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ABSTRACT

In an attempt to depart from the traditional process of orientating students to career awareness, a new approach is being developed at the Indiana Career Resource Center at South Bend, Indiana. The Basic concept of V. I. S. I. O. N. (Visual Imagery Selector for Indexing Occupational Needs) attempts to utilize a combination of the respondents' visual and auditory perceptions in series with a Holland typology. The program utilizes a 35mm slide picture and sound format. The program format relies on the career selection scheme suggested by Dr. John L. Holland's rationale. Preliminary validation of the system was accomplished by presenting the program to members of unique sample groups of practicing professionals. Their responses were empirically analyzed and provide predictive validity statements. Through the use of a chi-square analysis, the concept of visual discriminations of work descriptors is possible in a survey of vocational interests utilizing a Holland typology. These results are to be reconfirmed in a similar manner in 1975, utilizing a revised edition of the survey. (Author)

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ABSTRACTION

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VALIDATION STUDY OF V.I.S.I.O.N.

INTRODUCTION: In an attempt to depart from the traditional process of orientating students to career awareness, a new approach is being developed at the Indiana Career Resource Center at South Bend, Indiana.

The basic concept of V.I.S.I.O.N. (which stands for Visual Imagery Selector for Indexing Occupational Needs) attempts to utilize a combination of the respondents' visual and auditory perceptions in series with a Holland typology.

METHOD: The program utilized a 35 mm slide picture and audio-sound format. The decision was also made to have the program format on the career selection scheme suggested by Dr. John L. Holland's rationale.

RESULTS: Preliminary validation of the system was accomplished by presenting the program to members of unique sample groups of practicing professionals. These responses were empirically analyzed and provide predicative validity statements.

Through the use of a chi-square analysis, the concept of visual discriminations of work descriptors is possible in a survey of vocational interest survey utilizing a Holland typology. These results are to be re-confirmed in a similar manner next year, utilizing a revised edition of the survey.

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VALIDATION STUDY OF VISION

Introduction: A new technique for individuals or groups to test their occupational interest is being developed and evaluated by the Indiana Career Resource Center at South Bend, Indiana.

This occupational survey differs in several significant ways from the traditional pencil and paper test that are presently being used. The test, V.I.S.I.O.N. (Which stands for Visual Imagery Selector for Indexing Occupational Needs) attempts to utilize a combination of the respondents' visual and auditory perceptions in making occupational selections.

The initial idea grew from an attempt to provide a program for educational orientation of first-year students at Indiana University at South Bend. The program was designed and developed to assist students in their selection of college majors and related career options. The program was also used in a similar fashion with student participating in the Special Services program at the university. The technique helped to crystallize some career selections, or introduce the students to new possibilities for career choice. After each session, there was time given to discuss the survey in groups and later through individual contact with a counselor. These discussions are leading to related major course selections which parallel the student's principal interest.

Method: The V.I.S.I.O.N. program consists of two parts. Each part is similar in presentation, but differs in the manner for visualizing work. The program utilizes a 35mm 2X2 slide presentation coupled with an audio-programmed taped machine. The entire program consists of 136

slides which appear on the screen at 8-11 second intervals. Coupled with the visual appearance of the slide is an auditory signal. The entire presentation, plus scoring on the answer sheets by the respondents, takes between 25 to 30 minutes.

In the inventory there is no attempt to give the individual picture titles or labels relating to the work being performed. The respondents reaction in the reported research is based upon the idea that the respondents will visually recognize their practicing vocational choice. It also expects that they will relate either positively or negatively to that choice depending on their experiences to that choice. This of course forms the basis of the working hypothesis.

The decision was made to have the program structured on the career selection scheme suggested by Dr. John L. Holland's rationale. In his latest work, Making Vocational Choices, A Theory of Careers, Dr. Holland sets forth additional clarification of the basic design and function of this theory.

Basic to this design is the assumption that people are characterized by their resemblance to each of six personality types. Realistic, Investigative, Artistic, Social, Enterprising and Conventional. The hypothesis is set forth that each individual being a product of his environment, selects himself into a career similar to his personal orientation and preference.

The construction of the program under discussion seemed to lend itself to the format offered by Dr. Holland. This was done because of the simplicity of grouping visual stimuli under this approach and the ease of constructing the answer sheet used by the respondents. The survey features many of the advantages of Dr. Holland's Self Directed Search, program, in that it is self-administered and self-scored. The participants record their reaction to a sequenced visual and audio presentation and respond to what would be a typical work task, envi-

ronment, and/or experiences. The respondents are asked to make choices between pairs of selected scenes of people engaged in some work activity. These work situations or tasks are selected to show as much of the work activity as possible and as little of the person performing the task as practical. This eliminates bias that the respondents might have toward the facial and bodily features. The people that were surveyed for this report were workers, both professional, and non-professional engaged in a work activity listed by Holland, or described in the Dictionary of Occupational Titles. They had been engaged at their jobs for a period of at least six months, and were receiving a salary for their skills. Other types of demographic information relating to future research designs were asked relative to age, years of experience, and job satisfaction.

The sample of those surveyed are described in Table A. The survey was administered in the same manner as with other groups with one exception. The sample group was asked to record on their response sheets the 2X2 slide number of the work scene they preferred. This was done in anticipation of an item analysis at some later date.

The major null hypothesis selected for this research was that the sample groups of workers representative of the Holland typology will not be similar to those described by visual work selection.

The groups in the norming sample were given the test and were asked to respond and score their own answer sheets. These were checked for marking accuracy and either accepted or rejected.

The predictive validity was calculated using the test score and the workers job titles as the variables. The evaluation of the instrument was made by sampling practicing professionals in a number of job cat-

egories listed under the Holland classifications. These responses were then empirically analyzed to provide predictable validity statements useful with career counseling.

Results: The results presented in Table A and B of this report seem to indicate that through the use of this chi-square analysis, the concept of visual discriminations of work descriptors is possible in a survey of vocational interest utilizing a Holland typology. These results are to be reconfirmed in a similar manner next year, utilizing a revised edition of the survey.

Discussion: The idea of employing "pictorial psychology" as a device to measure responses to picture arrangement or picture completion is not new to the field of psychological assessment. Many tests such as the classical Rorschach, Thematic Apperception Test and the Wechsler Adult Intelligence Scale have as part of their interpretive format a section or sections devoted to pictorial perceptual data. There are many other like assessments, too lengthy to account in this report, however; the idea of having as part of their assessment, and making that assessment as part of their test validation gave rise for the first considerations of relating this technique to the area of vocational survey assessment. The fundamental hypothesis guiding the research presently under investigation at the Indiana Career Resource Center, "given the validity of past research and investigation utilizing pictorial perceptual assessment, will this type of assessment be useful in surveying vocational interest?" If this is possible can this description be used as a pictorial assessment of peoples' interests based on the theoretical structures of classification suggested by Dr. Holland.

The V.I.S.I.O.N. instrument has been developed specifically for use in an educational-vocational counseling setting. The instrument has demonstrated several advantages in administration. Among these are:

(1) Ease of administration to both individuals and groups (2) immediate feedback to the respondent (3) Visualization of environments of work for the respondent, therefore making his vocational selection more concrete and less abstract. (4) No verbal clues are necessary for recognition of job description. This may have several advantages with non-English speaking individuals.

(Table A)

Chi-Square Analysis.

<u>Workers Groups</u>	<u>N</u>	<u>df</u>	<u>x²</u>	<u>Sig</u>
1. Realistic	13	5	72.16	**
11 Police Officers				
1 Industrial Arts Teacher				
1 Veterinarian Assistant.				
2. Investigative	20	5	69.59	**
9 Optometrist				
6 Insurance Actuaries				
2 Math Teachers				
2 Nursing Instructors				
1 Ph.D.				
3. Artistic	11	5	111.83	**
7 Artist Instructors				
2 English Teachers				
1 Consultant-Foreign Language				
1 Public Relations Man.				
4. Social	39	5	255.18	**
14 Nurses				
11 Teachers				
10 Counselors				
3 Dean of Women				
1 Minister				
1 Personnel Worker				
1 Employment Social Worker.				
5. Enterprising	35	5	57.20	**
24 Insurance Salesmen				
7 D.E. Co-ordinators				
1 Personnel Manager				
1 Business Director of Chamber of Commerce				
6. Conventional	13	5	92.77	**
9 Business Teachers				
3 Administrators				
1 Certified Public Acct.				

** Significant at the .01 level

(Contingency Table)

	R	A	C	I	E	S
Expected	92	92	92	92	92	92
Realistic	156	60	55	103	87	94

df = 5

$\chi^2 = 72.16$

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Expected	115	115	115	115	115	115
Investigative	146	86	66	175	101	113

df = 5

$\chi^2 = 69.59$

Expected	59	59	59	59	59	59
Artistic	37	126	26	37	65	63

df = 5

$\chi^2 = 111.83$

Expected	214	214	214	214	214	214
Social	131	255	116	215	167	399

df = 5

$\chi^2 = 255.18$

Expected	204	204	204	204	204	204
Enterprising	218	208	130	201	280	190

df = 5

$\chi^2 = 57.20$

Expected	56	56	56	56	56	56
Conventional	21	52	115	35	60	52

df = 5

$\chi^2 = 92.77$