2008

The use of career assessments in transition planning: an exploratory study

Annmarie J. Schimmel

Running Header: CAREER ASSESSMENTS

The Use of Career Assessments in Transition Planning: An Exploratory Study

Annmarie J. Schimmel

Rochester Institute of Technology

Advisor: Dr. Scott P. Merydith

Committee Members: Dr. Jennifer Lukomski

TABLE OF CONTENTS

Abstract

The Self Directed Search (SDS) and the 16 Personality Factor Questionnaire (16PF) were administered to a group of college age students who were either School Psychology graduate students or undergraduate students enrolled in a Career Exploration course at a local, private university. It was hypothesized that the SDS and the 16PF profiles for the students would differ between the two groups, showing that the profiles for those enrolled as School Psychology graduate students would be similar to the career summary codes previously identified for their chosen careers. Independent t-tests showed that on the SDS the School Psychology graduate students scored higher on the Social scale and lower on the Realistic scale, both of which were consistent with the SDS summary codes for the students chosen career. On the 16PF, the School Psychology graduate students were shown to be higher on the primary scales of Factor A (Warmth), and Factor B (Reasoning). They also scored lower on the primary scales Factor L (Vigliance), Factor M (Abstractedness), and Factor N (Privateness). These results were also consistent with the SDS career code that was previously identified for the student's chosen career. The results of this study are discussed in terms of the usefulness of administering these measures to students who are in the process of transitioning from high school to postsecondary education or the work force.

CHAPTER 1

Introduction

Purpose of the study

The purpose of this study was to determine the effectiveness of using a career interest survey, the SDS, and a personality measure, the 16PF, in assisting college aged students in determining appropriate career choices. This study included two groups of students, School Psychology graduate students and undergraduate students enrolled in a Career Exploration course. It was believed that by comparing the career interest and personality profiles between the two groups that definite patterns would begin to emerge. It was hypothesized that the SDS and the 16PF would demonstrate career and personality profiles similar to the School Psychology graduate student's chosen field of study. Overall, this study was aimed at evaluating the effectiveness and precision that the use of career assessments could bring to career and vocational planning.

Significance of the study

One of the primary goals of education is to help students to succeed in not only school, but also in life. Whether students choose to go on to the world of work, vocational training or postsecondary education, planning for the transition from secondary school to adult life is an important step. Many students, however, do not receive the level of vocational or transition planning necessary to allow them to make a smooth transition to the post school activity of their choice. School resources and curriculum are focused on the college bound minority of students instead of on the students who are work bound (Levinson, 2002). Since the 1970's there has

been an influx in the amount of attention that transition planning has received at both the federal and state levels. Despite this increase in attention, many students are still receiving minimal and inadequate transitional planning resulting in not only poor career decision making, but also overall poor life outcomes (Dunn, 1996; Stroebel, Krieg, & Christian, 2008).

Previously the role of the school psychologist in utilizing vocational assessment in the area of transitional planning has been limited. School psychologists represent an important school based professional who can not only administer vocational assessments, but also translate this information into effective planning methods. By using information that is specifically geared towards the student's career interests and personality, it allows the school based team to create a specific individualized educational plan focused around transition. Only through increased awareness of the importance of proper transitional planning and the effectiveness of vocational assessments, will students begin to reap the benefits that these plans can provide, such as vocational training, entrance and gradation from postsecondary schooling, proper job training, increased job satisfaction and an overall improved quality of life.

Delimitations of the study

There are a number of limitations that apply to the current study. In this study the participants were college aged students who were currently enrolled at a local, private university. The participants were selected using a convenience sampling and had already been accepted and enrolled at the college when this study took place. This implies that these students already had some preexisting level of career interest and motivation which lead them to enroll in postsecondary education. Since the participants were selected based on their enrollment in specific courses, no further individual information was obtained regarding these students, such as whether any of these students were utilizing special education services through the college, had

been enrolled in previous colleges in different majors, or had any prior real work experience. Since the population of students used in this study represents a more specific population of individuals, it makes it more difficult to generalize the findings of this study to alternative populations and age groups.

Definition of terms

The following terms are defined as they were deemed pertinent to this study.

Career interest: Refers to ones attention, concern or curiosity as it relates to a specific field of employment. It may also refer to a specific field or topic of study.

Educators: This includes all members of the school personnel including the following: teachers, aides, administrators, school psychologists, counselors, school nurses and educational specialists who are involved in a child's education.

Personality traits: Aspects of personality such as emotions, thoughts, and behaviors that are thought to be stable across varying situations (Cattell & Schuerger, 2003).

Vocational assessment: Vocational or career assessments are designed to help individuals understand their personal interests, strengths and weaknesses as they relate to possible career options. There are a number of vocational and career assessments that are available through differing agencies that utilize both quantitative and qualitative methods. The terms career and vocational assessment are often used interchangeably.

Work: Work is defined as any environment either competitive, guided or sheltered work shop, in which an individual is given an opportunity to contribute to society in a productive manner in which they are repaid in a monetary format.

CHAPTER 2

Review of the Literature

One of the primary goals of education is to prepare students for successful independent living within society (Stroebel, Krieg, & Christian, 2008). Whether the next step after high school is postsecondary education or the world of work, the preparation for life after school is an important part of every adolescent's life. Although secondary schools provide a number of opportunities for students to develop their academic and interpersonal skills, these experiences are not always enough to prepare students for the transition from the world of textbooks to the world of work. Educators are aware that after leaving school, adolescents in general are frequently under prepared to meet life challenges leading to higher levels of unemployment and an overall lack of job satisfaction (Dunn, 1996; Cummings, Maddux, & Casey, 2000). Preparing students for life after school should be based on a comprehensive individualized vocational assessment process which includes a student's academic strengths and weaknesses, as well as the student's personality and career aspirations (Levinson, 2008).

Developmental considerations

Over the lifespan there are a number of school based transitions that occur. Transition it self is not a single event but rather an ongoing process of continual changes (Witte, 2002). For example some of these transitions include beginning preschool, entering kindergarten, transitioning from middle school to high school, graduating from high school and entering postsecondary school. Although these transitions can be a normal occurrence in a person's life, for some these transitions can require a great deal more planning and effort. Change at any point

in our lives requires coordination and preparation as we move from one phase to the next. For individuals with disabilities these transitions can be even more difficult requiring a more intensive level of support (Blalock & Patton, 1996).

Adolescence can be a challenging and interesting phase of development for individuals as well as their families and the educators that are trying to help prepare them for their future (Krieg, Brown, & Ballard, 1995). Teens developmentally progress at varying rates. This includes not only their physical characteristics, but also their decision making skills and the values they place in their future career aspirations. Today's teenagers have more decisions to make then ever before (Resnick, 1997). With the ever changing economy and competitive workforce, student's can no longer expect to obtain well paying, competitive jobs with a high school diploma (Stroebel, Krieg, & Christian, 2008). Although individual differences and personality characteristics influence one's decision making, student's can also be influenced by a number of outside factors such as their families, socioeconomic status, and culture. After high school, students can generally take one of two pathways. They can go directly from school to work, or from school to post secondary education or vocational training and then employment. The ways in which students can enter the world of work is an important variable when considering how they will receive transitional services and vocational education or training (Dunn, 1996; Resnick, 1997).

Legal considerations in the creation of transition planning

Vocational education programs became a part of the public school curriculum in 1917 with the passage of the Smith Hughes Act (Levinson, 1984). Although some focus was placed on creating educational and real life work opportunities, the transition from school to work was not identified as a national priority until the early 1980's. In 1983 the United States Commission on

Civil Rights reported that 50 to 70 percent of all United States Citizens with disabilities were unable to find work (Krieg, Brown, & Ballard, 1995). They also determined that a number of individuals that had graduated from special education programs were having difficulty in the areas of independent living and finding adequate employment. During this time focus on educational outcomes increased, resulting in federal and state legislation that created a set of guidelines from which individuals with disabilities should receive educational services. Knowledge of these laws is essential in guaranteeing that students with disabilities are provided with services, education and the continuing support to help them become successful and productive members of society.

The Rehabilitation Act of 1973 was one of the first laws which protected against the discrimination of individuals with disabilities (Salvia & Ysseldyke, 2004). This law states that any institution or program receiving federal funding may not discriminate against a person with a disability. An important portion of this law, Section 504, states that any institution or program receiving federal funds must be made accessible to individuals with disabilities by removing any physical barriers and discriminatory admissions practices. Section 504 protects against people being discriminated based solely on their disability. This law also states that no one shall be denied access because of a special need for additional services or auxiliary aids (Salvia & Ysseldyke).

The 1992 Amendments to the Rehabilitation Act of 1973 also emphasizes that a disability in no part should diminishes the human experience (Krieg, Brown, & Ballard, 1995). Individuals with disabilities are entitled to the right to in1dependent living, self determination, making individual choices, contributing meaningfully to society, pursuing meaningful careers and enjoying full inclusion in all activities. This amendment also required that individuals with

disabilities play a more active role in their own career planning (Fields, 1996). Within the school setting this ensures that no one is excluded in general participation based on their disability. This is important because within the school someone can qualify for services under Section 504 and not under The Individuals with Disabilities Education act. Students who qualify under Section 504 are entitled to accommodations to create a comparable educational opportunity to that of their non-disabled peers. These accommodations may be physical, instructionally based, or may take the form of aides or additional services. The accommodations must be specified in an accommodation plan to document that a free and appropriate education is being provided for the child (Krieg, Brown, & Ballard, 1995).

The Education for all Handicapped Children's Act was originally passed in 1975 and stated that students with disabilities were entitled to the right to a free and appropriate public education. This act also established that schools must have on file an individualized educational plan for each student determined to be eligible for services. It also provided parents the right to inspect their child's educational files and to be informed when changes to their child's educational programming are made. Children also have the right to be educated in the least restrictive environment possible, providing them with the highest level of educational opportunities regardless of disability, race, gender or economic status (Salvia & Ysseldyke, 2004).

In 1990, "The Education for all Handicapped Children's Act" was revised and renamed "The Individuals with Disabilities Education Act" (Krieg, Brown, & Ballard, 1995). Commonly referred to as IDEA, it was aimed at trying to refocus educators from simply classifying children with disabilities into noticing a student's strengths and capabilities. IDEA required that all children with disabilities should have transitional based goals and objectives included in their

individualized educational plan (IEP). These goals and objectives included an outline of the students current levels of performance in relation to their career goals, a set of coordinated activities, and precise and measurable goals to help them progress towards their career aspirations. An IEP, with transition based goals and objectives is required for all students who receive special education services and should be put into place by age 16 with a statement in regards to transition no later then the age of 14 (Witte, 2008). The IEP is also supposed to be created with a student's personal preferences and interests taken into account. Students should also be involved in the creation and implementation of this plan (Fields, 1996).

Prior to 1990 there was no mandate for providing transition services and no standardized mechanism for funding transition services other than through federally funded research projects, grants or through general education. Although states are now required to meet the criteria specified in IDEA the states have been given clearer objectives and educational opportunities (Blalock & Patton, 1996).

The Carl D Perkins Vocational Education Act of 1984 also played a significant role in helping to advance the area of transitional planning for students. The Carl D Perkins Vocational Education Act increased opportunities for vocational training and employment, particularly for students with disabilities. The act was concerned with meeting the needs of both the student and the labor market in which the main goal was to improve, update and expand the quality of vocational instruction programs. It was designed to create equal access to programs for all students and especially for students with limitations such as physical handicaps, learning disabilities, economic disadvantages, and limited English proficiency (Omizo & Omizo, 1992). As a result of The Perkins Act, schools are now required to obtain both career or vocational interest, and aptitude information on all students with handicaps who participate in career

development and vocational education curricula. This act was one of the first forms of legislation which required some form of planning and formal requirements in the area of transitional planning.

The Perkins Act was updated in 1990 with the creation of The Carl D. Perkins Vocational and Applied Technology Act. This act ensures that equal access is improved for high-quality vocational and educational opportunities for all students. The Perkins Act mandates that programs must provide students with experience in understanding all aspects of a job field they wish to enter and to integrate academics and problem solving skills (Krieg, Brown, & Ballard, 1995). This act also helped create greater opportunities for students to develop marketable skills which could help them within the work force.

The American's with Disabilities Act (ADA) of 1992 was another important law which helped to shift the focus of attention away from disabilities in order to focus more on the individual (Salvia & Ysseldyke, 2004). This act guarantees that all citizens with disabilities have equal access to employment opportunities, public accommodations, state and local government services, transportation, and communication. The civil rights that are provided by the ADA are similar to those provided to women and minorities. It also extends to all aspects of daily living such as work, the community and leisure activities. This act also requires that employers make accommodations for employees and protects against discrimination of employees due to their disabilities (Krieg, Brown, & Ballard, 1995). It also extends to provide individuals with equal job opportunities, rights to job training and other privileges.

In 1994 President Bill Clinton signed the School to Work Opportunity Act setting forth dynamic changes in education. This act was created to encourage activities that create workplaces which are active learning environments in coordination with school instruction. This

act has also encouraged a strong movement to increase academics in career and technology education and to encourage academic learning to occur in real work settings. It was designed primarily to help the more then 75 percent of students who enter the workforce after graduation from high school (Krieg, Brown, & Ballard, 1995). This act was also aimed at helping to create a universal, high quality, school to work transition system that enables youth in the United States to identify and navigate to more rewarding roles within the workplace.

The programs created by the School to Work Opportunity Act, unite the general areas of school and work based learning and the connecting activities between them. The combination of learning and real work activities are meant to focus on a declared career major for each student and to lead to the accomplishment of a skill certificate. This certificate is a portable, industry-recognized credential, issued by a program and certifying that a student has mastered skills at the levels endorsed by the National Skill Standards Board. This includes work experience and instruction within the field which helps to increase workplace competency and also helps to increase a students marketable skills. This program is designed to be linked to agencies and other services in order to ensure that students are receiving jobs after the completion of the program (Krieg, Brown, & Ballard, 1995). The main goal of this act is for all states to be consistent when implementing the school to work programs. This not only provides all students with the same opportunities but also helps to increase the number of students entering the workforce. Unfortunately, this legislation was sunsetted in 2002. This Act, however, still provides the blueprint for effectively providing successful transition services and continues to have great influence in this area today (Stroebel, Krieg, & Christian, 2008).

Vocational education programs created by legislation were implemented in order to not only protect students but also to provide students with the highest level of services available. The

legislation has helped to create a number of mandatory requirements, which each school must fulfill when creating an individualized educational plan for a student. The legislation has also provided more opportunities for students with disabilities to participate in the general education setting, as well as within career and vocational programming (Levinson & Capps, 1985). The changes in legislation over the past twenty years have left the educational community with little choice about the direction that the educational planning process must take (Levinson, 1984; Stroebel, Krieg, & Christian, 2008). Despite this outgrowth of federal laws and regulations there is still a great deal more that needs to be done in order to help create the best and most efficient form of transition planning possible.

The importance of transitional planning

During the mid 1980's the vocational transition movement was advanced by studies about adult outcomes for students classified with a disability. Studies during this time projected higher rates of unemployment, long-term underemployment for those with jobs, minimal participation in postsecondary education, an inability to live independently, limited social experiences, restricted participation in community activities, and higher arrest rates (Blalock & Patton, 1996; Cummings, Maddux, & Casey, 2000). These findings raised a number of warnings among educators, drawing additional attention to the need for transitional planning among the school aged population. Today, many of these general trends among individuals with disabilities still hold true.

In 2004 a report by the National Organization on Disability indicated that only 35% of people with disabilities reported being employed on a full-time or part-time basis, compared to 78% of those individuals not classified as having a disability. Overall, unemployment rates among individuals with disabilities have been reported to hover around 70% since 1994 (as cited

in Levinson, 2008). In comparison to students without disabilities, a student classified as having a specific learning disability experiences higher rates of unemployment as well as under employment. They receive lower pay, are more dependent on their parents and have higher rates of job dissatisfaction (Dunn, 1996).

Individuals with disabilities are also more likely to fail in postsecondary educational settings and are more restricted in their participation in community activities. When students with learning disabilities chose to pursue postsecondary education other issues need to be taken into consideration such as class size, availability of out of class support, and individual levels of self advocacy as it relates to requesting accommodations and educational services (Witte, 2008). Learning difficulties can also affect other areas such as decision making and problem solving which may create life long difficulties. Also those who have documented difficulties in the areas of memory, impulsivity, restlessness, hyperactivity, attention span and distractibility have compacting problems as they grow older and life demands increase (Dunn, 1996).

Much of the early forms of transitional planning were geared towards students with multiple disabilities who had more intensive needs (Cummings, Maddux, & Casey, 2000; Levinson, 2002). The common assumption at that time was that students with specific learning disabilities were capable of making a transition in to adulthood on their own without the help of additional school or community based agencies (Blalock & Patton, 1996). Transitional planning for the learning disabled population has lagged behind that of other groups due to the misconceptions surrounding the scope of these disabilities. Many people believe that since this population is still capable of being educated within the general education setting that they are not in need of any additional transitional support services. The reality is that students with learning disabilities finish high school with minimal academic or vocational skills resulting in roughly 28

to 56 percent of students with learning disabilities dropping out of high school prior to graduating (Cummings, Maddux, & Casey, 2000). As a result three times as many individuals with disabilities live in poverty as compared to those without disabilities. In addition only 34% of individuals with disabilities indicate that they are very satisfied with their life in comparison with 61% of individuals without disabilities (as cited in Levinson, 2008).

The National Center for Education Statistics (1997) indicates that almost 5 out of every 100 adolescents currently enrolled in high school each year leave with out completing a degree. This results in approximately 11% (over 3.6 million) of youth ages 16 – 24 not completing or being currently enrolled in a high school program (as cited in Dillon, Liem, & Gore, 2003). Existing research indicates that young people who drop out of school face substantial economic, psychological, and social difficulties. Economically, high school dropouts are almost twice as likely as high school graduates, to be unemployed or dissatisfied with their job. They are also more likely to experience psychological dysfunction, health problems, substance abuse, engagement in acts of violence, delinquency and incarceration. Dropping out of high school causes individuals to engage in a premature transition into adulthood. They are also more likely to become parents at an early age and to enter into low-wage or "dead-end" jobs. Most of the research surrounding students who drop out of high school look at pre-cursors such as; family influence, poor academic achievement, low grades and grade retention. Little has been researched as far as preventive measures such as career or vocational counseling with the use of career based assessments or the efficacy of transition planning in helping to prevent this phenomenon (Dillon, Liem & Gore, 2003).

The United States Department of Education (2002) indicated that 28.9% of students with disabilities ages 14 years and older, drop out of high school. Drop out rates for these students

have been reported to be as high as 50.6% (U.S. Department of Education, 2002). Drop out rates for students with other disabilities have been reported as follows: learning disabilities, 27.1%; mental retardation, 24.9%; visual impairments, 11.8%; and autism, 9.5% (U.S. Department of Education, 2002). The U.S. Department of Education also found that students in general were less likely to drop out of school if they found meaning in their education and if they received some type of vocational education training in high school. (Levinson, 2008; Stroebel, Krieg, & Christian, 2008). The lack of clear and precise transition plans, a lack of career counseling and planning for students within high school also plays a part in the life outcomes that students with disabilities currently face (Omizo & Omizo, 1992; Cummings, Maddux, & Casey, 2000).

Creation of effective transition planning

Transition is a bridge between the security and structure offered by the elementary school and the opportunities and risks of adult life (Levinson & Ohler, 1998). Since 1984 the United States Department of Education has funded continued research projects and acquired an abundance of information that confirms the importance of transition planning (Krieg, Brown, & Ballard, 1995; Levinson, 2008). While the laws and legislation are clear on the necessity of transitional planning as well as what must be done to provide these services to students, they do not clarify the best or most specific way to accomplish this goal. There are a number of "best practices" frequently cited which should be included within transitional planning. They include interagency cooperation and collaboration, functional vocational assessment, vocational/technical skills training, social skills training, career education, paid work experience during high school, and individual, parent and family involvement in the development of written transition plans (Krieg, Brown, & Ballard, 1995; Witte, 2008). Planning also needs to incorporate skills training in order to help students not only maintain their place of work but to

also help them with non-work related needs such as daily living skills. Once a plan is created it needs to correspond with the instruction that is provided within the school. While these needs vary depending on the student, linking them with community based resources is a crucial aspect of the transitional planning process.

Early transition planning. Early planning is important because it helps set students on the correct path, and allows for additional training during the high school years. The advantages to beginning to plan early led to the legal requirement under IDEA to incorporate transition planning into the IEP by age 16 with a statement of transition by age 14 (Witte, 2008). This is also motivated by the fact that the more involved students are in the planning for their future the more likely it is that the plan will be effective. It is also important to provide students with choices and opportunities to engage in decision making in order to help increase the likelihood of making good decisions later on in life (Fields, 1996). Unfortunately, transition planning that begins relatively close to the end of a student's high school career is bound to fail due to a lack of time and preparation. This is especially true for students with disabilities who are interested in continuing on to postsecondary education (Levinson & Ohler, 1990). Due to the planning demands that all students with disabilities require, it is important to start the transitional planning process early and to continually revise and readjust the plan to fit the students changing needs as they grow and develop.

Individual plans and programs. Each student's education and transitional plan is intended to be individualized, which means that it is driven by the student's specific interests and goals. The more involvement the student has, the stronger the plan will be. Schools that treat the Individualized Educational Plan (IEP) process as more then a legal mandate are more likely to benefit from the process. The transition plan should also include clear, relevant and measurable

goals from which to guide instruction (Blalock & Patton, 1996). It is important that the plan not only be specific but that it is also tailored to the student's educational and personal needs. The more clear and concise this plan is the easier it will be to link the plan with available educational opportunities and outside services.

Interdisciplinary teams. A comprehensive team should be involved with career planning. The theory behind using a team based approach is that each team member comes from a specific background with focused skills and knowledge (Krieg, Brown, & Ballard, 1995). By including team members from a variety of areas you achieve a diverse and well trained group of individuals who all have the student's best interest in mind. This team may include the school psychologist, school counselor, career-vocational evaluator, school nurse, parent, and a teacher who are familiar with the student. The student should also be a key member within this team. Data should also be collected and made available to students, parents and educators in order to help aide with proper planning, as well as measuring any progress made towards the student's career based goals and objectives (Omizo & Omizo, 1992). Team members should also communicate with each other in order to create a more meaningful and effective transition process.

Career education curriculum. A major objective of many high school career programs is for the students to acquire decision making skills. There is evidence that students who are involved in the planning, decision making, and implementation of their educational programs, perform better than peers who are not (Fields, 1996). The process of learning to make career decisions is a cumulative one and cannot be taught through a single lesson, or planned for in a single day (Krause & Hughey, 1999). In 1999, Kraus and Hughey, measured the effectiveness of career counseling on high school juniors. Sixty high school juniors were provided with career

counseling, which aimed at teaching the skills necessary to make important career decisions. Based on post study measures, no significant difference resulted in the student's levels of career decision making self-efficacy or their level of career indecision. Although there was no significant impact from the counseling that the groups received, the male population who did not receive counseling, was higher in the career decision-making self efficacy then the female population. Also the females who received counseling were higher in career decision making self-efficacy then those who did not (Krause & Hughey, 1999). This study illustrated that certain populations of students are more likely to benefit from training in career decisions then others. While the career counseling that the students received was not as specific or tailored to the students individual needs as is recommended, the findings illustrate important implications for the role of transition planning within a high school setting. Taking into account not only the target population but also the demographics of a high school are important when creating and implementing programs.

Self-determination is also an important part of the transition from school to adulthood. This includes a greater reliance on one's self and an increase in control over one's destiny. This is an area of growing importance as we continue to try and promote the skill of self-determination among students with disabilities (Field, 1996). Although students with disabilities often encounter a number of challenges in school based settings, they also come across difficulties in understanding their own personal strengths and weaknesses. This is especially true for students who are attempting to move from high school to postsecondary education. A successful transition for students with learning disabilities into college depends greatly on their ability to state their need for educational supports and accommodations within the classroom (Levinson & Ohler, 1990; Witte, 2008). These skills are also necessary for helping students to

create realistic career goals and in helping them to maneuver their way through the work environment.

Vocational assessment.

A necessary step in transition planning is assessment (Levinson, 2008). Vocational assessment was designed to provide individuals with disabilities with objective information that can assist them in making career decisions. It has been defined as a comprehensive process that uses work as the focus for assessment and exploration (Levinson, 1994). Historically, the placement of students with disabilities in vocational training programs has been some what problematic. Without vocational assessment data, the educators who were responsible for planning these programs had little relevant information to guide them (Levinson, 1987). The main goal of the assessment process is to assist in helping students to make successful adjustments to work, postsecondary education, and/or community living (Leconte, 2006).

A variety of assessment tools can be utilized, such as student interest inventories, learning styles inventory, interviews, projects, vocational evaluations, behavior rating scales, portfolios or other formalized psychometrics (Krieg, Brown, & Ballard, 1995; Sitlington, 2001).Vocational functioning can also be assessed based on a students interests, career maturity and work habits within a specific field. Performance tests such as work samples and situational assessments can also be used. These can be helpful when working with lower ability populations because they minimize the use of language during the assessment process. Work samples also allow individuals to experience or sample specific job tasks. They usually consist of demonstration, training and assessment phases. Situational assessment techniques are designed to determine an individual's interests, aptitudes, and work habits in a real or simulated work situation (Levinson, 1994).

Vocational assessment should be conducted along with other forms of evaluation such as psychological, educational, social, medical and cultural in order to obtain more information about the student's capabilities. Psychological functioning can include cognitive abilities, needs, values, temperament and behavioral tendencies (Levinson, 1994). For example, a student's cognitive abilities can be assessed in order to better understand his or her capabilities within a chosen occupation helping to create more realistic vocational goals and objectives (Levinson, 1990). Educational abilities can include language skills, reading skills, computational skills and general knowledge. Social functioning includes social skills, interpersonal skills, independent living skills and adaptive skills. Physical functioning can also include vision, hearing, endurance, dexterity and overall general health (Levinson, 1994). It can also include any area which may help to produce valuable information about a student's capabilities, likes and interests (Sitlington, 2001). Considering only the data provided from a single career assessment tool limits the effectiveness of the information provided during the assessment process (Omizo & Omizo, 1992). The main goal of this integrated assessment is to provide information that will allow school officials to develop appropriate vocational and educational goals that are within the reach of student's current capabilities (Levinson & Capps, 1985).

A number of school-based vocational assessment models have been created to provide professionals with an outline from which to guide assessments. Many of these programs are based in already existing multilevel programs (Levinson, 2008). Each level of the assessment process has different purposes and uses a variety of assessment techniques and tools in order to help assess the individual as a whole. The levels usually focus on three different phases. In the first phase assessments begins during the elementary school years and focus on an individual's needs, values, interests, abilities, interpersonal skills and decision making skills. They also use

vocational and career exploration activities and have the goal of building self-awareness. During the second phase assessments generally occur during the middle school or junior high school years. They focus more specifically on an assessment of vocational interests, vocational aptitudes, work habits and career maturity. They also utilize interviews, observations, and standardized norm referenced assessment instruments, and have the goal of continuing to encourage career exploration and assisting individuals in making tentative choices regarding educational and career goals. During the third and final phase, assessment generally occurs during the high school years and often uses more experientially based assessment devices like work samples and situational assessment. It also focuses on the specific training needs the student may require to obtain postsecondary education or employment. These assessments are also used to determine what skills may be necessary for the student to live independently within the community (Levinson, 1994; Sitlington, 2001).

Vocational assessment has changed and evolved since its original conception. It was originally designed to determine who was eligible for services provided by state and federal rehabilitation agencies and to determine what services an individual needed to be placed in a comprehensive employment agency (Levinson, 1994). The information collected through vocational assessment can now be used to help students with disabilities in a number of ways. It can be used to help identify student's interests, personal strength's, gain information about their potential for learning within a job, better understand their need for accommodations and additional training, and identify the need for additional support services (Leconte, 2006). The use of vocational assessment is an important aspect of the transitional planning process which is frequently minimized or eliminated within the actual school setting.

There are career interest and normal personality measures currently in use that can assist in vocational planning. These measures help to consider not only a specific job but rather occupational interests and individual personality characteristics. By considering an individual's personality, abilities and preferences, it not only assists in finding the correct career but also helps to increase the likelihood of later career satisfaction.

Self Directed Search. The Self Directed Search (SDS) was developed by John Holland in 1985 and is based on the idea that people who chose careers that match their personality types are more likely to be both satisfied and successful in their careers. The SDS is meant to help participants understand more about themselves and about their individual interests and skills. The SDS uses the RIASEC model, which is comprised of six personality types: realistic, investigative, artistic, social, enterprising, and conventional. The six personality traits can be arranged around a hexagon with one trait at each point. The placement of the six traits around the hexagon represents the relationship between the traits. Holland's theory states that most people can be loosely categorized within one of these six types. The SDS creates general scores within each of these six areas and the top three scores create a three letter code which is used to match the individual to a career area which may be appropriate for them. Although no individual assessment can determine the exact career an individual should consider, it creates a starting point from which to research, investigate and become interested in more specific career areas (Holland, Fritzsche, & Powell, 1994).

In 1990, Levinson tested the effectiveness of using the SDS in order to determine whether it was an effective measurement for career planning. Levinson found that the SDS can provide vocationally specific information that can assist in vocational planning and general recommendations. Measurements such as the SDS can also help in testing the overall

effectiveness of an evaluation. Levinson found that it was best used when students had a better understanding of the world of work and also when it was used in conjunction with other assessment tools (Levinson, 1990). There are a number of measurement tools which can be used during the assessment process to not only gain additional information but can also help the interdisciplinary team in creating a more focused and clear intervention plan.

The 16 Personality Factor Questionnaire. In 1936, Gordon Allport and H.S. Odbert hypothesized that an individual's personality could be described not only through their individual differences but also through the English language as we know it. This statement became known as the Lexical Hypothesis and led Allport and Odbert to create a list of 4500 words by which to describe personality. In 1946 Raymond Cattell began using computers to analyze the list into 181 clusters and began to ask subjects to rate people whom they knew by the adjectives on the list. The result was the creation of sixteen individual factors by which personality could be described. The sixteen primary factors include: warmth, reasoning, emotional stability, dominance, liveliness, rule-consciousness, social boldness, sensitivity, vigilance, abstractedness, privateness, apprehension, openness to change, self – reliance, perfectionism and tension. These 16 areas can be combined into five global factors which have also been referred to as the Big 5 factors of personality. The five global traits include extraversion, anxiety, tough-mindedness, independence, and self-control. Cattell went on to create the 16PF Personality Questionnaire, which is still widely used today (Cattell & Schuerger, 2003).

School Psychologist's role in transition planning

Traditionally there have been a number of connections made between the realm of psychology and the world of work (Levinson, 1990). With a continued emphasis on the role of educational planning in the transition from school to work, there is an increased need for school

psychologists to become involved in the educational planning and implementation of these career based goals. Although psychologists have always played an important role in working with students with disabilities and their families, their expertise in the area of assessment is becoming increasingly important for the realm of vocational education (Levinson, 1988). School psychologist's interest in the area of vocational assessment is a phenomenon which has developed greatly over the last thirty – five years. In 1974, an extensive literature review by Hohenshil failed to produce a single reference relating to school psychology and vocational education (Levinson, 1984). Since that time there has been an increase of research in the area of the school psychologist's role in the field of vocational assessment.

Historically, most students who were identified with a disability that graduated from school were trained and prepared to move into specialized work settings or placements. Since the 1980's a significant number of student's, including those with disabilities, have been pursuing postsecondary educational opportunities. This trend has increased the need for elementary and secondary School Psychologists to become involved in the transition process as participating members of the creation of IEP's, especially in the area of transition based goals and objectives. As a part of this team, School Psychologists need to be knowledgeable regarding disability assessment as well as the qualification procedures at the post secondary level, the impact of federal laws, and the need for self advocacy after high school. When these issues are brought to light they can help provide student with the support necessary to transition out of secondary school (Witte, 2008).

While the role of the school psychologist is varied from school to school there is no predominant research that indicates that psychologists are currently utilizing career based assessments to aide in this process. Also due to the varying standards and practices implemented

by school systems many school psychologists play a limited role in helping to create and implement transition based educational plans (Levinson, 2008). This study will be focused on trying to determine the effectiveness of using vocational assessments, especially the 16PF and the SDS, in determining appropriate career based decisions. It is also aimed at determining the extent to which these assessments could be effectively used within an educational setting.

Need for the present study

It is clear from the review of the legal mandates and past research that transition plans must be in place by the time a student is 16 in order to assist in their transition from high school to secondary education or the world of work. We have learned that these plans usually include the student's opinions about what jobs or careers would be the best for them. Given the generally poor life outcomes for these students it is apparent that this method is not effective. Career interest inventories and personality measures have proven to be an effective method to identify differences between occupation groups. The need for this study is to determine if these instruments can be used for students transitioning from secondary education to the world of work. In order for these measures to be effective they need to discriminate between individuals who have not entered into the world of work and those who had. The SDS and the 16PF are two measures which produce career and personality profiles for individuals. These measures produce different profiles depending on an individual's personality and career interests. The present study is geared towards determining whether these measures can reliably predict career paths for students who have not yet entered their chosen career field.

CHAPTER 3

Methodology

Participants

In order to investigate the extent to which career assessments are an effective tool in vocational evaluations and planning, a group of college age students were selected from a private university in upstate New York. A total of 60 college aged students ranging from 17 to 28 were chosen for this study. Out of the 60 participants, 33 were graduate students who were enrolled in a graduate level School Psychology program, and 27 were freshman students, who were enrolled in a 100 level Exploring Majors Course. The School Psychology graduate students volunteered to participate in the study while the Career Exploration undergraduate students participated as part of their enrollment in the Career Explorations course. Participants were fully informed of the results of their assessments at the time of their evaluations and they were also informed that the protocols would be retained for later use.

Measures

Self-Directed Search (SDS) Form R: 4th Ed. The Self Directed Search (SDS); (Holland, 1985) is a career interest inventory. The SDS can be self administered and self scored or administered in a group format. As reported in the SDS manual, the internal consistency coefficients (KR-20) for the 1985 edition, for a sample of 521 females and 297 males (aged 14 to 74 years), ranged from .59 to .92 for the different career interest sections and .84 to .92 for the summary scales (Holland, Fritzsche, & Powell, 1994). In the present study the participants self administered the SDS while the examiner scored and evaluated the outcomes. Using the SDS the participants of this study were asked to rate their interests for different activities, as they related to career based activities. These ratings yielded general scores for six factors which are described

as Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC). These six general areas are composed of subscales which include activities, competencies, occupations, and self estimates. Within each subscale, the participant must indicate whether or not they are interested in the item presented by indicating either yes or no. The number of responses marked yes for each area are then compiled and totaled for each of the RIASEC areas. The total scores for each RIASEC area are then ranked and the top three scores are used to produce a three letter summary interest code. This three letter summary interest code was used to represent the participant's vocational interest personality type. The three letter summary code can then be referenced in the Self Directed Search Career Finder booklet for a list of possible career's for the participant. The raw scores for the subscales and the RIASEC factors on the SDS can also be converted to standardized T scores (M = 50, SD = 10) based on the percentile ratings listed in the manual (S. Merydith, Personal Communication). T scores were used for analysis in the present study.

The SDS Form R Standard T Scores were used for data analysis in order to obtain indexes for the congruency, consistency and differentiation for both groups on the SDS. The congruence index, or compatibility, refers to how similar the participants dream job or current job choice relates to the summary code that was produced using the SDS. A higher level of congruence correlates to how similar the first and second letters of the three letter summary codes are. The congruence index was measured using the Zener-Schnuelle Index of Agreement (Prince & Heisar, 2000). The consistency index, or similarity, was determined by measuring the position of the first and second letters of the three letter summary code along Holland's hexagon (Holland, Fritzsche, & Powell, 1994). If the two letters were adjacent, or next to each other on the hexagon, they were scored as a 3, or high. If the letters were neither adjacent nor opposite

from each other on the hexagon, they were given a score of 2, or moderate. Finally, if the letters were opposite each other on the hexagon they were scored a 1, or low. The differentiation index, or the degree of distinctiveness within a profile, was calculated using the following formula: L = ½ (highest score – ((2^{nd} + 4^{th})/2)). The higher the level of differentiation the more interested an individual is in one specific career area (Prince & Heisar, 2000).

16 Personality Factor Questionnaire – Fifth Edition (16PF). The 16PF Fifth Edition (Cattell, Cattell, & Cattell, 1993) provides scores on 16 typical primary personality scales and five global scales. The 16 primary scales include warmth, reasoning, emotional stability, dominance, liveliness, rule-consciousness, social boldness, sensitivity, vigilance, abstractedness, privateness, apprehension, openness to change, self-reliance, perfectionism and tension. The internal consistencies for the primary scales range from .68 Factor E (Dominance) and Factor Q1 (Openness to change), to .87 Factor H (Social Boldness) (Cattell & Schuerger, 2003). Each primary scale contains 10-15 items which are presented in a three-choice answer format. For each question there are two answers choices (either a or c) and a non-descript choice (b). The answers are then recorded on a scantron sheet. There are a total of 185 questions from which raw scores can be converted. The raw scores are converted to Standard Ten Scores (Stens) that range from 1- 10 (M = 5.5, SD = 2). The Sten scores were then mapped onto the 16PF Fifth Edition Individual record form and converted into five global factors which include extraversion, anxiety, tough-mindedness, independence and self-control.

The 16PF Sten scores for the primary factors were also converted into prediction factors, which provide further information about a participant's personality. The prediction factors were calculated using the 16PF Technical Manual (Conn & Rieke, 1994). These factors were calculated for both the primary and global scales and included the areas of adjustment, self-

esteem, social skills, empathy, leadership, creativity and the something about myself scale. The Adjustment scale, which addresses overall emotional stability and general satisfaction with life, is divided into the three areas of emotional, social and occupational. Adjustment is associated with the 16 PF factors of Emotional Stability: C+, Vigilance: L-, Apprehension: O-, Tension: Q4-, Social Boldness: H- and Perfectionism: Q3+. Self Esteem , or an individual's self worth was also evaluated. The Self Esteem Factor relates to the 16PF primary factors of Emotional Stability: C, Apprehension: O, Dominance: E, Social Boldness: H and Vigilance: L.

The Social Skills scale, or ones ability to orientate and engage with others, was divided into the areas of Emotional Expressivity, Emotional Sensitivity, Emotional Control, Social Expressivity, Social Sensitivity, Social Control and the Social Skills Total. The Social Skills scales relate to the 16 PF primary factors of Social Boldness: H+, Vigilance: L-, Warmth: A+, Emotional Stability: C+, Openness to Change: Q1+, Tension: Q4-, and Liveliness: F+.

The Empathy scale, or ones ability to relate to others, relates to the 16PF primary factors of Social Boldness: H+, Emotional Stability: C+, Warmth: A+, and Vigilance: L+. The Leadership scale relates to a personals predicted potential for leadership. The 16PF primary factors which relate to Leadership are Emotional Stability: C+, Dominant: E+, Enthusiastic: F+, Conscientious: G+, Bold: H+, Tough – minded: I-, Practical: M-, Self Assured: O- and Compulsive: Q3+. The Creativity scale, measures a person's creative nature. This scale is broken up into Science-Business, Arts and Total Creativity. The 16PF primary factors which contribute to the Creativity scales includes: Reserved: A-, Possessed reasoning ability: B+, Dominant: E+, Serious: F-, Bold: H+, Sensitive: I+, Imaginative: M+, Experimenting: Q1+, and Self-Reliant: Q2+.

The Something About Myself or SAM scale, is a biographical measure of personality characteristics, thinking strategies and creative output. The 16PF primary scales which contribute to the SAM scale include: Social Boldness: H+, Perfectionism: Q3+, Abstractedness: M+, Dominance: E+, and Openness to Change: Q1+. These prediction factors were used to gather further information regarding the participant's personality characteristics as they related to career decision making. (See pages 145 – 211 in the 16PF technical manual for all equations used to calculate the prediction factors).

Procedure

Each of the participants were required to complete the Self Directed Search (SDS), and the 16 Personality Factors (16PF). The School Psychology graduate students were required to independently complete both of these measures as part of a graduate level course on Social and Emotional Assessment. The School Psychology students were responsible for administering, scoring and evaluating their own measures. This process took approximately forty-five minutes to an hour. The measures were then collected for the purposes of scoring and evaluation. After the completion of the course the students were informed about the intent of this study and willingly released their protocols for later use.

The undergraduate students enrolled in the Career Explorations course were required to complete a career assessment battery (16PF and SDS) to help them better understand their pending college majors and career aspirations. As part of this assessment the participants met with second and third year, School Psychology graduate students over two sessions. During the first session, which lasted approximately an hour, the School Psychology graduate students explained the assessment process, conducted a student interview, and administered both the SDS and the 16PF. Informed consent for the evaluation, as well as later use of the protocols and

resulting materials, were collected at that time. The School Psychology graduate students then scored and interpreted the assessments. After meeting with a professor in the graduate program to review the protocols and the resulting report, the School Psychology graduate students met with the undergraduate students enrolled in the Career Exploration course for a second time. During the second session they reviewed the results of the assessments, and the undergraduate students were given a copy of their report.

Data collection and analyses

After the assessments were completed the protocols were retained with permission of the participants for later use. The data was then compiled and analyzed through the use of SPSS version 14.0. Mean comparisons between the overall scores on the 16PF and the SDS for the two groups were conducted to determine if group differences existed. Descriptive statistics were also described as well.

CHAPTER 4

Results

Shown in Table 1 are the means and standard deviations for each of the six SDS scales by group. Significant mean differences were obtained for the Realistic and Social scales (t (59) = 2.62 p = .01, t (59) = -5.42 p= 0.00, respectively). The School Psychology graduate students scored higher on the Social scale where as the Career Exploration undergraduate students were higher on the Realistic scale.

Subscale differences for the Social and Realistic scales for each group were also observed. Shown in Table 2 are the mean and standard deviations for the subscales for the Realistic scale. Significant mean differences between the School Psychology graduate students and Career Exploration undergraduate students were observed for the Competencies scale (t (59) = 1.97 p = .05). Displayed in Table 3 are the mean and standard deviations for the subscales for the Social scale. Significant mean differences between the School Psychology graduate students and Career Explorations undergraduate students were observed for the Activities scale (t (59) = -8.46 p = 0.00), Competences (t (59) = -2.57 p = 0.01), Occupations (t(59) = -6.34 p = 0.00), Self Estimates 1 (t (59) = -2.25 p = 0.02), and Self Estimates 2 (t (59) = -3.73 p = 0.00).

Displayed in Table 4 are the mean and standard deviations for the Congruence, Consistency, and Differentiation indexes on the SDS. Significant mean differences between the School Psychology graduate students and Career Explorations undergraduate students were observed for Differentiation (t (59) = -2.16 p = 0.03) and Congruence (t (59) = -1.94 p = 0.05).

Shown in Table 5 are the mean and standard deviations for the 16 Personality Factors. Significant mean differences between the School Psychology graduate students and the Career Exploration undergraduate students were observed for the primary factors of Warmth (t (58) =

-2.01 p = .05), Reasoning (t (58) = -4.95 p = 0.00), Vigilance (t (58) = 2.93 p = 0.00), and Abstractedness (t (58) = 2.93 p = 0.00), and approaching significance for Privateness (t (58) = 1.81 p = 0.07). As can be observed in Table 5 School Psychology graduate students scored higher on Warmth and Reasoning and lower on Vigilance, Abstractedness and Privateness.

A number of prediction factors were also calculated using the primary factors of the 16PF. Displayed in Table 6 are the mean and standard deviations for the primary prediction factors. Significant mean differences between the School Psychology graduate students and Career Exploration undergraduate students were observed for Adjustment: Occupational (t (58) = -2.17 p = 0.03), and the Social Skills Total Scale (t (58) = -2.46 p = 0.01), and approaching significance for the Social Skills Social Control scale (t (58) = -1.90 p = 0.06).

CHAPTER 5

Discussion

The instruments used in the present study were able to identify career and personality differences between a group of School Psychology graduate students and a group of undergraduate students enrolled in a Career Exploration course. The results of the present study show that the School Psychology graduate students had an SDS profile code, as Holland presents in his dictionary of occupational titles, that was similar to those of individuals employed as School Psychologists. This finding is noteworthy in that the SDS was able to identify the School Psychology graduate students as being within their chosen profession despite the fact that they had not yet had any real work experience within that field. The undergraduate students enrolled in the Career Exploration course did not have a clearly identified Holland code, demonstrating that the SDS can effectively discriminate between the two groups.

More specifically, on the SDS the School Psychology graduate students were significantly different from the undergraduate students in the area of Social interests. Individuals who rate themselves as being higher on the Social scale are described as being cooperative, supportive, helping, and nurturing. These two groups were significantly different in the types of activities and occupations they found interesting, as well as their perceptions of their personal competencies and skills. On the 16PF, the School Psychology graduate students were higher in the areas of Warmth and Reasoning and lower in the areas of Vigilance, Privateness, and Abstractedness. The individuals within this group can be described as warm, outgoing and more abstract in their thinking. These findings indicate that the School Psychology graduate students presented a 16 PF profile that was consistent with a high level of social interest on the SDS. Further, the School Psychology graduate students self ratings on the 16PF indicated that they

liked to work with people and that they are trusting, grounded and genuine in their interactions. Differences within the area of reasoning (Factor B), however, can likely be attributed to the fact that the School Psychology graduate students had already attained a bachelor's degree, and the level of education an individual has attained can elevate this scale.

Further inspection of the SDS profiles indicate that the undergraduate students enrolled in the Career Exploration course, rated themselves as being significantly different on the Realistic scale. Individuals who rate themselves higher in this area are usually described as being practical and enjoying activities which are more hands-on in nature. It is likely that the undergraduate students enrolled in the Career Exploration course were higher on the Realistic scale due to the fact that the local university they were attending specializes in technology based courses of study. This group also consisted of students interested in a variety of different careers and who were also at varying degrees of career decision and interest. The differences that existed between the undergraduate students enrolled in the Career Exploration course, also helps to explain why on the SDS they only rated themselves as being significant in the area of competencies, or activities they felt that they were good at. On the 16 PF, the undergraduate students enrolled in the Career Exploration course, rated themselves as being lower on Warmth and Reasoning. This group also rated themselves as being higher on Vigilance, Abstractedness and Privateness. Based on these general ratings the undergraduate students within this group can be described as being more reserved and detached in their personal relationships as well as more concrete in their thinking. These ratings also indicated that these individuals may approach new situations in a suspicious or skeptical manner and may be more private and discreet in nature. Overall, these individuals are more abstract in their thinking and tend to be more absorbed in ideas then in other

people. In essence, their 16PF profile was consistent with the general description of the Realistic code on the SDS.

A number of prediction factors were also calculated based on the ratings on the 16PF for the two groups. These factors help to provide additional information about personality characteristics that may provide additional information about what types of careers may be appropriate for certain individuals. The School Psychology graduate students were higher in Adjustment: Occupational, Social Skills: SSI Total, and Social Skills: Social Control. Individuals who are higher in adjustment are considered more emotionally mature and more capable of maintaining good control over their relationships and emotions. The School Psychology graduate student's self endorsement on the Adjustment: Occupational Scale indicates that they are more likely to not only stay in the same job for a longer period of time, but that they are also more likely to be satisfied in their careers. The Social Skills Total is a general measure of social skills indicating that individuals who score higher on this scale have a good general ability to interact with others in a positive way. The School Psychology graduate students also scored higher in Social control indicating that they are generally more comfortable in almost all types of social situations.

Prediction factors were also calculated for the undergraduate students enrolled in a Career Explorations course based on their personal ratings on the 16PF. These individuals scored lower in the areas of Adjustment: Occupational, Social Skills: SSI Total, and Social Skills: Social Control. These findings indicate that this group may have less maturity and control as it relates to their occupations. Individuals in this group may also tend to be lower in general social skills and may feel uncomfortable in some social situations. The differences between these two groups may be a result of the age differences between the two groups. The School Psychology graduate

students, for example, are enrolled in a specialized graduate program and have already gone through a four year undergraduate program. Through this experience it is likely that these students have gained some wisdom and maturity. It is also likely that this experience provided these individuals with additional confidence in their abilities to socially interact with others.

On the SDS the congruence, consistency and differentiation were also calculated for each of the two groups. The School Psychology graduate students ratings were higher in Differentiation, or the distinctiveness of their profiles, and Congruence, or how similar the code was to their current occupational code. This indicates that the School Psychology graduate students profiles were more similar to each other and to Holland's predetermined code for a School Psychologist. This also means that the codes for their ideal jobs were similar to the code that they received on the SDS. This is likely due to the fact that all of the School Psychology graduate students were already enrolled in a specialized graduate level program of study which is geared towards becoming a certified School Psychologist.

These findings have direct implications for assessing adolescents who are transitioning from school to work. Both the 16PF and the SDS have demonstrated their ability to differentiate between individuals who are at different points of their career development. Currently, within schools today students are usually only asked what they would like to do after graduation and they are provided with little information regarding the different career options that may be available to them. Although this method has not produced favorable results, as evidenced by outcome studies as described in the review of the literature, it continues to be a prominent method within schools. The use of measures such as the 16PF and the SDS would provide these student's with more clear and concise information which could help to guide career development. It would also afford student's with areas of interest to help educators assist in the

planning for these student's. Currently, the lack of these measures within schools proves to be an area of weakness in regards to the creation of effective transition planning.

Although School Psychologists are often under utilized in the transitioning planning process the present study illustrates that the use of the 16PF and the SDS could have positive effects on career and vocational assessments. At the high school level the use of these assessment tools would be an effective way for School Psychologists to become involved in this process. The administration of the 16PF and the SDS as part of the mandated tri-annual evaluations may help to not only involve the school psychologist but also to assist the transition team in creating and implementing more effective transition planning.

Limitations of the study

There are a number of limitations that apply to the current study. The sample of individuals who were chosen for this study, were currently enrolled in a local private university. This indicates that the individuals already had interest in obtaining a career as well as motivation and guidance in transitioning from secondary to postsecondary education. Due to the group used in the present study there is no way to determine whether the results from the present study can be used to determine the effectiveness of using these measures with younger populations or at risk populations such as students with specific learning disabilities. Due to these limitations there is a need for further research in the use of career assessments in assisting a wide range of students in transition planning.

Future Research

The present study focused on the effectiveness of using the SDS and the 16PF in career assessments and focused on the ability of these tools to differentiate between groups. Future studies in the realm of career assessments should focus on utilizing these assessment tools with

high school and middle school age populations. This study could also be expanded to look at varying age levels to determine the appropriate age at which transition planning should begin. It could also be expanded to looking at different interest groups such as students classified with disabilities, and students at risk of dropping out of school. The majority of research in the area of student drop out rates focus's on the precursor's to a student leaving school and has yet to evaluate the use of career based measures in assisting them in staying in school. This study also only utilized a small sample of information from the two groups. Future research should look at the implementation of career assessments, followed by a longitudinal study in order to measure the effectiveness of the assessments in relation to the majors or career choices that the participants make later on in life.

References

Blalock, G., & Patton, J. (1996). Transition and students with learning disabilities: creating sound futures. *Journal of Learning Disabilities, 29(1),* 7 – 16.

Cattell, H. E. P. & Schuerger, J. M. (2003). *Essentials of 16PF Assessment*. John Wiley & Sons: United States of America.

Conn, S. R. & Rieke, M. L. (1994). *16 PF fifth edition: Technical manual*. Institute for Personality and Ability Testing, Inc.: Champaign, Illinois.

Cummings, R., Maddux, C. & Casey, J. (2000). Individualized transition planning for students with learning disabilities. *The Career Development Quarterly, 49 (1), 60 – 72.*

Dillon, C. O., Liem, J. H. & Gore, S. (2003). Navigating disrupted transitions: getting back on track after dropping out of high school. *American Journal of Orthopsychiatry*, 73(4), 429 – 440.

Dunn, C. (1996). A status report on transition planning for individuals with learning disabilities. *Journal of Learning Disabilities, 29(1),* 17 – 30.

Field, S. (1996). Self-determination instructional strategies for youth with learning disabilities. *Journal of Learning Disabilities, 29(1),* 40 – 52.

Holland, J. L., Fritzsche, B. A., & Powell, A. B. (1994). *SDS Self Directed Search: Technical Manual.* Psychological Assessment Resources, INC: Lutz, Fl.

Kraus, L., J., & Hughey, K. F. (1999). The impact of an intervention on career decision- making self-efficacy and career indecision. *Professional School Counseling, 2(5),* 384 – 390.

Krieg, J., Brown, P., & Ballard, J. (1995). *Transition: school to work.* United States of America: The National Association of School Psychologists.

Leconte, P. (2006). The evolution of career, vocational, and transition assessment: implications for the summary of performance. *Career Development for Exceptional Individuals, 29(2),114 – 124.*

Levinson, E. (1984). Vocational/career assessment in school psychological evaluations: rationale, definition, and purpose. *Psychology in the Schools, 21*, 112 – 117.

Levinson, E. (1987). Incorporating a vocational component into a school psychological evaluation: a case example. Psychology in the Schools, 24, 254 – 264.

Levinson, E. (1988). Correlates of vocational practice among school psychologists. *Psychology in the Schools, 25*, 297 – 305.

Levinson, E. (1990). Vocational assessment involvement and use of the self-directed search by school psychologists. *Psychology in the Schools, 27,* 217 – 228.

Levinson, E. (1994). Current vocational assessment models for students with disabilities. *Journal of Counseling & Development*, 73, 94 – 101.

Levinson, E. M. (2002). Best practice in school-based vocational assessment. In A. Thomas & J. Grimes (Eds.), *Practices in School Psychology IV: Vol. 2*(1569 – 1584). Bethesda, MD: The National Association of School Psychologists.

Levinson., E. M. (2008). Best practice in school-based career assessment and school-to-work transition for students with disabilities. In A. Thomas & J. Grines(Eds.), *Best Practices in School Psychology V: Vol. 4 (*1563 – 1580). Bethesda, MD: The National Association of School Psychologists.

Levinson, E., & Capps, C. (1985). Vocational assessment and special education triennial reevaluations at the secondary school level. *Psychology in the Schools,* 22, 283 – 292.

Levinson, E., & Ohler, D. (1998). Transition from high school to college for students with learning disabilities: needs, assessment, and services. *The High School Journal,* 2 – 69.

Omizo, S., & Omizo, M. (1992). Career and vocational assessment information for program planning and counseling for students with disabilities. School Counselor, *40(1),* 32 – 40.

Pfeffer, R., A. (1978). *Proposed functions for school psychologists in career education.* Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University.

Prince, J. P. & Heisaur, L. J. (2000). *Essentials of Career Interest Assessment*. J. W. Wiley: New York.

Resnick, L. (1997). Getting to work: thoughts on the function and form of the school-to-work transition. In A. Lesgold, M. Feuer, & A. Black (Eds.), *Transitions in work and learning: implications for assessment (264 – 280).* Washington, D.C.: National Academy Press.

Salvia, J., & Ysseldyke, J., E. (2004). *Assessment: in special and inclusive education* (9th ed.). New York: Houghton Mifflin Company.

Shepard, J., & Hohenshil, T. (1983). National survey of career development functions of practicing school psychologists. *Psychology in the Schools, 20,* 445 – 449.

Sitlington, P. (2001). Career/vocational assessment: a critical component of transition planning. *Assessment for Effective Intervention, 26(4), 5 – 22.*

Stroebel, S. S., Krieg, F. J., & Christian, S. (2008). Best practices in planning for an effective transition from school to work. In A. Thomas & J. Grines (Eds.), *Best Practices in School Psychology V: Vol. 4 (*1581 – 1597). Bethesda, MD: The National Association of School Psychologists.

U. S. Department of Education. (2002). *Twenty-third annual report to Congress on the implementation of Public Law 101-476: The individuals with Disabilities Education Act*. Washington, DC: U.S. Government Printing Office.

Witte, R. (2002). Best practice in transition to post-secondary work. In A. Thomas & J. Grimes (Eds.), *Practices in School Psychology IV: Vol. 2*(1585-1597). Bethesda, MD: The National Association of School Psychologist.

Witte, R. (2008). Best practices in facilitating transition to postsecondary settings for students with learning disabilities. In A. Thomas & J. Grines (Eds.), *Best Practices in School Psychology V: Vol. 4 (*1599 – 1609). Bethesda, MD: The National Association of School Psychologists

Tables

Table 1

Mean Differences between School Psychology and Career Exploration Students on the Self Directed Search

	Group				
	School Psychology Graduate Students (n = 33)		Career Exploration Undergraduate Students (n = 27)		
SDS Variables	M	SD	M	SD	M Diff.
Realistic	42.35	10.35	48.78	8.33	6.42*
Investigative	52.26	8.60	50.00	10.83	-2.26
Artistic	47.76	10.34	46.74	9.65	-1.02
Social	57.76	8.44	46.04	8.29	-11.73*
Enterprising	46.18	7.28	47.11	10.44	0.93
Conventional	48.79	7.07	48.11	10.72	-0.68

*$p<.05$

Table 2

Mean Differences between School Psychology and Career Exploration Students on the Realistic Subscale of the Self Directed Search

	Group				
	School Psychology Graduate Students (n = 33)		Career Exploration Undergraduate Students (n = 27)		
Realistic Subscales	M	SD	M	SD	M Diff.
Activities	50.53	6.04	51.93	6.86	1.39
Competencies	45.50	6.82	49.37	8.45	3.87*
Occupations	52.12	3.36	52.04	5.99	-0.08
Self Estimates 1	50.00	5.53	51.81	10.28	1.81
Self Estimates 2	52.79	6.83	56.48	11.68	3.69

*$p<.05$

Table 3

Mean Differences between School Psychology and Career Exploration Students on the Social Subscale of the Self Directed Search

	Group				
	School Psychology Graduate Students (n = 33)		Career Exploration Undergraduate Students (n = 27)		
Social Subscales	M	SD	M	SD	M Diff.
Activities	62.50	8.27	46.56	5.89	-15.94*
Competencies	56.68	12.12	48.48	12.68	-8.19*
Occupations	60.06	8.50	47.63	6.78	-12.43*
Self Estimates 1	56.82	9.27	50.89	11.31	-5.93*
Self Estimates 2	61.29	8.30	51.89	11.34	-9.41*

*$p<.05$

Table 4

Mean Differences between School Psychology and Career Exploration Students for Congruence, Consistency, and Differentiation on the Self Directed Search

	Group				
	School Psychology Graduate Students (n = 33)		Career Exploration Undergraduate Students (n = 27)		
SDS	M	SD	M	SD	M Diff.
Congruence	3.56	1.05	2.78	2.03	-0.78†
Consistency	2.44	0.56	2.52	0.64	0.77
Differentiation	69.06	28.97	53.04	28.40	-16.02*

*p<.05, †p<.10

Table 5

Mean Differences between School Psychology and Career Exploration Students on the 16 Personality Factors

	Group				
	School Psychology Graduate Students (n = 33)		Career Exploration Undergraduate Students (n = 27)		
16PF Subscales	M	SD	M	SD	M Diff.
A: Warmth	6.39	1.69	5.37	2.24	-1.02*
B: Reasoning	6.88	1.29	5.15	1.41	-1.73*
C: Emotional Stability	4.58	1.73	4.63	1.47	0.05
E: Dominance	4.15	1.92	4.63	1.69	0.48
F: Liveliness	6.58	1.75	6.00	1.90	-0.58
G: Rule Consciousness	4.55	1.48	4.04	1.79	-0.51
H: Social Boldness	5.03	2.04	5.19	2.15	0.15
I: Sensitivity	5.52	1.50	5.52	1.99	0.00
L: Vigilance	4.97	1.76	6.26	1.73	1.29*
M: Abstractedness	4.91	1.79	6.19	1.52	1.28*
N: Privateness	4.24	2.29	5.26	1.97	1.02†
O: Apprehension	6.24	1.30	6.07	1.73	-0.17
Q1: Openness to Change	5.58	1.97	5.41	1.76	-0.17
Q2: Self Reliance	5.18	1.31	5.41	2.17	0.23
Q3: Perfectionism	5.00	2.19	4.78	1.91	-0.22
Q4: Tension	6.09	1.68	5.26	2.09	-0.83
EX: Extraversion	6.26	2.12	5.91	2.42	-0.34
AX: Anxiety	6.22	1.58	6.14	1.86	-0.08
TM: Tough Mindedness	5.56	1.79	5.34	2.05	-0.22
IN: Independence	4.47	1.71	5.07	1.95	0.60
SC: Self Control	4.92	1.54	4.38	1.86	-0.54

*p<.05, †p<.10

Note: 16PF Factors scores are Sten Scores which are standard scores that range from 1 – 10 (M = 5.5, SD = 2).

Table 6

Mean Differences between School Psychology and Career Exploration Students on the 16 Personality Factors Prediction Factors Primary Scales

	Group				
	School Psychology Graduate Students (n = 33)		Career Exploration Undergraduate Students (n = 27)		
16PF Prediction scales	M	SD	M	SD	M Diff.
Adjustment: Emotional	4.47	1.02	4.17	1.18	-0.30
Adjustment: Social	4.70	0.86	4.60	0.92	-0.10
Adjustment: Occupational	5.12	0.96	4.61	0.85	-0.51*
Self Esteem	4.95	0.79	4.80	0.77	-0.15
Social Skills: Emotional Expressivity	5.30	1.09	5.16	1.25	-0.14
Social Skills: Emotional Sensitivity	5.98	1.34	5.39	1.54	-0.60
Social Skills: Emotional Control	4.97	1.03	4.77	1.04	-0.19
Social Skills: Social Expressivity	5.76	1.29	5.35	1.49	-0.41
Social Skills: Social Sensitivity	5.58	0.72	5.25	0.93	-0.33
Social Skills: Social Control	5.28	0.95	4.82	0.90	-0.46†
Social Skills: SSI Total	6.24	1.06	5.46	1.40	-0.78*
Empathy	5.30	1.01	5.01	1.15	-0.28
Leadership	5.05	0.80	4.80	0.77	-0.25
Creativity: Science – Business	5.09	0.61	5.21	0.72	0.11
Creativity: Arts	5.63	0.71	5.44	0.86	-0.20
Creativity: Total	5.23	0.60	5.31	0.59	0.08
Something About Myself	4.93	0.96	5.24	1.05	0.30

*p<.05, †p<.10

Note: 16PF Factors scores are Sten Scores which are standard scores that range from 1 – 10 (M = 5.5, SD = 2).