help "guide" students, one must select appropriate test data, information representing essential elements or important pieces of information about the student. Such data should encompass an understanding of the students' abilities (actual achievements), aptitudes (capacities or potentials for learning), and interests, preferences, personality characteristics, attitudes and special skills.
4. THE COMPLEXITY in the development of such meaningful information lies in the fact that each student has multiple potentialities, both educationally and vocationally, thereby necessitating a battery of information measures. No single job or specific educational pattern is the one best and only choice for an individual.
5. THE IMPLICATIONS of this multiplicity concept are particularly significant for vocational and educational choices. The old trait and factor approach to vocational assessment becomes inadequate. Students at each stage of their maturation and development have a series of feasible possibilities rather than being limited merely to one or perhaps two specific choices.
6. AS OUR knowledge of the complexity of humans increases, the necessity to measure more of the elements of this multiplicity also increases. At present, in relation to educational and vocational decisions, the minimal assessment criteria for the information of students should include measurements of achievement, capacities, interests and personality. In short, the ultimate purpose of the entire testing enterprise should be to provide the student with the most accurate, complete information we can develop of her multiple potentialities.

7. MANY TESTS and inventories in the areas of achievements, aptitudes and interests have conclusively proven their worth, both in terms of reliability, (consistency in measurement) and validity (accuracy in measurement). Therefore the careful analysis and interpretation of test information can serve as a solid foundation at all vocational-educational decision-points which face the student. Once this basic step has been achieved, i.e., (the careful analysis and interpretation of test data), we can then proceed to the next step, the process of assisting each student to examine where she is now in reference to her future goals and aspirations. The more accurate and complete the available test data, the greater the opportunity for the student to become aware of the viable options available to her.

8. THE BATTERY of test information presently available for all Harcum freshmen is both comprehensive and current. The (1) Nelson-Denny Reading Test (2) the Study Habits and Attitudes Inventory (3) the Gordon Personal Profile and (4) The Watson-Glaser Critical Thinking Appraisal, as well as the (5) College Board SAT and (6) English Achievement tests, together, provide an array of measures furnishing extensive information relating to the achievements, capacities, attitudes, interests, special skills, and personality assessment of students.

9. THE SKILLFUL interpretation of the results achieved through the administration of this comprehensive battery of educational and psychological tests and inventories can provide students with objective, factual information to assist them in making sensible educational and vocational decisions and choices. Information relating to the interpretation of test results is made available by the Director of Guidance to all program directors, and through them, to other faculty members. Careful study of this material can insure basic understanding of the test data, and permit sound interpretation to students of this vital learning-experience information.

10. A TEST is no better nor worse than the mind that interprets it. Even a 'poor' test with a good interpreter is better than a 'good' test with a poor interpreter!

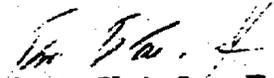
11. PRESIDENT Leonard W. Rice of Oregon College of Education believes that educators are misusing tests in several ways:

(a) Assignment of numerical values to human qualities. This easily leads to false and grossly inaccurate labeling of people and seeking for certainties in human traits which do not exist.

(b) "A society misuses tests," Dr. Rice states, "when it uses them to nurture a comfortable self-image, to provide quick and easy evaluation, to free

from searching a nalysis, and to get students into college and out again with degrees . . . . The test, created in an effort to provide a better means of predicting success, becomes success itself so that society does not really know, has not thought about, what success is or what it should be."

12. TO HELP insure a more meaningful learning-guidance experience for Harcum students, all faculty members and staff are urged to thoughtfully review and study the interpretive information relating to test results which has been furnished to them by the Director of Guidance.

  
Boris Blai, Jr. Ed.D.  
Director of Research

October 1970