DOCUMENT RESUME

ED 128 739 CG 010 852

AUTHOR Ewens, William P.
TITLE Research and Postulates Related to a Behavioristic Theory of Career Development.
PUB DATE [73]
NOTE 19p.; Paper presented at the Annual Convention of the North Central Association for Counselor Education and Supervision (Kansas City, Missouri, October 23-24, 1975); Best copy available, figure 1 (chart) has been split onto two pages.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Behavior Theories; *Career Choice; *Career Education; *Humanistic Education; Models; Occupational Choice; Social Psychology; Systems Analysis; *Theories; *Vocational Development

ABSTRACT

The postulates for the behavioristic theory of career development are based on ideas that emerged from a systems analysis of career education. The systems analysis was structured to reflect the following definition of career education: Career education is composed of all the planned and incidental learning experiences of the individual that contribute to the development of attitudes, values and competencies relative to the world of work which are operational in making educational and vocational plans and to function on the job and to the development of a satisfying and contributing way of life. The postulates reflect the importance of perceptual psychology and research findings on manifest interest-perceived ability relationships. The postulates also recognize the birth to death concept of career development of persons of different socio-economic levels. (Author)

Research and Postulates Related to a Behavioristic Theory of Career Development

Wm B Ewens - Okla. State Univ.

Introduction

Gilbert Wrenn in the Journal of Counseling Psychology in 1959 suggested that we need fewer theories of career development and more building of theories. Osipow states that "theory begins with an observation of events, it becomes more complex as it brings together diverse happenings and permits, by deduction, the predictions to be made about other events involved in the framework under consideration" (6,p.2). In theory building one is not working with proven facts but instead is dealing with ideas, impressions, observations, hunches, hypotheses, etc. At this point I am not making a claim of a new theory of career development. What I will attempt to do is to share with you some research, ideas and postulates which have meaning for me and I will present them as they evolved. The postulates seem to have a different base from current theories but there are some similarities.

Concepts of Career Education

In 1970 the concept of career education received a large amount of attention in the news media and in professional journals. Considerable money was made available through the Department of Health, Education and Welfare for the development of model career education programs. Numerous local and national conferences were held in an attempt to communicate the career education concept and to encourage involvement in career education.

A definition of career education often used in the conferences and in the literature was the following which was written by Dr. Kenneth B. Hoyt.

> "Career education is the total effort of public education and the community to help all individuals to become familiar with the values of a work oriented society, to integrate those values into their personal value structure and to implement those values into their lives in such a way that work becomes possible, that work becomes meaningful, that work becomes satisfying to each individual." (4)

This definition appears to speak to the product of career education rather than to the process. To this writer there seemed to be a need for a definition that focused on the process of career education since the conferences were directed to teachers, administrators and counselors for the purpose of getting them involved in the development of career education programs. The following was written in an attempt to describe the process and is the definition of the term used for this presentation.

> Career education is composed of all the planned and incidental learning experiences of the individual that contribute to the development of attitudes, values, and competencies relative to the world of work which are operational in making educational and vocational plans and to function on the job, and to the development of a satisfying and contributing way of life.

To assist in further clarification of the concept a systems analysis of the career education process was developed. Figure 1 shows A System Analysis Career Education Model. Since one of the career education program models discussed in the conferences encouraged schools to take a strong leadership and instructional role, the rectangles 1.0, 2.0, 3.0, 4.0, 5.0 and 6.0 (subsystems) are the center and focal points of the model. Following the flow chart model one notes an attempt to recognize the contribution of pre-school learning experiences (7.0) and out-of-school learning experiences represented by 8.0, 9.0, 10.0, 11.0, 12.0, 13.0 and 14.0

to the career education process. The flow chart also notes the potential contribution of resource persons (16.0), referral sources (17.0), and parents (18.0), in career development. The flow chart builds in the potential learning experiences from technical schools (20.0), business schools (21.0), apprenticeship programs (22.0) and military service (24.0). The model permits an employed person to return to school as indicated by arrow to 3.0, 4.0, etc. and to return to employment 23.0 as indicated by arrows from 3.0, 4.0, 5.0, and 6.0.

It is probably impossible to show by diagram every possible learning opportunity offered by our society that contributes to career education. The flow chart does communicate the idea of the career education process. A second level career education diagram can be used to describe the career guidance programs of 1.0, 2.0, 3.0, 4.0, 5.0 and 6.0 and the processes in these educational systems.

Further thought about the model suggests that the career education process is dissimilar for any two individuals. Persons may appear to engage in similar activities yet their experiences may be different because of the background taken to the experience and the person's reaction to and evaluation of the experience.

Reflecting on an early experience of a child in an activity that is different from prior experiences permits one to hypothesize on the experience-outcomes process. This "new" experience of the child and the hypothesized outcomes are shown in Figure 2. It would appear that the child who views the experience as satisfying, successful, pleasant, etc. might be inclined to choose similar experiences in the future from among available options. Repeated experiences of this type would tend to develop competencies relative to the activity. If the activity was evaluated as unsuccessful,

unpleasant, etc, similar experience in the future are likely to be avoided in the future resulting in very low level competencies in activities of this type. This rejection of probable unpleasant experiences can be confirmed in any high school by observation of student rejection of elective courses in areas of prior limited success or failure.

This hypothesizing on the movement from experiences to evaluation, to awareness of interest and to the development of competencies brought to mind the large amount of research on the relationship between interest and ability Miller generalize as follows:

> "Doubtless there are still some who hold to a belief in a close relationship between interest and ability; somehow it seems that there ought to be such a relationship. But if by ability we mean tested ability, and by interest inventoried interest, the accumulated evidence is so overwhelmingly in the negative that there is little to be gained by laboring the point." (5, p. 302)

Reflecting on the interest-ability research, on the experience-interest-competency illustration above and having done prior research relative to the interest-ability variables (2) the impression emerged that the relationship between these variables was probably between perceived ability and manifest interest rather than inventoried preference and measured ability as most frequently researched. Super (7, p.378) defines manifest interest as "synonymous with participation in an activity or an occupation."

Relationship of Perceived Ability and Manifest Interest

The Activity Experiences Inventory, the instrument selected to measure manifest interest, is an instrument designed to inventory the amount of experience the subject has had in the areas of outdoor, mechanical, computational, scientific, persuasive, artistic, literay, musical, social service and clerical. For each area there are twenty-five experience items.

The subject responds to each item on a 0-4 scale with 0 meaning no experience and 4 an large amount of experience. When the instrument was developed the odd-even reliability for 398 11th grade males varied from .87 to .94 with a mean of .90. For 438 females 11th grade students the reliability varied from .82 to .92 with a mean of .89. Based upon an independent criterion measure of experience the validity coefficients varied from .27 to .82. The development and standardization of the Inventory may be found in Ewens(3). The area of Outdoor was not included in the original measure.

A card sort technique was used to determine perceived ability. Each subject was given a deck of ten cards to "rank from high to low in terms of perceived ability" with one being assigned to the area of highest ability. In data collection the subjects first responded to the card sort of perceived ability in order to have the minimum of confounding of data. At the time of card sort they did not know what was to be asked of them following this first request. The reliability of the card sort of perceived ability is shown on Table I. The median rank order of perceived ability is .76. There was an interval of five months between the test and retest of perceived abilities.

The study of relationship between perceived ability and manifest interests involved 171 9th grade students, 169 11th grade students and 209 college freshmen in Arts and Sciences Orientation classes. To examine the relationship between the two variables rho coefficients of profiles were used. Perceived ability data was in rank order, therefore, rho seemed to be a more desirable statistic than D. The rho frequency distributions for the three groups is given in Table II.

The extreme negative rho coefficients on Table II could have resulted from a reversal of the ranking of the perceived ability. The large number of high rho coefficients and the medians of .62, .56 and .66 suggest a fairly close relationship between the perceived ability and manifest interest profiles.

To further examine the relationship between these two variables the ranks of perceived ability and manifest interest were used to make scattergrams. These data in terms of percent of sample are given in Tables III, IV and V.

Table III shows that 35% of the 162 9th grade students ranked as highest perceived ability.the area of greatest manifest interest. It also shows that 28.7% of these students ranked themselves 2nd high in perceived ability in the area of greatest manifest interest . The Chi Square of 808.41 and a "t" value of 22.24 indicates a very signifcant relationship between perceived ability and manifest interest. Tables IV and V show corresponding high Chi Squares of 745.56 and 1139.82; "t" values of 20.64 and 29.82; Contingency coefficients of .554 and .594 for 11th grade students and college freshmen respectively.

These data seem to support the hypothesis that there is a significant relationship between manifest interest as measured by an Experience Inventory and perceived ability as measured by card sort. No claim is made that these are "pure' measures but they seem to be very functional concepts. Additional research may show that perceived ability and manifest interest more frequently influence career choices than measured abilities and inventoried preferences.

Summary

The above has briefly reflected upon my attempt to clarify my concept of career education by definition and by systems analysis and the resulting research on the relationships between perceived ability and manifest interest. In addition to these experience a change in teaching schedule, which permitted teaching career development theories and made necessary studying existing theories to a much greater depth than I had done previously, caused me to examine the above discussed career education concept, and the research data in terms of existing career development theories. During this process the postulates to follow began to emerge.

POSTULATES FOR A BEHAVIORISTIC THEORY OF CAREER DEVELOPMENT

1. "All behavior, without exception, is a function of the behavor's perceptual field at the instant of behaving."

2. Activities (behavior resulting from reaction to the perceptual field) which result in success experiences tend to induce the development of interests which in turn cause the individual, in the future, to choose similar activities from available options.

3. Persons tend to accumulate large amounts of experience in those activities in which they have the greatest interest. The development of competencies relative to the skills needed for success in the activities results from the involvement in the activities. The developing concept of some degree of perceived ability for the activity is a reflection of the success experiences.

4. When a person's environment (the perceptual field) offers more than one activity option, the person is more likely to select the activity of greatest interest, offers the greatest possibility of success and most likely to satisfy perceived needs. The person will avoid, if possible, those activities which are perceived as probably failure or unpleasant experiences.

5. The person's environment, which for some is quite limited, provides the opportunities for experiences and, therefore, becomes a strong factor in the development of interests and competencies.

6. The more unique an experience is to an individual the greater the immediate impact the experience is likely to have on the modification of self-concepts.

7. As an individual progresses through life, perceptions of self change as a result of experiences, the development of new interests, the reassessment of long-standing interests, awareness of previously unperceived abilities and change of needs. This may cause a reevaluation of prior career decisions and lead to new career decisions.

8. The evaluation of experiences from infancy to death provides the basis for the development of self-concepts, attitudes, values, personality traits and abilities some of which may be influenced by factors of heredity.

9. Career decision making involves perception of self (needs, attitudes, values, interests, abilities, philosophy of life, preferred life style, etc.) within the context of the society in which he/she lives, and the anticipated consequences resulting from options (working conditions, advancement potential, benefits, etc.).

10. With the rapidly changing job market anticipated in our society, the career development stages of awareness, exploration, decision making, job preparation and job implementation represent a process that will probably occur many times during a person's life.

11. At any point in the career development process there are wide individual differences in readiness for developing career awareness, exploration, decision making, etc.

Summary Comments:

The first postulate states the psychological base for the behavioristic theory of career development.

The second, third and fourth postulates are based on the definition of career education and reflections on the systems analysis of career education. Specifically, they speak to the development of interests, competencies, perceived ability and the importance of these in choosing from activity options. Prior discussion in this paper and the research on manifest interest and perceived abilities relate to these postulates.

The fifth postulate recognizes the role of sociological factors in the career development process. It notes specifically the limited range of experience options of some minority group persons. These limitations in experiences would seem to significantly limit the career options for these persons.

The sixth postulate relates to what might be referred to as "Ah, Ha!" experiences. Occasionally a person becomes involved in a basically new experience with high satisfaction resulting from the experience. The person's response to this gratifying experience might be "Ah, Ha!, this is fun. I do this fairly well." The increment of change in self-concept is relatively large in comparison with self-concept modification associated with future involvement in similar activities. Very satisfying experiences of this type could be significant in the career development process.

Postulate eight speaks to the changing of interests, perceived abilities, needs, etc. and the possibility of changes in career plans. This postulate notes career development as a life long process.

Included in postulates one through eight are statements relative to or inferences to decision making. Postulates nine and ten note factors which become a part of the decision making process and, because of recurring use emphasizes the importance of decision making in career development.

Postulate eleven is recognition of the wide range of individual differences found in readiness for career planning and in the career development process. These individual differences have significant implications in planning career education program.

Bibliography

1. Combs, Arthur W., Some basic concepts of perceptual psychology, speech at the American Personnel and Guidance Association Convention, 1956.

2. Ewens, Wm. P. "Relationship of interest to aptitude by profiles and interest areas," Personnel & Guidance Journal, 42: 359-363,

3. Ewens, Wm. P., "The development and standardization of a preliminary form of an activity experience inventory: a measure of manifest interest,: Journal of Applied Psychology, 40: 169-174.

4. Hoyt, Kenneth, Career Education Speech at Central State University, 1972.

5. Miller, Carroll H., Foundations of Guidance, New York, Harper and Row Publishers, 2nd edition, 1971.

6. Osipow, Samuel H., Theories of Career Development, New York. Appleton-Century-Crofts, 1973.

7. Super, Donald & Crites, John O. Appraising Vocational Fitness, New York, Harper & Brothers, 1962.

Figure 1. A SYSTEMS ANALYSIS FLOW CHART OF CAREER EDUCATION

W. Price Ewens

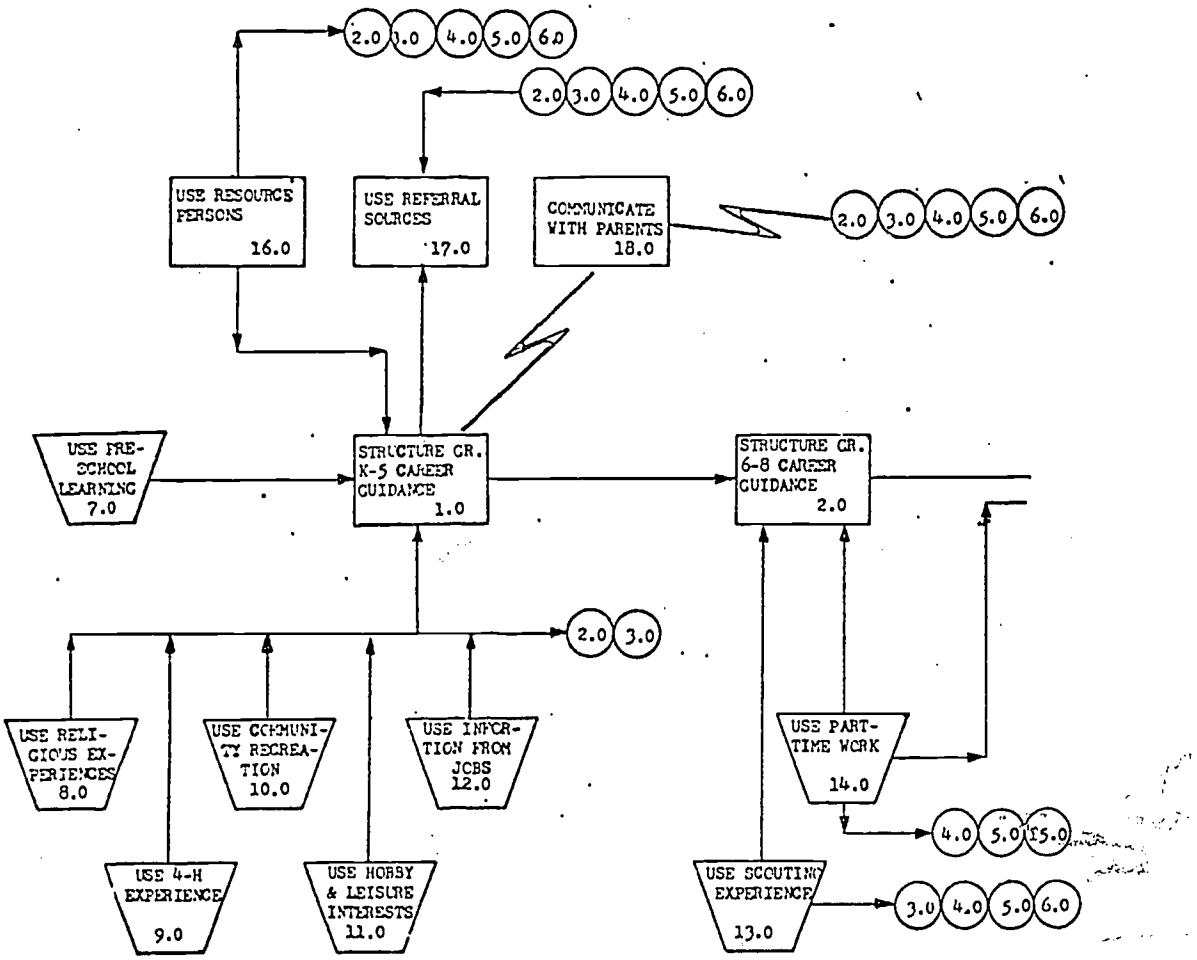
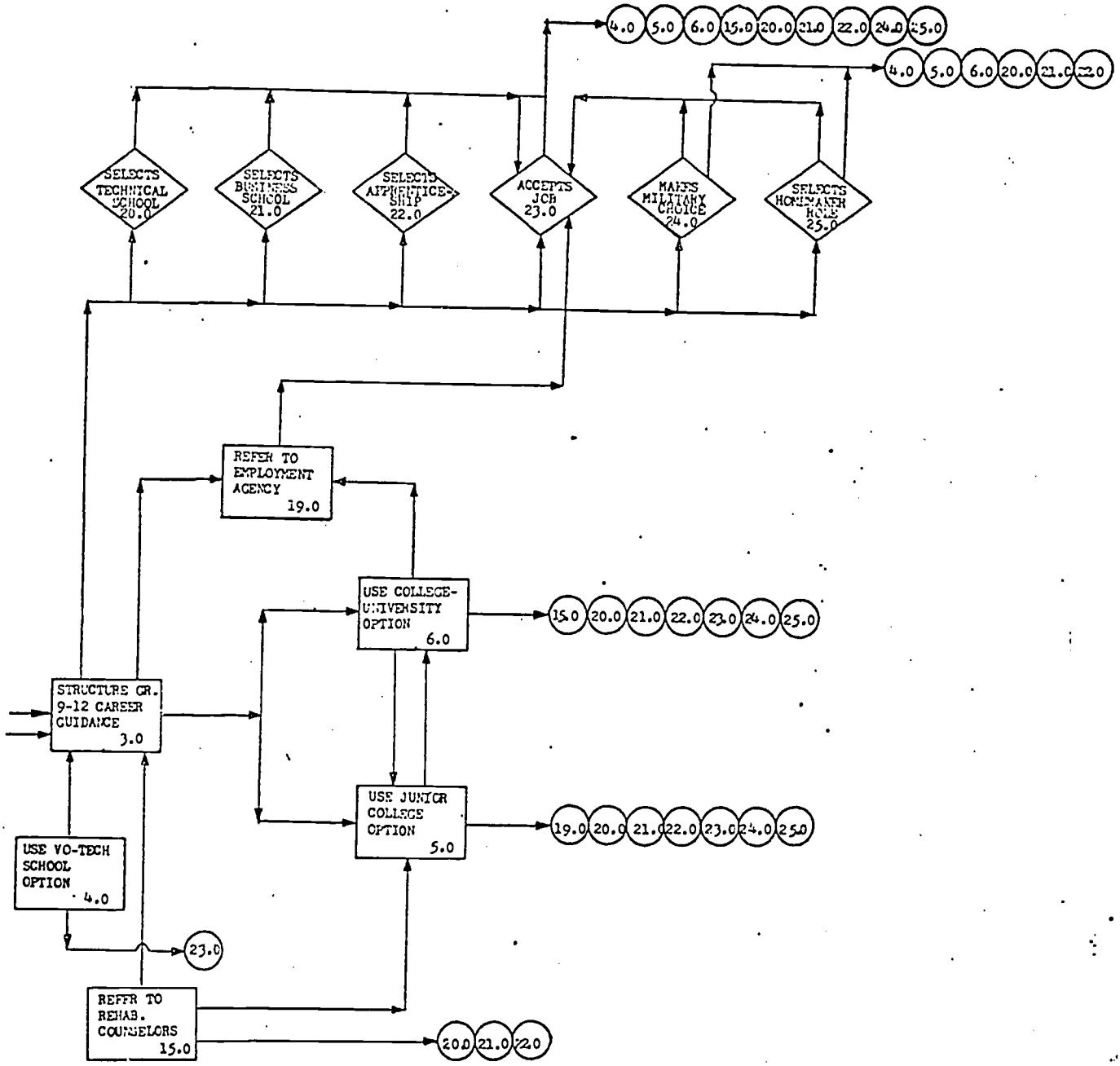


Figure 1. (con't.)



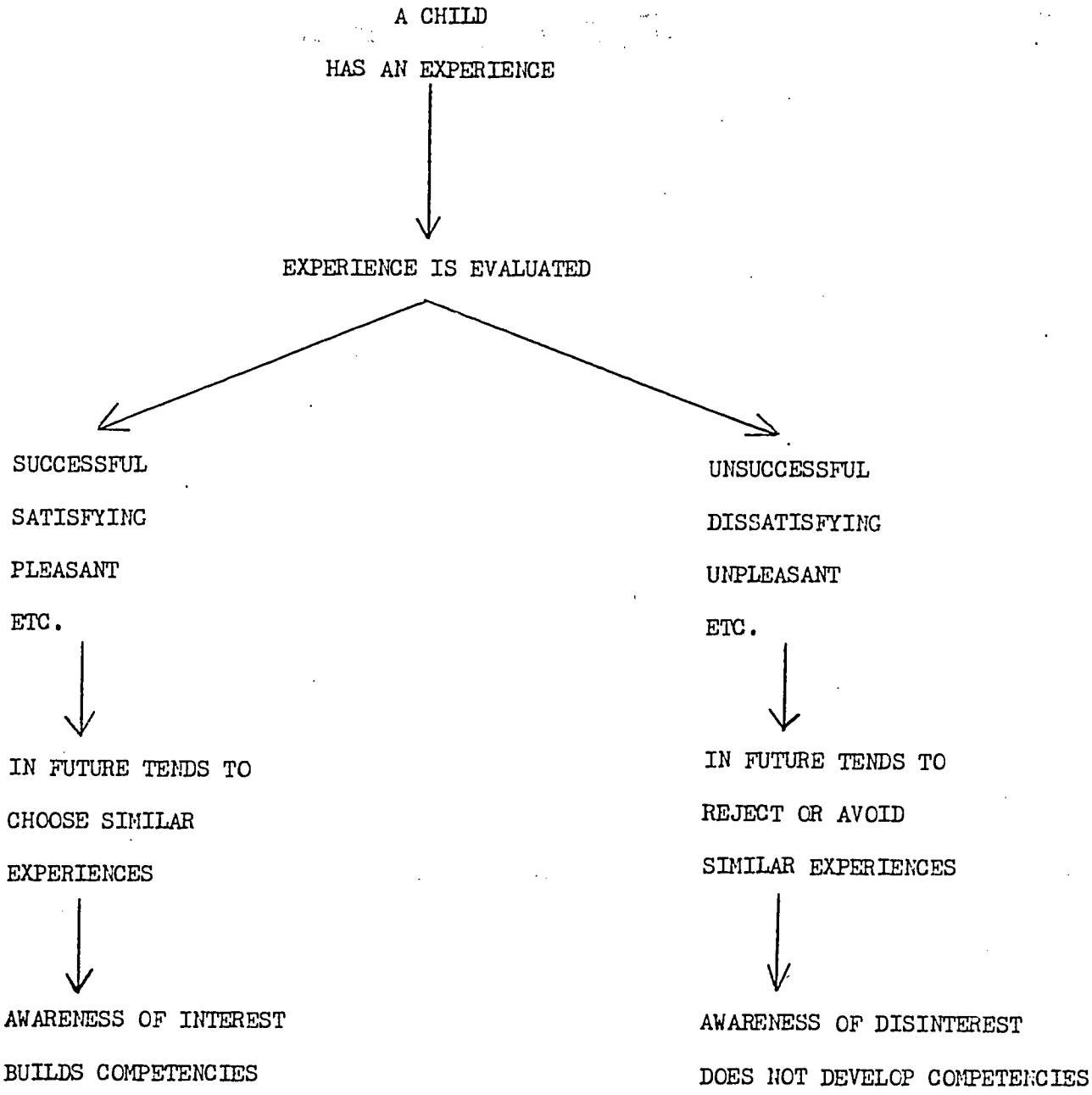


Figure 2. An Early Childhood Experience and Hypothesized Outcome

TABLE I

FREQUENCY DISTRIBUTION OF RHO COEFFICIENTS FOR PROFILE OF RANKS OF PERCEIVED ABILITY

Rho Coef.	f
.90 - .99	10
.80 - .80	8
.70 - .79	8
.60 - .69	4
.50 - .59	5
.40 - .49	1
.30 - .39	5
.20 - .29	0
.10 - .19	1
N	42
Mdn. Rho	.76

TABLE II

RANK ORDER RELATIONSHIP OF MANIFEST INTEREST AND PERCEIVED ABILITY FOR THREE GROUPS OF STUDENTS

Rho Coef.	9th Grade Students	11th Grade Students	University Freshmen
.90 - .99	8	6	11
.80 - .89	26	18	39
.70 - .79	22	20	46
.60 - .69	38	31	27
.50 - .59	23	25	21
.40 - .49	11	18	22
.30 - .39	16	17	15
.20 - .29	5	11	13
.10 - .19	9	10	4
.00 - .09	3	7	6
-.10 - -.01	2	5	2
-.20 - -.11	4	1	1
-.30 - -.21	-	-	1
-.40 - -.31	-	-	1
-.50 - -.41	2	-	-
-.60 - -.51	1	-	-
-.70 - -.61	1	-	-
N	171	169	209
Mdn Rho	.62	.56	.66

TABLE IV

RELATIONSHIP OF PERCEIVED ABILITIES AND MANIFEST INTERESTS

FOR ELEVENTH GRADE STUDENTS IN PERCENT OF SAMPLE

(N = 169)

Rank Order of Manifest Interest	Rank Order of Perceived 1	2	3	4	5	6	7	8	9	10
1.0	40.8	18.9	13.0	5.3	6.5	3.0	4.1	1.2	3.0	--
1.5	1.2	2.4	1.2	0.6	1.2	1.2	0.6	--	--	1.2
2.0	18.3	15.4	20.1	14.2	6.5	3.6	3.6	2.4	3.0	0.6
2.5	4.1	2.4	1.2	3.0	1.2	2.4	1.2	--	0.6	--
3.0	11.2	11.8	13.6	8.3	11.2	6.5	10.1	4.1	4.1	2.4
3.5	3.0	1.2	1.8	0.6	3.0	2.4	0.6	1.8	1.2	0.6
4.0	4.7	9.5	10.1	14.8	5.9	12.4	8.9	6.5	3.6	5.3
4.5	0.6	4.7	--	3.6	3.0	3.6	0.6	2.4	1.2	3.0
5.0	4.7	8.3	5.3	10.7	6.5	14.2	6.5	7.7	4.7	8.3
5.5	1.2	3.6	2.4	3.0	1.8	4.7	3.6	1.2	1.2	0.6
6.0	2.4	6.5	7.1	5.9	10.1	6.5	8.9	7.1	10.1	8.3
6.5	--	0.6	2.4	2.4	4.1	5.3	3.0	2.4	4.1	1.2
7.0	2.4	2.4	5.3	8.3	9.5	7.1	14.8	12.4	10.1	7.1
7.5	--	0.6	1.2	2.4	3.6	1.2	2.4	4.7	4.1	3.0
8.0	1.8	1.2	2.4	7.1	9.5	11.2	10.7	11.8	8.3	12.4
8.5	--	1.2	0.6	1.2	2.4	1.8	1.8	3.0	4.7	4.7
9.0	--	5.3	4.7	5.9	10.1	4.7	8.3	14.2	18.9	15.4
9.5	--	0.6	0.6	--	--	--	0.6	0.6	1.8	1.8
10.0	3.6	3.6	6.5	3.0	4.1	8.3	10.1	17.8	15.4	21.3

Chi Square 745.5591
df 162
"t" 20.64
Contingency Coef .554

TABLE III

RELATIONSHIP OF PERCEIVED ABILITIES AND MANIFEST INTERESTS

FOR NINTH GRADE STUDENTS IN PERCENT OF SAMPLE

(N = 171)

Rank Order of Manifest Interest	Rank Order of Perceived Ability									
	1	2	3	4	5	6	7	8	9	10
1.0	35.1	28.7	11.1	8.2	4.1	1.2	2.9	1.2	0.6	2.9
1.5	4.1	1.2	2.3	0.6	1.2	0.6	0.6	0.6	0.6	--
2.0	17.5	19.3	16.4	12.3	5.3	8.8	4.1	0.6	1.8	--
2.5	3.5	1.2	2.3	1.8	0.6	2.3	1.2	--	--	--
3.0	16.4	5.8	17.5	11.7	8.2	8.2	7.6	4.1	4.1	2.3
3.5	0.6	1.8	1.8	1.8	3.5	1.2	0.6	1.2	0.6	1.8
4.0	4.1	9.4	11.1	8.2	9.9	6.4	10.5	5.8	5.3	4.1
4.5	1.2	4.7	2.9	4.7	4.7	3.5	4.1	2.9	1.2	1.8
5.0	5.8	5.3	6.4	14.6	8.8	7.6	8.8	7.6	9.9	4.7
5.5	--	0.6	2.3	1.8	2.3	3.5	1.2	1.8	2.3	0.6
6.0	1.8	6.4	4.1	9.4	12.3	12.3	9.4	6.4	8.2	8.2
6.5	0.5	2.9	2.3	1.2	1.8	2.9	4.1	2.9	4.1	0.6
7.0	4.1	3.5	6.4	7.6	8.8	5.8	12.3	13.4	6.4	9.9
7.5	1.8	0.6	0.6	0.6	1.8	2.3	2.9	3.5	4.1	1.2
8.0	1.2	4.7	4.1	4.7	8.2	10.5	11.1	12.9	15.2	9.4
8.5	0.6	1.8	0.6	1.8	2.3	1.2	2.9	4.1	2.9	3.5
9.0	1.8	0.6	4.1	4.7	7.6	12.3	7.0	14.0	4.7	16.8
9.5	--	0.6	1.8	1.2	1.8	2.9	1.2	2.9	2.3	4.1
10.0	--	1.2	1.8	3.5	7.0	6.4	7.6	15.2	19.9	28.1

Chi Square 808.4128
df 162
"t" 22.24
Contingency Coef. .568

TABLE V

RELATIONSHIP OF PERCEIVED ABILITIES AND MANIFEST INTERESTS

FOR COLLEGE FRESHMEN IN PERCENT OF SAMPLE

(N = 209)

Rank Order of Perceived Ability

Rank Order of Manifest Interest	1	2	3	4	5	6	7	8	9	10
1.0	42.5	16.7	16.7	8.1	6.2	3.3	1.4	1.9	1.0	1.0
1.5	1.4	1.4	0.5	--	--	1.0	0.5	1.4	--	--
2.0	14.4	21.0	16.3	11.0	8.1	7.2	4.3	2.9	1.0	1.0
2.5	1.9	1.9	1.4	1.9	2.4	1.9	1.4	--	1.0	0.5
3.0	11.5	17.2	13.4	11.0	9.6	11.5	3.3	1.9	1.9	3.8
3.5	1.9	2.4	1.4	2.4	4.3	1.9	--	1.0	1.0	0.5
4.0	7.7	9.6	10.0	13.4	6.7	12.4	9.1	8.6	2.9	1.0
4.5	2.4	2.9	0.5	1.9	3.3	2.9	1.4	2.9	1.4	0.5
5.0	5.7	9.6	8.6	10.5	11.5	9.1	12.9	6.7	4.3	2.9
5.5	1.0	1.0	1.9	1.4	1.9	1.9	3.3	2.4	1.4	2.4
6.0	2.9	4.8	7.2	13.4	8.1	11.0	12.0	8.6	5.3	3.8
6.5	1.4	0.5	1.4	2.9	2.4	2.9	6.2	4.3	2.4	1.4
7.0	1.4	4.3	8.1	5.7	9.6	6.2	8.1	14.8	12.0	7.2
7.5	1.0	--	0.5	1.9	1.9	1.9	2.4	3.3	1.9	2.4
8.0	1.0	4.8	4.3	8.1	9.6	12.9	10.5	11.5	12.4	10.5
8.5	0.5	--	0.5	0.5	1.4	1.0	1.0	2.4	2.4	3.8
9.0	1.9	1.0	4.3	1.4	8.1	6.7	9.6	11.5	22.0	17.7
9.5	--	--	1.4	0.5	--	0.5	3.3	2.4	5.3	6.7
10.0	--	1.0	1.4	3.8	4.8	3.8	9.1	11.5	20.6	33.0

Chi Square	1139.8210
df	162
"t"	29.82
Contingency Coef.	.594