Interests are a part of the motivational system in man. The psychological needs in early life become the interests of youth which develop into values and a value system in later life. The measurement of interests appears to have taken a practical turn with the finding that interests, although significant in vocational development, may not be efficient in long term prediction, but are nonetheless useful in vocational exploration and self-understanding. Osipcow identifies four broad approaches to career development theory, including self-concept development and personality needs. These are further explained, and followed by a list of indications of the development of vocational interests. The current trends of interest measurement are listed and the features of the Ohio Vocational Interest Survey are explained. The value of interest inventories will lie both in the vocational exploration and decision making process by individual students as well as in the understanding of student needs by guidance personnel. (Author/KJ)
THE ROLE OF INTERESTS AND INTEREST MEASUREMENT
IN GUIDANCE

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What are interests?

There is a common thread running through affective terms like needs, interests, aspirations, motives, values, which merits emphasis in guidance. The infant may be said to manifest interest in satisfying his basic needs whereas the adult is directed by his values. The history of psychology is replete with concepts and theories about these affective forces because man has always been interested in understanding man. The struggle with concepts like instincts, drives, and needs in psychology, and with worker satisfaction and personnel motivation in industrial management is indicative of man's strong desire to understand and predict human behavior.

Another aspect of the process of growth from dependency to maturity is that there is a series of interests or strivings towards a goal, accomplishment of the goal, new strivings to new goals, etc. Piaget (1952), Erickson (1963), Allport (1937) and others have stressed this epigenetic nature of growth. Thus, growth occurs in stages, and the acquisition of an earlier stage influences the acquisition of later ones. This process requires accommodation of the subject to his environment and has been looked upon in terms of self-concept attainment (Super, 1957), the development of a system of values (Allport, et. al., 1931), the process of self-actualization (Maslow, 1954), or just becoming a person (Allport, 1955).

Interests might be considered as a manifestation of the major strivings or motivations of the individual (Roe and Siegelman, 1964). The term "interests" has acquired certain connotations which differentiate it from "needs," and others which differentiate it from "values." "Needs" tend to be looked upon as innate, deep-seated, basic. They
seem to exist in a raw form without being available at the conscious level at all times. Values have societal or cultural strings attached. They are acquired with maturity and, as such, are more acceptable to the individual and, therefore, more stable in their manifestation. In the continuum of terms, interests are considered to be more stable than the flighty single expression "I'd like to be a policeman." Typically, the measurement of interests is based on a large number of likes and dislikes, thereby declaring that the intent is to measure a reasonably stable and reliable personality characteristic.

Yet, interests are known to be variable, particularly in young people, and are known also to be unrealistic. Ginzberg et. al. (1951) refer to a child's fantasy choices or preferences thereby pointing to their lack of realism. The term "aspirations" seems to be similar to interests and has also been used to indicate stable and long-term needs.

One might, even though precariously, harmonize these terms by agreeing that interests and aspirations manifest some major felt needs of the individual, and that values are more complex, stable, and long-term interests. This is borne out by Katzell (1964) who noted that, "a large number of inventories have been devised to measure constructs that have been variously labelled as values, interests, needs, and motives," but all of which are "conceptually linked to measuring what we have termed values." Katzell defines values as "that magnitude of a stimulus or job characteristic which evokes a relatively high level of satisfaction."

A Theory of Vocational Interests

McCall, (1965) reviewing the status of interest measurement, noted that there was "no adequate theory available yet." However, there have been several theories proposed with respect to vocational choices and career development. Several psychologists, Super (1949) being the most prominent among them, agree that interests play an important part in vocational development and vocational choice. In choosing a career, says Super, a person states in occupational terms the kind of person he would like to be. Furthermore, from the type of interest measures available, it appears that psychologists have felt more comfortable to work with the specific area of vocational interests, or interests for occupations, than the broad field of interests in general. Clark (1961) uses the term synonymously with "vocational interests." In a sense, one could look at any interest in terms of its relationship to work, especially since work itself is looked upon as a vehicle for fulfilling oneself or one's personality.
A curious situation occurs when interests can be looked upon as vocational interests. Since vocational development is reasonably orderly, interests should be stable and predictable. They also grow in complexity with development. Occupational values and personal ambitions can all be incorporated into this concept. This paper subscribes to this type of definition of "interests" and emphasizes Super's thesis that interests are a part of the self-concept and that they develop into a system which is a part of the self-concept system.

There is no theory yet that attempts to explain or predict the development of the interest system. However, since research studies (Schultz, 1958; Schaffer, 1953; Gordan, 1955) have supported the thesis that interests can affect vocational choice and do affect vocational satisfaction, it would seem possible to look at interest development in terms of vocational development. In making this statement, it is immediately recognized that the two processes may not be similar nor mutually determining, even though the validation studies of the Strong Vocational Interest Blank (SVIB) after twenty-five years suggest that interests and vocational choices can be expected to be broadly related to one another (Campbell, 1966). The term "interests" is here used to refer to measured interests and not expressed, or manifest, or tested interests (Super, 1949). Apparently, measured interests have a stability and validity that is based on their ability to secure a depth of personal searching and on their strength based on a combination of supportive responses.

If it can be accepted that interests and vocational development are related, a search for a theory of interests may be begun by examining available theories of vocational development. It is beyond the scope of this paper to examine vocational development theories, except to extract from them what might be relevant to a theory of interest development.

Osipow (1968) identifies four broad approaches to career development theory - i) trait and factor, ii) sociological reality or accident, iii) self-concept development, and iv) personality needs. The traditional trait and factor theory (Parsons, 1909; Kitson, 1925; Williamson, 1965), lacked the developmental approach and made it appear as though vocational choice is a one-time task which had to be performed on a true-reasoning basis. This involved the matching of one's interests, abilities, and attainments with the opportunities and requirements of available jobs. The more recent trait and factor theory put forth on the basis of Project TALENT data analysis (Cooley and Lohnes, 1968) suggests that vocational development consists of a series of decisions or choices which are made by the individual beginning early in life and continuing well into maturity. It is a rational and orderly process, but is broadly predictable. In this approach, interests are governed by rationality and stimulate planfulness.
The sociological reality or accident theory (Caplow, 1954; Miller and Form, 1951) points out that vocational choices are made largely on the basis of chance and opportunity. Political and economic conditions, family and cultural situations affect opportunities available to the individual and determine his choice. Interests, in this system, would succumb to or be channelized by opportunity.

Self-concept theory (Super, et. al., 1963; Tiedeman, 1963) is developmental and incorporates a person-centered or individual-directed evolvement as prescribed by Rogers (1958). It is a process of developing a complex self-concept system while attempting to satisfy or express oneself through career choices. As Super says, "A person seeks to fulfill himself through the work that he chooses." In this theory, interests would be included in the general personality system which seeks self-fulfillment. The person expresses "likes" or "dislikes" for activities or objects according to how he perceived these as developing or meeting the needs of his self-concept.

Personality needs have been used to various extents by career development theorists, such as Roe (1956), Hopock (1935), and Holland (1959) on the one hand, and Bordin, Nachmann, and Segal (1963) on the other. Roe believed that vocational choices tend to meet psychoic needs even though in canalized form. Early childhood experiences, like parental love and protection, are the basis for people orientation and lead to careers involving people. Furthermore, she endorsed Maslow's (1954) need hierarchy to emphasize that basic physiological needs take priority over social needs. With Roe's hypotheses, occupational interests reflect needs and can be highly dependent upon genetic and home background variables. Holland's (1966) typology of careers identifies six different occupational environments in American society - the realistic, intellectual, social, conventional, enterprising, and artistic. Vocational development consists of the individual's adjustment to these six environments through a process of rank ordering of them in one's value structure. This process includes a choice of the level at which one subscribes to or wishes to engage in these environments. The adequacy of the individual's vocational decisions and the amount of difficulty he experiences are related to his knowledge about himself and the world of work. Holland's theory emphasizes the genetic and environmental bases of the development of personal orientations or interests. He recommends "environmental programming" or real-life occupational experiences, perhaps like those being developed by Krumboltz (1966) in order to provide for reality-testing and valid career decisions.

Bordin, Nachmann, and Segal (1963) proposed a psychoanalytic framework which hypothesized that occupations were chosen in terms of their potential for gratification of certain psychic dimensions or body
zones. Dimensions, such as, nurturance, genital, sensual, were postulated and used to describe impulse gratification and anxiety reduction available through certain occupations. The key force in development for this theory would be "needs" and these would be defined through psychoanalytic assessments rather than through simple objective tests.

The following indications appear to become evident with respect to a theory for the development of vocational interests from currently available theories of vocational development:

1. That early interests are based on innate, physiological needs. Thus, a child likes the candyman or begins to think in terms of jobs performed by the persons who satisfy his needs. Often times these are the people he loves and meets.

2. As the child grows from dependency to the gang or neighborhood group stage, his interests become more social. The jobs he associates himself with, like professional athletes, reflect this identification or role-seeking process. Obviously, the models are culturally-based and reflect societal mores.

3. In early adolescence, interests begin to take on a new realism based on a vague understanding of functions performed and abilities needed. The Ginzberg and Super models become applicable. Interests begin to develop into a system of values, often optimistic and altruistic.

4. Adolescence and later life has been well explained by Super's self-concept development theory. In terms of interest development, this appears to be a testing period of the interest and self-concept system (exploration and tentative choice) in which the hard realities of opportunity and ability bring home lessons of what is possible and what may be difficult. The values system acquires a practical and realistic dimension. Abilities and interests interact, so that one learns to like what one can do well, and to do better what one likes. (Cooley, 1967) At the later stages more practical values are developed, and personal and professional goals become tempered by marital responsibilities and job requirements.

Measurement of Interests

Theories of occupational choice suggest that interests play a significant role in achievement, in vocational exploration, in vocational decision-making, and in vocational success. It would, therefore, appear
that the measurement of interests is worthwhile. Yet, research reported by Cooley (1967), Holland and Lutz (1968), and others have raised certain questions about interest measurement which merit attention. Holland questions whether measured interests provide better information than a simple expression of choices. His research found that later vocational plans (expressed) are better predicted by expressed plans than by measured interests. A certain amount of criterion contamination appears to be evident in his research. Cooley studied the predictability of Grade 12 vocational plans of Project TALENT youth from their Grade 9 plans, ability measures, and interest measures. He found that most of the prediction provided by interest measures was available from the ability measures alone and that the latter were far more powerful predictors than the former. However, he also found that interests interact with abilities, thereby, showing that youth appears to like what they do well in and to learn to do well what they enjoy doing. Interests appear, therefore, to be motivators, but their specific manifestations may not be very stable.

One wonders how the above research findings can be compatible with the convincing 25-year validation studies reported for the SVIB by Campbell (1968). The answer probably lies with the fact that success in prediction depends upon the specificity of prediction, the less specific being better predictable, and the precision and reliability of the instruments used. Cooley (1968) studied Project TALENT data and reported that predictive success was more definite when broad categories of classification were used. Roe and Siegelman (1964) found that their predictors from early home environment were far too simple, or crudely used, to provide accurate predictions of later vocational preferences. The Strong occupational scales are precise and yet stable enough to be useful in long-term prediction, according to Campbell.

The more critical evidence in the discussion of interest prediction arises from the fact that today's youth are living in an extremely changing world. There is greater social mobility, considerable change in the character of jobs, and an incredible knowledge explosion. Obviously, job opportunities are becoming many and varied. Considerable concern is being expressed about the need to prepare youth for changing skills and opportunities. What is important in counseling is to develop in youth a planfulness which will facilitate their readiness for choice and prepare them for a changing world.

Interest measurement appears to be responding to these major influences discussed above. The current trends are:

1. The use of a theoretical framework in developing interest measures.
2. The change in emphasis from long-term prediction to information for self-understanding and decision-making.

3. The providing of a reality-testing and vocational exploration experience.

Several interest inventories currently available have adjusted their sights to this new look in interest measurement. This paper wishes to briefly review some of these attempts before proceeding to describe some of the features of the Ohio Vocational Interest Survey (D'Costa, et. al., 1967) which is geared to these new influences in interest measurement. The new Kuder Preference Record (Form DD) provides several occupational indices in an attempt to help the individual understand himself in terms of specific occupations in addition to broad interest areas. The SVIB has recently developed 22 basic interest scales (Campbell, 1969) which enable an individual to survey his interests in terms of broad areas of work. Science Research Associates have published a Vocational Planning Inventory which is a package designed to help students to look at themselves in terms of their abilities, interests, and other personality traits. The Hall's Occupational Orientation Inventory uses psychological "need" theory and provides opportunities for occupational explorations via personal counseling.

The Ohio Vocational Interest Survey is a new instrument which attempts to facilitate the vocational development of youth. Some of its features are as follows:

1. It is based on a defined domain of vocational interests which is representative of the world of work in terms of the Dictionary of Occupational Titles (D.O.T.), (U.S. Department of Labor, 1965).

2. It uses a classification of occupations in terms of homogeneous and psychologically meaningful clusters of jobs. This classification is based on an analysis of work in terms of its involvement with data, people, and things. The job clusters are defined in terms of worker characteristics rather than work characteristics and are, therefore, useful in understanding oneself in terms of the world of work.

3. It provides scores on interest scales which are defined in terms of job clusters described in the D.O.T. and, therefore, permit intensive occupational exploration.

4. It is a survey instrument rather than a prediction one. The items in the survey are job activities representative of the
world of work and are responded to on a Likert-type scale rather than by forced choice.

5. The instrument includes a vocational planning questionnaire designed to facilitate the comparison of measured and expressed interests, plans, and school achievement data.

This paper has attempted to provide a clarification of terms related to the interest domain. It holds the belief that interests are a part of the motivational system in man. The psychological needs in early life become the interests of youth which develop into values and a values system in later life. The measurement of interests appears to have taken a practical turn with the finding that interests, although significant in vocational development, may not be efficient in long-term prediction, but are nonetheless useful in vocational exploration and self-understanding. The development of interest inventories, particularly the Ohio Vocational Interest Survey, indicates that their value to guidance will lie both in the vocational exploration and decision-making process by individual students as well as in the understanding of student needs by guidance personnel.
REFERENCES


