The Impact of Personality Type on Undergraduate College Student Success at Oklahoma State University

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THE IMPACT OF PERSONALITY TYPE ON UNDERGRADUATE COLLEGE
STUDENT SUCCESS AT OKLAHOMA STATE UNIVERSITY
THE IMPACT OF PERSONALITY TYPE ON UNDERGRADUATE COLLEGE
STUDENT SUCCESS AT OKLAHOMA STATE UNIVERSITY

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education

By

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ABSTRACT

The purpose of this descriptive/causal-comparative study was to determine if relationships existed between individual personality types as determined by the Do What You Are (DWYA) on-line personality inventory and gender, ethnicity, area of academic study, entering and exiting grade point averages (GPA), and time to degree completion of undergraduate students at the case study institution.

Data were collected over a six year period by the institution’s career development center. The student respondents were undergraduates and were self-selected to take the inventory. The sample included 2,533 undergraduate students surveyed between 2003 and 2007.

Statistical analysis utilized scores on the four continuous dimension scales on the personality inventory and other student demographic variables. Student scores on the DWYA served as the chief independent or predictor variable for all of the outcome variables.

The first and second research questions examined the descriptive information of the majority types in each of the academic areas. The third and fourth questions examined the relationship between personality type and undergraduate grade point averages of the respondents. The fifth question examined the relationship between personality type and the student’s academic status (continuing, dropped, or graduated). The sixth question sought to find a correlation between personality type and the time to degree obtainment.

The four-way factorial ANOVA found one significant main effect interaction between the judging / perceiving dimension scale where judging types had a significantly higher mean GPA than perceiving types. ANOVA also discovered a significant two-way
interaction between mean GPA's of the respondents and the extroversion/introversion scale and the thinking/feeling scale. Introverted thinkers had a higher mean GPA than extroverted thinkers. The Chi square statistic was found to be significant for feeling perceiving (FP) personality types (ENFP, ESFP, INFP, ISFP) and the dropout status.
ACKNOWLEDGEMENTS

Having been both a student and a teacher for many years, I particularly appreciate great teachers. The members of my committee have shown by example what great teachers do everyday. My special thanks to Dr. Michael T. Miller for his encouragement and support. He kept me on track when times were difficult. His expertise, patience, and support are renowned among graduate students in his department. In spite of long distance communications; he has been generous with his time and talents.

My greatest support has been my husband Kim Ehlers. I thank him for listening, sacrificing, driving me to Fayetteville on many long evening trips, and for his love. I also thank my only son Chase Ehlers. It's not easy being a college student along with your mother.

My dissertation committee has been invaluable. Dr. Jenny Miles, Dr. Daniel Kissinger and Dr. Carl Holt have been very supportive and I appreciate their efforts in reading my manuscript and making suggestions.

Martin Rutte stated, “You have to do it by yourself, and you can’t do it alone.” I owe thanks to many of my colleagues along my career journey. I thank Dr. Jim AuBuchon, Pittsburg State University Vice President for University Advancement (retired) for his encouragement to enroll in a doctoral program, PSU President Tom Bryant for his support and encouragement to attend the University of Arkansas, and Dr. Lee Bird, Oklahoma State University Vice President for Student Affairs, for her encouragement and support during the last phase of my program. And finally, I want to thank all the wonderful colleagues in Career Services and higher education at OSU and PSU that supported, advised, and guided me through the process.
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CHAPTER I

INTRODUCTION

Introduction to the Study

College student retention and graduation are among the most dominant issues facing higher education institutions. Barely half of all four-year college students (51.8%) graduate within five years of their entry into higher education (American College Testing Services [ACT], 2007), and this downward trend has continued to prompt many institutions to explore mechanisms and tools that will help them increase retention and graduation rates. Institutions have implemented a variety of transitional programs to help students become acquainted with their new surroundings, they have structured student success courses designed to teach study and social skills, and institutions have employed a host of early warning signs that might signal when a student is at risk of not continuing (Dougherty, Reid, & Nienhusser, 2006).

Fremont (1998), for example, studied the relationship between personality type and dropout proneness, predicted academic difficulty, educational stress, receptivity to institutional help, and persistence when persistence is measured by the completion of the first two semesters by college freshmen and their registration for the second year, and found direct relationships. Similarly, Stewart (2002) linked personality type to student success in achieving a degree in engineering at Auburn University.

Many institutions have also begun to explore the personal characteristics of their students, especially those characteristics of students who are successful at completing their degree in a timely manner and with high levels of academic achievement (Korth, 2004). One specific characteristic that has been alluded to is the disposition of the
student’s personality, and whether the student’s tendency to be externally or internally focused, among other dispositions, has any relationship to student persistence. The current study was fashioned to explore personality characteristics, as measured by one prominent inventory, to degree selection, completion, and achievement. Although there is a number of personality profiling protocols, the current study made use of the Do What You Are (DWYA) program, an inventory based on the Myers-Briggs type indicator (MBTI) and developed in 1997. The program has been used on many campuses to help identify personality preferences that correlate with specific fields of work and study, and is frequently used in career development centers to help students begin to think about occupational choices and academic majors (Tieger, & Barron-Tieger, 1993). Like the MBTI, the DWYA uses the four dimensions of type developed by Isabel Briggs Myers and is based on the personality theory of Carl Jung.

Knowledge of personality type as it relates to academic persistence and graduation may be useful to higher education professionals for a number reasons and in a number of ways. If students with certain personality preferences find it difficult to persist in certain academic disciplines, then perhaps specifically tailored programming could be developed as an intervention to help students succeed (Miller, 2007a).

The DWYA program differs from other personality inventories in several important ways. Perhaps most notable is that other programs are based on the belief that the best career decisions result from matching students’ values, skills, and interests with specific jobs. However, all three of these elements can be fluid in college-aged students, and can change often as they mature. The DWYA was designed and based on personality type, the innate way people naturally see the world and make decisions, a set of basic
drives and motivations that remain constant throughout a person’s life, and may shift subtly, but do not change radically, thus allowing for a more accurate matching of interests and personality (Miller, 2007b).

**Personality Testing**

The DWYA profile is built on the Myers-Briggs Type Indicator with four dimensions of type (Extraversion/Introversion, E/I, Sensing/Intuition, S/N, Thinking/Feeling, T/F, and Judging/Perception, J/P) and a resulting 16 combinations or types. This inventory and resulting classifications scheme represents the lifelong work of Isabel Briggs Myers, and was published in 1962 by the Educational Testing Service with Katherine Briggs. The two developed the classification inventory over a 20 year period, and it was not widely utilized or well received until the mid-1970s when the Consulting Psychologists Press assumed responsibility for its publication. Lawrence (1984) noted that the MBTI was especially relevant in bringing Jungian’s theory of type into practical application, and that it was very well received by the scientific and popular communities.

Jessup (2002) wrote that by definition, an individual tends to prefer one pole for each of the four dimensions to the other pole, and the intent is to sort individuals into types, rather than to measure traits. Jung and Myers believed that type did not change, although the self-report of it might change, as individuals focus on developing different mental processes at various stages in life. Preferences are viewed as inborn, but one’s environment at any point throughout life can change, supporting or negating one’s preference.

In 1997 the Do What You Are inventory was developed based on the MBTI classification, correlating specific personality tendencies that do not change over time,
with occupational and discipline related observations. These observations correlated personality characteristics with the characteristics of individuals in specific fields and occupations, therefore allowing for students at any age level to more accurately note and consider personality in regard to occupation. The instrument has become a common element in many college career development centers, but has not been linked to academic performance or used to begin to predict college success, and these are the issues that are central to the current study.

Purpose of the Study

The purpose for conducting the study was to describe personality types as predictors of collegiate success at one mid-western research university. Using a case study institution, Oklahoma State University, data were collected over a six year period by the institution’s career development center. The center housed DWYA data that were extracted for students who met certain criteria and drew additional data from the institution’s office of institutional research, including time to degree completion, academic grade point average, and selected demographic variables.

Personality type referred to a system for understanding human behavior. It is based upon the belief that there are 16 distinctly different personality types, and every person has one type that most accurately describes him or her (Miller, 2007b). Research has revealed that extraverts find it more appealing to work actively with objects or other people. Introverts are more intrigued by work that involves ideas and in which much of their activity takes place inside their heads. Although everyone lives partly in the extravert’s world of people and things and partly in the introvert’s world of concepts and
ideas, most people are consciously more at home in one of those worlds and do their best work in the preferred environments (Alig, 1994).

The model of personality type is non-judgmental. There are no better or worse, healthier or sicker types. Each type has its own inherent strengths and potential weaknesses. Personality Type does not predict intelligence; rather it identifies important natural pre-dispositions and tendencies (Miller, 2007b). Practical outcomes of the study include a better understanding of the types of students that persist with their coursework and/or graduate from Oklahoma State University. Such knowledge is useful for the development and improvement of new or current student affairs programming.

Research Questions

1. What were the majority of personality types of college students at one case study university in the mid-west as measured and reported by the Do What You Are personality inventory?

2. What were the personality types, as measured by the Do What You Are personality inventory based on academic major area?

3. Did certain personality types, as measured by the Do What You Are personality inventory, have higher grade point averages than other personality types?

4. What were the entering and exiting grade point averages of college students by personality type as measured by the Do What You Are personality inventory?

5. What personality types persisted and/or graduated from the university and what types dropped out or exited the university prior to graduation?

6. To what extent was there a correlation between personality type, as measured by the Do What You Are personality inventory, and time to degree obtainment?
Definition of Terms

The following terms were defined to give the reader an understanding of the variables employed in the study.

Extraversion: describes how someone lives in the world outside around themselves; these individuals focus their attention and energy on the world outside of themselves. They seek other people and enjoy frequent interaction, whether one-on-one or in groups. They are constantly and naturally pulled to the outer world of people and things (Tieger, & Barron-Tieger, 1995).

Defectors: students that took the DWYA assessment who are no longer enrolled in classes and who did not graduate from Oklahoma State University. At other universities these students might be called ‘stop-outs’ or ‘drop-outs.’

Dimensions: the aspects of human personality are called dimensions because each one can be placed as a continuum between opposite extremes (Tieger, & Barron-Tieger, 1995).

Figure 1

Personality Dimensions

(E) Extraversion-------------I-----------------Introversion (I)
(S) Sensing-----------------I-----------------iNtuition (N)
(T) Thinking---------------I-----------------Feeling (F)
(J) Judging---------------I-----------------Perceiving (P)

Tieger, P. D. & Barron-Tieger, B., 1995
Feeling: is a term for a process of appreciation, making judgments in terms of a system of subjective, personal values. Feeling types (F) use thinking and feeling but prefer to reach judgments through feeling (Lawrence, 1984).

Function: describes two of the bipolar scales of the Myers Briggs Type Indicator (MBTI) and the DWYA. One scale relates to perception and information gathering (sensing and intuition); the other scale pertains to the subsequent judging process of coming to conclusion (thinking and feeling). Knowledge of the four functions, a small part of the results provided by the assessment, yields several applications in integrating type with organizational change (Jessup, 2002).

Graduates: students that took the DWYA assessment prior to graduation from a degree program who persisted and received an undergraduate degree from Oklahoma State University.

Introversion: describes how someone lives in the world inside themselves. Introverts focus their attention and energy on the world inside of themselves and enjoy spending time alone and feel that this type of time spent is a necessity to their mental well-being. Introverts try to understand the world before they experience it, which means they spend significant time in mental, thoughtful processing (Tieger, & Barron-Tieger, 1995).

Intuition: is the term used for perception of meanings, relationships and possibilities by way of insight. Intuitive types (N) are sensing and intuition, but prefer and therefore develop intuition. With good type development, intuition provides insight into complexity, an ability to see abstract, symbolic and theoretical relationships, and a capacity to see future possibilities, often creative ones (Lawrence, 1984).
**Judgment:** people who prefer to use their Judging process in the outer world tend to live in a planned, orderly way, wanting to regulate and control life. They make decisions, come to closure, and move on. Their lifestyle is structured and organized, and they like to have things settled. Sticking to a plan and schedule is very important to them, and they enjoy their ability to get things done (Myers, 1993).

**Perception:** people who prefer to use their Perceiving process in the outer world tend to live in a flexible, spontaneous way, seeking to experience and understand life, rather than control it. Plans and decisions feel confining to them; they prefer to stay open to experience and last-minute options. They enjoy and trust their resourcefulness and ability to adapt to the demands of a situation (Myers, 1993).

**Persisters:** students who took the DWYA assessment and who are currently enrolled in an undergraduate degree program beyond the semester the assessment was taken at Oklahoma State University.

**Personality:** is typically defined as the sum total of an individual’s beliefs, perceptions, emotions, and attitudes and may be related to behavior aspects of an individual as well (Isaacson, & Brown, 2000).

**Personality Type:** Four letter designations that describe preferences on each pole of the four indices of the MBTI (and the DWYA): (E) Extraversion or (I) Introversion, (S) Sensing or (N) Intuition, (T) Thinking or (F) Feeling, and (J) Judging or (P) Perceiving. The four indices yield 16 possible combinations called personality types (e.g., ESTJ, INFP) (Myers, 1993).
Preferences: an individual’s personality falls onto one side of the midpoint or the other on each of the four personality scales developed and reported in the MBTI. The opposite ends of the scales are called preferences (Tieger, & Barron-Tieger, 1995).

Sensing: is the term that is used for perception of the observable by way of the senses. Sensing types (S) are attracted to careers and settings where skillful application of well-learned knowledge is more important than developing new solutions; where working with tangibles is more important than using theory and insight; and where dealing with the immediate situation and using conventional wisdom is more important than making bold new breakthroughs (Lawrence, 1984).

Thinking: is a term used to define a logical decision-making process, aimed at an impersonal finding. Thinking types (T) use both thinking and feeling but prefer to use thinking for making judgments (Lawrence, 1984).

Limitations

The study accepted the following limitations:

1. The study was conducted at one, mid-western case study university. Study findings might be very different at other institutions and at different types of institutions, such as regional, non-research focused universities, community colleges, and private liberal arts colleges.

2. The study made use of the Do What You Are personality inventory. There are a variety of personality assessment inventories that are related to occupational preferences, and their use might have produced different results.

3. The study was limited to data collected in the early- and mid-2000s. Students of this collegiate generation might have had unique characteristics, particularly in
the mid-west, that are not found at other points of time or in other geographic locations.

4. The data were collected as part of the Career Services Center at the case study institution. The voluntary participation might have resulted in certain types of students making use of the Career Center or voluntarily using the Do What You Are inventory.

5. The study was limited to the academic majors at the case study institution. Other institutions might have broader representations of academic interests, or more limited or focused interests, and study results should be generalized with caution at these institutions.

Assumptions

The study accepted the following assumptions:

1. That personality types can accurately be assessed and reported based on the taxonomy developed and reported in the Myers-Briggs Type Indicator.

2. That college students can accurately have a sense of self that allows them to be thoughtful and reflective in completing a self-report inventory on personality assessment.

3. That the Do What You Are inventory is accurately correlated with the Myers-Briggs Type Indicator.

4. That personality type and occupational sense of awareness can be correlated, reported, and linked to retention and academic performance.
Significance of the Study

Research revealed that there are no studies that look at the impact of personality type on academic success for students who defect or drop out of college, persist or graduate from college. There is a need for a study using personality preferences as indicated in the Do What You Are program to determine the relationship with persistence or graduation of students so as to alert interveners early in the students' academic career in order to exert a positive influence on student's persistence in college.

Practically speaking, students need to be made aware not only that work is important in their lives but also that ideally it should add fulfillment and meaning (in addition to salary, security, prestige, and status) to their lives. If students search for career fulfillment by seeking work that matches well with their own personality characteristics, then perhaps they will make better career choices (Antony, 1998). Awareness of personality preferences also serves to strengthen instructional procedures by assisting teachers in their knowledge of their students' individual differences and can help the practitioner find a rationale for predicting some, but certainly not all, important behaviors (Alig, 1994).

Study findings will be of particular interest to college administrators in all areas, especially student affairs and enrollment management, as they seek creative and effective ways to keep students enrolled in college. Further, study findings hold tremendous relevance to those working in career planning and service programs who want to help students find the best-fit academic majors and career choices possible. This subsequently has relevance to those who are concerned with collegiate experience satisfaction.
CHAPTER II
REVIEW OF RELATED LITERATURE

College student retention is an increasingly important consideration for those concerned with higher education and larger social issues. The ability to correlate variables, such as the alignment of academic major with the personality preferences of those working in those disciplines is an important consideration and the topic of the current study. The current chapter was designed to describe existing literature related to the broad areas of personality. Terms including the following were used to identify relevant literature using a variety of data bases made available through the University of Arkansas and Oklahoma State Universities libraries: personality, personality type, personality traits, psychological tests, the Myers-Briggs Type Indicator, personality measures, career assessment, educational evaluation, academic performance, learning preferences, educational psychology, counseling, occupational psychology, academic guidance counseling, adult education, adult development, continuing education, school administration, vocational guidance, advancement, graduation, and higher education.

For the purpose of clarity, the current chapter was divided into primary sections, the first of which focused on the issue of personality theory and its related constructs. The second section focused on the interrelationship between personality and academic success and progress, including occupational choice, race, and persistence. The chapter was concluded with a chapter summary.

Overview of Personality Theory

The Swiss physician-psychologist Carl Gustav Jung developed one of the most comprehensive current theories to explain human personality. Where other observers saw
people’s behavior as random, Jung saw patterns. What he called “psychological types” (Lawrence, 1984, p. 7) were patterns in the way people preferred to perceive and make judgments (Lawrence, 1984). Jung, an eclectic psychoanalyst and disciple of Sigmund Freud, realized that behavior that seemed unpredictable could be anticipated if the underlying mental functions and attitudes of an individual were understood (Tieger, & Barron-Tieger, 1995).

Jung’s conceptions about human nature described individuals in terms of types. He developed his typology to find “some kind of order among the chaotic multiplicity of points of view” (Jessup, 2002, p. 502). He strongly believed that choices were determined by the individual’s preferences, and he explored the orientatons of extraversion and introversion and the mental functions of thinking, feeling, intuition, and sensing. Attitudes were similarly explored in terms of judging and perception (Alig, 1994).

In Jung’s theory, all conscious mental activity could be classified into four mental process, two perception processes, sensing and intuition, and two judgment processes, thinking and feeling (Lawrence, 1984). This theory held that learning and finding things out were polarized around sensing and intuition, and opposite ways of deciding were stratified by thinking and feeling (Myers, & McCaulley, 1985). This means that data, information, and material that come into an individual’s consciousness, moment by moment, comes either through the senses or through intuition. To remain in consciousness, perceptions must be used, and they sorted, weighed, analyzed, and evaluated by the judgment processes, thinking and feeling (Lawrence, 2000).

To understand Jung’s theory, it is essential to appreciate the uses of the terms perception and judgment (Peterson, & Gonzalez, 2005). Those with a disposition to judge
(relying on a judging process, whether thinking or feeling), live in a planned decided, orderly way, wanting to regulate life and control it. Those who perceive (relying on a perceptive process, through sensing or intuition) live in a flexible, spontaneous way, wanting to understand life and adapt to it (Lawrence, 2000). Perception includes the many ways of becoming aware of things, people, events, or ideas, and includes information gathering, the seeking of sensation or of inspiration, and the selection of the stimulus to be attended to. Judgment includes all the ways of coming to conclusions about what has been perceived, and it includes decision-making, evaluation, choice, and the selections of the response after perceiving the stimulus (Peterson, & Gonzalez, 2005). The core idea is that when a mind is active, it is involved in one of two mental activities: taking in information, e.g., perceiving; or organizing that information and coming to conclusions, e.g., judging. Jung observed that there are two opposite ways to perceive, which he called sensing and intuition, and two opposite ways to judge that he termed thinking and feeling (Myers, 1993).

These four essential processes are used daily in both the external world and the internal world. Jung called the external world of people, things, and experience extraversion and the internal world of inner processes and reflections introversion. These four basic processes used in both the external and internal world provided eight ways of using the mind (Myers, 1993).

In the early 20th century Katharine Briggs undertook the development of a typology instrument that furthered Jung’s theoretical formulation of psychological types. This work originated because of her desire to understand the young man that her only daughter, Isabel, had brought home from college who was unlike anyone in her family.
During the 1940s, Brigg’s work was continued by her daughter, largely because Isabel desired to make sense of the conflict of the Second World War. Isabel desired a means for people to understand rather than destroy one another (Jessup, 2002).

As Jung conducted his work, Briggs, who had been intrigued with similarities and differences between human personalities, began to develop her own system for classifying or typing people. In 1921, Jung’s theory of personality was published as *Psychological Types*. When Briggs read the English translation published in 1923, she realized that Jung had already identified what she had been looking for, so she adopted his model and began a serious study of his work. She interested her daughter Isabel in her pursuit (Tieger, & Barron-Tieger, 1995), and the most popular instrument for the measurement of Jungian personality was developed by mother and daughter, Myers and Briggs (Arnau, Thompson, & Rosen, 1999).

Isabel Briggs Myers believed that many problems might be addressed more successfully if approached in the light of Jung’s psychology types. She maintained that much seemingly chance variation in human behavior is the logical result of a few basic and observable distinctions in mental functions. These dissimilarities concern preferences, specifically the way a person perceives and makes judgments (Alig, 1994).

As someone uses preferences in each of these areas they tend to develop behaviors and attitudes characteristic of other people with those preferences. There is not right or wrong to these preferences, as they simply produce different kinds of people, interested in different things, drawn to different fields (Myers, 1993). Type preferences are not traits, or even clusters of traits. They are preferred ways of being in the world, different mind-sets, different ways of experiencing life’s daily events and processing...
experiences (Lawrence, 2000). People with different preferences tend to be opposite in many ways, and each type has its own inherent strengths, as well as likely disadvantages (Myers, 1993).

Structural Model of Personality Assessment

The MBTI differs from typical trait approaches to personality that measure variation or strength of traits along a continuum. The MBTI test focuses instead on sorting respondents into one or the other of the four theoretical bipolar categories, and where measurement of the strength of preferences is subordinate to sorting into true type categories (Jessup, 2002). The ‘Type’ system of personality assessment has been based on four basic aspects of human personality: how someone interacts with the world and where energy is directed; the kind of information naturally noticed (taking in information); how decisions are made (making decisions); and whether one prefers to live in a more structured way or in a more spontaneous way (how we prefer to interact).

Aspects of human personality are called ‘dimensions’ because each one can be pictured as a continuum between opposite extremes (Tieger, & Barron-Tieger, 1995).
According to Jung, each human has a preference or preferred way of acting and reacting in one of the four mental processes (Sensing, Intuition, Thinking, or Feeling) and in one attitude (Extroversion or Introversion). These natural preferences make up the primary description of type. Jung believed that people are born with a disposition for one type over another, but that environmental factors are still important as they can foster (or dissuade) type development (Lawrence, 1984).

Orientations labeled Extraversion and Introversion (E and I) are found in individuals who are located on a scale between the breadth-of-knowledge approach with quick action and more depth-of-knowledge, or reflective action. Persons preferring the extraverted attitude give weight to events in the world around them. Those of an introverted attitude seek engagement with their inner world and give weight to concepts and ideas to understand events (Alig, 1994). Extrovert’s interest turns mostly outward to the world of action, people and things. Introvert’s interest turns more often to the inner
world of ideas and private things. Everyone turns outward to act and inward to reflect; all individuals must do both, but, some are more comfortable doing one or the other (Lawrence, 1984).

The Jungian idea of information gathering by individuals is shown in the Do What You Are (DWYA) scale as Sensing and Intuition (S and N). Some people find it more comfortable to view events in a practical, concrete manner, finding interest in what is real, immediate, practical, and observable by the senses, known as the Sensing type. Others prefer to view occurrences by complex interactions, theoretical implications, or new possibilities, known as Intuitive types. When using intuitive perception, persons are interested in future possibilities and implicit meanings (Alig, 1994). Sensors give more attention to facts that come from personal experiences, and sensing people can more easily observe details. Intuitive (N) types, conversely, can more observe broad categories and inter-relationships, and give the most attention to not immediately observable when looking at the face-value of facts (Lawrence, 1984).

The two styles of decision making or judgment are called Thinking and Feeling (T and F). Individuals range from drawing conclusions or making judgments objectively to weighing human, subjective factors, and making judgments with personal conviction based on their value. People, who prefer to use thinking judgment, rationally decide through a process of logical analysis. Those who prefer to use feeling judgment rationally decide by weighing such values as warmth, understanding, or desire for harmony. They are often known as ‘people persons’ (Alig, 1994). Thinking types make decisions by examining data and staying impersonal. Feeling types make decisions by paying attention to personal values and feelings (Lawrence, 1984).
The fourth basic scale of attitudes is known as Judging and Perceptive (J and P). Judging attitudes are displayed by people who prefer to collect only enough data to make a decision before setting on a direct path. People who prefer the judging orientation enjoy moving quickly toward decisions and enjoy organizing, planning, and structuring. Typically, these individuals stay on that path, while others, those with perceptive attitudes, tend to adapt better to changing situations. Individuals holding perceptive attitudes are alert to developments which may require a change of strategy, or even a change of goals. These persons tend to be curious and open to changes, preferring to keep options open in case something better comes along (Alig, 1994). Judging types show others their thinking or feeling judgment more easily than they show their sensing and intuitive perception. The opposite is true for Perceiving types; they show their sensing or intuition rather than judgment in dealing with the world outside themselves.

The MBTI provides a vehicle for identifying and measuring eight mental or psychological preferences for living or performing certain tasks, as outlined by Hirsh and Kummerrow (1992)

There are two ways a person can be energized. Extroversion is the preference that relates to drawing energy from outside oneself in the external world or peers, activities, and things. Introversion is the preference that relates to drawing energy from one’s inner world of ideas, emotions, and impressions. The two preferences for attending are Sensing and intuition. Sensing relates to the preference for paying attention to information that is perceived directly through the five senses and for focusing on what actually exists. Intuition refers to the preferences for paying attention to information that is taken in through a “sixth sense” and for noticing what might or could be, rather than what actually exists. The deciding preferences are Thinking and Feeling. Thinking is the preference that relates to organizing and structuring information to decide in a logical and objective way. Feeling is related to the preference for organizing and structuring information to decide in a personal, value-oriented way. Judgment and perception are the two preferences that relate to how one likes to live one’s life. Judgment is the preference that relates to living a planned and organized life. Perception refers to the preference for living in a more spontaneous and flexible way. (pp. 5-6)
According to the structure of the MBTI, everyone's personality falls onto one side of the midpoint or the other in each of the four scales. The opposite ends of the scales are called preferences. If an individual scores closer to the extraverted side, then they are said to have a preference for Extraversion. If one scores closer to the introverted side, the preference is for introversion (Tieger, & Barron-Tieger, 1995).

Jessup (2002) wrote that one of the four functions is dominant within an individual profile, revealing the individual’s favored process; the dominant function leads and the second preferred function (known as the auxiliary) helps out. Individuals enjoy using their dominant function, becoming experienced and developed in its use. Because of the polarity inherent in each dichotomy and the need for balance, the “helping” auxiliary is always formed in the dichotomy that the dominant is not in. For example, if the dominant process is a judging one (i.e. T or F), the auxiliary will be perceptive (i.e. S or N), as either sensing or intuition can supply sound material for judgment. If the dominant process is perceiving, the judging functions of thinking or feeling “give continuity of aim”. Consequently, the dominant and auxiliary functions allow perception and judgment to complement one another. Although Jung specified the role of the auxiliary, he showed the dominant and auxiliary processes only, with a sharp emphasis on extroverted and introverted forms, and he provided eight descriptions of theoretically pure types. Myers clarified that the dominant and auxiliary processes are used differently by introverts and extroverts, with the dominant function being used in the preferred world (for extroverts the preferred world is the outer, for introverts the preferred world is the inner). For extroverts, their dominant process is visible to the outside world; for introverts their dominant process is saved for the inner world. Accordingly, introverts are more likely underestimated in casual contact situations as they are exhibiting primarily their auxiliary function. Myers split each of Jung’s eight types into two, which yielded 16 types: instead of Jung’s introverted thinker, she proposed an introverted thinker with sensing and an introverted thinker with feeling. The auxiliary function provides the necessary balance enabling the individual to adapt to both inner and outer worlds. The two remaining functions are referred to as tertiary and inferior functions. (pp. 505-506)
Identifying Weaknesses in Personality Type

Jessup (2002) also wrote that Jung used the term shadow as an archetype that covered more than the inferior function, although he directly addressed the inferior function as the “Achilles' heel of even the most heroic consciousness” (p. 506). The inferior function is the least used and trusted of the functions; it is largely unconscious, and is triggered by fatigue, illness, stress, and alcohol or mind-altering drugs. Each type has a different experience of stress: often stress is associated with lack of balance related to the overuse of the dominant preference (for example a dominant intuitive type so engrossed with possibilities to the detriment of handling their physical needs associated with their inferior sensing function). Because it is not developed, when the inferior function appears, it is typically immature or childish, and is reported to appear in important transitional periods in life, such as graduation or changes in marital status (Myers, & Myers, 1980).

The inferior function is attached to an individual’s less preferred attitude; i.e. for introverts, the inferior function is extroverted and vice versa. The inferior function is sometimes referred to as a blind spot for an individual, as the individual is unconscious of being under its influence. When this inferior function is coupled with the activation of the less preferred attitude, and individual can encounter any number of challenges, particularly impaired or irrational decision-making (Quenk, 1996). Being aware of the dominant and inferior mental process is especially important when working with students or employees whose types are different (Lawrence, 2000). Although the experience of being primarily influenced by the inferior function can be uncomfortable, it aids the psyche in achieving self-regulation; Jung saw it as a link to unconscious knowledge.
providing transformative capability (Quenk, 1996). Because the inferior function stays almost hidden from consciousness, it is hard to understand (Lawrence, 2000). People do not typically understand their personal or others' inferior function episodes, and the alarm associated with the strangeness can force reexamination of the self in an attempt to return to equilibrium. The influence of inferior function episode can range from minutes to weeks, but when it has run its course, a process of self-regulation utilizes the other functions in attempting to achieve balance (Quenk, 1993). By acknowledging personal innate weak points, a person can avoid the types of circumstances or the kind of work that regularly places them at the mercy of their lesser functions (Tieger, & Barron-Tieger, 1995). As individuals mature and learn from such powerful experiences, they are more likely in daily life to strive for balance in all functions (Quenk, 1993).

Kennedy and Kennedy (2004) wrote

Knowledge obtained from MBTI research provides a type of empowerment in that individuals can (a) achieve insight into their sources of energy, information gathering, decision making, and personal lifestyle or orientation; (b) strengthen interpersonal relationships based on an objective view of individuals' underlying rationales for their reactions to highly charged emotional issues; (c) gain opportunity to consider different ways of meeting objectives; and (d) find encouragement toward more constructive and complementary uses of their preferences and differences. (p. 39)

Type theory helps people discover what best motivates and energizes them as individuals, and this in turn empowers them to seek these elements in the work they choose to do and in the relationships they seek to have (Tieger, & Barron-Tieger, 1995). In terms of distribution of type preferences in the US population, research has indicated that in adults, introverts slightly outnumber extraverts. About 68% of the population prefers sensing; about 58% prefers thinking; and 58% prefers judging. However, the T-F
continuum is influenced by gender, with about 68% of men preferring thinking and 61% of women preferring feeling (Opt, & Loffredo, 2000).

Many things go into the makeup of a personality, including genetics, family life, life circumstances outside the family, society’s expectations and requirements, and learned traits; psychological type is just one aspect of personality (Lawrence, 2000). Each four-letter type represents a unique and positive personality style. As a person cannot use both poles of a pair at the same time (such as turning outward in Extraversion and turning inward in Introversion), an assessment such as the MBTI scale can suggest which pole is naturally preferred (Grutter, & Kummerow, 2003).

Having a preference does not mean that one uses the preferred pole exclusively. In healthy functioning, one has access to all eight poles and can consciously choose to override a natural preference, should the situation require it. For example, writing may require the use of introversion to focus inward and put ideas on paper. Extraverts have to suspend their natural desire to talk things through with others when they are writing; thus they are using Introversion even when it is not their preference (Grutter, & Kummerow, 2003). Jung, along with Myers, viewed type development as a life-long process. During youth, dominant and auxiliary processes are developed naturally. As individuals mature, they may begin to explore and develop lesser preferred processes (Opt, & Loffredo, 2000).

The Myers-Briggs Type Indicator and related measures have brought Jung’s typology to a high level of practical application. Each of the measures has its own idiosyncratic characteristics, and Jungian measures have proven to be popular in a variety of counseling situations (Arnau, Thompson, & Rosen, 1999). Personality research is not
an exact science, but the theories do attempt to explain a myriad of complex behaviors that occur within a variety of equally complex situations (Schurr, & Ruble, 1986).

**Personality Type and Career Choice**

Jessup (2002) found that individuals typically self-select occupations that correspond with their psychological types. Type was not found to have a relationship with competence or capability in a chosen career path, but, it was found to be useful in examining career interest tendencies (Jessup, 2002). Tieger and Barron-Tieger (1995) argued that individuals should correlate their personality dispositions with work expectations, basically suggesting that individuals operate from a position of strength while at work, thus allowing them to rely on their skills and preferences that are most natural, and subsequently can lead to the greatest success.

College students and administrators have a need to understand that type preferences can have an effect on career choice and learning. Type should not be used to exclude career choices, but rather, can provide a non-threatening language for exploring how individuals differ from others in their chosen fields (Kennedy, & Kennedy, 2004).

Although it is generally considered inappropriate and unethical to use personality assessment results for hiring or for promotion, type theory does have job design implications. Individuals with increased awareness of preferences may choose to restructure schedules, tasks, methods of communication, and work interactions in meaningful ways. For example, if an introverted individual has an upcoming speech before a large audience, the individual knows in advance the energy this will take and can plan accordingly (Jessup, 2002).
Many personality tests have been used for career counseling purposes, attempting to help individuals align their personality with types of tasks and expectations of different careers and career types. MBTI career research has covered a variety of areas, including questions about personality type in choice of careers, choice of specialties, career satisfaction, and career success (McCaulley, & Martin, 1995). An understanding of personality type can provide confidence for an individual in making career choices, and can help to identify the areas in which an individual might have a tendency to do better. Finding a proper level of calibration between an individual’s ability and preferences and occupational challenges can also reduce the guilt an individual might feel at not being able to do everything in life equally well (Kennedy, & Kennedy, 2004). The advantages to knowing one’s natural strengths include allowing individuals to seek situations that allow personality to be used to its fullest advantage (Tieger, & Barron-Tieger, 1995) and opening the possibility of finding constructive values instead of conflicts in the differences that might be encountered with someone with different preferences (Kennedy, & Kennedy, 2004).

Jung and the MBTI made reference to the first half of an individual’s life as specializing in the dominant and auxiliary functions, referred to at different times in the career development literature as identity formation, exploration, commitment, career entry and progression, and identifying career congruence (Grutter, & Kummerow, 2003). In this developmental stage, an individual’s greatest strengths are reflected in their dominant and auxiliary functions (Tieger, & Barron-Tieger, 1995). In the second half of life, individual’s tend to generalize Jung beyond the core functions to the other side of
their type, incorporating tertiary and least preferred functions for career refinement and career/life enrichment (Grutter, & Kummerow, 2003).

Personality Type and Academic Success

Tinto (2006) found that student retention is one of the most widely studied areas in higher education, but substantial gains in student retention have been limited. Though some institutions have been able to make substantial improvements in the rate at which their students graduate, many have not. Indeed, the national rate of student persistence and graduation has shown little change over the past decade. Persistence during the first year and the first semester in particular have been found to be important to scholars and practitioners as approximately three-fourths of all dropouts leave at some time during the first year (Tinto, 1988). Elkins, Braxton, and James (2000) wrote that a student’s sense of congruence with the social system of a college or university may be dependent upon the successful passage through the stages of separation, transition, and incorporation. Holland noted that congruence is supposed to reflect the degree to which an individual’s personal qualities match environmental demands (Osipow, & Fitzgerald, 1996).

Jung argued that two basic differences exist among humans in how they prefer to use their minds and how their core personality develops (Opt, & Loffredo, 2003). Strengths and weaknesses in people, as shown by type theory, come in patterns. By analyzing students in terms of type concepts, an individual can gain insights into personal strengths and weaknesses and get clues for planning ways to help students develop (Lawrence, 1984).

Holland (1973) found that individuals choose careers because their personality characteristics are similar to those displayed by individuals working in that career area.
Those who leave a field usually have a different personality from that which is typically displayed in that field. Brown (1970) studied the personality type of changers (those who changed majors) versus persisters (those who stayed in their initially identified major) in the collegiate majors in the sciences and humanities using the omnibus personality inventory. The measurements were taken at the beginning and at the end of the school year. The differences between the sciences and the humanities were consistent with previous studies, as no significant differences were identified between changers and persisters, however, there were significant differences identified between majors.

Studies of college students consistently support the self-selection proposition; results have shown that choice of major is generally congruent with personality type (Pike, 2006a). Congruence is one of the principle dependent outcomes associated with Holland’s theory. Congruence is supposed to reflect the degree to which an individual’s personal qualities match the environmental demands of the occupational area chosen. This has been assessed by comparing scores on the Holland Self-Directed Search inventory to personality assessment scores (Osipow, & Fitzgerald, 1996). Occupations have been correlated to personality types based on how satisfied people of a certain personality type would be doing a particular job. Miller (2007b), however, noted that career counselors should use extreme caution and use a variety of data to help college students find occupational areas that match their personality.

Although, Jung and Myers both assumed an inborn predisposition for the pathways of personality type, career and occupational development have not always been found to be tightly correlated. Families and cultures can support the development of a personality type or discourage it, and can offer conflicting pressures about type and
occupation or lifestyle choices. Jung studied this notion of falsification of type, which in extreme cases was found to lead to neurosis or exhaustion (McCaulley, & Martin, 1995).

Academic Grade Point Average (GPA) and Student Persistence

College student retention is an important variable in determining higher education accountability and for working for the welfare of college students. Tinto (2006) wrote that it is one thing to understand why students leave; it is another to know what institutions can do to help students stay and succeed. The rising costs of education, as well as the high costs of program administration mean retaining students can be a matter of economic survival. Attrition costs vary across campuses and the longer a student stays at a particular college, the more significant the costs associated with losing the student become (Mayo, Helms, & Codjoe, 2004). Although a large number of students enroll in higher education immediately following their high school graduation and live on campus, increasingly college students do not fit this traditional stereotype (Niles, & Harris-Bowlsbey, 2005).

Data have indicated that retention rates of all U.S. colleges for first and second-year students is so poor that the US Department of Education is studying ways to use federal money to reward successful retention programs. As concerns escalate over student retention, attention is being focused on methods of increasing retention among the college student population and frequently on what factors will influence successful retention, including the use of pre-college programs (Mayo, Helms, & Codjoe, 2004).

Retention has become an organizational activity designed to facilitate the dependency-binding of students with the larger student collective (Waggoner, & Goldman, 2005). Institutions have designed a broad spectrum of programs and strategies
to keep students enrolled in college, ranging from peer mentoring, early-warning
detection monitoring for drop-out, faculty and staff mentoring, orientation and student
success classes, and even long-term required study and involvement programs. This
relationship management approach to student retention in higher education lifts the focus
from key decision points to longer term relationships (Rowley, 2003).

There are two dominant areas of exploration that are emerging in the existing
literature related to persistence and personality types, including the effects of classroom
practice upon student learning, and persistence and the impact of institutional investment
in faculty and staff development programs (Tinto, 2006). Holt, Denny, Capps, and De
Vore (2005) wrote that curriculum and instructional strategy integration may be
beneficial if teachers learn more about their students at the beginning of the school year.
If teachers can obtain reliable assessments of student learning preferences early in the
year, they may be able to better develop instructional methods that best meet the varied
characteristics of the students in their class.

Higher education institutions are not alone in worrying about retaining their
students, also referred to as their customer base (Rowley, 2003). McCaulley and Martin
(1995) wrote that the MBTI can be helpful in advising students about the tasks of passing
the courses needed for their fields of study. The value of understanding a student’s
learning style is first to develop natural approaches to learning and then to develop the
capacity to learn in ways that may require more attention and effort. Learning how to
learn in different ways has the potential to assist students to be lifelong learners who are
capable of learning in various settings and situations. And if students can be successful
by learning in ways that are not natural to them, then they are more likely to undertake the challenge of moving toward Jung’s concept of completion (McClanaghan, 2000).

Research has suggested that knowing one’s preferred learning style enhances a student’s ability to achieve academic success. The knowledge that there are different styles for achieving success is unusual for many students (McClanaghan, 2000). The three components of Holland’s theory give rise to three propositions about college students and their academic majors: students actively select academic majors that are compatible with their personality types; academic majors differentially reinforce and reward student abilities and interests; and students are more likely to flourish in environments that are congruent with their personality types (Pike, 2006b).

Some studies have indicated that academically successful students have fewer strong learning style preferences than do low achievers (McClanaghan, 2000), and that student success has been affected by the degree to which a student engages in the college experience (Mayo, Helms, & Codjoe, 2004). Engaging in the process of learning how to learn must include awareness of how self-learning styles and how material is processed. Instructors, then, can enhance a students’ awareness by calling their attention to different ways to approach a given subject (McClanaghan, 2000). A significant challenge, then, is to assist students in perfecting their natural learning style while providing the incentive to develop less dominant styles they will need in the workforce and other areas of their lives.

Race and Academic Persistence

The increase in cultural diversity over the past decade is partially the result of immigration from non-European countries, resulting from the Immigration Act of 1965.
According to the Population Reference Bureau (1999), the number of school-age immigrant children in America has risen to between 2.5 and 2.9 million, with the largest numbers of immigrants coming from Mexico, Asia, Central and South America, and the Caribbean (Lunenburg, 2000).

Tinto (2006) wrote that much of the research on students of color is in fact research on low-income students. Given that low-income students are disproportionately academically under prepared, there is a need to connect the research on developmental education, inappropriately referred by some as remedial education, to that on the retention of low-income students. In particular, more information is needed on the critical linkage between institutional actions to enhance the education of academically under-prepared low-income student to that of their persistence and subsequent program completion. Students who are members of racial/ethnic minority groups receive less support for college attendance (Elkins, Braxton & James, 2000).

Freeman (1999) reported that the expectations of African American students often influenced their decisions to attend college and the selection of academic disciplines. Other studies have found that when expectations are not met, students change academic majors and may even elect to leave an institution altogether.

Academic performance also impacts the occupational achievement of multicultural populations. Research on cognitive development and learning shows that across all subject areas (reading, writing, math, science, and social studies), White students perform substantially better than both African-American and Hispanic students, and
Hispanic perform slightly better than African-American students (Peterson, & Gonzalez, 2005).

Considerable research has examined the ways in which race variables influence the process and outcome of career development. Sometimes known as the special groups' literature, this body of research consists mainly of studies comparing the vocational outcomes of racial groups (generally Blacks and Whites) and consistently demonstrates marked differences between the two in educational attainment and occupational distribution. Although most studies have compared Black and White samples, a considerable body of data now exists documenting the vocational outcomes of other groups (Hispanic, Asian Americans, Native Americans). With the exception of Asian Americans, each of these groups demonstrates considerably poorer educational and vocational outcomes than Whites, and the occupational distribution of the groups are dramatically different by both field and level (Osipow, & Fitzgerald, 1996).

Xavier University of Louisiana is a historically black university that has had success in producing students who gain entry into health professional schools at a greater rate than the national average for black students. Xavier's comprehensive program design deals with the affective entry behavior, cognitive entry behavior, and the college curriculum and instruction. Their success has been attributed to addressing issue on several fronts: pre-college preparation through a series of science-related summer programs for students from eighth grade through high school graduation; college instruction consisting of extensive modification of general biology, general chemistry, organic chemistry, non-calculus physics, and pre-calculus / calculus courses to provide assistance for the under prepared; research by mathematics and science faculty devoted
to finding better ways to promote a student's ability to master scientific concepts and problem solving; and special advising system designed specifically for the program the students are pursuing (Loftin, 1993). Successful schools also look at the achievement and comfort of their students of color (Laurel, 2002).

Social class, or socioeconomic status (SES), has been acknowledged as a powerful determinant of vocational behavior. The relationship between occupation and social class is so strong that the former is generally considered to be the single best indicator of the latter. Although studies of occupational attainment and mobility are generally the domain of occupational sociologists, the correlation of SES with important psychological variables such as ability, values, and aspirations is generally acknowledged, although the meaning and causal direction of such relationships are hotly debated (Osipow, & Fitzgerald, 1996).

Student integration into the college experience is a frequent retention study topic. Academic and social integration were found to be the major factors affecting student retention with financial factors playing a lesser role. Student integration is a crucial factor in student retention, along with external commitments, emotional commitments to the university, and quality of teaching. Student attribute variables have been studied so as to their ability to predict retention. These include personality and concerns over adjustment and what to expect (Mayo, Helms & Codjoe, 2004).

Mayo, Helms, and Codjoe (2004) wrote that students who withdrew from college had more adjustment difficulties, less development of creative potential, an inability to cope well with exams, poor study habits, and were more involved in social relationships.
and their personal enhancement. These individuals also had more financial difficulty and expected greater than realized academic performance.

Gender and Academic Persistence

Female career development is currently the most active area of study in vocational psychology. Traditional theories of choice and adjustment have been criticized as andocentric and ignoring the realities of women's lives; more recently, new theories have been proposed that are either based explicitly on women's experiences or that are designed to be applicable to both sexes (Osipow, & Fitzgerald, 1996).

Academic performance cannot be artificially separated from future occupational considerations for adolescents, especially for young women. Research in cognitive development and learning shows that as early as the first grade females perform better than males on reading comprehension and writing tests; by adolescence, males perform better on math, science and most social studies tests (Peterson, & Gonzalez, 2005). Role relationships, however, are changing, with men filling many of the roles that women have filled when women enter the work force out of choice and necessity. Just as women must plan for multiple roles, so too must men, even though there is some evidence that men are still planning careers without consideration of their family role (Isaacson, & Brown, 2000).

Personality Assessment and Academic Persistence

The literature on student retention in higher education reflects a relatively narrow focus. Research in this area is defined by a collection of quantitative studies designed to identify and model those variables that predict retention success. While the existence and effectiveness of student affairs programs are included as factors in these models, studies
examining the impact of retention activities on the larger organization are virtually non-existent (Waggoner, & Goldman, 2005).

Tuel and Betz (1998) wrote that many researchers are now focusing on the importance of linking career assessment with personality theory; the objective would be to make both increasingly useful in counseling. Recognizing the conceptual appeal of the MBTI to users, researchers have increasingly focused on examining the psychometric qualities of the MBTI, especially when continuous scores are used. Indeed, most research on the MBTI, including reliability and validity data cited in the manual, has used continuous scoring techniques. Examples of exemplary recent research include Cummings’s (1995) study of the assumption of age invariance of the MBTI, Carson, Stalikas, and Bizot’s (1997) research examining the relationships between MBTI scores and aptitudes; and Harvey, Murray, and Stamoulis’s (1995) and Jackson, Parker, and Dipboye’s (1996) factor analyses.

As a group, personality measures have demonstrated excellent stability and validity, as they may be useful in clarifying personal style, even though they have not been found to have predictive validity for career choice.

Student success is largely affected by the degree to which the student engages in the college experience. Structural features (e.g. disinterested advisors) tend to isolate students, promote anonymity and produce poor student outcomes. Colleges with a strong sense of direction (i.e. program completion plans at the point of initial enrollment) or that including high student involvement (i.e. appropriate instructional methods) tend to promote retention. Thus, student-to-faculty and student-to-peer relations are important and the quality of effort a student expends in interactions with peers and faculty is an
important determinant in student outcomes and is supported by the retention literature. If a student is unable to create a strong student peers group, frequent student-faculty contact was found to counter feelings of isolation (Mayo, Helms, & Codjoë, 2004).

Chapter Summary

Because personality type theory focuses heavily on the Jungian concepts of perceiving (taking in information) and judging (making decisions) much research has concentrated on trying to determine possible links between personality type and academic achievement (Stewart, 2002). Lawrence (2000) suggested that motivation is the key element that makes the difference in student success or failure and that motivation is highly related to type. Knowledge of temperament theory has value to both the educator and the student. Temperament theory focuses on core needs and natural skills of an individual (Fairhurst, 1990). The chapter included a comprehensive discussion of the evolution of the study of personality type and the role personality type identification can have on academic achievement and retention.
CHAPTER III

METHODOLOGY

The purpose for conducting the study was to examine the role of personality type on undergraduate college student success at Oklahoma State University from 2003 to 2007. The student’s personality type was identified by the Internet based personality assessment Do What You Are® (DWYA), which is an optional assessment available to all students. Students were self-selected to take the assessment. The age, gender, first semester Grade Point Average (GPA), and final GPA of graduates were also analyzed.

Instrument

The Internet based personality assessment Do What You Are (DWYA) was used to assess the personality types of the student participants. Do What You Are® differs from other programs in several important ways. Perhaps most notable is that other programs are based on the belief that the best career decisions result from matching students’ values, skills, and interests with specific jobs. But in reality, all three of these are quite fluid in young people and often change significantly as they grow older. This program is based on personality type, the innate way people naturally see the world and make decisions, a set of basic drives and motivations that remain constant throughout a person’s life (Miller, 2007b).

A type is really more than just a four letter code that describes difference preferences. Each type preference reveals something important about the individual. But no one is “just” an Introvert. A person is an INTJ, an ISFP or one of six other introverted types. In other words, while all Introverts share certain characteristics, it is the other
letters in their type, the combination of the letters, which makes Type so rich and its insights so valuable (Miller, 2007b).

The DWYA and MBTI are forced-choice questionnaires. The choices are between equally valuable opposites, not right or wrong or good or bad. Some questions provide choices between key words; other questions provide choices between phrases. Omissions are permitted, because the best estimate of type is between clear preferences, not random guesses (McCaulley, & Martin, 1995).

Learning about their Personality Types provides students with accurate and invaluable insights about themselves and their career-related needs. This enables them to make the most informed, satisfying, and college and career decisions (Miller, 2007b).

The Sample and Population

The subjects for the survey were undergraduate students at Oklahoma State University, Stillwater, Oklahoma. The students are undergraduates and are self-selected to take the survey. The sample includes 2,533 undergraduate students who were surveyed between 2003 and 2007.

Prior to conducting the study, permission was received from Oklahoma State University's Institutional Review Board (Appendix B). The entire research protocol was also approved by the University of Arkansas’ Institutional Review Board (Appendix A).

Data Collection

A report was generated from the Do What You Are (DWYA) program which identified every student participant by name and Campus Wide Identification (CWID). The report also identified each student’s personality type and the date the assessment was taken by the participant. Initially, the student data were analyzed to determine missing
information or incorrectly recorded information. Participants who had incomplete data were eliminated from the study. All data were void of any personal identifiable information. Data collected was analyzed for student participants who persisted at the university with their coursework (continuing) beyond the semester the assessment was taken, those that dropped out or left the university (dropped), and the students who graduated from the university (graduates) beyond the semester the assessment was taken. Data collected included the grade point average (GPA), academic college, academic major, minority status, gender and age of each student participant. All student participants were assigned an unidentifiable number for research purposes. After the data were processed, and all personally identifiable information was removed, it was ready for analysis.

Data Analysis

Statistical analysis utilized scores on the factors of the student rating items, the four continuous scores on the DWYA, gender, age, undergraduate GPA, and minority status.

Student scores on the DWYA served as the chief independent or predictor variable for all of the outcome variables. The authors of the MBTI recommended interpreting each of the four bipolar scales by the dominant pole (Healy, & Woodward, 1998). In the study, the bipolar scores were presented as dichotomous scores (E or I, S or N, T or F, and J or P). The following strategies were developed and implemented to answer the research questions presented in Chapter 1:
1. The relationship between the three status categories (continuing, dropped and graduated) and the four dichotomous DWYA scores was determined by a chi-square test of the contingency coefficient.

2. The relationship between the GPA, minority status, gender and age of the student and the four dichotomous DWYA scores was determined by a distribution table.

3. The relationship between the first semester college GPA and the four dichotomous DWYA scores was analyzed using a four-way (2 x 2 x 2 x 2) factorial analysis of variance (ANOVA). A Tukey post-hoc test was performed.

4. The relationship between the final semester college GPA and the four dichotomous DWYA scores was analyzed using a four-way (2 x 2 x 2 x 2) factorial analysis of variance (ANOVA). A Tukey post-hoc test was performed.

5. The distribution of whole four-letter DWYA personality type scores to the three status categories (continuing, dropped and graduated) was determined.

6. The distribution of whole four-letter personality type scores to the four status categories (GPA, minority status, academic college, and gender) was determined.

7. The distribution of whole four-letter personality type scores to the first college semester GPA and the final semester (graduation) GPA was determined.

Chapter Summary

The chapter provided a discussion of the sample, population, data collection, and analysis strategies that were to be used in the current study. Additionally, the nature of the Do What You Are inventory was presented to clarify the inventory as a statistical measurement.
CHAPTER IV

RESULTS

Results presented in the chapter were arranged in five sections to follow the research questions of the study. Data presented described the personality types and preferences of the Do What You Are (DWYA) inventory participants. The first two sections present descriptive data that answer the first two research questions:

1. What were the majority personality types of college students at one case study university in the mid-west as measured and reported by the Do What You Are personality inventory?

2. What were the personality types, as measured by the Do What You Are personality inventory based on academic major area?

The second section the chapter provided answers to the third and fourth questions of the study and presented the relationship between personality type and undergraduate grade point averages of the participants. A four-way factorial ANOVA statistic was used to analyze data and a Tukey post-hoc test was also implemented. This section addressed the following research questions:

3. Did certain personality types, as measured by the Do What You Are personality inventory, have higher grade point averages than other personality types?

4. What were the entering and exiting grade point averages of college students by personality type as measured by the Do What You Are personality inventory?
The third section presented the findings regarding the relationship between personality type of the student respondent and one of three categories regarding academic status (continuing, dropped, or graduated). A Chi square ($\chi^2$) was used to analyze the following research question:

5. What personality types persisted and/or graduated from the university and what personality types dropped out or exited the university prior to graduation?

The fourth section of the chapter presented the findings of the last research question which identified the relationship between personality type of the participants and the amount of time it took them to graduate and complete their course of study at the university. The Eta ($\eta$) correlation ratio was used to answer the final research question:

6. To what extent was there a correlation between personality type, as measured by the Do What You Are personality inventory, and time to degree obtainment?

Descriptive Data

The population studied began with 2,333 undergraduate students who voluntarily participated to take the Do What You Are personality on-line assessment from 2003 to 2007. Of these students, 688 were deleted because of incomplete information or were never enrolled at the case study institution. The age range of the student participants was from 19 to 46 with both the oldest and the youngest participants of the female gender. Data collected on each student participant included the following: personality type as assessed by the DWYA, gender, birthdates, ethnicity, date of first term of enrollment, grade point average after completion of the first term, grade point average at graduation.
(if graduated), current status (graduated, dropped or continuing coursework), last term of enrollment if dropped, current classification if continuing, college or area of study, degree sought, and academic major.

The first set of analyses dealt with the personality types of students who took the assessment between 2003 and 2007. Of the 1,654 individuals, ISTJ (introverted sensing thinking judging) represented the largest overall personality type assessed with 191 students or 11.6% of the respondents and ENTJ (extroverted intuitive thinking judging) represented the overall lowest number of personality type of the respondents with 38 students or 2.3%.

Throughout the statistical computations, student totals may vary from the total of 1,645 due to other missing data.
Table 1

Frequency and Percentage Table of DWYA Respondents

<table>
<thead>
<tr>
<th>Personality Type</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENFJ</td>
<td>73</td>
<td>4.4%</td>
<td>4.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>ENFP</td>
<td>145</td>
<td>8.8%</td>
<td>8.8%</td>
<td>13.3%</td>
</tr>
<tr>
<td>ENTJ</td>
<td>38</td>
<td>2.3%</td>
<td>2.3%</td>
<td>15.6%</td>
</tr>
<tr>
<td>ENTP</td>
<td>44</td>
<td>2.7%</td>
<td>2.7%</td>
<td>18.2%</td>
</tr>
<tr>
<td>ESFJ</td>
<td>126</td>
<td>7.7%</td>
<td>7.7%</td>
<td>25.9%</td>
</tr>
<tr>
<td>ESFP</td>
<td>102</td>
<td>6.2%</td>
<td>6.2%</td>
<td>32.1%</td>
</tr>
<tr>
<td>ESTJ</td>
<td>169</td>
<td>10.3%</td>
<td>10.3%</td>
<td>42.4%</td>
</tr>
<tr>
<td>ESTP</td>
<td>61</td>
<td>3.7%</td>
<td>3.7%</td>
<td>46.1%</td>
</tr>
<tr>
<td>INFJ</td>
<td>60</td>
<td>3.6%</td>
<td>3.6%</td>
<td>49.7%</td>
</tr>
<tr>
<td>INFP</td>
<td>116</td>
<td>7.1%</td>
<td>7.1%</td>
<td>56.8%</td>
</tr>
<tr>
<td>INTJ</td>
<td>44</td>
<td>2.7%</td>
<td>2.7%</td>
<td>59.5%</td>
</tr>
<tr>
<td>INTP</td>
<td>80</td>
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<td>4.9%</td>
<td>64.3%</td>
</tr>
<tr>
<td>ISFJ</td>
<td>188</td>
<td>11.4%</td>
<td>11.4%</td>
<td>75.7%</td>
</tr>
<tr>
<td>ISFP</td>
<td>109</td>
<td>6.6%</td>
<td>6.6%</td>
<td>82.4%</td>
</tr>
<tr>
<td>ISTJ</td>
<td>191</td>
<td>11.6%</td>
<td>11.6%</td>
<td>94.0%</td>
</tr>
<tr>
<td>ISTP</td>
<td>99</td>
<td>6.0%</td>
<td>6.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1645</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

**Personality Type and Gender**

A total of 1,035 females or 62.9% and 610 males or 37.0% took the DWYA assessment. The ISTJ (introverted sensing thinking judging) personality type represented the largest number of males with 91 students or 14.9%. The ISFJ (introverted sensing feeling judging) personality type represented the largest number of females with 136 students or 13.1%. The ENTJ (extroverted intuitive thinking judging) personality type represented the lowest number of females with 18 students or 1.7% taking the assessment. The ENFJ (extroverted intuitive feeling judging) personality type represented the lowest number of males taking the assessment with 11 students or 1.8%. 

44
Table 2

Numbers and Percentages of Personality Types by Gender

<table>
<thead>
<tr>
<th>Personality Type</th>
<th>Female n</th>
<th>Female %</th>
<th>Male n</th>
<th>Male %</th>
<th>Total n</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENFJ</td>
<td>62</td>
<td>6.0%</td>
<td>11</td>
<td>1.8%</td>
<td>73</td>
<td>4.4%</td>
</tr>
<tr>
<td>ENFP</td>
<td>101</td>
<td>9.8%</td>
<td>44</td>
<td>7.2%</td>
<td>145</td>
<td>8.8%</td>
</tr>
<tr>
<td>ENTJ</td>
<td>18</td>
<td>1.7%</td>
<td>20</td>
<td>3.3%</td>
<td>38</td>
<td>2.3%</td>
</tr>
<tr>
<td>ENTP</td>
<td>21</td>
<td>2.0%</td>
<td>23</td>
<td>3.8%</td>
<td>44</td>
<td>2.7%</td>
</tr>
<tr>
<td>ESFJ</td>
<td>106</td>
<td>10.2%</td>
<td>20</td>
<td>3.3%</td>
<td>126</td>
<td>7.6%</td>
</tr>
<tr>
<td>ESFP</td>
<td>66</td>
<td>6.4%</td>
<td>36</td>
<td>5.9%</td>
<td>102</td>
<td>6.2%</td>
</tr>
<tr>
<td>ESTJ</td>
<td>96</td>
<td>9.3%</td>
<td>73</td>
<td>12.0%</td>
<td>169</td>
<td>10.3%</td>
</tr>
<tr>
<td>ESTP</td>
<td>26</td>
<td>2.5%</td>
<td>35</td>
<td>5.7%</td>
<td>61</td>
<td>3.7%</td>
</tr>
<tr>
<td>INFJ</td>
<td>47</td>
<td>4.5%</td>
<td>13</td>
<td>2.1%</td>
<td>60</td>
<td>3.6%</td>
</tr>
<tr>
<td>INFP</td>
<td>77</td>
<td>7.4%</td>
<td>39</td>
<td>6.4%</td>
<td>116</td>
<td>7.0%</td>
</tr>
<tr>
<td>INTJ</td>
<td>26</td>
<td>2.5%</td>
<td>18</td>
<td>3.0%</td>
<td>44</td>
<td>2.7%</td>
</tr>
<tr>
<td>INTP</td>
<td>41</td>
<td>4.0%</td>
<td>39</td>
<td>6.4%</td>
<td>80</td>
<td>4.8%</td>
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<tr>
<td>ISFJ</td>
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<td>13.1%</td>
<td>52</td>
<td>8.5%</td>
<td>188</td>
<td>11.4%</td>
</tr>
<tr>
<td>ISFP</td>
<td>78</td>
<td>7.5%</td>
<td>31</td>
<td>5.1%</td>
<td>109</td>
<td>6.2%</td>
</tr>
<tr>
<td>ISTJ</td>
<td>100</td>
<td>9.4%</td>
<td>91</td>
<td>14.9%</td>
<td>191</td>
<td>11.6%</td>
</tr>
<tr>
<td>ISTP</td>
<td>34</td>
<td>3.3%</td>
<td>65</td>
<td>10.7%</td>
<td>99</td>
<td>6.0%</td>
</tr>
<tr>
<td>Total</td>
<td>1035</td>
<td>62.9%</td>
<td>610</td>
<td>37.0%</td>
<td>1645</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
**Personality Type and Ethnicity**

The case study university collected data on diverse groups enrolled at the institution. The individuals who responded to the DWYA inventory represented the following ethnic groups: American Indian/Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, Hispanic Americans, Nonresident Alien or International, and Multi-Racial. The largest ethnic groups who took the DWYA inventory were American Indian/Alaskan Native with 170 respondents or 50.1%. The second largest ethnic group who took the assessment were Black, not of Hispanic origin with 81 respondents reporting or 23.9%. Asian or Pacific Islander ethnicity was third with 22 respondents or 6.5%. Fourth were Hispanic Americans with 40 respondents or 11.8%. The Nonresident Alien or International students who had 25 respondents or 7.4% were fifth. The lowest respondent group was the Multi-racial student group with one respondent or 0.3%.

The personality type representing the largest group of students across all ethnic groups was the ISTJ (introverted sensing thinking judging) type with 53 respondents or 15.6%. The personality type representing the smallest group of students across all ethnic groups was tied with 8 respondents or 2.4% in both the ENTP (extroverted intuitive thinking perceiving) type and the ENTJ (extroverted intuitive thinking judging) type. The largest percentage ethnic group type found were Nonresident Alien or International with 8 students or 32.0% in the ISFJ (introverted sensing feeling judging) personality type.
Table 3

Numbers and Percentages Table of Respondent Ethnicity

<table>
<thead>
<tr>
<th>Type</th>
<th>Asian or Pacific Islander n</th>
<th>Black n</th>
<th>%</th>
<th>Hispan Amer n</th>
<th>%</th>
<th>Amer Indian n</th>
<th>%</th>
<th>Multiracial n</th>
<th>%</th>
<th>Nonres Alien or Intl n</th>
<th>%</th>
<th>Totals n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENFJ</td>
<td>0</td>
<td>4</td>
<td>4.9%</td>
<td>1</td>
<td>2.5%</td>
<td>4</td>
<td>2.4%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>4.0%</td>
<td>10</td>
<td>2.9%</td>
</tr>
<tr>
<td>ENFP</td>
<td>2</td>
<td>5</td>
<td>6.2%</td>
<td>4</td>
<td>10.0%</td>
<td>8</td>
<td>4.7%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>19</td>
<td>5.6</td>
</tr>
<tr>
<td>ENTJ</td>
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<td>2</td>
<td>2.5%</td>
<td>1</td>
<td>2.5%</td>
<td>4</td>
<td>2.4%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>8</td>
<td>2.4</td>
</tr>
<tr>
<td>ENTJ</td>
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<td>2.5%</td>
<td>1</td>
<td>2.5%</td>
<td>5</td>
<td>2.9%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>8</td>
<td>2.4</td>
</tr>
<tr>
<td>ESFJ</td>
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<td>4</td>
<td>4.9%</td>
<td>2</td>
<td>5.0%</td>
<td>11</td>
<td>6.5%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>20</td>
<td>5.9</td>
</tr>
<tr>
<td>ESFP</td>
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<td>9</td>
<td>11.1%</td>
<td>3</td>
<td>7.5%</td>
<td>11</td>
<td>6.5%</td>
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<td>0%</td>
<td>0</td>
<td>0%</td>
<td>26</td>
<td>7.7</td>
</tr>
<tr>
<td>ESTJ</td>
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<td>4</td>
<td>4.9%</td>
<td>3</td>
<td>7.5%</td>
<td>24</td>
<td>14.1%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>4.0%</td>
<td>35</td>
<td>10.3</td>
</tr>
<tr>
<td>ESTP</td>
<td>0</td>
<td>2</td>
<td>2.5%</td>
<td>0</td>
<td>0%</td>
<td>8</td>
<td>4.7%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>4.0%</td>
<td>11</td>
<td>3.2</td>
</tr>
<tr>
<td>INFP</td>
<td>1</td>
<td>3</td>
<td>3.7%</td>
<td>2</td>
<td>5.0%</td>
<td>6</td>
<td>3.5%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>4.0%</td>
<td>12</td>
<td>3.5</td>
</tr>
<tr>
<td>ISFJ</td>
<td>3</td>
<td>5</td>
<td>6.2%</td>
<td>5</td>
<td>12.5%</td>
<td>12</td>
<td>7.1%</td>
<td>1</td>
<td>1.0%</td>
<td>8</td>
<td>32.0%</td>
<td>34</td>
<td>10.0</td>
</tr>
<tr>
<td>ISFP</td>
<td>1</td>
<td>8</td>
<td>9.9%</td>
<td>3</td>
<td>7.5%</td>
<td>10</td>
<td>5.9%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>4.0%</td>
<td>23</td>
<td>6.8</td>
</tr>
<tr>
<td>ISTJ</td>
<td>3</td>
<td>15</td>
<td>18.5%</td>
<td>5</td>
<td>12.5%</td>
<td>23</td>
<td>13.5%</td>
<td>0</td>
<td>0%</td>
<td>7</td>
<td>28.0%</td>
<td>53</td>
<td>15.6</td>
</tr>
<tr>
<td>ISTP</td>
<td>2</td>
<td>6</td>
<td>7.4%</td>
<td>3</td>
<td>7.5%</td>
<td>8</td>
<td>4.7%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>8.0%</td>
<td>21</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>81</td>
<td>23.9%</td>
<td>40</td>
<td>11.8%</td>
<td>170</td>
<td>50.1%</td>
<td>1</td>
<td>.3%</td>
<td>25</td>
<td>7.4%</td>
<td>339</td>
<td>100</td>
</tr>
</tbody>
</table>
Individual Personality Types of Undergraduate Students

All students were enrolled full-time in one of six colleges or areas of study at the case study institution. The six colleges included: Agriculture, Arts & Sciences, Business, Education, Human Environmental Sciences, and Engineering. There were 114 part-time students who took the assessment that were not assigned to a college and therefore were not included in the individual college count.

The College of Business had the largest number of student participants with 352 respondents or 21.4%. Arts and Sciences had the largest number of enrolled students at the case study institution. The College of Engineering reported the lowest number of student participants with 74 or 4.3%.

Within the College of Agriculture, the highest personality type reported was ESTJ (extroverted sensing thinking judging) with 14 students or 11.1%, and there were zero INTJ (introverted intuitive thinking judging) personality types reporting in the college of Agriculture.

The personality types of students assessed in the College of Arts & Sciences were more evenly distributed with 37 INFP (introverted intuitive feeling perceiving) personality types reporting or 10.5%. The lowest personality type in the College of Arts & Sciences reported was ENTJ (extroverted intuitive thinking judging) with 6 students or 1.7%.

Within the College of Business, the highest personality type reported was ISTJ (introverted sensing thinking judging) with 75 students reported and the lowest personality type reported was ENTP with 12 students or 2.4% reported.
The ENFP (extroverted intuitive feeling perceiving) personality type was the highest type reporting for College of Education participants and there were no INTJ (introverted intuitive thinking judging) types reported in the college.

Within the College of Engineering the ISTJ (introverted sensing thinking judging) personality type was the largest group reporting with 20 students or 27 % of the participants and there were no ENTP (extroverted intuitive thinking perceiving) personality types.

The largest group of personality type reporting in the College of Human Environmental Sciences was ESFJ (extroverted sensing feeling judging) types with 46 participants or 14.4 %. The lowest group reporting was ENTP (extroverted intuitive thinking perceiving) personality type with 6 participants or 1.9 %.
Table 4

Numbers and Percentages of Personality Types by Area of Study or Academic College

<table>
<thead>
<tr>
<th>Personality Type</th>
<th>Agriculture</th>
<th>Arts and Sciences</th>
<th>Business</th>
<th>Education</th>
<th>Engineering</th>
<th>Human Environmental Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>ENFJ</td>
<td>6</td>
<td>4.8%</td>
<td>16</td>
<td>4.5%</td>
<td>23</td>
<td>4.5%</td>
</tr>
<tr>
<td>ENFP</td>
<td>11</td>
<td>8.7%</td>
<td>36</td>
<td>10.2%</td>
<td>38</td>
<td>7.5%</td>
</tr>
<tr>
<td>ENTJ</td>
<td>3</td>
<td>2.4%</td>
<td>6</td>
<td>1.7%</td>
<td>14</td>
<td>2.8%</td>
</tr>
<tr>
<td>ENTP</td>
<td>3</td>
<td>2.4%</td>
<td>18</td>
<td>5.1%</td>
<td>12</td>
<td>2.4%</td>
</tr>
<tr>
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<td>7.1%</td>
<td>15</td>
<td>4.3%</td>
<td>31</td>
<td>6.1%</td>
</tr>
<tr>
<td>ESFP</td>
<td>4</td>
<td>3.2%</td>
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<td>6.0%</td>
<td>21</td>
<td>4.1%</td>
</tr>
<tr>
<td>ESTJ</td>
<td>14</td>
<td>11.1%</td>
<td>25</td>
<td>7.1%</td>
<td>64</td>
<td>12.6%</td>
</tr>
<tr>
<td>ESTP</td>
<td>6</td>
<td>4.8%</td>
<td>9</td>
<td>2.6%</td>
<td>17</td>
<td>3.3%</td>
</tr>
<tr>
<td>INFJ</td>
<td>8</td>
<td>6.3%</td>
<td>14</td>
<td>4.0%</td>
<td>15</td>
<td>3.0%</td>
</tr>
<tr>
<td>INFP</td>
<td>9</td>
<td>7.1%</td>
<td>37</td>
<td>10.5%</td>
<td>25</td>
<td>4.9%</td>
</tr>
</tbody>
</table>
Table 4 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Arts and Sciences</th>
<th>Business</th>
<th>Education</th>
<th>Engineering</th>
<th>Human Environmental Sciences</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTJ</td>
<td>0</td>
<td>0%</td>
<td>11</td>
<td>3.1%</td>
<td>19</td>
<td>0% 3.7%</td>
<td>3</td>
<td>4.1%</td>
</tr>
<tr>
<td>INTP</td>
<td>2</td>
<td>1.6</td>
<td>32</td>
<td>9.1%</td>
<td>25</td>
<td>4.9 1.5</td>
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<td>12.2</td>
</tr>
<tr>
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<td>17</td>
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<td>34</td>
<td>9.7%</td>
<td>66</td>
<td>13.0 9.7</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
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<td>10</td>
<td>7.9</td>
<td>20</td>
<td>5.7%</td>
<td>28</td>
<td>5.5 11.7</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
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<td>11.1</td>
<td>35</td>
<td>9.9%</td>
<td>75</td>
<td>14.8 9.2</td>
<td>18</td>
<td>20 27</td>
</tr>
<tr>
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<td>10</td>
<td>7.9</td>
<td>23</td>
<td>6.5%</td>
<td>35</td>
<td>6.9 5.6</td>
<td>11</td>
<td>13.5</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>7.7</td>
<td>352</td>
<td>21.3%</td>
<td>508</td>
<td>30.9 11.9</td>
<td>74</td>
<td>4.3</td>
</tr>
</tbody>
</table>
Personality Type by Academic Classification When Assessed

The classification of the DWYA inventory participants at the time they took the inventory at the case study institution resulted in a total of 1,632 respondents or 99.5%. Freshman students accounted for 436 respondents or 26.7%. Sophomore students accounted for 306 respondents or 16.8%, students classified as juniors represented 476 respondents or 29.2%, and seniors accounted for 414 respondents or 25.4%.

The personality type with the largest number of freshman students continuing their education was ESTJ (extroverted sensing thinking judging) with 50 student participants or 11.5%. The lowest number of student personality types reported for freshmen was INTJ (introverted intuitive thinking judging) with only nine student participants or 2.1% of continuing freshman.

The ISFJ (introverted sensing feeling judging) personality type accounted for the largest number of sophomore students with 36 continuing students or 11.8%. The lowest reported personality type for sophomore students was INTJ (introverted intuitive thinking judging) with five student participants or 1.6%.

The largest number of continuing junior students reported that ISTJ (introverted sensing thinking judging) was the dominant personality type with 65 students or 13.7%. The ENTP (extroverted intuitive thinking perceiving) personality type was the lowest type found with seven participants or 1.5%.

The ISTJ (introverted sensing thinking judging) personality type was the largest group of participants for continuing students was 63 or 15.2%. The lowest number of senior participants was the ENTJ (extroverted intuitive thinking judging) personality type with 9 students or 2.2%.
Table 5

Numbers and Percentages of Personality Types by Academic Classification

<table>
<thead>
<tr>
<th>Personality Type</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENFJ</td>
<td>18</td>
<td>4.1%</td>
<td>15</td>
<td>4.9%</td>
<td>29</td>
<td>5.9%</td>
</tr>
<tr>
<td>ENFP</td>
<td>41</td>
<td>9.4%</td>
<td>34</td>
<td>11.1%</td>
<td>40</td>
<td>8.4%</td>
</tr>
<tr>
<td>ENTJ</td>
<td>10</td>
<td>2.3%</td>
<td>8</td>
<td>2.6%</td>
<td>10</td>
<td>2.1%</td>
</tr>
<tr>
<td>ENTP</td>
<td>14</td>
<td>3.2%</td>
<td>8</td>
<td>2.6%</td>
<td>7</td>
<td>1.5%</td>
</tr>
<tr>
<td>ESFJ</td>
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<td>8.0%</td>
<td>32</td>
<td>10.5%</td>
<td>40</td>
<td>8.4%</td>
</tr>
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<td>45</td>
<td>10.3%</td>
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<td>6.5%</td>
<td>24</td>
<td>5.1%</td>
</tr>
<tr>
<td>ESTJ</td>
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<td>11.5%</td>
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<td>10.8%</td>
<td>40</td>
<td>8.4%</td>
</tr>
<tr>
<td>ESTP</td>
<td>21</td>
<td>4.8%</td>
<td>11</td>
<td>3.6%</td>
<td>15</td>
<td>3.2%</td>
</tr>
<tr>
<td>INFJ</td>
<td>12</td>
<td>2.8%</td>
<td>11</td>
<td>3.6%</td>
<td>19</td>
<td>4.0%</td>
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<td>5.5%</td>
</tr>
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<td>1.6%</td>
<td>9</td>
<td>1.9%</td>
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<td>INTP</td>
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<td>3.7%</td>
<td>8</td>
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</tr>
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<td>11.8%</td>
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<td>11.6%</td>
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<tr>
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<td>8.3%</td>
<td>27</td>
<td>8.8%</td>
<td>65</td>
<td>13.7%</td>
</tr>
<tr>
<td>ISTP</td>
<td>19</td>
<td>4.4%</td>
<td>17</td>
<td>5.6%</td>
<td>33</td>
<td>6.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>436</td>
<td>26.7%</td>
<td>306</td>
<td>16.8%</td>
<td>476</td>
<td>29.2%</td>
</tr>
</tbody>
</table>

53
Personality Types and Grade Point Averages (GPA)

To determine if one personality type had a significantly higher grade point average (GPA) than other personality types, a 2 x 2 x 2 x 2 (four-way) factorial analysis of variance (ANOVA) was computed. The four-way factorial ANOVA has four independent variables which are completely crossed with each other, where all combinations of the variables yielded 16 cells. This statistic compares the means of student GPA's among these groups. This study is causal-comparative in design, and prior to the ANOVA a Levine’s Test confirmed homogeneity of the variances (p=.159).

The main effects A = (E/I scale), B = (N/S scale), C = (F/T scale) and D = (J/P scale), were all fixed, between-subjects dimensions, and each dimension had two levels (a=2, b=2, c=2, d=2).

Table 6
Between-Subjects Factors Table

<table>
<thead>
<tr>
<th>MAIN EFFECT</th>
<th>TYPE</th>
<th>N</th>
</tr>
</thead>
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</tr>
<tr>
<td></td>
<td>I</td>
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<tr>
<td>B</td>
<td>N</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>1045</td>
</tr>
<tr>
<td>C</td>
<td>F</td>
<td>919</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>726</td>
</tr>
<tr>
<td>D</td>
<td>J</td>
<td>889</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>756</td>
</tr>
</tbody>
</table>

A = Extroverted/Introverted scale; B=Sensing/Intuitive scale; C=Thinking/Feeling scale; D=Judging/Perceiving scale
Personality Type and GPA Significant Effects

The ANOVA design identified one significant main effect in the D dimension (J/P type scale). The mean GPA for the Judging type preference was significantly higher at a mean of 3.079 than the Perceiving type preference mean GPA of 2.836, the among cells effect (corrected model) was also found to be significant.

Table 7

ANOVA Tests of Between Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
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</thead>
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<tr>
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<td>5.090</td>
<td>13.480</td>
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<tr>
<td>B</td>
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<td>.122</td>
<td>.323</td>
<td>.570</td>
</tr>
<tr>
<td>C</td>
<td>.100</td>
<td>1</td>
<td>.100</td>
<td>.265</td>
<td>.607</td>
</tr>
<tr>
<td>D</td>
<td>18.974</td>
<td>1</td>
<td>18.974</td>
<td>50.246</td>
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</tr>
<tr>
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<td>.240</td>
<td>.636</td>
<td>.425</td>
</tr>
<tr>
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</tr>
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<td>1</td>
<td>.001</td>
<td>.001</td>
<td>.969</td>
</tr>
<tr>
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<td>.403</td>
<td>1.067</td>
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<td>.053</td>
<td>.141</td>
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<td>.755</td>
<td>1.999</td>
<td>.158</td>
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<tr>
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<td>1</td>
<td>.404</td>
<td>1.069</td>
<td>.301</td>
</tr>
<tr>
<td>A * B * D</td>
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<td>1</td>
<td>.001</td>
<td>.002</td>
<td>.963</td>
</tr>
<tr>
<td>A * C * D</td>
<td>.729</td>
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<td>.729</td>
<td>1.931</td>
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</tr>
<tr>
<td>B * C * D</td>
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<td>1</td>
<td>.025</td>
<td>.067</td>
<td>.795</td>
</tr>
<tr>
<td>A * B * C * D</td>
<td>.001</td>
<td>1</td>
<td>.001</td>
<td>.002</td>
<td>.966</td>
</tr>
<tr>
<td>Error</td>
<td>615.135</td>
<td>1629</td>
<td>.378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15141.387</td>
<td>1645</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The four-way factorial ANOVA design identified no significant four-way or three-way interactions, and only one significant two-way interaction. The significant two-
way interaction was between the A and C dimensions (E/I scale and the T/F scale). If an individual was a Feeling type preference, then it did not matter whether the individual was an extrovert or an introvert with respect to GPA. However, if the individual was a thinking type preference then the Introverted mean GPA will be higher than the extroverted mean GPA.

Table 8

A x C Two-way Significant Interaction Table

<table>
<thead>
<tr>
<th>[A]</th>
<th>[C]</th>
<th>F</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td></td>
<td>2.936</td>
<td>2.852</td>
</tr>
<tr>
<td>I</td>
<td>2.961</td>
<td></td>
<td>3.080</td>
</tr>
</tbody>
</table>

A Tukey adjustment was used in the post-hoc analysis concerning the A (E/I dimension) by C (T/F dimension) interaction. The contrast of the extroverts and introverts that were feelers was shown not to be significant (p = .940). However, a significant difference did exist between the introverts and extroverts that were thinkers (p < .001).
Figure 3

Two-way Interaction between the E/I dimension and the T/F dimension

---

**Personality Type and Entering and Exiting GPA**

The mean GPA’s of student respondents to the DWYA were determined on a scale range from 0.0 to 4.0 from the first semester the student entered the case study institution to the semester graduated. The sample for these data included 374 graduated respondents.

The highest mean GPA for first semester enrollees was the INTJ (introverted intuitive thinking judging) personality type with a 3.18616. The lowest first semester mean GPA was for the ENFP (extroverted intuitive feeling perceiving) personality type with a 2.66273. The highest exiting or final mean GPA was for the 1STJ (introverted sensing thinking judging) personality type with an overall mean GPA of 3.16202. The lowest exiting GPA was the ENFP (extroverted intuitive feeling perceiving) personality type with an overall mean GPA of 2.73242.
Of the 16 different personality types, three had a negative difference between their first semester GPA and their GPA at graduation. ENTP (extroverted intuitive thinking perceiving), ESTJ (extroverted sensing thinking judging), and ISFP (introverted sensing feeling perceiving) personality types experienced a drop in their overall GPA from their first semester of enrollment to their final mean GPA upon graduation. The ENTP (extroverted intuitive thinking perceiving) personality types had the largest negative difference with a negative .12373 drop in overall mean GPA.

The type with the largest positive increase in overall mean GPA was the INFJ (introverted intuitive feeling judging) personality types. The student with this type increased their overall mean GPA .14335 points over their academic career.
### Table 9
**Entering and Exiting Mean GPA**

Mean GPAs by personality type; n = 374

<table>
<thead>
<tr>
<th>Type</th>
<th>First</th>
<th>Final</th>
<th>Difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENFJ</td>
<td>3.01289</td>
<td>3.09286</td>
<td>.08442</td>
</tr>
<tr>
<td>ENFP</td>
<td>2.66273</td>
<td>2.73242</td>
<td>.06911</td>
</tr>
<tr>
<td>ENTJ</td>
<td>2.85518</td>
<td>2.90532</td>
<td>.05013</td>
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<td>2.87611</td>
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<td>ESFJ</td>
<td>3.11784</td>
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<td>ISTP</td>
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<td>Total</td>
<td>2.92475</td>
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</tr>
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</table>

*Difference = Final – First

---

**Personality Types and Academic Success**

A contingency table with frequency data was used to investigate the relationship between personality type and academic success, and in particular the independence of those two factors. A Chi square ($\chi^2$) was used to investigate whether distributions of categorical variables differed from one another. The statistic showed whether the percentages of continuing, dropped, or graduated students were the same for each personality type.
*Personality Type and Graduation Status Results*

The Chi square ($\chi^2$) was found to be significant ($\chi^2_{30} = 52.665, p = .006$), the data did not support the idea of independence of the two factors (personality type and status), and the 16 personality types as determined by the DWYA assessment and status (continuing, dropped, or graduated), were dependent. This means that the proportions of status will not be the same for all personality types, and this warranted further investigation into the data.

Further investigation illustrated that all four FP auxiliaries (ENFP, ESFP, INFP, and ISFP) had the total highest dropout percentage across all personality types. The four FP auxiliaries for the dropout status were: ENFP = 24.1%; ESFP = 27.5%; INFP = 29.3%; ISFP = 29.4%.
Table 10

Chi Square (\(\chi^2\)) Table of Significance

<table>
<thead>
<tr>
<th>Type</th>
<th>C</th>
<th>D</th>
<th>G</th>
<th>Total</th>
</tr>
</thead>
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<td>73</td>
</tr>
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<td>60.3%</td>
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<td>100.0%</td>
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<td>55</td>
<td>16</td>
<td>28</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>55.6</td>
<td>16.2</td>
<td>28.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>817</td>
<td>328</td>
<td>500</td>
<td>1645</td>
</tr>
<tr>
<td></td>
<td>49.7</td>
<td>19.9</td>
<td>30.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Testing for the independence of the FP auxiliary classification (FP, non-FP) and academic status (continuing, dropout, and graduated), the chi-square statistic was found to be significant ($\chi^2 = 22.934, p < .001$).

Table 11

FP Auxiliary and Non-FP Auxiliary Status Table

<table>
<thead>
<tr>
<th>FP type Auxiliary</th>
<th>Non-FP</th>
<th>Continuing</th>
<th>Status Dropout</th>
<th>Graduated</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>FP</td>
<td>217</td>
<td>199</td>
<td>129</td>
<td>126</td>
<td>472</td>
</tr>
<tr>
<td></td>
<td>46.0</td>
<td>17.0%</td>
<td>27.3</td>
<td>26.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>817</td>
<td>328</td>
<td>500</td>
<td>100.0</td>
<td>1645</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Non-FP</th>
<th>Continuing</th>
<th>Status Dropout</th>
<th>Graduated</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>600</td>
<td>51.2%</td>
<td>12.0</td>
<td>374</td>
<td>1173</td>
</tr>
<tr>
<td></td>
<td>199</td>
<td>17.0%</td>
<td>27.3</td>
<td>31.9%</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>817</td>
<td>49.7%</td>
<td>19.9</td>
<td>500</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of the female inventory respondents, the ISFJ (introverted sensing feeling judging) personality type had the highest number of dropouts at 27 and the INFP (introverted intuitive feeling perceiving) type was close with 25 female dropouts and the ENFP (extroverted intuitive feeling perceiving) type was third with 22 dropouts. The personality type with the largest number of male dropouts was the ISTJ (introverted sensing thinking judging) and the ESTJ (extroverted sensing thinking judging) both with 14 dropouts.
Table 12

Personality Type by Academic Status by Gender

Frequency counts for personality type by academic status by gender

<table>
<thead>
<tr>
<th>Personality Type</th>
<th>Gender</th>
<th></th>
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<th></th>
<th></th>
<th></th>
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<td>D</td>
<td>G</td>
<td>Total</td>
<td></td>
<td></td>
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<tr>
<td>ENFJ</td>
<td></td>
<td>36</td>
<td>7</td>
<td>19</td>
<td>62</td>
<td>8</td>
<td>2</td>
<td>1</td>
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<td>2</td>
<td>7</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ENTP</td>
<td></td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>21</td>
<td>9</td>
<td>3</td>
<td>11</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESFJ</td>
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<td>65</td>
<td>14</td>
<td>27</td>
<td>106</td>
<td>10</td>
<td>5</td>
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<td>ESFP</td>
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<tr>
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<td>5</td>
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<td>18</td>
<td>6</td>
<td>11</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
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<td>13</td>
<td>16</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTJ</td>
<td></td>
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<td>3</td>
<td>10</td>
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<td>7</td>
<td>2</td>
<td>9</td>
<td>18</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>INTP</td>
<td></td>
<td>20</td>
<td>8</td>
<td>13</td>
<td>41</td>
<td>16</td>
<td>4</td>
<td>19</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISFJ</td>
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<td>45</td>
<td>136</td>
<td>23</td>
<td>11</td>
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<td></td>
</tr>
<tr>
<td>ISFP</td>
<td></td>
<td>31</td>
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<td>22</td>
<td>78</td>
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<td>7</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>43</td>
<td>14</td>
<td>34</td>
<td>91</td>
<td></td>
<td></td>
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<tr>
<td>ISTP</td>
<td></td>
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<td>4</td>
<td>14</td>
<td>34</td>
<td>39</td>
<td>12</td>
<td>14</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
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<td>Total</td>
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<td>207</td>
<td>306</td>
<td>1035</td>
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<td>121</td>
<td>194</td>
<td>610</td>
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<td></td>
</tr>
</tbody>
</table>

**Personality Type and Time to Graduation**

Correlation is a bi-varient measure of association or strength of the relationship between two variables. Before analyzing the data, the number of semesters to degree obtainment was determined. Fall and spring semesters were always counted as one semester between the date of enrollment and the date of graduation. The summer semester was only counted with the same calendar year if the student enrolled or graduated during the summer.
**Personality Type and Time to Degree Obtainment**

Eta ($\eta$), the correlation ratio, is a coefficient of nonlinear association. This statistic is a nominal-by-interval association. In this research, it was the association between the number of semesters to graduate (nsdo), and personality type. Eta ($\eta$) is computed as the square root of between-groups sum of squares divided by total sum of squares. Correlation between type and number of semesters to degree obtainment (nsdo) was not significant because of the large amount of non-systemic variance associated with the determination method for the number of semesters to degree obtainment. $H = .207$, $p = .121$. Some DWYA respondents were as many as 20 or more semesters and the error in the computation of the statistic was too large. $H^2 = .043$; only 4.3% of variance in number of semesters to degree obtainment can be attributed to type.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>457.863(a)</td>
<td>15</td>
<td>30.524</td>
<td>1.447</td>
<td>.121</td>
<td>.043</td>
</tr>
</tbody>
</table>

The relationship between type and nsdo is modest $\eta = .207$, $p = .121$ and difficult if not impossible to establish any associations.

**Summary of Findings**

The purpose of this descriptive / causal-comparative study was to determine if relationships existed between individual personality type as determined by the Do What You Are personality inventory and gender, ethnicity, area of academic study, entering
and exiting grade point averages, and time to degree completion of undergraduate students at the case study institution. The ISTJ (introverted sensing thinking judging) personality type represented the largest type reported by the Do What You Are (DWYA) inventory. The largest ethnic group taking the assessment was American Indian /Alaskan Native. The largest number of students who took the inventory by academic classification was juniors, and the largest area of study for the respondents was business. The INTJ (introverted, intuitive, thinking judging) personality type reported the highest GPA mean of 3.242 / 4.0 of all personality types and the lowest mean GPA upon graduation was the ENFP personality type with a 2.73242 / 4.0. This type also reflected the lowest first semester mean GPA with a 2.66273 / 4.0. All four FP types have the highest combined dropout percentage of all the personality types. The correlation between personality type and number of semesters to degree obtainment was so modest that it was difficult to infer any kind of relationship between the nominal and categorical data.
CHAPTER V

CONCLUSIONS

As the environment for higher education has moved to increased accountability there has been a heightened focus on the part of institutions to increase the rate at which students persist and graduate (Tinto, 2006). Much research has investigated demographic, age, life stage, ethnicity, and other variables that influence retention (Mayo, Helms, & Codjoe, 2004). Despite this, substantial gains in student retention have been minimal. Hirsh and Kummerow (1992) believed that to perform well at work and school individuals need to use all of the eight preferences in Jung’s personality theory at the appropriate time and when required by a situation.

The premise of the type model is that only one of the 16 personality types best describe each person. Faculty and administrators working with students could use personality type theory to help identify students who may have dominant processes that do not lend themselves to the academic environment. Psychological assessment, and in particular personality inventories such as the Do What You Are, can help administrators uncover predispositions that might not surface or even be recognized by the respondents themselves prior to taking the inventory (Harmon, Hansen, Borgen, & Hammer, 1985). This, in turn, can lead to program development that encourages and aids in retention.

The current chapter provides a summary of the research, conclusions from the study, and recommendations for research.

Summary of the Study

An objective of the research was to gain insight to the personality types of students at the case study institution and examine the relationship between type and
academic success. Woodard, Mallory and Deluca (2001) wrote that universities need to "develop a retention strategy that is specific to their environment," (p. 69). Identifying student personality types that struggle in coursework and eventually drop out or leave the university prior to graduation may help administrators in future retention efforts.

Data for the study were collected via the Do What You Are (DWYA) Internet-based personality inventory over a six year period by the Oklahoma State University career center. The center housed DWYA data collected from 2003 to 2007 and were extracted for students who met certain criteria. Additional data were collected from the institution’s office of institutional research, including time to degree completion, academic grade point average, and selected demographic variables.

The six research questions for the study were designed to better understand the personality types of the student population. The first and second questions examined the descriptive information of the majority types in each of the academic major areas of the university. The third and fourth questions examined the relationship between personality type and undergraduate grade point averages of the DWYA respondents. The fifth question examined the relationship between personality type and the student’s academic status (continuing, dropped, or graduated). The sixth question correlated personality type and the time to degree obtainment.

Research question one asked what were the majority personality types of college students at one case study university in the mid-west as measured and reported by the Do What you Are personality inventory. Based on the descriptive data collected by the DWYA assessment and the office of institutional research, the majority type was ISTJ (introverted sensing thinking judging) with 191 inventory respondents or 11.6 % of the
The majority male type was also ISTJ with 91 respondents or 14.9 %, and the majority female type was ISFJ (introverted sensing feeling judging) with 136 respondents or 13.1 % of the population. Of the 339 ethnic group data sets, the American Indian / Alaskan Native group was the largest and the majority personality type was ESTJ (extroverted sensing thinking judging).

The second research question asked about the personality types in academic major areas as measured by the DWYA personality inventory. The college of business had the largest number of students participates with 508 respondents or 30.9 % of the population. Junior students were the majority classification reported at the time of assessment with 476 respondents or 29.2 % of the total population. Of the junior class students the largest number of continuing students was the ISTJ (introverted sensing thinking judging) personality type.

Research question three examined whether certain personality types measured by the Do What You Are had higher grade point averages (GPA) than other personality types using a causal-comparative design. The four-way factorial ANOVA using four independent variables were completely crossed with each other. Every combination of the variables levels yielded 16 cells. This statistic compared the means of student GPA’s among these groups. The main effects were the four personality type scales (A = Extrovert/Introvert scale; B = Sensing / Judging scale; C = Thinking / Feeling scale; and D = Judging / Perceiving scale). The ANOVA design found one significant main effect in the D dimension (J / P scale). The mean GPA for the Judging type preference was significantly higher at a mean of 3.079 than the Perceiving type preference mean GPA of 2.836.
Research question four examined the entering and exiting grade point averages of college students by personality type. The entering GPA was the one earned during the first semester of the student’s enrollment at the case study institution and the exiting GPA was the one earned upon graduation. The four-way factorial ANOVA identified one two-way significant interaction between the A and C dimensions (Extrovert/Introvert scale and the Thinking/Feeling scale). If an individual was a feeling type preference, then it did not matter whether the individual was an extrovert or an introvert with respect to GPA. However, if the individual was a thinking type preference, then the introverted mean GPA was higher than the extroverted mean GPA.

The fifth research question asked what personality types persisted and/or graduated from the case study institution and which personality types dropped out or left the institution prior to graduation. A Chi square ($\chi^2$) was used to investigate whether the percentages of continuing, dropped or graduated students were the same for or different for each personality type. All four FP auxiliaries (ENFP, ESFP, INFP, ISFP) had the total highest dropout percentage across all personality types. The four FP auxiliaries for the drop status was: ENFP = 24.1 %; ESFP = 27.5 %; INFP = 29.3 %; ISFP = 29.4 %.

The final research question examined the relationship between personality type and time to degree obtainment. Determining time to degree obtainment was difficult because some students enrolled in the case-study institution then dropped out for a number of years, and then re-enrolled. A formula had to be determined to calculate the number of semesters to graduation. Fall and spring semesters were always counted as one semester between the date of enrollment and the date of graduation. The summer semester was only counted with the same calendar year if the student enrolled or
graduated during the summer. The sample used to calculate this statistic dropped from 1, 644 respondents to 374 graduated students. Some DWYA respondents were as many as 20 or more semesters to graduate and the error in the computation of the statistic was large. The Eta ($\eta$) correlation ratio of nonlinear association between type and number of semesters to degree obtainment was not significant because of the large amount of non-systemic variance associated with the determination method for the number of semesters to degree obtainment. $H = .207$, $p = .121$. $\eta^2 = .043$; only 4.3% of variance in number of semesters to degree obtainment could be attributed to type.

Conclusions

1. Based on the findings, the overall majority personality type of respondents were sensing judger (SJ) types. Sensing judging types are the most traditional of the four temperaments. They are bound by their sense of duty and always try to do the right thing, which makes them reliable, dependable, and above all else responsible (Tieger, & Barron-Tieger, 1995). The DWYA inventory was a voluntary inventory and it lends to reason that the sensing judgers were drawn to take the assessment in large numbers.

2. Significantly more females took the assessment than males and the majority female personality type was ESFJ (extroverted sensing feeling judging). The majority male personality type was ISTJ (introverted sensing thinking judging).

3. The personality type representing the largest group of students across all ethnic groups was the ISTJ (introverted sensing thinking judging). The largest ethnic groups assessed were the American Indian / Alaskan Native. This finding was not surprising since the case study institution is located in the State of Oklahoma.
4. Junior class students were the largest classification to take the assessment and the majority college was business. Business students typically start taking major related courses at the beginning of the junior year. Many junior students probably start to question their college major and seek help or answers through self exploration.

5. The four-way factorial ANOVA research design identified one main effect in the Judging / Perceiving scale with judging types having a significantly higher GPA than Perceiving types. Hirsh and Kummerow (1992) wrote that judgment and perception were the two preferences that related to how one prefers live one’s life. The judging preference is associated with a cognitive style that favors having a clear structure in a learning situation (Lawrence, 2002). Judgers aimed at completion and getting closure and they had life organized into an orderly plan. The perceiving preference is associated with a cognitive style that favors open exploration without a planned structure. Perceivers study when the surges of impulsive energy come to them and they find novel ways to do routine assignments so as to spark enough interest to do the assignments (Lawrence, 2000).

6. The four-way factorial ANOVA also identified a significant two-way interaction between mean grade point averages (GPA) of the respondents and the Extroversion / Introversion scale and the Thinking / Feeling scale. Introverted thinkers will had a higher mean GPA than extroverted thinkers, extroverted feelers, and introverted feelers. Tieger and Barron-Tieger (1995) wrote that Introverts think things through inside their heads, they listen more than talk and
they are energized by spending time alone. Thinkers make decisions by analyzing and weighing evidence, even if that means coming to unpleasant conclusions. This dominant preference is more conducive to an academic setting where schedules and studying are important to academic success.

7. Some personality types dropped out or exited the university in greater numbers than other personality types. The Chi square ($\chi^2$) statistic identified significance for feeling perceiving (FP) personality types and the dropout status. All four FP auxiliaries (ENFP, ESFP, INFP, ISFP) had the total highest dropout percentage across all personality types. The four FP auxiliaries for the drop status were: ENFP = 24.1%; ESFP = 27.5%; INFP = 29.3%; ISFP = 29.4%. Testing for the independence of the FP auxiliary classification (FP, non-FP) and academic status (continuing, dropout, and graduated), the Chi-square ($\chi^2$) statistic was found to be significant ($\chi^2 = 22.934, p < .001$).

8. The number of years to degree obtainment could not be correlated with a personality type determined by the Do What You Are personality inventory. Some DWYA respondents were as many as 20 or more semesters and the error in the computation of the statistic was too large. $H^2 = .043$; only 4.3% of variance in number of semesters to degree obtainment can be attributed to type.

Recommendations

Future research with the Do What You Are inventory data would be more meaningful if every first-year student at the university were required to take the assessment during orientation courses. Tracking students over their academic career according to personality type could give the university valuable information regarding
students who drop out or exit the institution prior to graduation. A larger sample was needed for a correlation ratio to determine the relationship between personality type and time to degree obtainment.

Junior class students were found to be the largest classification of students to take the Do What You Are inventory. The College of Business at the case study institution had the largest number of inventory respondents. Recommendations included adding the DWYA inventory in the business orientation course requirements for all students in the college prior to the junior year or the business major declaration.

ANOVA found judging types had a significantly higher mean GPA than perceiving types. Students with perceiving personality types could be recommended to voluntarily participate in increased study skill instruction within the orientation courses at the case study institution. Because introverted thinking types have significantly higher GPA’s than other types, they could be paired as mentors to other students within the orientation courses.

The Chi square ($\chi^2$) statistic found a higher percentage of feeling perceiving types dropout or exit the university prior to graduation. These personality types could be targeted by the career center staff for volunteer participation in time management and study skill instruction. Feeling types need approval and personal support more than they need to achieve (Lawrence, 200). Perceptive types dislike schedules and feel constrained by too many deadlines (Hirsh, & Kummerow, 1992). The feeling perceiving student may benefit from learning more about the importance of time management and studying in order to succeed in higher education.
Future researchers should try to determine a better way to calculate time to degree
obtainment. Given that the research data only included first semester of enrollment dates,
and the date of graduation, the time in-between these two variables was not accounted for
by the data collected. This was the variable that created an error in the Eta (\( \eta \)) correlation
ratio.

Chapter Summary

This descriptive causal – comparative study about the relationship between
academic success and the 16 personality types assessed by the Do What You Are
inventory had several significant findings. First, on the fourth dimension
Judging/Perceiving scale the mean GPA for judging type preferences was significantly
higher than perceiving type preferences. Second, was a significant interaction between
the Extrovert/Introvert scale and the Thinking/Feeling scale and mean GPA of the
respondents. Introverted Thinking types had a higher mean GPA than introverted feeling
types, extroverted thinking types, and extroverted feeling types. Third, feeling perceiving
(FP) types (ENFP, ESFP, INFP, ISFP) had a higher dropout percentage across all
personality types at the case study institution.
REFERENCES


Lawrence, G. (2000). *People types & tiger stripes.* Gainesville, FL: Center for Applications of Psychological Type.


Miller, B. (2007b). *Personality type handbook: A counselor/advisor's guide for using personality type to understand and counsel and advise students,* Marlborough, CT: Human eSources.


APPENDIX A
University of Arkansas IRB Letter of Approval
MEMORANDUM

TO: Pam Ehlers  
       Michael T. Miller

FROM: Ro Windwalker  
       IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 07-10-104
Protocol Title: The Impact of Personality Type on Undergraduate College Student Success at Oklahoma State University
Review Type: ☒ EXEMPT  ☐ EXPEDITED  ☐ FULL IRB
Approved Project Period: Start Date: 10/12/2007  Expiration Date: 10/11/2008

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form Continuing Review for IRB Approved Projects, prior to the expiration date. This form is available from the IRB Coordinator or on the Compliance website (http://virWW.uark.edu/admin/rssrinfo/compliance/human-subjects/index.html). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

If you wish to make any modifications in the approved protocol, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 120 Ozark Hall, 5-2208, or irb@uark.edu.

The University of Arkansas is an equal opportunity/affirmative action institution.
APPENDIX B
Oklahoma State University IRB Letter of Approval
October 16, 2007

Ms. Pam Eihlers
OSU Career Services 360
Student Union

Dear Ms. Eihlers:

The Oklahoma State University Institutional Review Board has received and reviewed the information on your research study, "The Impact of Personality Type on Undergraduate College Student Success at Oklahoma State University." Based on the review and approval of your study by the University of Arkansas Institutional Review Board, the OSU IRB supports the planned data collection at Oklahoma State University.

You are responsible to the University of Arkansas which has official oversight over this study. Please direct any questions concerning subjects' rights to the University of Arkansas IRB.

Sincerely,

Sue C. Jacobs, P.I.*
Chair, Oklahoma State University Institutional Review Board
APPENDIX C
DO What You Are® Personality Inventory
Instructions:
There are four parts to the Self Discovery Assessment. In each part, you will be asked to read brief descriptions of two people and decide which person sounds more like you. These are only brief descriptions, so neither one will sound exactly like you. After you’ve decided, answer the questions and move on to the next part.

Please keep in mind, there are no right or wrong, better or worse answers. Just try to answer each question as honestly and objectively as you can - based on which person you are more like in your everyday life, not who you may wish you were, or think you should be like!

Description 1
Emily has lots of friends whom she likes to spend time with and she usually enjoys meeting new people. She likes to talk on the phone and often tries to get her friends together to party or go to the movies. Just thinking about getting something going gets Emily pretty pumped up.

Melissa’s a pretty private person. She has very close friends she’s known for years. She likes to do things with them but she also enjoys spending time alone — working on projects, reading, or just relaxing. When it comes to social situations — especially new ones — Melissa often prefers to hang back and observe awhile before getting involved.

○ I am more like Emily
○ I am more like Melissa

Description 2
At lunch, Emily almost always sits and talks with others and she belongs to several clubs — mostly because she likes the social interaction. If given a choice, she would prefer to do homework with others, and often chats with her friends while she’s working.

Melissa almost always prefers to study alone and she has amazing powers of concentration. Melissa’s interests are deep and intense, like she is. She knows a lot about the subjects that interest her and enjoys sharing her knowledge with other people, but she really dislikes superficial chit-chat.

○ I am more like Emily
○ I am more like Melissa

Description 3
Emily has lots of energy, prefers to be involved in a variety of activities, and usually jumps into new projects with enthusiasm. She often skips over directions and plunges into the assignment. Emily’s a “talker” who often does her best thinking out loud and sometimes monopolizes conversations.

On the outside, Melissa may appear to be calm and cool, but she can get very enthusiastic about things that are important to her or when discussions get to a deep level. But usually, Melissa is fairly quiet unless she has something important to say. And when she does, it’s usually very well considered and thought out and people find her really fascinating.

○ I am more like Emily
○ I am more like Melissa
DO WHAT You ARE

Introduction

You are about to begin the Do What You Are® Self Discovery Personality Type assessment. Successful completion of the assessment will generate a report that will provide you with important information about your personal characteristics. You will learn about careers that are matched to you, your personal strengths and blindspots, how you negotiate in your daily life, and a host of other useful information.

It is important to remember that the science of personality type is not an exact science. However, an understanding of your type can guide you in making better decisions for your future.

At the top of each page, a progress bar will indicate how much of the survey you have completed. Please follow the instructions carefully so your results reflect who you are as accurately as possible. Also, remember you can stop the survey at any time by clicking the stop sign. The next time you login to the program you will pick up where you left off.

When you are ready to begin, please click the "Continue" button below.

^Continue
Student Success Programs

Self Discovery Assessment

Instructions:
Read the following paragraphs that describe some other ways that Emily and Melissa are different from one another. See if this helps you identify which one you are more like - even if it is just a little bit more.

Recently Emily and Melissa went to the same party.

Emily
Emily had looked forward to this party all week and was one of the first ones through the door. Arranging to meet her friends there, she walked in alone and immediately started scanning the room to see who had already arrived. Eager to connect with her many friends, she made a quick sweep of the room saying hi or making eye contact with lots of people along the way. During the course of the night Emily spoke with just about everybody she knew, but none of the conversations were very involved or lasted more than a few minutes. By the end of the night she had also met several new people and even made plans with a few of them to go to the movies together the next day. When she got home Emily was so wound up by all of the interaction it took her almost two hours to fall asleep.

Melissa
While she was looking forward to the party Melissa was also feeling a little nervous, so she arranged to go with her best friend. On the way over they got into a discussion and walked into the party still talking. In fact, Melissa didn't immediately notice some of the people waving to them because she was so involved in what she was saying. A while later she wandered over to the CD player and looked through some CDs. She listened for several minutes to a group of kids discussing a movie they'd all seen. When one of the girls asked her opinion, she told her, which led the two of them into a long discussion about other films they both liked. When it was time to leave Melissa felt the time had flown by. She realized on the way home that she'd been talking to this one person for well over an hour! She was really tired when she got home and fell asleep pretty quickly.

If I were in a similar situation, I would probably act
more like Emily.

If I were in a similar situation, I would probably act
more like Melissa.

(Continue)
Self Discovery Assessment

Instructions:
Read both statements in each pair below and decide which one describes you better. Although each statement in a pair may be somewhat true of you, try to pick the one that describes you best — even if it describes you just a little bit better than the other one. Not all statements are exact opposites. And remember, there are no right or wrong, better or worse answers.

Description 1
- I'm more likely to strike up a conversation with a stranger.
- I'm more likely to wait for others to initiate conversations with me.

Description 2
- I'm more likely to call up friends to see if they want to get together, and I enjoy going to parties.
- I'm more likely to enjoy hanging out with a close friend or two, rather than with a lot of people I don't know well.

Description 3
- I'm more likely to get bored and a little "antsy" when nothing's going on.
- I'm more likely to enjoy some quiet time alone reading, listening to CDs, or just relaxing.

Description 4
- I'm more likely to sometimes forget a thought unless I say it out loud.
- I'm more likely to want to really think things through before I'm ready to discuss them.

Description 5
- I'm more likely to volunteer personal information about me or my family pretty freely.
- I'm more likely to not divulge a lot of personal information, especially to people I don't know well.
- I'm more likely to jump into new social situations pretty comfortably.
- I'm more likely to hang back and watch for awhile before getting involved in new situations.

Description 7

- I'm more likely to prefer a fast pace, and often like doing more than one thing at a time.
- I'm more likely to prefer a more leisurely pace, and want to pay attention to one thing at a time.

(Continue)
DO WHAT You ARE

Self Discovery Assessment

Instructions:
On this page you will be asked to read brief descriptions of two people and decide which person sounds more like you. These are only brief descriptions, so neither one will sound exactly like you. After you've decided, answer the questions and move on to the next part.

Please keep in mind, there are no right or wrong, better or worse answers. Just try to answer each question as honestly and objectively as you can - based on which person you are more like in your everyday life, not who you may wish you were, or think you should be like!

Description 1
Rachael is a down-to-earth, realistic kind of person. She is pretty observant, notices lots of details, and usually has a very good memory. When she talks to other people she often pays close attention to what they are saying and tends to stick with the subject at hand.

Julia is a very imaginative person. She's interested in anything new or unusual and often is more curious about what might happen in the future than what is going on now in the present. Julia loves to figure out new and different ways to accomplish a task but gets bored pretty quickly once she's mastered something.

0 I am more like Rachael
0 I am more like Julia

Description 2
In college, Rachael tends to prefer, and does best at subjects that deal with real and hands-on things rather than abstract subjects. She especially dislikes having to analyze a theme or find the underlying meaning in a piece of writing. Rachael likes to work through projects step-by-step, completing one part of an assignment before moving on to the next. Since she almost always reads directions, she responds best to faculty who give her clear instructions.

Julia loves to think about ideas and possibilities even if they may seem far-fetched, unrealistic, or impractical. Julia is especially curious about why people and things act the way they do. In college, she prefers subjects that let her use her imagination, like art and creative writing, or when she is asked to read between the lines. Rather than follow a set sequence, Julia works in leaps and bounds, often starting in the middle of a project.

0 I am more like Rachael
0 I am more like Julia

Description 3
In her spare time, Rachael likes to watch and play sports, or just be outside. When she was younger she collected baseball cards and toy cars and was often out riding her bike. She has a hard time sitting still for too long.

Julia has a wide range of interests like reading, watching movies, and inventing funny contraptions. Julia thinks of herself as a very original person and she has an off-beat sense of humor.

0 I am more like Rachael
0 I am more like Julia
Student Success Programs

DO WHAT You ARE

Self Discovery Assessment

Instructions:
On this page you will be asked to read brief descriptions of two people and decide which person sounds more like you. These are only brief descriptions, so neither one will sound exactly like you. After you've decided, answer the questions and move on to the next part.

Please keep in mind, there are no right or wrong, better or worse answers. Just try to answer each question as honestly and objectively as you can - based on which person you are more like in your everyday life, not who you may wish you were, or think you should be like!

Description 1
Rachael is a down-to-earth, realistic kind of person. She is pretty observant, notices lots of details, and usually has a very good memory. When she talks to other people she often pays close attention to what they are saying and tends to stick with the subject at hand.

Julia is a very imaginative person. She's interested in anything new or unusual and often is more curious about what might happen in the future than what is going on now in the present. Julia loves to figure out new and different ways to accomplish some task but gets bored pretty quickly once she's mastered something.

Q I am more like Rachael
Q I am more like Julia

Description 2
In college, Rachael tends to prefer, and does best at, subjects that deal with real and hands-on things rather than abstract subjects. She especially dislikes having to analyze a theme or find the underlying meaning in a piece of writing. Rachael likes to work through projects step-by-step, completing one part of an assignment before moving on to the next. Since she almost always reads directions, she responds best to faculty who give her clear instructions.

Julia loves to think about ideas and possibilities even if they may seem far-fetched, unrealistic, or impractical. Julia is especially curious about why people and things act the way they do. In college, she prefers subjects that let her use her imagination, like art and creative writing, or when she is asked to read between the lines. Rather than follow a set sequence, Julia works in leaps and bounds, often starting in the middle of a project.

Q I am more like Rachael
Q I am more like Julia

Description 3
In her spare time, Rachael likes to watch and play sports, or just be outside. When she was younger she collected baseball cards and toy cars and was often out riding her bike. She has a hard time sitting still for too long.

Julia has a wide range of interests like reading, watching movies, and inventing funny contraptions. Julia thinks of herself as a very original person and she has an off-beat sense of humor.

Q I am more like Rachael
Q I am more like Julia

92
Instructions:
Read the following paragraphs that describe some other ways that Rachael and Julia are different from one another. See if this helps you identify which one you are more like—even if it is just a little bit more.

As co-chairpersons of the spring weekend committee, Rachael and Julia are responsible for planning the event. Their different styles surfaced at the committee’s first meeting.

**Rachael**
Rachael began by making very specific suggestions—for example, hiring a particular band she really likes. She also suggested they book a caricaturist to draw pictures of the kids so that there would be things to do besides dance and stand around and talk. She wanted to note the dates by which all the jobs had to be completed to make sure they met their planning deadline. To be more efficient, Rachael had contacted last year’s chairperson. She suggested that they use her same “to do” list to make sure all tasks got completed. To save money, she suggested they just modify last year’s decorations. Rachael thought both suggestions made sense. Although she wanted spring weekend to be fun, she warned the group to keep it manageable, and not to bite off more than it could chew. Rachael suggested the committee survey several students to see which themes they preferred. And being the practical person she is, she thought the committee should write a little “instruction manual” which included all they had learned to pass on to next year’s committee.

**Julia**
Julia’s approach was very different. She thought they were moving way too fast through the creative part of the process, and wanted the group to first spend time brainstorming possible themes. She encouraged them to “think beyond the box” in order to make this spring weekend totally unique and not be limited by what was done in the past. She argued that they couldn’t deal with the specifics until they knew the big picture—what the event would look like. And they couldn’t know that, unless they considered lots of possibilities, even ones that seemed pretty far out. She dismissed Rachael’s frequent reminders that they had to be realistic and sensible and played down the problems of a limited budget by suggesting they could always raise more money if they came up with something really great. She didn’t think this year’s committee needed to copy last year’s theme, and felt this committee was creative enough to come up with a new theme. While she agreed that the idea of an “instruction manual” might be helpful, she believed it could also stifle next year’s committee’s creativity.

*If I were in a similar situation, I would probably act more like Rachael.*

*If I were in a similar situation, I would probably act more like Julia.*
Student Success Programs

DO WHAT You ARE

Self Discovery Assessment

Instructions:
Read both statements in each pair below and decide which one describes you better. Although each statement in a pair may be somewhat true of you, try to pick the one that describes you best — even if it describes you just a little bit better than the other one. Not all statements are exact opposites. And remember, there are no right or wrong, better or worse answers.

Description 1

0 It's fair to say that I'm the kind of person who is pretty realistic about most things.
0 It's fair to say that I'm the kind of person who has a good imagination and lots of creative energy.

Description 2

0 It's fair to say that I'm the kind of person who notices a lot of details around me and can usually remember important facts.
0 It's fair to say that I'm the kind of person who may not notice ordinary things but notices things that are new or different.

Description 3

0 It's fair to say that I'm the kind of person who feels most comfortable trusting my own direct experience with something.
0 It's fair to say that I'm the kind of person who is comfortable trusting my hunches or "gut feelings" about things.

Description 4

0 It's fair to say that I'm the kind of person who works best when I can start at the beginning and work my way through to the end.
0 It's fair to say that I'm the kind of person who likes to work in bursts of energy, often jumping around from one task to the next.

Description 5

0 It's fair to say that I'm the kind of person who likes best to learn practical things I can use in my everyday life.
0 It's fair to say that I'm the kind of person who enjoys thinking or talking about possibilities, even if they're not very practical.
It's fair to say that I'm the kind of person who usually accepts most things for the way they are.

It's fair to say that I'm the kind of person who often wonders about why things are the way they are and about their meaning.

It's fair to say that I'm the kind of person who likes to learn new skills, practice them, and use them well.

It's fair to say that I'm the kind of person who gets bored pretty easily when I have to do things the same way very often.
Instructions:
On this page you will be asked to read brief descriptions of two people and decide which person sounds more like you. These are only brief descriptions, so neither one will sound exactly like you. After you’ve decided, answer the questions and move on to the next part.

Please keep in mind, there are no right or wrong, better or worse answers. Just try to answer each question as honestly and objectively as you can - based on which person you are more like in your everyday life, not who you may wish you were, or think you should be like!

Description 1
Sabrina is a logical problem solver. She has a talent for analyzing situations objectively and calmly, and usually has no trouble putting her personal feelings aside when she's making decisions. Competitive and pretty assertive, Sabrina rarely takes things too personally.

Leah is a warm, helpful person who's always doing something nice for someone. A very good friend, she is sensitive to other people's needs and goes out of her way to make people feel comfortable.

- I am more like Sabrina

- I am more like Leah

Description 2
Sabrina can almost always be counted on to give her honest, truthful opinion. She is most impressed by achievement and accomplishment - her own and others, and she sets high standards for herself and others.

Leah has strong convictions about lots of things, and while she strives to be truthful and direct, she can sometimes be less than 100% honest, and may tell someone a “little white lie” rather than risk hurting their feelings. Relationships are very important to Leah, and since she tends to take things personally, she can easily be disappointed by others.

- I am more like Sabrina

- I am more like Leah

Description 3
Sabrina is quite independent. It is often more important to Sabrina what she thinks about something, than what others think. And she is more likely to do something because it’s fair and makes sense to her, rather than just because someone else may not like it.

A natural helper, Leah tends to worry about other peoples problems that can make her feel sad. Although Leah can be competitive, she prefers to work cooperatively with people. She doesn’t usually like to argue and is good at complimenting people when they do something she appreciates.

- I am more like Sabrina

- I am more like Leah
I am more like Sabrina

-Continue-

I am more like Leah
Student Success Programs

DO WHAT You ARE

Self Discovery Assessment

Instructions:
Read the following paragraphs that describe each person, and decide who you would be more likely to choose.

Imagine you're the captain of your college basketball team and you need to pick one team member to be honored as "player of the year" at the annual awards banquet. The final selection comes down to two candidates, Sabrina and Leah.

Sabrina
Clearly, Sabrina is the star of the team. Even though she's only a junior, Sabrina leads the team in scoring. Sabrina is truly a natural athlete to whom winning comes easily. She is also a very committed team player and works hard at being the best. To be fair, the selection must be based on performance alone. Otherwise, it will seem like favoritism or come down to a popularity contest and set a bad example. With another year to play, Sabrina will almost certainly win this honor next year.

Leah
Although she's not the star or even the best player on the team, Leah should get the award. While Leah is a consistently good player, she is not a "natural athlete", so she had to work extremely hard for many years to finally realize her dream of making the varsity team. But what Leah really has is "heart". She always gives 150%, is the most enthusiastic person on the team at every game, and inspires her teammates to play their best, even when she is sitting out. Since Leah is a senior, - who certainly won't be pursuing professional basketball - this is the last time she's likely to ever experience this type of honor.

If I were in a similar situation, I would probably choose Sabrina.
If I were in a similar situation, I would probably choose Leah.

Continue
Instructions:
Read both statements in each pair below and decide which one describes you better. Although each statement in a pair may be somewhat true of you, try to pick the one that describes you best — even if it describes you just a little bit better than the other one. Not all statements are exact opposites. And remember there are no right or wrong, better or worse answers.

Description 1
0 People who know me well would probably say I am most likely to be convinced by good logical reasoning
0 People who know me well would probably say I am most likely to be persuaded by how I feel or how others feel about an issue.

Description 2
0 People who know me well would probably say I am objective and fair-minded and seldom get my feelings hurt.
0 People who know me well would probably say I am sensitive and empathetic, and often take things personally.

Description 3
0 People who know me well would probably say I like to be judged by my achievements and accomplishments.
0 People who know me well would probably say I like to be appreciated for being helpful to others.

Description 4
0 People who know me well would probably say I get satisfaction from coming up with logical solutions to problems.
0 People who know me well would probably say I get satisfaction from being sensitive to others and helping them with their problems.

Description 5
0 People who know me well would probably say I can be counted on to tell people what I honestly believe.
0 People who know me well would probably say I sometimes "sugar coat" the truth so as to not hurt someone's feelings.
People who know me well would probably say I like consistency and believe all people should be treated equally. People who know me well would probably say I believe in equality, but can often see reasons why exceptions should be made.

People who know me well would probably say I most often do something because I think it's the smart and logical thing to do. People who know me well would probably say I most often do something because I feel strongly that it's the right thing to do.
Instructions:

On this page you will be asked to read brief descriptions of two people and decide which person sounds more like you. These are only brief descriptions, so neither one will sound exactly like you. After you've decided, answer the questions and move on to the next part.

Please keep in mind, there are no right or wrong, better or worse answers. Just try to answer each question as honestly and objectively as you can - based on which person you are more like in your everyday life, not who you may wish you were, or think you should be like.

Description 1

Sarah is a super responsible person who likes to make plans and is happier when those plans are followed. But when plans change unexpectedly, it can make her anxious and a little nervous. Sarah usually likes to make decisions, because for her, once something is decided, she doesn't have to worry about it anymore.

Jessica is a fun-loving, casual kind of person who is always looking for new experiences. Because she's curious about many things, and always wants to keep her options open, she can sometimes have trouble making up her mind. So, she often asks lots of questions to make sure she has enough information so she can make the best decisions.

Which of the following statements describes you more?

I am more like Sarah

I am more like Jessica

Description 2

Sarah likes to be prepared and to be productive, and usually gets her work done before playing or taking it easy. She's also usually very organized. Her homework assignments are almost always really done and on time, and sometimes, even before they're due. Sarah often feels an obligation to get her work done before she relaxes and feels best when she takes on a job and finishes it.

Jessica really likes to be spontaneous - and may wait to decide what to do until the last minute. Organization is not one of Jessica's strengths, and she frequently misplaces things. And, she may have more energy for starting projects, than for finishing them.

Which of the following statements describes you more?

I am more like Sarah

I am more like Jessica

Description 3

Sarah is also pretty time-conscious - she's seldom late, and has a good sense of how long things will take. She has strong opinions about many things, and usually doesn't hesitate to step in to take charge and make things happen the way she thinks they should.

Because Jessica is not particularly time-conscious, she can easily get side-tracked, and may be late for appointments, or misjudge how long a job or task will take. As a result, she sometimes puts things off - like homework assignments - to the last minute. But working in bursts of energy, she usually still manages to get everything done that she needs to.

Which of the following statements describes you more?

I am more like Sarah

I am more like Jessica
DO WHAT You ARE

Self Discovery Assessment

Instructions:
Read the following paragraphs that describe some other ways that Sarah and Jessica are different from one another. See if this helps you identify which one you are more like—even if it is just a little bit more.

Sarah and Jessica were assigned to work together on a lab and to make a presentation to the class. They divided up the presentation and agreed to take turns presenting different parts. But before the presentation even began, it was clear how differently Sarah and Jessica approached this task.

Sarah
Sarah was extremely prepared. She had neatly printed detailed notes on 3 x 5 index cards using two different colors of ink to emphasize key points. She had timed out her parts, knew exactly how long each portion would take, and had practiced in front of her brother a few times. She had prepared some handouts that summarized and described key results. As the class began she learned that four of the twenty students would be about five minutes late. But she wanted to start anyway to make sure she covered all her material and not penalize the majority of students who were there on time. When a student asked a question she told her she’d answer all questions at the end if there was time. Since she and Jessica were alternating she became very frustrated when Jessica went over her allotted time, forcing Sarah to spontaneously shorten her presentation. And she was upset that Jessica’s being unprepared made Sarah appear disorganized.

Jessica
Jessica took a more casual approach. Since she knew the material she only wrote out an outline of her presentation. She wanted to wait for the four late students, feeling that five minutes here or there was “no big deal.” And although she had a general idea of how long her presentation would take, she had not bothered to time them out. Feeling confident she could “wing it” if she had to. She did prepare a few graphics but had somehow not gotten around to creating the handouts she had thought about making. She welcomed the chance to answer her classmates’ questions and talk spontaneously about the project, although she was aware it was pushing her over her time limit. She reasoned she could always scale back, or go over a little, if she had to. Although friends, she was annoyed that Sarah took the presentation too seriously and seemed rigid and unwilling to go with the flow.

If I were in a similar situation, I would probably act more like Sarah.

If I were in a similar situation, I would probably act more like Jessica.
Instructions:
Read both statements in each pair below and decide which one describes you better. Although each statement in a pair may be somewhat true of you, try to pick the one that describes you best — even if it describes you just a little bit better than the other one. Not all statements are exact opposites. And remember, there are no right or wrong, better or worse answers.

Description 1

\( p \) In general, I'd describe myself as someone who likes to make plans and is happiest when they're followed.

\( w \) In general, I'd describe myself as someone who usually doesn't like to plan things so I can be free to respond to opportunities as they arise.

Description 2

\( o \) In general, I'd describe myself as someone who likes things settled and usually don't have much trouble making decisions.

\( o \) In general, I'd describe myself as someone who sometimes feels uncomfortable being forced to make decisions.

Description 3

\( o \) In general, I'd describe myself as someone who can get somewhat upset if people change plans once we've agreed to them.

\( o \) In general, I'd describe myself as someone who often feels that things are "over planned" and not spontaneous enough.

Description 4

\( o \) In general, I'd describe myself as someone who likes to be productive and can relax once I get my work done.

\( o \) In general, I'd describe myself as someone who sometimes puts things off until the last minute, but still manages to get them done.

Description 5

\( o \) In general, I'd describe myself as someone who is usually pretty punctual and seldom late for appointments.

\( o \) In general, I'd describe myself as someone who, despite my best intentions, often find I am running a little late.
In general, I'd describe myself as someone who is fairly organized and usually knows where everything is.

In general, I'd describe myself as someone who can get impatient and restless when things take too long to finish.

In general, I'd describe myself as someone who often likes starting new projects better than finishing them.
Your Personality Profile

People like you are friendly, creative, and confident. Since you love to talk and tell engaging stories, you probably have lots of friends and acquaintances and are pretty easy to get to know. You like being in the spotlight and especially enjoy entertaining others with your clever wit and unusual sense of humor. You probably have little trouble going with the flow, and most people admire your adaptability. You pride yourself on your creativity and ability to see possibilities where other people can’t. You grasp new ideas quickly and enjoy learning new things, but can be easily distracted and tend to get bored as soon as the challenge in a project is over. While you are easy going and playful, it may be a struggle for you to make decisions or commit to one plan of action for any extended period of time, since you are so curious and eager to experience as much of life as you can.

You are also a very logical person and are bothered by inconsistencies and unfairness. And you love a spirited debate—regardless of the topic. Your spontaneity and enthusiasm is infectious, and other people often want to follow your lead. Since you probably like starting things much more than you enjoy finishing them, you may have trouble slowing down, preparing carefully, and following through with your commitments. Luckily, you are great at improvising and get a real sense of excitement from pulling things off at the last minute. You are also an excellent negotiator and can usually convince or charm other people into letting you have your way.

How accurately did the above Personality Profile describe you?

Very Accurate (85% or more)  O  O
Mostly Accurate (75%)  O  O
Somewhat Accurate (60%)  O  O
Not Very Accurate (50% or less)  O  O

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### Career Interest Survey

**Instructions:**
This part of the Do What You Are® assessment indicates your level of interest in a variety of career groupings. Please read the description for each category and decide how interested you are in that category.

**Agriculture & Natural Resources**
Agriculture is involved in providing food and clothing for the world's population, managing natural resources, and preventing and rehabilitating damage to the environment. Some common jobs include farmers, agricultural engineers, inspectors, and fish hatchery managers. Natural Resources jobs often involve the search for, development, management, and use of energy sources. Producers of natural gas and companies that mine coal and generate electric and nuclear power employ people in numerous jobs including energy analysts, risk analysts, and gas supply/product managers.

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<thead>
<tr>
<th>How interested are you in Agriculture &amp; Natural Resources careers?</th>
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<tr>
<td>Very Interested</td>
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**The Arts**
Visual artists draw, paint, photograph, sculpt, and work with ceramics or other materials. Graphic designers and illustrators often work in the advertising industry. Performance artists - actors, singers, dancers, musicians, choreographers, directors - often work in theater, television, or motion pictures, as do directors, set designers, and costumers. Writers include novelists, writers of plays, books, articles, and screenplays, as well as poets, lyricists, and editors. Other examples of creative "artistic" jobs include interior designers and landscape architects.

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<tr>
<td>Very Interested</td>
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**Business, Management & Finance**
The primary purpose of business is to make money, usually through the sale of goods and/or services. This involves a wide range of activities, including buying, selling, marketing, advertising, and manufacturing. Management involves training and supervising workers, while finance is concerned with generating, investing, spending, and keeping track of money. Jobs can range from a bookkeeper in a small shop to a Chief Financial Officer of a billion-dollar company. Others function as accountants, bankers, stockbrokers, financial analysts, and advisors.

<table>
<thead>
<tr>
<th>How interested are you in Business, Management &amp; Finance careers?</th>
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Very Interested  Pretty Interested  Somewhat Interested  Not Very Interested  Not At All
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Consumer Services, Hospitality, Travel & Tourism

Consumer services are found in many industries including health and beauty (barbers, hairdressers, massage therapists); childcare (nannies, babysitters, child care workers); money, personal financial advisors, insurance salespeople, stockbrokers); home (lawn care, dry cleaning, and interior decorators); pets (veterinarians, animal trainers, dog walkers); car (mechanics, detailers, etc.). Hospitality jobs involve providing food, lodging, and entertainment for individuals and organizations, and can be found at hotels, motels, resorts, theme parks, campgrounds, casinos, etc. Travel involves using planes, trains, buses, cars and boats to help people move for business or pleasure. Tourism jobs can involve developing, organizing, promoting, and managing trips from local tours, to around the world excursions.

How interested are you in Consumer Services, Hospitality, Travel & Tourism careers?

Very Interested  Pretty Interested  Somewhat Interested  Not Very Interested  Not At All
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Computer Sciences & Technology

Computer sciences include a wide range of occupations including systems analyst, engineers, and scientists. Systems analysts solve computer problems by developing new systems, hardware and software. Programmer-analysts design and update software. Network systems and data communication analysts design, test and evaluate systems including the internet and intranet, while computer engineers often design hardware, software, networks, processes, and prototypes. Other computer jobs include database administrators, technical support specialist, systems administrators, security specialists, and webmasters. Technology jobs often involve applying the latest scientific principles and discovering to solve practical problems.

How interested are you in Computer Sciences & Technology careers?

Very Interested  Pretty Interested  Somewhat Interested  Not Very Interested  Not At All
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Communications & Media
Communications involves conveying ideas, knowledge and information by spoken, written, visual or electronic means. It includes both the creative and technological delivery of products and services. Communication jobs include journalists, writers, editors, publishers, speakers, teachers, advertisers, etc. The media are comprised of print (newspapers, magazines, news services), electronic (television, radio, movies), and cyberspace (the internet), which are used primarily to inform and entertain. Some popular media jobs include researchers, writers, producers, broadcasters, reporters, talk show hosts, and support people.

How interested are you in Communications & Media careers?

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Education & Training
Education is a broad category that involves imparting information to others. Most formal education occurs in institutional settings such as childcare centers, elementary, middle, and high schools, colleges, and post-graduate institutions. Besides teachers, some educational jobs include administrators, para-professionals, program directors, and librarians. Training refers to a more specialized and narrowly focused educational experience, usually of a shorter duration. Extremely diverse, training can involve teaching refrigeration technicians how to replace a part, or coaching company presidents to communicate more effectively.

How interested are you in Education & Training careers?

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The Environment
Environmental careers have become more numerous and important in recent years and involve the care and protection of the earth's air, water, soil, and the preservation of plant and animal species. Environmental occupations may integrate many disciplines including earth science, agriculture, geology, solar, nuclear, and other sources of energy, soil and waste management, forestry, politics, and law. Some common jobs involving the environment are eco-tourism specialists, natural science managers, park naturalists, and lobbyists for environmental organizations.

How interested are you in Environmental careers?

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Government & Law

Hundreds of thousands of people are employed by the federal, state, or local governments. While these include elected officials such as mayors, governors, and members of Congress, the vast majority are salaried "civil servants" who provide hundreds of government services from delivering the mail to auditing tax returns. Most government jobs offer security and a highly structured environment. The law encompasses a broad range of jobs including civil or criminal attorneys, prosecutors, judges, paralegals, court reporters, court clerks, and court administrators.

How interested are you in Government & Law careers?

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Health Services

Health services encompass dozens of specialties dealing with the research, diagnosis, and treatment of physical and psychological conditions. People work as doctors, nurses, technologists, and technicians within the same specialty. Jobs can range from heavy to no patient contact, and include people of all ages. Working with animals is also included in this category. A small sample of job variety includes: chiropractors, emergency medical technicians, family physicians, physical therapists, nurse anesthetists, nuclear medicine technologists, researchers, veterinarians, and respiratory therapists.

How interested are you in Health Services careers?

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Human Services

Human services involves helping people solve a very wide range of problems, using skills most associated with psychology and social work. People work for themselves, for private companies, and government agencies. Some common jobs include child protective services workers, community organizers, court-appointed advocates, case consultants, and substance abuse counselors. Many social workers have specialties such as working with children, the elderly, mentally ill patients or mentally retarded citizens, and people in the criminal justice system.

How interested are you in Human Services careers?

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Military & Protective Services

The Military, which consists of the Army, Air Force, Navy, Marine Corps, National Guard, and Joint Forces, encompasses hundreds of very diverse jobs, from artillery officers and cooks, to pilots and generals. Most protective services workers are employees of either local, state, or the federal government. Jobs in law enforcement include police officers, detectives, firefighters, park rangers, fish and game wardens, security guards, corrections officers, transit police, life guards, animal control workers, and investigators.

How interested are you in Military & Protective Services careers?

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Marketing & Sales

Salespeople sell an almost infinite variety of products and services ranging from consumer goods like shoes, cars, houses, and insurance policies, to commercial and industrial products such as manufacturing equipment, telephone systems, and electricity. Marketers create advertising messages to influence behavior, develop plans, may place advertising in print, broadcast, and other media, and/or sell space for publications, radio, and television. Some common marketing jobs include public relations specialist, advertising account manager, marketing researcher, and telemarketer.

How interested are you in Marketing & Sales careers?

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Science & Scientific Research
Science involves the study of knowledge based on things that can be observed and verified. Scientific research is the process of conducting experiments in a systematic way. Since there is so much to learn and research, there are several branches of science. Some jobs in Life Sciences include agronomists, animal scientists, horticulturists, foresters, and zoo directors. Physical scientists sometimes work as astronomers, chemists, or physicists. And some common jobs in Earth Science include geologists, geophysicists, oceanographers, and meteorologists.

How interested are you in Science & Scientific Research careers?

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Sports & Entertainment
While few people make their living as professional athletes, the sports industry is enormous and caters to people of all ages. Some common jobs include coaches, trainers, scouts, referees, agents, managers, announcers, and promotion specialists. Physical fitness jobs include health club managers, personal fitness trainers, and instructors. Entertainment is a broad category that includes people who work in television, radio, the theater, nightclubs, and many other settings as writers, agents, managers, producers, directors and crew.

How interested are you in Sports & Entertainment careers?

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(Continue)
Introduction
Of the many factors that contribute to a successful college experience and subsequent career, an understanding of Personality Type is among the most useful.

While interests and skills change during the course of a person’s life, the one thing that does remain constant is an individual’s Personality Type - the innate way each person naturally prefers to see the world and make decisions. And although all individuals are unique, people of the same type share enormous similarities in the kinds of academic subjects and careers they find interesting and the kind of work they find satisfying.

By understanding the role Personality Type plays, people can gain important insights into their educational, career, and relationship needs. And because people of different types often communicate in very different ways, counselors and advisors can learn which strategies work most effectively with each individual student.

Understanding you, Pam
People like you are friendly, creative, and confident. Since you love to talk and tell engaging stories, you have lots of friends and acquaintances and are pretty easy to get to know. You thrive in the spotlight and especially enjoy entertaining others with your clever wit and unusual sense of humor. You probably have little trouble adapting to change, and most people admire your adaptability. You pride yourself on your creativity and ability to see possibilities where other people can’t. You grasp new ideas quickly and enjoy learning new things, but are easily distracted and tend to get bored as soon as the challenge in a project is over. While you are easy going and playful, it is often a struggle for you to make decisions or commit to one plan of action for any extended period of time since you are so curious and eager to experience as much of life as you can.

You are also a very logical person and are bothered by inconsistencies and unfairness. You love a spirited debate — regardless of the topic — but can sometimes be argumentative. Your spontaneity and enthusiasm is infectious, and other people often want to follow your lead. Since you like starting things much more than you enjoy finishing them, you often have trouble slowing down, preparing carefully, and following through with your commitments. Luckily, you are great at improvising and get a real sense of excitement from pulling things off at the last minute. You are also an excellent negotiator and can usually convince or charm other people into letting you have your way, or one more chance!

Note: Based on our assessment, your personality type is “ENTP.”
Your Strengths and Blindspots:
Everyone has strengths and weaknesses. The key to finding the best path for all people is by using their natural strengths and becoming aware of their natural blind spots.

Your strengths may include:
- Impress people with your articulateness and enthusiasm
- Being creative at selling yourself
- Conveying a sense of great confidence
- Reading people well and changing gears quickly
- Being able to show a history of creative accomplishments

Your blind spots may include:
- Not approaching things in an organized, well-planned way
- Not following through on important details or instructions
- Having unrealistic expectations
- Exaggerating your accomplishments or skills
- Talking too much and not being a good enough listener

For a college experience to be satisfying for you, it should provide:
- A thriving social environment that offers the chance for lots of interaction with a wide variety of people.
- Ample opportunities for you to develop and express your creativity.
- Alternative, non-traditional programs that allow you to customize your educational program (such as independent study and interdisciplinary majors).
- A variety of social activities, clubs, and organizations that will give you the opportunity to develop and exercise your leadership skills.
- Opportunities to be recognized for your public speaking and/or performance skills.

For a career to be satisfying for you, it should:
- Give you opportunities to engage in creative problem solving.
- Acknowledge your creativity, competency, and ability to improvise.
- Let you increase your knowledge, competence, and power.
- Allow you to work with lots of other creative, interesting, and powerful people.
- Be done in a casual, unstructured environment.
- Not impose too many rules or standard ways of doing things.
- Encourage and reward you for starting projects, but not force you to deal with too many details or follow through.
- Provide plenty of public recognition of your creativity.

Your Preferred Learning Style:
While ALL individuals are unique, people of the same type often learn best in similar ways. The following summarizes what you need in order to maximize learning.
- A wide variety of activities and a varied schedule.
- Plenty of interaction and group work.
- A logical rationale behind ideas.
- Continually presents new challenges and avoids repetitive tasks when possible.
- An opportunity to demonstrate your competence in front of others.
- Rewards you for your quick-wit and creative problem solving abilities.

Your Interpersonal Negotiating Style:
Everyone negotiates something with someone on almost a daily basis. Borrowing the family car, requesting more time to finish a research paper, deciding amongst friends which movie or restaurant to go to, etc. In college and in work, "interpersonal negotiating" becomes substantially more significant. Here are your possible strengths and blind spots with this process.

Possible Strengths
- Creative problem solver; see possibilities and options.
- Extremely perceptive about people; understands their motives and how to reach them.
- Quick and flexible; can shift gears quickly when necessary.
- Charming and charismatic; can be very entertaining and persuasive.
- Quick study; can absorb and integrate concepts and information quickly.

Possible Blind Spots
- May not prepare yourself adequately, often prefer to "wing it".
- May not be attentive listener and may miss important information.
- May not be as interested in details and specifics of issues.
- May be unreliable and unrealistic and promise more than you can deliver.
- May have trouble committing to a decision and performing necessary following through.

Potential careers and majors for you to consider:
The careers listed below are all linked to your personality type and are organized by career cluster you have indicated most to least interested in. While there is never a guarantee, people of your type have indicated job satisfaction with these careers.

Very Interested  Interested  Somewhat Interested