HOLLAND'S THEORY:
A COMPREHENSIVE OVERVIEW

Janeesha Pleasant

*Eastern New Mexico University,
Portales, NM 88130, **USA***

ABSTRACT

This paper will discuss Holland's Theory and the details that make up the RIASEC model. The author will discuss the typology that includes six personality types, six corresponding occupational environments, and their interactions that are offered as a tool for understanding work histories, vocational satisfaction, achievement, and vocational interest. The paper will also cover evidence based research that supports Holland's theory. Readers will be able to understand the RIASEC model, and what assessments are based from the model.

INTRODUCTION TO THEORY

The purpose of this paper is to examine and explore the importance of Holland's Theory, and how it is used to make vocational decisions. Knowing personality types and desired environments helps students and client find occupations that will let them implement their skills and abilities. The reader will gain knowledge about the different personality types, the different environments, and the occupations that fall under each. The author will also demonstrate where a person is located within a particular environment will determine the kind and amount of stimulation he or she will receive.

When Holland created his theory he was trying to answer three fundamental questions. According to Holland (1997), these questions were (a)what personal and environmental characteristics lead to substantial career decisions, involvement, triumph and what characteristic lead to hesitancies, disgruntling decisions, or lack of accomplishment (b) what personal and environmental characteristics lead to steadiness or change in the level of work a person achieves over a lifetime and (c) what are the most effective approaches for providing support to people with career problems (Holland, 1997).

People can be categorized by their resemblance of the six personality types; Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. According to Spokane, Luchetta, & Richwine (2002), the theory infers that many people resemble more than one, and in most cases all, of the types to a degree. An individual's personality is combination of all the types; each individual has a unique mixture. These types consistently show characteristic repertoires of behavior and patterns of likes and dislikes, hold explicit values, and validate unique self-descriptions. The environments in which people live and work can be characterized by their resemblance to six model environments Realistic,

Investigative, Artistic, Social, Enterprising, and Conventional. Environmental structure is identified as the distinguishing abilities and values of individuals who occupy the work environment (Zunker, 2014).

The pairing of persons and environments leads to outcomes that we can foresee and understand from our knowledge of the personality types and the environmental models. As Spokane (1996) explained, interests are complex measures that reflect personality as well as preferences, morals, self-efficacy and so one. Holland proposed that personality types can be organized in a coded system (RIASEC theory) following his modal-personal-orientation themes R (realistic); I (investigative); A (artistic); S (social); E (enterprising); and C (conventional) (Zunker, 2014).

There are four working assumptions that constitute the heart of the theory. Those assumptions are as follows (a) in our culture, most persons can be classified as one of six personality types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional; (b) there are six model environments: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional; (c) people look for environments that will let them implement their skills and abilities, express their attitudes and values and take on congenial problems and roles; (d) behavior is determined by an collaboration between personality and environment (Holland, 1997).

There are four secondary concepts to moderate or qualify predictions or explanations that are significant from the main concepts consistency, differentiation, identity, congruence, and calculus (Holland, 1997). "All things being equal, an individual with high identity who is congruent, consistent, and differentiated should be more predictable and better adjusted then one who is incongruent, inconsistent, and undifferentiated (Spokane et. al., 2002, p.385). Helping the client who is low in consistency to become aware of the possible pendulum shifting that can occur in occupational decision making is important because, if the corresponding occupational environment is not possible, suitable avocational activities may provide the solution rather than ongoing shifting from occupations in one of Holland environment to another (Niles & Harris-Bowlsbey, 2013).

Holland (1997) stated, "The formulation for the types grew out of my experiences as a vocational counselor in educational military and clinical settings. That experience, the vocational literature, and the construction of the Vocational Preference Inventory led to the notion that it might be helpful to categorize people in terms of interest or personality types" (p.6). The choice of motivation is an expressive act which reflects the person's inspiration, knowledge, temperament, and ability. Careers represent a way of life, an environment rather than a set of isolated work functions or skills (Spokane et. al, 2002).

Holland's typology provides the most useful framework for understanding and predicting individual behavior (i.e., job satisfaction, job performance, and occupational stability) within work environments (Niles & Harris-Bowlsbey, 2013). The idea for a typology resulted from the frequent observation that several broad classes account for most human interest, traits, and behaviors because of this, six principles seemed plausible in developing the typology and the environmental models. These principles were:

1. The choice of vocation is an expression of personality
2. Interest inventories are personality inventories
3. Vocational stereotypes reliable and important psychological and sociological meanings
4. The members of a vocational similar personalities and similar histories of personal development
5. Because people in a vocational group have similar personalities, they will respond to many situations and problems in similar ways, and they will create characteristic interpersonal environments
6. Vocational satisfaction, stability and achievement depend on the congruence between one's personality and the environment in which one works (Holland, 1997).

The theory is a structural-interactive or typological-interactive theory. It is structural or typological because it attempts to organize the vast sea of information about people and jobs. It is interactive because it assumes that many career and social behaviors are the outcome of people and environments acting on one another. It is not a one-way street; jobs change people and people change jobs (Holland, 1997). According to Weinrach (1984), Holland's theory has been described as structural-interactive because it provides an explicit link between various personality characteristics and corresponding job titles and because it organizes the massive data about people and jobs. Compared with other theories of personality, the theory is a fulfillment model as it assumes that all people look for enjoyment and seek to reach goals that actualize talents, skills, and interests, some goal-oriented activities are conscious and some are not, and all people are active and that all psychological agents give direction to behavior (Holland, 1997).

PERSONALITY TYPES

The realistic personality type prefers activities that entail the explicit, ordered, or systematic manipulation of objects, tools, machines, and animals and has an aversion to educational or therapeutic activities. Realistic types are often described as conforming, humble, normal, frank, materialistic, persistent, modest, practical, honest and thrifty (Niles & Harris-Bowlsbey, 2013).

The investigative personality type prefers activities that entail the observational, symbolic, systematic, and creative investigation of physical, biological, and cultural phenomena in order to understand and control such phenomena. Investigative types have an aversion to persuasive, social, and repetitive activities. Investigative persons are often described as analytical, independent, modest, cautious, introverted, critical, curious, and reserved (Niles & Harris-Bowlsbey, 2013).

The artistic personality type prefers ambiguous, free, unsystematized activities that entail the manipulation of physical, verbal, or human materials to create art forms and products. Artistic persons have an aversion to explicit systematic and ordered activities. Artistic persons are often described as complicated, introspective, impulsive, independent, and idealistic (Niles & Harris-Bowlsbey, 2013).

The social personality type prefers activities that entail the manipulation of others to inform, train, develop, cure, or enlighten. They have an aversion to explicit ordered and systematic activities involving materials, tools, or machines. Social persons are often described as convincing, kind, friendly, patient, understanding, helpful, and warm (Niles & Harris-Bowlsbey, 2013).

The enterprising personality type prefers activities that entail the manipulation of others to attain organizational or economic gain. They have an aversion to observational, symbolic, and systematic activities. Enterprising persons are described as domineering, pleasure-seeking, extroverted, attention-getting, impulsive, and self-confident (Niles & Harris-Bowlsbey, 2013).

The conventional personality type prefers activities that entail the explicit, or ordered and systematic manipulation of data such as keeping records, filing materials, and reproducing materials.

Conventional types have an aversion to be ambiguous, free, exploratory, or unsystematized activities. Conventional persons are described as conforming, inhibited, persistent, conscientious, orderly, efficient, and unimaginative (Niles & Harris-Bowlsbey, 2013).

THE ENVIRONMENTAL MODELS

The Realistic environment is characterized by the dominance of environmental demands and opportunities that entail the explicit, ordered or systematic manipulation of objects, tools, machines, and animals, and by a population dominated by Realistic types. Realistic people create a characteristic atmosphere that operates in the following ways (a) it stimulates people to perform realistic activities such as using machines and tools; (b) it fosters technical competencies and achievements; (c) it encourages people to see themselves as having mechanical ability and as lacking ability in human relations, and it encourages them to see the world in simple, tangible, and traditional terms; (d) it rewards people for the display of traditional values and attitudes and for being concerned with goods, money, power, and possessions (Holland, 1997).

People within the environments become more susceptible to pragmatic and traditional influences, more attracted to realistic occupations and roles in which they can express themselves on realistic activities, less adept at coping with others and less open to new ideas and beliefs which lead to a narrow range of interest and a closed belief system (Holland, 1997). Example of occupations that have a realistic environment are carpenter, diesel mechanic, electrician, farmer, fire fighter, flight engineer, forester, locksmith, locomotive engineer, pilot, police officer, and truck driver.

The Investigative environment is characterized by the dominance of environmental demands and opportunities that entail the observation and symbolic, systematic, creative investigation of physical, biological, or cultural phenomena. Investigative people create characteristic atmospheres that operate to produce the following outcomes:

1. It stimulates people to perform investigative activities
2. It encourages scientific competencies and achievements

3. It encourages people to see themselves as scholarly, as having mathematical and scientific ability, and as lacking in leadership ability, and it encourages them to see the world in complex, abstract, independent, and original ways (Holland, 1997).

People within these environments become more susceptible to abstract, theoretical, and analytical influences. More attracted to investigative occupations, roles in which they can express themselves in investigative activities, more apt to cope with others in rational, analytic, and indirect ways, and more open to new ideas and beliefs which lead to a wide range of interest and an open belief system (Holland, 1997). Examples of occupations that have an investigative environment are biologist, chemist, computer programmer, dentist, electrical engineer, mathematician, medical technician, meteorologist, pharmacist, physician, surveyor, and veterinarian.

The Artistic environment is characterized by the dominance of environmental demands and opportunities that entail ambiguous, free, un-systematized activities and competencies to create art forms or products, and by the dominance of Artistic types. Artistic people create characteristic atmospheres that operate to produce the following outcomes (a) it stimulates people to engage in artistic activities; (b) it fosters artistic competencies and achievements; (c) it encourages people to see themselves as expressive, original, intuitive, nonconforming, independent, having artistic abilities and encourages people to see the world in complex, independent, unconventional, and flexible ways; (d) it rewards people for the display of artistic values and attitudes (Holland, 1997).

People within these environments become more susceptible to personal, emotional, and imaginative influences, more attracted to attracted to artistic occupations, roles in which they express themselves in artistic activities, more likely to cope with others in personal, emotional, expressive, unconventional ways and more open to new ideas and beliefs which lead to a wide range of interest and an open belief system (Holland, 1997). Examples of occupations have an artistic environment are actor, art teacher. Book editor, clothes designer, comedian, composer, dancer, disk jockey, graphic designer, and musician.

The Social environment is characterized by the dominance of environmental demands and opportunities that entail the manipulation of others to inform, train, develop, cure. Or enlighten. Social people create a characteristic atmosphere that operates to produce the following goals and outcome:

1. It stimulates people to engage in social activities
2. It fosters social competencies
3. It encourages people to see themselves as liking to help others, understanding of others, cooperative, sociable and it encourages them to see the world in flexible ways
4. It rewards people for the display of social values and attitudes (Holland, 1997).

People within these environments become more susceptible to social, humanitarian, and religious influences, more attracted to social occupations and roles in which they can express themselves in social activities, more apt to cope with others by being friendly, helpful, cooperative and they are more open than

Realistic and Conventional types, which lead to a moderate range of interest (Holland, 1997). Examples of occupations that have a social environment are athletic trainer, counselor, dental hygienist, librarian, nurse, parole officer, physical therapist, social worker, and teacher.

The Enterprising environment is characterized by the dominance of environmental demands and opportunities that entail the manipulation of others to attain organizational or self-interest goals. Enterprising people create characteristic atmospheres that operate to produce the following outcomes:

1. It stimulates people to engage in enterprising activities such as selling or leading other
2. It fosters enterprising competencies and achievements
3. It encourages people to see themselves as aggressive, popular, self-confident, sociable, possessing leadership and speaking abilities
4. Encourages people to see the world in terms of powered, status, responsibility, stereotyped, constricted, simple terms
5. It rewards people for the display of enterprising values and goals (i.e., money, power, and status) (Holland, 1997).

People within these environments become more susceptible to social, emotional, and materialistic influences, more attracted to enterprising occupations and roles in which they can express themselves in enterprising activities, more probe to cope with others in an enterprising manner (dominance) and more open to new ideas and beliefs than Realistic and Conventional types which lead to a moderate range of interest (Holland, 1997). Examples of occupations that have an enterprising environment are auctioneer, bank president, camp director, city manager. Customs inspector, hotel manager, judge, lawyer, recreation leader, real estate agent, sales manager, sales person, school principle, travel agent, and TV newscaster.

The Conventional environment is characterized by the dominance of environmental demands and opportunities that entail the explicit, ordered, systematic manipulation of data such as record keeping. Conventional people create atmospheres that operate to produce the following outcomes:

1. It stimulates people to engage in conventional activities such as recording and organizing data and records
2. It fosters conventional competencies and achievements
3. It encourages people to see themselves as conforming, orderly, non-artistic, and having clerical competencies
4. Encourages them to see the world in conventional, stereotypes, constricted simple, and dependent ways
5. It rewards people for the display of conventional attitudes and values (Holland, 1997).

People within these environments become more susceptible to materialistic influences (money), more attracted to conventional occupations and roles, more prone to cope with people in conventional manner (controlling) and less open to new beliefs and practices which lead to narrow interest and a closed belief system (Holland, 1997). Examples of occupations that have a conventional environment is

bank teller, book keeper, court clerk, mail carrier, post office clerk, secretary, time keeper, title examiner, and typist.

EVIDENCE

In addition to identifying interest as vital piece of information for individuals making career decisions, most theorists would also assert that if a person is in an environment (or job) that is very different from her or his interests, they are going to be unhappy. Research does support this. Logue, Lounsbury, Gupta, and Leong (2007), found that business students whose primary codes were investigative, artistic, or realistic were less likely to be satisfied with their major. However, the converse was not true – having a primary code of enterprising did not relate to being satisfied with their business major.

Given the popularity of the RIASEC codes, it is likely that clients or students who take more than one inventory will have more than one report that provides a RIASEC summary code. In fact, Savickas and Taber (2006), compared RIASEC summary codes across five different inventories and found that almost half of the 99 participants had RIASEC profiles in the less similar to most dissimilar range, and only 19 had profiles in the quite similar to very similar range. These researchers concluded that the inventories measure different aspects of personality, and that those with more stable interest (or traitedness) were more likely to have higher consistency across the inventories (Osborn & Zunker, 2015).

The RIASEC model has been tested with a wide range of ethnically diverse individuals, including those from different socioeconomic backgrounds, and with international groups. The results are mixed, that is, some studies support Holland's theory and others indicate less support (Rounds & Tracey, 1996). One limitation of Holland's theory is that it fails to distinguish between group-level and individual-level change and stability as a result of students' membership and participation in the proposed academic environments (Smart & Feldman, 1998).

There does appear to be enough positive evidence, however, to use instruments based on Holland's codes with caution when testing culturally diverse populations (Gelsco & Fretz, 2001).

In Taiwan, Chang (2002) described that for centuries, test results were used to classify people into occupations, and people would follow career path that was suggested by results. This highlights a difference in philosophy between Taiwan and most American counselors. Knowing that a Taiwanese client probably puts a great deal of faith into test results, a counselor must ensure that the test used meets the highest psychometric standards and that the client understands the purpose of the test.

In a recent study by Willie, Tracey, Feys, & De Fruyt, (2014), a subsample of 167 college alumni (79 males and 88 females) could be included for whom congruence indices could be computed at both measurement occasions (more information on study dropout is provided at the end of this section). In 1994, three months prior to graduation from college, all participants completed a comprehensive vocational interest questionnaire measuring their vocational aspirations at the career start. Although all highly educated, participants were

heterogeneous with regard to vocational interests, with alumni representing a broad range of college faculties including Industrial engineering (N = 36), Philosophy, History, and Languages (N = 28), Law(N = 18), Sciences (N = 14), Applied sciences (N = 14), Economics (N = 14), Psychology and Educational sciences (N = 25), Applied Biological sciences (N = 2), and Political and Social sciences (N = 16). One year later (1995), a first follow-up of the sample was conducted asking participants to report on their current nature of employment using open ended questions as well as a standardized questionnaire (see Measures). These 1994 and 1995 assessments are further referred to as Time 1 (T1) assessments in the current text. Participants' vocational interests and work environments were reassessed in 2010 (Time 2; T2), together with the indicators of general and career-specific well-being after 15 years on the labor market.

TYPES OF INSTRUMENTS

Applying Holland's theory in career counseling requires a working knowledge of several inventories and diagnostic measures. The Holland codes are a common way for presenting information about an individual's interest and personalities. Several inventories, including the Strong Interest Inventory, The Self-Directed Search, the ASVAB, Career Key, the RIASEC Inventory, The Picture Interest Career Survey, and others utilize the Holland types (Osborn & Zunker, 2015). Only a few will be discussed in detail in this paper.

THE SELF-DIRECTED SEARCH

The Self-Directed Search (SDS) is a self-administered, self-scored, and self-interpreted vocational counseling tool. The SDS was developed for two main purposes: to multiply the number of people a counselor can serve and to provide a vocational counseling experience for people who do not have, or do not wish to have, access to vocational counselors (Holland, 2013). With the Self-Directed Search, a counselor would add up the six summary scores for the RIASEC types and end up with one total score. In the most recent SDS technical manual (Holland & Messer, 2013), low scores are defined as less than 54, average scores are from 99-205, and high scores are greater than 205.

Dozier, Sampson, & Reardon (2013), wanted to learn more about the impact of these two different interpretive materials on SDS users. The sample consisted of 51 undergraduate students enrolled in two sections of a college career course. Common reasons for enrolling in the course were to explore career options and learn more about career decision-making. Participant ages ranged from 18 to 26 years (M = 21.14, SD = 1.16). The demographic breakdown of the sample was 52.9% Caucasian, 31.4% African-American, 9.8% Hispanic/Latino, 3.9% other, and 2% Asian. Academic class was 62.7% seniors, 19.6% juniors, 15.7% sophomores, and 2% freshmen. The findings in this study indicate that individuals receiving the SDS:IR generated by the SDS software portfolio computer system were more likely to recall their SDS overall three-letter summary code, as well as the first and third letters of their code, than those receiving the YYC and the EOF booklets. Because

the SDS software portfolio generates a more customized and individualized interpretive report, the findings of this study are consistent with Brown and Ryan Krane's (2000) recommendations for providing individualized interpretations and feedback regarding career development interventions.

THE CAREER KEY

The Career Key is an online career assessment for middle and high school student's bases on Holland's interest codes. The Career key helps the users with career choices, career changes, career planning, job skills, and choosing a college major or educational program (Seng & Zeki, 2014). Research shows that close personality, college majors, and career matches predict success and satisfaction. This career test is one of the few test that truly measures the Holland six personality types. Career Key's scientific matching system enables students to identify careers and college majors that match their interests, traits, skills and abilities. In a study Jones, Sheffield, & Joyner (2000), results showed that students found the CK helpful and satisfying. Their ratings of the CK were equal to those given by students taking the other two instruments--the SDSCE and Job-OE. In addition, students took less than half the time to complete the CK as compared to these two instruments, leaving at least 20 minutes more for other activities. The CK suggested many more occupations to the students than the two other instruments, but there was no difference among the three groups and the control group with how many occupations they were considering 3 weeks later. There was no difference in career information-seeking behavior among the three intervention groups and the control group, but there was between high and low choice-work importance groups.

Zytowski (1999), identified five principles that a counselor should follow when providing an interpretation of interest inventories that will decrease the likelihood of losing a client in mid-interpretations. They include:

1. Prepare for the session
2. Actively involving the client in the results
3. Using simple, empathic communication whether verbally or through the use of graphs, checkmarks, other graphics or body language
4. Ask the client to restate their results using their own words
5. Use the inventory as a springboard to continue career development

CONCLUSION

Holland's theory is unique in employing a comprehensive and integrated assessment system of individuals and their work environments based on a theoretical formulation of vocational personalities. The system has been subjected to more tests and analyses than any other model of career development. A surprising amount (though certainly not all) of his research has been supportive of the existence of a limited set of types, the underlying circular (or hexagonal) structure of those types, the validity of the instruments to measure types, and to a lesser extent, the interactive proposition of the theory. The cross-cultural validity

and utility of the model and the interventions that logically derive from it are encouraging, especially in Asian populations. Evidence examining career interventions using the instruments and principles of the theory support the rigor as well as the practicality of the theory and related assessments and interventions for use in evidence-based counseling practices (Spokane & Cruza-Guet, 2005).

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