Full Length Research Paper

Impacts of personality traits on career choice of Information Scientists in Federal University of Technology, Minna, Niger State, Nigeria

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During the last decades, we have seen a growing demand on the capacity to handle information. It is encouraged to become an information literate life-long learner in order to meet the requirements of the fast-paced society. At a certain extent, this is something which can be learnt. It is however, plausible that certain persons match these requirements and adapt to the changing demands with less effort than others. There is certainly not one single personality type which would form the "ideal" information literate citizen. Quite the contrary, different traits may prove useful in different situations. A comprehension of how different traits come into place if information seeking would increase the understanding of users of information services. The aim of this article is to reflect over individual differences in information behaviour with a particular focus on how and why personality traits influence information strategies and to determine the impact that personality trait can have on an individual's career choice. Its objective is to determine the personality trait of Information Scientists. The research questions raised to guide the study were; what are some typical personal character traits and what kind of personality traits does an Information Scientist possess? The Information Scientist personality trait questionnaire was developed to effectively implement the study. A sample population of 300 students was randomly selected from a total population in the Department of Library and Information Technology in Federal University of Technology, Minna. A total number of 282 questionnaires were retrieved with valid data. The conclusion of the study was that according to the Holland's personality trait theory on career choice, Information Scientists are likely to be the enterprising type.

Key words: Career choice, career counseling, personality traits, Information Scientist, librarian.

INTRODUCTION

Holland's (1997) theory proposes that people are attracted to work environments that conform to their personality orientation. Holland referred to the alignment between personality and work environment, as congruence. He proposed that individuals, whose personalities are poorly matched to their work environments, are more likely to change careers than their congruent counterparts. Additionally, Holland hypothesized that when people change careers, they tend to move towards more congruent environments. The purpose of the current study was to examine the validity of these two propositions. While Holland's (1997) theory has attracted considerable research attention, the majority of these studies have tended to focus on the influence of congruence on job satisfaction or performance.

Although, research examining congruence and career choice has generally been supportive of Holland's (1976) framework, studies investigating congruence and career change/career persistence have produced mixed findings. Apart from the relatively stable organization of a person's character, temperament, intellect, and physique which predisposes him or her to behave and act in particular ways in given situations, and which differentiates one individual from another, there are also many different theories about the nature of personality and how it develops. Sheldon's constitutional theory and trait theories are two that have often been used in trying

to explain behaviour in sports.

Personality is sometimes viewed as consisting of three levels; the psychological core, typical responses and role related behaviour. American Heritage Dictionary (2009) explains that traits are genetically determined characters which are being passed by living organism from their descendents through the genes. Most parents pass on traits/genes that stay all through the life cycle of their children.

Super and Knasel (1981) wrote that youths are in a crucial stage of exploring and confirming their career plans. Twenty years later, Arnett's (2000) research concurred with Super's submission, but suggested that the emerging adults of today view their career potential as limitless, with or without career planning. Personality traits could also be influenced by peer groups, friends, environment, society and colleagues. They can affect an individual's life either positively or negatively. Findings characterize positive traits as a person's character by the way the person thinks, how they feel, and how they act not only during the good times but also during challenging times. Positive trait is a product of culture evolution; which views human cultures as changing gradually throughout time as a result of various cultural processes, and equally effective tool for a passionate workforce. Weisenberger et al. (2008) identifies negative traits as crime, disobedience to parents, dropping out from school and bad tempers. Negative traits can make an individual useless to himself and his or her environment.

Impact is a reportable, quantifiable difference or potential difference, that a project or program is making in a person's life. Personality as a whole has its own impacts on choice of career for an individual. Personality traits can be interpreted as both positive and negative. For example, If being critical is one of one's traits, this would have a positive impact if you are to be an editor of a publishing company. It is obvious that people possessing personality traits within the categories of extraversion, openness, agreeableness and conscientiousness have more effective coping skills than people with traits falling within the category of Neuroticism. "Coping is personality in action under stress", (Engler, 2006). Bradberry (2007) posits that identifying one's career choice depends on one's personality traits and how one perceives a particular job. The author further states that one's personality can give one a clear understanding whether or not each aspect of the profession chosen suits him or her. Career success can be defined as the real or perceived achievements individuals have accumulated as a result of their work experiences. Thus, it is necessary that career planning views individuals' needs through the career decision-making stage they are in, their interests, and unique personality variables.

Personality is formed from feelings, thought patterns, interests and other behaviors. An individual characteristic is said to makes each of us unique. McCrae (2000) reported however, that personality traits can be categorized as: neuroticism, extraversion and openness to experience, agreeableness and conscientiousness. Career choice is aimed to provide individualized career counseling services to clients to achieve their educational career and personal goals. The question of whether personality measures are valid predictors of career performance has been answered about as well as it can be because in a truly empirical discipline, there is always room for some residual doubt and some minds tolerate ambiguity better than others. As recently as the last 10 years, the conventional wisdom in academic psychology was that personality measures lack validity, are easily faked and are generally unsuitable for decisions about job performance.

Skepticism regarding the usefulness of personality measurement for predicting performance reached a peak during the 1970s with the publication of Abramson's (1978) book, which claimed that (a) there is no evidence that personality is consistent across situations and (b) personality measures explain only a trivial amount of variance in social performance. In addition, in a very influential review, Guion and Gottier (2002) concluded that there was no evidence for the validity of personality instruments. These claims stimulated a new generation of research that ultimately reversed earlier critical conclusions. Nevertheless, there is still some skepticism in which is argued that some applied psychologists are not persuaded that personality measurement is useful for understanding job performance.

In a review of the personality and occupational performance literature, Hogan and Roberts (1996) concluded that well-constructed measures of normal personality are valid predictors of a wide range of career performance. They generally do result in adverse impacts for minority groups. They can be linked to performance. There are no persuasive conceptual models or theories to explain why personality measures are correlated with job performance. This argument is based on socio-analytic theory (Hogan, 1983) and concludes that people are preprogrammed to seek social solidarity and status during social interaction. These efforts to get along and get ahead translate into individual differences in personality test scores and job performance. Understanding one's personality type will improve one's career choices and enhance one's performance at work, but more importantly improve his or her life. Many of us find ourselves wondering why I or we hate our job and which career is right for us? If helped to understand one's personality type, this might determine how you like to work, where you like to work, what one's passions are, what motivates you. It is not as simple as it sounds, that is why many people today find themselves less than satisfied in their current career choices and life.

This research explains some key personality factors, which will help one find the resources to explore one's

own personality type, so that one can find the career of one's dreams and live the life he or she was meant to live. It is not really about income or salary, although we cannot get by without it, but we can live with less if we are happy with our career and get what is identified as "job satisfaction" or "career progress". It is about one's passions, dreams and style.

Statement of the problem

The following are some of the problems identified by the researcher which likely would affect Information Scientist's career choice:

i. Improper information or poor orientation before embarking on a choice of career.
ii. Inferiority complex, lack of motivation, thereby making them (Information Scientist) feel it is not a better career when compared with medicine, engineering, administration, etc.
iii. Problem of truancy and staff delinquency among Information Scientists.
iv. Poor career counseling which has an effect on job satisfaction.

Objectives of the study

The objectives of this study are:

i. To ascertain what type of personal traits affect an Information Scientist career?
ii. To determine the extent to which John Holland theory on career choice and its impacts on the personal characteristics of Information Scientist (Holland, 2009),
iii. To determine the appropriate environmental descriptions for the Information Scientist,
iv. To deduce from the findings of the study, the implications for counseling Information Scientist on their occupational choice, and
v. To make recommendations on the improvement of Information Science as a career.

Significance of the study

This research is designed for multiple purposes. First, it may serve as a guide to individuals who are choosing a career in information science. Secondly, it may assist those who are counseling individuals who may want to choose a career in Information Science. Different individuals need a guideline to help them ascertain a career path that will be both challenging and satisfying. According to Lombardo (2003), a person has the right to choose a career that suits his or her personality type. At a certain extent this is something which can be learnt. It is

however plausible that certain persons match these requirements and adapt to the changing demands with less effort than others. There is certainly not one single personality type which would form the "ideal" information literate citizen. Quite the contrary, different traits may prove useful in different situations.

Therefore, this study is aimed at ascertaining the personality traits that are needed by Information Science professionals. This information can be used as a guideline for future Information Scientists seeking to enter the profession thus increasing potential job satisfaction. The Big Five (extraversion, neuroticism, conscientiousness, agreeableness, and openness) are found to predict job performance and career success which is why an individual´s ex ante decision for an occupation is an essential research question. This research work is limited to the impact of personality traits on career choice of those studying in the field of Library and Information Science (Technology) in Federal University of Technology, Minna - Niger State.

Research questions

i. What are some typical personal character traits of Information Scientist?
ii. What is the personality trait of Information Scientist?
iii. How do personal character traits relate to success in career choice?
iv. What is the impact of Holland's theory on personality and career choice?

LITERATURE REVIEW

Concept of personality traits

According to psychologists, personality psychology is a branch of psychology that studies personality and individual differences. Its areas of focus include:

i. Constructing a coherent picture of a person and his or her major psychological processes
ii. Investigating individual differences or how people can differ from one another.
iii. Investigating human nature or similarities in human behavior.

One emphasis in this area is to construct a coherent picture of a person and his or her major psychological processes. Another emphasis views personality as the study of individual differences, in other words, how people differ from each other. A third area of emphasis examines human nature and how all people are similar to one another, these three viewpoints merge together in the study of personality. The pioneering American

psychologist, Allport (1937) described two major ways to study personality, the nomothetic and the idiographic. Nomothetic psychology seeks general laws that can be applied to many different people, such as the principle of self-actualization, or the trait of extraversion. Idiographic psychology is an attempt to understand the unique aspects of a particular individual. The study of personality has a rich and varied history in psychology, with an abundance of theoretical traditions. The major theories include dispositional (trait) perspective, psychodynamic, humanistic, biological, behaviorist and social learning perspective. There is no consensus on the definition of "personality" in psychology. Most researchers and psychologists do not explicitly identify themselves with a certain perspective and often take an eclectic approach. Some research is empirically driven such as the "Big 5" personality model whereas other research emphasizes theory development such as psychodynamics. There is also a substantial emphasis on the applied field of personality testing.

What is personality?

Personality can be defined as a dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations and behaviors in various situations. The word "personality" originates from the Latin *persona*, which means mask. Significantly, in the theatre of the ancient Latin-speaking world, the mask was not used as a plot device to disguise the identity of a character, but rather was a convention employed to represent or typify that character. Wagner (2008) gave a brief definition that personality is made up of the characteristic patterns of thoughts, feelings and behaviors that make a person unique. In addition to this, personality arises from within the individual and remains fairly consistent throughout life. It has been consistently argued and concluded that personality is a result of interaction between the individual and the environment, however behavioral theorists; study observable and measurable behaviors, rejecting theories that take internal thoughts and feelings into account.

In another way, individual's personality has been seen as the most striking or dominates characteristics. Here, a person may be said to have a "good or bad personality" meaning his or her most distinctive attributes appear to be good or bad. Personality therefore refers to the overall impression that an individual makes on others. For example, the personality of a lawyer differs from the personality of a businessman; a lawyer's character will be that of a person who is always prone to argument on matters to arrive at an answer. On the contrary, the personality character of a businessman or woman will be that of someone who is good in convincing people to buy or trade certain products, goods and services. Such individuals have the traits they display when they are born.

This can equally means the sum total of characteristics that are typical of an individual. This assumption fails to realize that individuals may either be "good or bad" depending on the situation. Personality traits refer to attributes by which people may vary in relative terms, rather than being divided into absolute types. In respect of their own understanding of the term, the popular meanings of personality are various, but most of them fall under one of the two heading. The first one sees the term as social skills; thus an individual's personality is assessed by the effectiveness with which he or she is able to show positive reactions from a variety of persons under different situations. The second views personalities as consisting of the most outstanding impression that an individual creates in others. In any of the cases, the on-looker selects an attributes or quality that is highly typical of the person and of which the overall impression created about others.

Hogan (2009) writes that personality should be defined from two perspectives. First, there is personality from the inside, which is called "identity". This is the person you think you are. It is best defined by one's hopes, dreams, aspirations, goals and intentions of one's values. Secondly, personality is referred to as "reputation". This is the person others think you are and is best defined by five models: self confidence, sociability, integrity, charm and creativity, or their opposites. There are disparities between a person's identity and his or her reputation. Moreover, the size of the disparity is related to one's career success. For some theories it is the central issue. These theories often spend considerable attention on things like types and traits with which we can categorize or compare people. Some people are neurotic, others are not. Some people are more introverted while others are extroverted and so on.

Personality psychology is a branch of psychology that studies personality and individual differences which consist of two related activities. The first personality theory is a semi-philosophical attempt to conceptualize human nature; the second personality assessment is a practical exercise that uses psychometric procedures to predict significant life outcomes (occupational performance) and provide people with feedbacks to assist their personal and professional development. Here, we trace the history of personality psychology from the early theorist to its emergence as a force in the world of business. Personality psychology began with the development of psychiatry in France and Germany in the 19th century. Prominent names in this field include Jean-Martin Charcot (also known as the Napoleon of the Neuroses) and Sigmund Freud (founder of psychoanalysis). Psychiatry set the tone for personality psychology until after World War II. For about 70 years, personality theory concerned the origins of dysfunctional behavior. Personality assessment concerned efforts to forecast or diagnoses dysfunctional behavior. The

minnesota multiphasic personality inventory (MMPI) became the most widely used personality measure in the world. After World War II stimulated by humanistic psychology; (Abraham Maslow, Carl Rogers and Gordon Allport), personality theory increasingly focused on the origins of maturity. Stimulated by the development of factor analysis and high-speed computers, personality assessment became increasingly focused on analyzing the structure of normal personality. Socio-analytic theory is the effort to provide a conceptual account of individual difference in career success, along with the ability to get along and get ahead. It is designed to forecast on career success and to provide people with development feedback for career enhancement.

Who is an Information Scientist?

An Information Scientist is a person who does research in information science. Information Scientists should not be confused with information professional that does practical information work not scholarly research (Wikipedia, 2009). It could further be explained as a person who organizes, manages and develop information systems which are used to store analyze and retrieve data for clients. Their work also involves the use of electronic resources, information communication technology (ICT), and paper based materials for research. They also develop new systems such as databases and are often involved in the creation of web content. The role of an Information Scientist as a key role in many organizations, schools and companies, to handle all types of information including scientific, technical, legal, commercial, financial and economical. Their role may cover one particular information function or the management of a computer base-system.

Typical working activities of an Information Scientist

The roles of Librarians, Information Managers, Information Officers, and Information Scientists are almost indistinguishable other than the context in which they practice. In addition, the term information specialist is becoming widely used to describe the work of an Information Scientist. All concerned with managing information in order to make it easily accessible to members of a particular group or organization or a clientele. As an Information Scientist, a person will provide information function to a particular organization or company or school. Work activities can vary at a great deal but includes all or some of the following:

i. Developing and managing electronic resources,
ii. Using electronic and printed resources,
iii. Selecting and acquiring new resources,
iv. Cataloguing and indexing of materials,
v. Writing and editing technical reports,
vi. Overseeing the development of new systems,
vii. Managing and overseeing the specification of database,
viii. Training colleagues and clientele on how to retrieve specific information form a database.

Personality trait theory

Carl and Briggs (2001) explained that one of the earliest trait theories was introduced by Sigmund Freud's colleague Carl Jung. Jung was never completely sold on Freud's ideas, and soon left his circle to develop his own theory. One aspect of Jung's theory concerned traits that Jung felt was inborn. These inborn, genetically determined traits are usually called temperaments. Later, two students of Jung's theory named Myers and Briggs - mother and daughter - developed a personality test based on Jung's temperaments called the Myers-Briggs Type Inventory, or MBTI. It has gone on to become the most famous personality test of all time.

Hans Eysenck was the first psychologist to make this trait or temperament business into something more mathematical. He gave long lists of adjectives to hundreds of thousands of people and used a special statistics factor analysis to figure out what factors or trait dimensions that carry the most weight. He took the results of this work and created a test called the Eysenck personality questionnaire (EPQ). Eysenck's research is well regarded and most psychologists agree with his theory. It has been revealed that social-cognitive structures and processes serve as a basis of personality coherence. Social-cognitive structures and processes are the unique patterns of experience and action that make each of us who we are. They demonstrate how a personality theory can be built on psychology's broader foundation of knowledge about cognitive and affective systems and the interactions between persons and the socio-cultural environment. Presenting novel theoretical developments from leaders in personality, social, cultural and developmental psychology, they showed how personality coherence arises from the ways people assign meaning to social information, gain causal agency over their lives through self-knowledge and self-reflective processes and organize multiple life events within a framework of goals and life tasks.

The big five dimensions of personality

Personality researchers have proposed that there are five basic dimensions of personality. Evidence of this theory has grown over the past 50 years, beginning with the research of Fiske (1949) and later expanded upon by other researchers including Barick and Mount (1991). The big five dimension of personality traits are broadly

Personality dimension	High level	Low level
Neuroticism	Sensitive, nervous	Secure, confident
Extraversion	Outgoing, energetic	Shy, withdrawn
Openness to experience	Inventive, curious	Cautious, conservative
Agreeableness	Friendly, compassionate	Competitive, utspoken
Conscientiousness	Efficient, organized	Easy-going, careless

Figure 1. Personality dimensions and the poles of traits they form. Based on Costa and McCrae (1992: 14-16, 49).

categorized. However, these five categories are usually described as follows:

a. Extraversion: Includes characteristics such as excitability, sociability, talkativeness, assertiveness and high amounts of emotional expressiveness.
b. Agreeableness: Includes attributes such as trust, altruism, kindness, affection and other pro-social behaviors.
c. Conscientiousness: Features of this dimension include high levels of thoughtfulness with good impulse control and goal directed behaviors. They tend to be organized and mindful of details.
d. Neuroticism: This kind of person tends to experience instability, anxiety moodiness, irritability and sadness.
e. Openness: Such persons are characterized as imagination and insight and high broad range of interest.

These dimensions represent broad areas of personality. Research has demonstrated that these groupings of characteristics tend to occur together in many people. For example, individuals who are sociable tend to be talkative. However, these traits do not always occur together. Personality is a complex and varied and each person may display behaviors across several of these dimensions. The five-factor model discussion evolved from an analysis of the terms which are used to describe personality. The lexical hypothesis states that there is enough information in natural language to describe differences in personality, as natural basic characteristics are reflected into language. Besides the lexical analysis, additional support for the five-factor model was found in the analysis of personality questionnaires. Almost all of the personality tests existing today measure one or more of the five factors (McCrae and John, 1992, 1996). The five dimensions can be further depicted in Figure 1.

The extraversion-introversion dimension contrasts an outgoing character with a withdrawn nature. Extraverts tend to be more physically and verbally active whereas introverts are independent, reserved, steady and like being alone. The person in the middle of the dimension likes a mix between social situations and solitude

(Howard and Howard, 1995). Extraverts are adventurous, assertive, frank, sociable and talkative. Introverts may be described as quiet, reserved, shy and unsociable (Costa and McCrae, 1992: 49).

The agreeableness scale is linked to altruism, nurturance, caring and emotional support versus competitiveness, hostility, indifference, self-centeredness, spitefulness and jealousy (Howard and Howard, 1995). Agreeable people can be described as altruistic, gentle, kind, sympathetic and warm (Costa and McCrae, 1992: 49).

Conscientiousness is a measure of goal-directed behaviour and amount of control over impulses. Conscientiousness has been linked to educational achievement and particularly to the will to achieve. The focused person concentrates on a limited number of goals but strives hard to reach them, while the flexible person is more impulsive and easier to persuade from one task to another (Howard and Howard, 1995). The more conscientious a person is, the more competent, dutiful, orderly, responsible and thorough (Costa and McCrae, 1992: 49, McCrae, 2002).

Neuroticism is a measure of affect and emotional control. Low levels of neuroticism indicate emotional stability whereas high levels of neuroticism increase the likelihood of experiencing negative emotions. Persons with high levels of neuroticism are reactive and more easily bothered by stimuli in their environment. They more frequently become unstable, worried, temperamental and sad. Resistant persons on the other hand need strong stimuli to be provoked (Howard and Howard, 1995). The term neuroticism does not necessarily refer to any psychiatric defect. A more proper term could be negative affectivity or nervousness (McCrae and John, 1992).

Openness to experience is a measure of depth, breadth and variability in a person's imagination and urge for experiences. The factor relates to intellect, openness to new ideas, cultural interests, educational aptitude and creativity as well as an interest in varied sensory and cognitive experiences. People with a high openness to experience have broad interests, are liberal and like

novelty. The preservers with low openness to experience are conventional, conservative and prefer familiarity (Howard and Howard, 1995).

HISTORY OF CAREER CHOICE

Early career guidance programs from Merrill on 1900's industrial arts and Jesse B. Davis on the 11th grade educational and vocational guidance between 1898 and 1907, respectively require students to actively reflect on career decisions. The historical perspectives of these provide an insight on the role of the career counselors to the development of career choices. Dewey's educational reform in the 1990's increased focus on the individual and the assessment of abilities for the purposes of identifying differences in ability. The foundation of intelligence assessment is a great influence on the development of both career and school counseling. Parsons, the Father of career guidance developed the first comprehensive conceptual framework for "choosing a vocation". He also started the Vocation Bureau of Boston. Parson's Framework gave us an understanding of the meaning of self, aptitudes, abilities, interests, resources, limitations, etc. knowledge of these requirements as conditions for success in career choice. Yerkes developed the first group intelligence tests: Alpha-verbal tests and Beta-non-verbal tests. Aptitude testing was published to provide information on aptitude test batteries in order to match human traits with job roles and requirements. Personality testing though slow to develop became integral to career assessment in the "1920s".

Steps involved in career choice

Costa et al. (1992), outline career steps in selecting career in the following perspectives:

a. Assessing yourself,
b. Make a list of occupations to explore,
c. Explore the occupations on one's list,
d. Conduct informational interviews,
e. Narrowing down one's list,
f. Set one's goals,
g. Write a career action plan,
h. Train for one's new career.

How to measure personality

It is important to stipulate the agenda for personality assessment. The agenda concerns forecasting individual differences in a person's abilities for getting ahead. We must decide which aspect of the personality from the inside identity that we need a measure of values on. And the optimal use of such an assessment is to evaluate how well a person will fit into the culture of a specific organization, as opposed to trying to predict occupational performance. If for instant we want to assess personality from the outside reputation, then we should use observer rating (a 360-degree feedback instrument). The optimal use of assessment of reputation is to forecast occupational performance, as opposed to trying to predict person's culture fit. If the foregoing distinctions are appropriately observed, personality and personality assessment will be indispensible tools for making decisions about people in any organization.

Personality and occupational choice

Among psychologists, the question determining the decision for a certain occupation has been of interest for a long time. In 1956, Blau et al. introduced a conceptual framework which contained psychological, economic, and sociological factors to explain occupational choice. Holland (1958, 1985) argued that personality traits have an impact on vocational choice and proposed a model containing six personality and work environment types, known as Holland types or RIASEC. These types are frequently used in vocational counseling to achieve the optimal match between employer and employee. Correspondingly, studies examining the person-vocational fit report more job satisfaction if the job matches the personality traits of the employee.

According to Holland (1997), six types exist: realistic, investigative, artistic, social, enterprising and conventional. Realistic types like working with their hands, with tools, or machineries. They work in agriculture or mechanical engineering, for example. In contrast, investigative types enjoy working methodically, analytically and processing information. Examples of where this type fits are Economics, Mathematics and Information Science in general. Artistic types cannot only be found among actors and artists but also in professions such as graphic design or art therapy. Typically, they are creative, non-conformative and independent. Social types are described as supporting, helpful and enjoying working in social contexts such as nursing, counseling or the medical professions. Enterprising types like to persuade, lead and dominate others and can be found in management positions, banks and insurances. Finally, conventional types pay much attention to detail and enjoy organizing tasks and work, for instance, as accountants, actuaries, or technical writers (Lombardo and Foschini, 2003)

Holland's theory of personality traits on career choice

Holland (1976) observed that people seek out only for those occupations that are likely to promote what
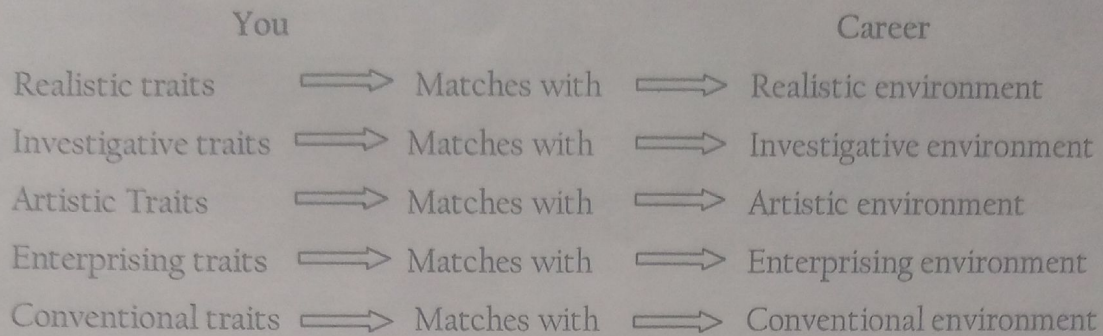
You   Career

Realistic traits   ⟹   Matches with   ⟹   Realistic environment

Investigative traits   ⟹   Matches with   ⟹   Investigative environment

Artistic Traits   ⟹   Matches with   ⟹   Artistic environment

Enterprising traits   ⟹   Matches with   ⟹   Enterprising environment

Conventional traits   ⟹   Matches with   ⟹   Conventional environment

Figure 2. Types of Personality traits and the career environment they tend to function.

enhances their personality characteristic than hamper and block them. He presented four main assumptions to support one's personality as follows:

i. Most people can be categorized as one of the six types: Realistic, social, investigative, artistic, enterprising and conventional,
ii. There are six kinds of environments namely: Social, investigative, artistic, enterprising, realistic and conventional environments,
iii. People search for environments that will let them to exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles,
iv. A person's behavior is determined by an interaction between his personality and the characteristics of his environment.

He goes further to state that by comparing a person's traits with those of each model type, one can ascertain which model he or she belongs to as illustrated in Figure 2. Figure 2 shows that an artistic person is more likely to be successful and satisfied if they choose a job that has an artistic environment: like choosing to be a dance teacher in a dancing school, an environment "dominated" by artistic people where creative abilities and expression are highly valued. When they are match together will likely lead to success and satisfaction in career each other's career's goal. Furthermore, an individual acts in conformity with the characteristics in line with the six main personality types and these influences one's personality.

Student personality and vocational factors in career choice

Santrock et al. (2008) results from the multiple analyses of variance analyses (MANOVA) indicated that perception of the need to acquire specific information about or experience in various occupations before making a career decision was essentially the same for male and female college students. Regardless of sex,

both groups reported a need for greater self-understanding of career dimensions. In regards to making a career decision, self-understanding was considered equally as important as obtaining additional information about careers. Nervousness or distress factors expressed relating to career choice were also essentially similar for male and female college participants, and nervousness was no more a mitigating factor than career information or self-knowledge for either sex. Difficulty in decision making was also of no greater or lesser importance than career Information, self-knowledge, or the level of nervousness felt when faced with making a career decision for males or females. The undeclared majors, as compared to the declared majors, significantly expressed more of a need to acquire specific information about their experience in various occupations before making a career decision.

As could be expected, seeking career counseling assistance to make a career choice may be helpful for undeclared majors. The present day emerging adults/adolescents are not only impacted by social contacts but also by emerging cognitive strengths and skills, and that contemporary males and females do not differ in the importance they place on career development. Vickery (2000) vocational maturity model suggested that world-of-work knowledge, career planning and exploratory behavior predominantly influence career decision-making. The findings here confirmed that male and female emerging adults have a similar need for career information and self-knowledge and they also have similar levels of career choice anxiety and generalized indecisiveness on career decision-making factors. Major status in this study had an influence on career decision-making needs for emerging adults.

An early study that applied Holland's theory to the personality types of Library Science students is the one by Afolabi's (1996) paper entitled Holland's typological theory and its implications for Librarians and libraries", which found that 16(80%) of the Librarians who responded, ranked the dominant personality type of Librarians as social followed by investigative which accounted for 60%. The Librarians also revealed that the

Table 1. Statistics of respondents by sex.

Respondents	Questionnaire administered	Returned questionnaire	Percentage (%)
Male	190	181	64.2
Female	110	101	35.8
Total	300	282	100

Table 2. Distribution of respondents by their age.

Age	Frequency	Percentage (%)
15 to 20 years	162	57.4
21 to 25 years	55	20
26 to 30 years	30	10.6
31 to 35 years	20	7.1
36 and above	10	3.5
Missing value	5	1.8
Total	282	100

dominant environmental type of the library is social. The study investigated the personality types of professionals required of librarianship as an occupation and the environmental types of a library school. A total of 107 undergraduate Library Science students at Ahmadu Bello University, Zaria were used to complete the study. The results indicated that the dominant personality type of library science students was the enterprising personality, while the dominant environmental type was also found to be enterprising. The study recommended that leadership and management skills be emphasized in library education as library science students perceive themselves as leaders, supervisors and managers. Another study that is closely related to the present one is that of Agada (1998) entitled "Profiling librarians with the Myers-Briggs type indicator: studies in self selection and type stability". He found out that in their opinion, professional librarians should belong to the "Social type" of Holland"s typology of occupational group.

RESEARCH METHODOLOGY

The study utilized the survey research design to gather relevant data from the respondents. This technique is used for gathering information from a large sample population and was considered appropriate in sampling respondents' opinions on impacts of personality traits on career choice in the Department of Library and Information Technology, Federal University of Technology Minna. Survey design can also be used to efficiently investigate conditions and problems in realistic settings thus gathering accurate and adequate information on which to base sound assessment. Exploratory data screening tests and procedures were conducted prior to analysis.

To address the study objectives, multiple analyses of variance (MANOVA) were used to evaluate career factors inventory (CFI) subscale scores by participants' sex and major, and bi-variate correlations were computed to assess relationships between career decision-making variables (CFI scores), personality factors (NEO-FFI), and vocational personality variables (SDS). The population of this study comprises a sample size of 300 students randomly selected from students in levels 300, 400 and 500, respectively of the Department of Library and Information Technology, of the Federal University of Technology Minna. This selection was considered appropriate in the opinion of the researcher because, they were in the field of Library and Information Technology and ultimately is in the process of taking a career in which their personality is likely to affect this choice.

Presentation and analysis of data

The data were presented and analyzed based on the research questionnaire in the study. The researcher personally administered questionnaires to the respondents which consisted of both males and females. Table 1 to 12 provides an overview of the data collected and indicates the responses from respondents. The instrument for data collection was a researcher designed questionnaire tagged: Information Scientist personality traits survey questionnaire (ISPTSQ). The data generated from the study was analyzed using simple percentage and frequency counts.

Table 1 provides information about the sex distribution of the respondents who participated in the study. The table shows that a total number of 300 questionnaires were distributed, out of which 282(94%) were returned. 181 (64.2%) respondents were male, while 101(35.8%) were female. It reveals that there were more males respondents (64.2%) than females (35.8%). Nevertheless, the sex of a respondent is not a factor that could influence the personality trait of an individual.

Table 2 reveals that there were more respondents within the ages of 15 to 20 years (57.4%) followed by those within the ages of 21 to 25 years (19.5%), while the lowest age range falls between ages 36 and above (3.5%). This indicates that the majority of the Information Scientists who participated in this study were in a period between adolescence and adulthood in which individuals are committed to selecting and choosing a career.

Table 3 shows that majority of respondents 173 (61.4%) knows what personality traits means, at the same time, the ratio of those

Table 3. Do you know what a personality trait is?

Variable	Frequency	Percentage (%)
Yes	173	61.4
No	105	37.2
Not sure	4	1.4
Total	282	100

Table 4. If yes, do you think it has an effect on one's choice of career?

Variable	Frequency	Percentage (%)
Yes	137	79.2
No	19	10.9
Not sure	17	9.9
Total	173	100

that little or no knowledge of personality traits falls under 105 (37.2%) of the population under study. These shows that most respondents must have heard of the word but some still do not really know what it means and 4 (1.4%) not sure of it.

Table 4 reveals that the respondents considered their personality trait when selecting a career. It indicated that 137 (79.2%) of the respondents were certain of the impact personality trait can have on his or her career choice. A low percentage of 19 (10.9%) of the participants felt that one's personality did not affect their career choices. However, 17 (9.9%) were not sure if personality trait had an affect their career choices or not.

Table 5 shows that 191 (67.7%) of the respondents believe that an individual needs to go through a series of counseling before he or she goes on to choose a career while 53 (18.8%) stated that this was not necessary for such counseling before making a career choice decision while 38 (13.5%) were not sure of this at all.

Table 6 reveals that 117 (41.6%) of the populations are Library and Information Science students through the influence of friends around them, without having a full knowledge of what are the professional requirements or prospects entail. A proportion of 96 (34.0%) are in the department by personal choice, while 50 (17.7%) of the students are influenced into the department through their parent/guardians advice. It also shows that very little percentage of respondents 13 (4.6%) are in the department through counseling.

Table 7 reveals that most of the respondents 175 (62.1%) in the department would love to further their career in field of Library and Information Science thereby leaving 67 (23.7%) who will not and 40 (14.2%) of the proportion who are not sure and either way has other career choices.

Table 8 results established that 28.1% of the students are in the opinion, that as an Information Scientist you need to have an enterprising skill/traits which emphasizes on leadership and management followed closely by investigative skills which carry 26.6% of the population under study followed by social, conventional, technical and artistic skills which carries 17.7, 15.9, 7.4 and 4.2, respectively.

Table 9 indicates that majority of the respondents 184 (65.2%) are in the opinion that personality traits can lead to a good career choice and by implication job satisfaction while other respondents 88 (31.3%) do not share this opinion thus leaving a little percent 10 (3.5%) of the respondents without any decision.

Table 10 reveals that 139.5 (49.5%) of the respondents believe that identifying personality traits can bring about job satisfaction, 57 (20.2%) believes that it can open them to more understanding of

their career and 44 (15.7%) says it inspires and enables them to be more skillful while 39.7 (14.10%) indicated that provides a means to be rated better in terms of take-home pay.

Table 11 reveals that 108 (38.3%) of the respondents are of the opinion that majority of individuals chooses a particular career because it pays them better, while 103 (36.5%) says they love the career because everybody else loves the same profession and wants to be in that specific career, while 5 (1.7%) constitute respondents with other reasons.

Table 12 shows that 199 (70.6%) of the respondents are of the opinion that an individual needs to go through career counseling in order to choose an appropriate career while 58 (20.6%) do not see it as important, 24 (8.5%) are not sure and 1 (0.35%) constituted the missing value for this.

DISCUSSION OF FINDINGS

People's personalities obviously have an impact on many things that they do but how profound the effect of personality is on career success depends of course on the unique facets of an individual's personality. It also has a great impact on overall productivity in a social workplace. This study from the statistic obtained from the ISPTSQ analyses agrees with the fact that personality traits have functional value for individuals in solving problems and represent individual difference in the qualities or resources individuals can draw upon to solve adaptive problems and in this case, handling and processing of information. Cognitive ability however has been shown to be more positively correlated to actual task performance. Besides human capital variables (e.g., education and experience), personality traits can also shed light on the question of occupational choice. Our results could prove useful for both employers and employees as both sides have a natural interest in achieving the best and therefore most productive match between individuals and jobs.

The ISPTSQ results equally indicated that factors

Table 5. Do you consider career counseling as important process before embarking on a career choice?

Variable	Frequency	Percentage (%)
Yes	191	67.7
No	53	18.8
Not sure	38	13.5
Total	282	100

Table 6. Why did you choose to become a Library and Information Scientist?

Variable	Frequency	Percentage (%)
By personal choice	96	34.0
Through counseling	13	4.6
Through one's parent/Guardian influence	50	17.7
Through friends	117	41.6
Other	6	2.1
Total	282	100

Table 7. If you are given the opportunity, would you love to pursue one's present career to a higher level?

Variable	Frequency	Percentage (%)
Yes	175	62.1
No	67	23.7
Not sure	40	14.2
Total	282	100

Table 8. What kind of personality traits do you think an Information Scientist needs to possess?

Variables	Frequency	Percentage (%)
Artistic skills	12	4.2
Enterprising skills	79	28.1
Conventional skills	45	15.9
Investigative skills	75	26.6
Social skills	50	17.7
Technical skills	21	7.4
Total	282	100

Table 9. Do you think personality traits are related to success in career choices?

Variable	Frequency	Percentage (%)
Yes	184	65.2
No	88	31.3
Not sure	10	3.5
Total	282	100

Table 10. If yes, why?

Variables	Frequency	Percentage (%)
It brings about job satisfaction	91	49.5
It opens an individual understanding to the job	37	20.2
It enable an individual to be more skillful	29	15.7
It provide a better take-home pay	26	14.1
Others	1	0.5
Total	184	100

Table 11. Why do you think people choose a particular career?

Variables	Frequency	Percentage (%)
It pays better	108	38.3
Natural interest for the profession	42	15.0
Because it a profession of their role model	24	8.5
Because everybody loves the profession	103	36.5
Other reasons	5	1.7
Total	282	100

Table 12. Do you think is important for one to go through career counseling before choosing a career?

Variable	Frequency	Percentage (%)
Yes	199	70.6
No	58	20.6
Not sure	24	8.5
Missing value	1	0.35
Total	282	100

expressed relating to career choice were also essentially similar for male and female respondents, and nervousness was no more a mitigating factor than career information or self-knowledge for either sex. Difficulty in decision making was also of no greater or lesser importance than career information, self-knowledge, or the level of nervousness felt when faced with making a career decision for males or females. That personality trait of an Information Scientist falls within enterprising and investigating skills. These skills deal with leadership and management and the data also identify that Information Scientist see themselves first and foremost as mangers of people, information and information resources. The findings confirmed that male and female emerging adults have a similar need for career information and self-knowledge, and they also have similar levels of career choice anxiety and generalized indecisiveness on career decision-making factors. They reported to have chosen the profession through the influence of friends around them, without having a full knowledge of what is the professional requirements or

prospects entail and as such perception of the need to acquire specific information about or experience in various occupations before making a career decision was essentially the same for male and female respondents. Regardless of sex, both groups reported a need for greater self-understanding of career dimensions. In regards to making a career decision, self-understanding was considered equally as important as obtaining additional information about careers.

Nevertheless, the present study is interesting in that the results are indicative of multiple links between personality traits and both the job and career satisfaction of Information Science professionals - all of which warrant replication as well as further explanation of why and how these results occur. In part, the present results contravene traditional assumptions about Information Science work favoring introverts and individuals who prefer to work independently. That moderately substantial amounts of variance in job and career satisfaction can be accounted for by a small number of personality traits also sets a challenge for researchers who wish to show how

other factors such as pay, autonomy, responsibility and challenge can contribute uniquely to the prediction of job and career satisfaction above and beyond what can be accounted for by antecedent personality traits. However, undeclared majors as compared to those who had declared a major, significantly expressed more of a need to acquire specific information about or experience in various occupations before making a career decision.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The findings of this study are summarized as follows:

i. The study discovered that based on the Holland's six personality traits, enterprising skills are indeed a dominant skill set which affect choice of career of an Information Scientist,
ii. The study highlighted that personality traits of an Information Scientist mostly fall within enterprising and investigating skills. These skills deal with leadership and management. The studies also identify that Information Scientist see themselves first and foremost as managers of people, then information and information resources,
iii. It was discovered that the personal character of an individual could also enable an Information Scientist to achieve job satisfaction and open his understanding to himself and his desired career prospect,
iv. Lastly, the study established that Holland's theory on personality can indeed help to determine the enterprising skill of an Information Scientist.

Conclusion

Based on the findings of this study, the personality traits of an Information Scientist was determined, and was found to be enterprising, followed by investigative. The implication of these findings is that enterprising skills should be emphasized in the education and training of Information Scientists. By adding this information about personality to the usual human capital variables, however, more research is also needed in the field of job matching theories. Can the Big Five help us understand why individuals switch jobs, and can this knowledge be used to give young men and women advice as to which job would fit them?

From this fact, the study concludes that the impact of personality traits comes into place because if one is unwilling to perform the task and lacks conscientiousness, then the job will not get done regardless of potential ability. An emotionally stable person may rely on steadiness of nerves, inner resilience and the capacity to rally from setback which allows the person to focus on career demands without performance being impaired by anxiety, worrying, loss of energy and

etc. Moreover, a personality trait facilitates successful job performance and positive career outcomes and is thus related to career satisfaction.

Recommendations

Based on the findings of this study and the conclusion arrived at, the following recommendations are suggested:

a. Information Scientists in managerial positions should adopt the findings of this study by providing career development counseling. For instance, an Information Scientist whose personality traits are not in accordance with the reported findings of this study should be appropriately counselled.
b. Organizations and individuals can use these personality traits as guidance for corporate ladder success.
c. Similar study should also be conducted in other departments of the FUT, Minna to ascertain students' personality traits.

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