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# Examination of the Training of School Psychologists in Post-Secondary Transition Practices

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EXAMINATION OF THE TRAINING OF SCHOOL PSYCHOLOGISTS IN

POST-SECONDARY TRANSITION PRACTICES

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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May 2013

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Title:     Examination of the Training of School Psychologists in
           Post-Secondary Transition Practices

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Transition planning is an essential part of the education of students with disabilities. The school psychologist has the opportunity to contribute to the success of transition planning outcomes. A review of the professional literature indicates that there is infrequent emphasis placed on the contribution of the school psychologist in the transition planning process and there is little in the professional literature to indicate how school psychologists are being trained or to what extent they typically participate in the post-secondary transition process.

This study examines the amount and type of transition training that school psychology students are currently receiving, as well as the relationships between the characteristics of the training programs and the amount of transition training that takes place. This qualitative study addresses the question, "What types and intensities of training in the area of transition are current students of NASP-approved programs receiving?"

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Overall, analysis indicated that programs with a greater number of full-time faculty were not found to offer a significantly greater amount of training in the area of transition. Programs with a greater number of full-time faculty who were also certified school psychologists were found to offer a slightly higher, but non-significant amount of training in the area of transition. Programs that offered a doctoral credential were not found to offer a significantly greater amount of training in the area of transition than were programs that offer a specialist only credential. Correlations indicated positive but non-significant relationships among these variables. The data collected in this study suggest that little training is occurring specifically in the area of transition training.

As only NASP-approved training programs were included in this study, the results of this study may not generalize completely to those school psychology programs that do not have NASP-accreditation. Future research should include methods to assess the reliability and validity of the results, could expand the number of programs included in the survey, involve school psychology training programs that are not NASP-accredited, and include surveying students and program directors about the perceived needs of school psychologists, and how these needs may be have been better met in their training.

ACKNOWLEDGMENTS

I would like to extend my gratitude to my family and committee members, who have all supported my efforts in completing my dissertation.

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CHAPTER 1

STATEMENT OF THE PROBLEM AND RESEARCH QUESTIONS

**Background**

Transition planning is an essential part of the successful education of students with disabilities, whether they are moving on to post-secondary education or training, employment, independent living, or residential placement. The school psychologist has the opportunity to contribute to the success of transition planning outcomes. A review of the professional literature indicates that there is infrequent emphasis placed on the contribution of the school psychologist in the transition planning process. Especially lacking is the literature related to the training of the school psychologist in relation to transition assessment and planning. While best practices indicate that school psychologists can play a vital role in assessment, coordination of services, community linkages, and recommendations for post-secondary life, there is little in the professional literature to indicate how school psychologists are being trained or to what extent they typically participate in the post-secondary transition process.

**Statement of the Problem**

Current legislation mandates that transition planning be completed for all students with disabilities. The latest legislation, including Indicator 13 (2007), sets forth

guidelines for effective transition planning, with one factor

specifically addressing transition assessment. While Indicator

13 does not mandate that this assessment be standardized or be

completed by the school psychologist, the school psychologist

does represent the member of the team most highly trained in

assessment. For students with disabilities who intend to

continue with post-secondary education, educational institutions

have set forth requirements for detailed records of students'

disabilities and their recommended accommodations.

Based on the professional literature, it appears that

school psychologists are not regularly providing such

evaluations and recommendations for students, causing students

and their families to look beyond the school in order to obtain

these evaluations. It also remains unclear how much and what

type of training school psychology students are receiving to

prepare them to be effective members of a transition-planning

team. More thorough training of school psychologists in training

programs would enhance their participation in the transition

planning process.

After reviewing the current research on the transition

training of school psychologists, it was determined that more

research should be done in this area. The survey that will be

developed for this study will indicate the characteristics of

National Association of School Psychologist (NASP) approved

school psychology training programs that most highly correlate with thorough transition training.

**Research Questions and Hypotheses**

This study examined the amount and type of transition training that school psychology students attending NASP approved training programs are receiving, as well as the relationships between the characteristics of the training programs (number of full-time faculty, number of full-time faculty who are also certified school psychologists, and type of credential offered by the program) and the amount of transition training that is taking place. This exploratory quantitative and qualitative study addressed the questions, "What program characteristics are correlated to transition training?," "On what aspects of transition are students being trained?," and "Why is training on the topic of transition offered/not offered by the program?" All 182 NASP approved university school psychology training programs (both specialist and doctoral levels) were contacted via surveys sent to the attention of the program directors to explore the aspects of transition training occurring within their programs, as well as relevant demographic information regarding their department. Additional information was collected from existing public information posted on university and program websites. Questions about the demographics of the training program were also gathered via a review of the program's website. Questions

related to demographics of the program included the type of credential offered by the program (specialist, doctoral, or both) and how many courses offer any kind of transition training, with such training being categorized into assessment, theory, and application.

It was the purpose of this study to explore the specific variables of NASP approved school psychology training programs that correlated with an increased amount of training relative to transition planning and assessment. It was hypothesized that there would exist relationships between the characteristics of the training programs (number of full-time faculty, number of full-time faculty who are also certified school psychologists, and type of credential offered by the program) and the amount of transition training that is taking place.

## Problem Significance

School psychologists who have received less training about the issue of transition may be less likely to address transition assessment and planning in their practice. For students with disabilities pursuing post-secondary education or training, poor or non-existent transition evaluations may result in their being denied accommodations necessary for success in the academic setting. For students pursuing post-secondary employment, a lack

of transition planning may cause them to be unprepared for the
demands of employment, leading to continued rates of high
unemployment for individuals with disabilities.
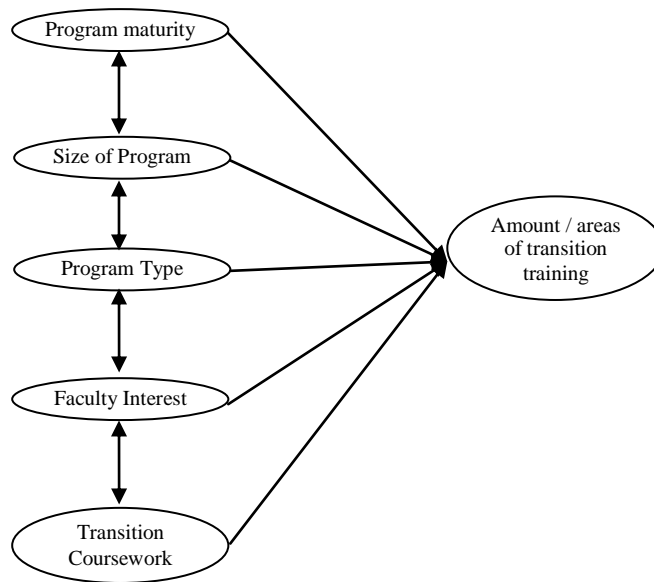


*Figure 1.* Research path diagram of the latent variables.

For families seeking residential placement or other adult
services for the student with a disability, poor transition
planning may result in their being denied access to adult
services or their being placed on interminably long waiting
lists before services can begin. Adequate transition planning,
skillfully facilitated by the school psychologist, can do much
to prevent these undesirable outcomes.

**Definition of Terms**

The Individuals with Disabilities Education Act (IDEA) defines transition services as "a coordinated set of activities for a child with a disability that is designed to be within a results oriented process that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities" (IDEA, 2004).

A comprehensive transition assessment should be comprised of psychological, social, educational, academic, physical/medical, and vocational measures. Numerous techniques and tools can be used to generate this information, including interviews, observations, written tests, performance tests, work samples, and situational assessments (Levinson, 1994).

"Transition assessment is an on-going process of collecting information on the student's strengths, needs, preferences, and interests as they relate to the demands of current and future living, learning, and working environments. This process should begin in middle school and should continue until the student graduates from or exits high school. Information from this process should be used to drive the IEP and the transition planning process. This information should also be used to develop the Summary of Performance (SOP), the document that details the student's academic and functional

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performance and post-secondary goals (Sitlington & Clark, 2007, page 133)."

NASP approved training programs are those which have been reviewed by NASP and have been found to comply with the *NASP Standards for Training and Field Placement Programs in School Psychology.* NASP is a member of the National Council for Accreditation of Teacher Education (NCATE), which is the professional accrediting organization for educators in the United States. NASP approval status may be either full or conditional, with conditional approval requiring that a program submit additional documentation demonstrating compliance with NASP standards. NASP approved programs can be at either the specialist or doctoral level, with specialist level programs providing only certification as a school psychologist, rather than certification and a doctorate credential.

The type and amount of school psychologist transition training was defined by participants' responses to the constructed survey items.

<div align="center">**Assumptions**</div>

For the results of this study to be generalizable to other school psychology training programs and to be considered representative of the field, it was assumed that survey responses are valid and reliable. For the purposes of this study, it was also assumed that all programs that respond to the

<div align="center">7</div>

survey were in good standing with NASP at the time the responses were generated. It was assumed that the responding school psychology training programs were acting in accordance with NASP Best Practices. This study assumed that the survey results were an accurate representation of the training program to which they pertained. Validity should be acceptable as information on the program websites was controlled by the programs themselves, and in some cases, was provided directly by the professors of the courses being analyzed. Many program websites also aligned their course content with the Standards for Training and Field Placement Programs in School Psychology (http://www.nasponline.org, 2008). Reliability was also assumed to be acceptable as a search of program website content should have yielded the same results each time a site was explored for the key terms, assuming that website content was not modified after the data was collected.

## Limitations

Because this study included only NASP approved programs, the results are not necessarily generalizable to school psychology training programs which are not NASP approved. The sample was rather small due to the number of NASP approved training programs and the quantity of usable surveys that were returned.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

**Background**

In American society, individuals are expected to live independently, determine a career field, find and maintain employment and/or post-secondary education, maintain social relationships, and engage in leisure activities. As of the 2000 United States Census, approximately 20% of individuals reported some level of disability. The employment rate for individuals with disabilities was approximately 37.5%, in contrast with an employment rate of 77.8% for non-disabled individuals (Smith, 2007). Individuals with disabilities experience higher unemployment rates, higher dropout rates, less participation in community activities, and depend more on their families for financial support than do their non-disabled peers (Sheehey & Black, 2003). They also report a social life which is lacking, as well as a high level of dependence on their families (deFur, 2003). Collet-Klingenberg and Kolb (2011) reported that in 2006, the national drop-out rate for general education students was approximately 14%. However, the drop-out rate for students with disabilities at that time was as high as 49%.

Individuals with disabilities may possess limited knowledge on the details of their disability, as well as a limited knowledge on the impact of their disability on their post-

secondary outcomes and vocational success. Many of these individuals have minimal involvement in their transition planning and often place undue limitations on their post-secondary educational goals. Other times, students with disabilities have unrealistic expectations for their vocational pursuits and are unprepared for the educational requirements necessary to attain their career goals (Fives, 2008). Transition planning is defined as "…a coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, and/or community participation" (Federal Register, 2005, p. 35841).

A more recent definition of transition places responsibility for transition planning with the student. In order to prepare students with disabilities to engage in effective transition planning, they must be taught skills of self-determination, be brought to acceptable levels of academic achievement, be versed in relationship building and consumerism, and be well-prepared in self-maintenance or life skills (Repetto, 2003).

Transition services include vocational and career training, with decisions made based on the needs of the student and the Individualized Education Plan (IEP) determining what services are needed to provide the student with a free and appropriate public education (FAPE). Transition services (to be provided beginning with the first IEP during which the student will be 16 years of age) must include appropriate and measurable goals and objectives, an outline of how these goals will be met utilizing transition services, and an explanation of the transfer of rights to the child once they have reached the age of majority (IDEA, 2007). IDEA does not require that the local education agency (LEA) assess a child in order to determine eligibility for another agency, such as the Office of Vocational Rehabilitation (OVR). LEAs are not required to provide the post-secondary services addressed by the Summary of Performance (SOP). IDEA also does not require specific transition assessments, leaving these decisions to be made by the state or LEA.

A review of the research suggests that secondary schools may not be preparing students with disabilities in a thorough enough manner to prepare them for post-secondary education/training, independent living, and/or community involvement. While transition legislation for students with disabilities has been in place for over twenty years, this

population continues to attain poorer post-secondary outcomes than do their non-disabled peers. Hughes and Carter (2011) posit that this is an indication that schools are failing to execute the transition legislation in an effective manner.

## History of Transition Planning

According to Repetto (2003), transition planning is not a new concept, having evolved beginning in the 1960s with the development of work-study programs and the trend toward "normalization." Career education was introduced by the United States Commissioner of Education in 1971 and was defined as the programming necessary to teach students about living and how to earn a living. The term "transition" took the focus away from "career education" in 1983 when it was launched as a federal initiative. However, transition focused on the world of work, neglecting others roles such as community member and volunteer, for example. Follow-up studies revealed the importance of the various roles associated with post-secondary living beyond that of employee. IDEA re-introduced the concept of a more well-rounded and inclusive view of transition planning (Repetto, 2003). IDEA necessitates that transition planning include assessment of all life domains, which could assist in a more individualized and appropriate transition plan. However, while IDEA addresses the need for transition assessment, it does not

define what that transition assessment should address (LeConte, 2006).

The National Longitudinal Transition Study - 2 (NLTS2; Newman, Wagner, Cameto, & Knokey, 2009) is a national survey of special education students aged 15 to 21, and provides a variety of descriptive statistics for this population. The NLTS2 was funded by the National Center for Special Education Research at the Institute of Education Sciences, U.S. Department of Education. The NTLS2 has revealed both the improvements and the shortcomings of the attempts to improve outcomes for individuals with disabilities as it was designed to follow students with disabilities as they transitioned from secondary education into their early adulthood. The NLTS2 surveyed a nationally representative sample of students with disabilities over a ten year period to evaluate their post-secondary outcomes in the areas of education, employment, independence, and social functioning (Newman et al., 2009).

The NLTS2 gathered information via phone interview and mailed surveys, with information provided by the students themselves or their parents. Students included in the fifth and final wave of the survey completed in 2009 were aged 21 to 25 and had been out of high school for between one month and eight years.

With regard to post-secondary education, the NLTS2 found that 80% of students with disabilities express an interest in post-secondary education. Sixty percent of these students enrolled in post-secondary education. These students were more likely to enroll in two-year or community colleges (44%) than they were in vocational, business, or technical schools (32%) or in a four-year college/university (19%). Of the students who did attempt post-secondary education, only 28% disclosed their disability and need for accommodations to their post-secondary education/training institution. While 87% of these students reported receiving some accommodations during their secondary education, only 19% of these same students received accommodations in their post-secondary education. Of the students who had not received accommodations, 43% reported that it would have benefitted them to have received such accommodations (Newman et al., 2009).

The NLTS2 revealed that in the area of employment, 91% of students with disabilities indicated that they had some form of employment. These students reported that they had held an average of four jobs during that time. Of the individuals who reported some level of employment, 67% reported that they were employed full-time at their present job. These individuals worked for an average pay rate of $10.40 per hour, with 61% receiving at least one employment benefit (paid vacation/sick

leave, health insurance, and/or retirement benefits). Of those individuals who were employed, 26% reported that their employer was aware of their disability, with 7% receiving some accommodation in their place of employment (Newman et al., 2009).

The NLTS2 assessed community engagement by examining the education/training experiences of individuals with disabilities, rather than by assessing the outcomes of these activities, as the original NLTS did. Within their communities, 94% of individuals with disabilities reported that they had some employment, post-secondary education, and/or job training following graduation from high school (Newman et al., 2009).

**Legislation Related to Transition**

Wittenburg and Maag (2002) purport that education has increased its focus on the transition of individuals with disabilities from high school to post-secondary life. However, even with the changes in educational policy, various studies have revealed that individuals with disabilities experience high unemployment rates, poor economic standing, and disproportionately low involvement in higher education. While research has indicated that students with disabilities benefit greatly from instruction in self-determination, which allows individuals to become active and appropriate decision-makers,

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educators frequently fail to include self-determination instruction in the transition process (Young, 2007).

Individuals with disabilities are a high risk for failing to secure and maintain competitive employment (Levinson, 1994). One of the most specific modifications to the transition process for individuals with disabilities is the implementation of Indicator 13. The reauthorization of IDEA in 2004 called for all states to develop state performance plans addressing each of 20 indicators. The latest legislation, including Indicator 13, sets forth guidelines for effective transition planning, with one factor specifically addressing transition assessment. Indicator 13 is defined as the "percent of youth with IEPs aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age-appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition services needs. There also must be evidence that the student was invited to the IEP Team meeting where transition services are to be discussed and evidence that, if appropriate, a representative of any participating agency was invited to the IEP Team meeting with the prior consent of the parent or student who has reached the

age of majority" (National Secondary Transition Technical Assistance Center, 2009).

Indicator 13 pertains to transition services for students with disabilities, specifying that all students aged 16 and above with an Individualized Education Plan (IEP) will be provided with an IEP that includes "coordinated, measurable, annual IEP goals and transition services that will reasonably enable the student to meet the post-secondary goals" (IDEA, 2004).

Currently, there exist both state and federal laws which regulate the practices employed in special education. These legal requirements outline the standards for special education eligibility through a strict and formalized process. These standards also provide guidance for the specific assessments which are to be used in eligibility determination. These requirements are intended to prevent the misclassification and over-identification of individuals with disabilities. Several pieces of federal legislation govern transition planning for students with disabilities. Individuals with disabilities are protected by the Vocational Rehabilitation Act, the Education of the Handicapped Act, the Vocational Education Amendments Act, the Career Education Incentive Act, the Carl D. Perkins Vocational Education Act, and IDEA, which have all contributed to the development of school-based vocational

assessment for students with disabilities (Levinson, 1994). The Carl D. Perkins Vocational Education Act (U.S. Department of Education, 2008) indicates that students with disabilities should receive information about vocational education by the beginning of ninth grade, or the year before vocational education is available to the student. The Act also requires that assessments be completed with the intention of the student with a disability's being included with typical peers while completing their vocational education. IDEA designates that a student's transition from high school to their post-secondary plans must be a part of the first IEP in which the student will reach age 16 (IDEA, 2004).

Before 1990, schools were not mandated to provide transition planning for students with disabilities. Following the 1997 amendments to IDEA, however, schools were required to participate in a multidisciplinary transition planning process (Young, 2007). IDEA 2004 mandates that transition planning begin during the year in which the student will turn 16 years of age. IDEA 2004 states that "(b)eginning not later than the first IEP to be in effect when the child turns 16, or younger if determined appropriate by the IEP Team, and updated annually thereafter, the IEP must include: appropriate measurable postsecondary goals based upon age-appropriate transition assessments related to training, education, employment and,

where appropriate, independent living skills; the transition services (including courses of study) needed to assist the child in reaching those goals; and beginning not later than one year before the child reaches the age of majority under State law, a statement that the child has been informed of the child's rights under Part B, if any, that will transfer to the child on reaching the age of majority under §300.520 [see 20 U.S.C. 1415(m)]."

IDEA (2004) requires that public schools provide a free and appropriate public education (FAPE) to all eligible children in the least restrictive environment (LRE). IDEA requires that public schools develop an IEP for every student with a disability who is found to be eligible for special education services. The educational needs and goals, as well as the necessary related services, are to be contained in the student's IEP. The Protection in Evaluation and Eligibility Determination regulations included in 34 CFR 300.530 through 300.534 demand that in determining eligibility of students with disabilities, there is a full and individualized evaluation, consideration of a variety of sources of information spanning multiple life domains, and no decisions being made based solely on a student's intelligence quotient (IQ). These evaluations are to be completed only by individuals who are qualified to do so, such as a school psychologist, and decisions about assessment results

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will be made by a group of qualified professionals, as well as including the student's parents (Reschly, 2002).

The School-to-Work Opportunities Act of 1994, and several state initiatives have attempted to improve the academic course of study, transition plans, and other health-related supports for individuals with disabilities. The School-to-Work Opportunities Act of 1994 specifies that school- and work-based learning experiences will be integrated, that students will complete an identified course of study, that students will gain an understanding of the field in which they are employed, and that students will be provided full access to a range of enrollment, recruitment, and placement activities (Office of School to Work Opportunities, 1995). The Act also indicates that students will be provided with feedback on their vocational performance and that assessments and the aforementioned feedback will be included in their school-to-work transition (Sitlington, 1994).

The purpose of the No Child Left Behind Act of 2001 was implemented in order to improve educational outcomes for those students considered to be at-risk, which included students with disabilities (Madaus & Shaw, 2006). Students with disabilities should also be educated on the Fair Labor Standards Act (FLSA; The Fair Labor Standards Act of 1938, as amended 29 U.S.C. 201, *et seq.)*, which sets forth guidelines for minimum wage and

overtime pay, record keeping, and child labor standards. The FLSA also helps employers and labor organizations to develop a more comprehensive understanding of the role of and expectations for students with disabilities within the workplace.

Adults with disabilities are protected by a variety of pieces of legislation. The Rehabilitation Act of 1973 was created to provide individuals with disabilities vocational rehabilitation which would enable them to live independently, benefit from medical advances, access their community, and to engage in appropriate employment experiences. 34 CFR Part 361 was created to amend the Rehabilitation Act of 1973. The act is intended to assist individual states in operating an effective vocational rehabilitation system in order to provide individuals with disabilities the chance to prepare for and locate meaningful employment.

The Americans with Disabilities Act (ADA) prohibits discrimination against individuals with disabilities (defined as a physical or mental impairment that substantially limits one or more life activities). ADA and the New Freedom Initiative in 2001 also intended to increase the participation of disabled individuals in social settings and events and in productive employment, as well as to improve their economic outcomes. ADA disallows discrimination in employment on the basis of disability (Americans with Disabilities Act, 1990).

The Olmstead Decision, which was based on ADA, required that states must provide services to individuals with disabilities in "the most integrated setting appropriate to the needs of qualified individuals with disabilities" (28 CFB 35.130(d)). This decision stated that individuals with disabilities who could be living in a less restrictive setting in the community should not be automatically institutionalized based on their disability alone. Institutionalization limits an individual's opportunities to interact with their family and peers, to be employed, and to live a meaning life as part of their community.

The Higher Education Opportunity Act mandates that students with disabilities should be afforded an opportunity to attend a post-secondary educational program as long as they are able to meet the standards set by the institution of higher education. The Workforce Investment Act of 1998 was meant to increase the employment of individuals with disabilities through improved implementation of the vocational rehabilitation program. The Act also meant to improve the economic standing, independent living, and community membership of individuals with disabilities.

## Best Practices in Transition Planning

Individuals with disabilities are at a disadvantage when it comes to being prepared for work after graduating from high school. Individuals with learning and emotional disabilities are

especially at risk (Newman et al., 2009)). Individuals with disabilities often lack the academic and work skills necessary for employment or post-secondary education. When this is the case, accommodating or remediating these deficits should become the focus of a secondary student's Individualized Education Plan (IEP). IEPs that focus purely on academics will not provide the student with the life-long skills necessary to become contributing members of society (Witte, 2002). Transition planning should focus on a student's career, community life, and social life. A balance between work and social life is fundamental for a good quality of life for all adults (Repetto, 2003).

Transition planning can begin even before a student with a disability reaches high school. Parent involvement is crucial for success in the transition planning process. Transition goals should be developed in the areas of employment, continuing education, and adult living. Skill deficit issues are best addressed when the student is still in school, rather than following graduation. Despite what is known about methods of enhancing transition for students with disabilities, thorough and appropriate transition goals and objectives are often missing from disabled students' IEPs (Witte, 2007).

Hicks-Coolick and Kurtz (1997) demonstrated that individuals with learning disabilities (LD) are most likely to

experience success in post-secondary education when they have

set attainable goals for themselves, possess essential academic

skills, and are able to effectively self-advocate. This study

reinforces the idea that actively preparing a student for post-

secondary education can increase the likelihood that they will

be successful. More recent research on the involvement of

students in their transition planning indicate that students

with learning disabilities are frequently required to take

remedial courses and often cannot manage a full-time course load

upon entering post-secondary education institutions. As a

result, it often takes students with learning disabilities

longer than their non-disabled peers to complete their post-

secondary education (Daviso, Denney, Baer, & Flexer, 2011). A

review of the literature indicates that the transition planning

process and services provided to students with learning

disabilities varies greatly, which could be attributable to the

lack of empirical research on the effectiveness of transition

planning activities (Daviso et al., 2011). Previous research

also indicates that post-secondary outcomes were improved by a

variety of transition planning activities, including career and

technical education in the secondary setting and work study and

paid employment experiences in the secondary setting. Students

were also found to have attained better post-secondary outcomes

when they had been provided with social and vocational services

prior to their graduation from high school (Daviso et al., 2011).

A study completed by Wehmeyer, Palmer, Williams-Diehm, Shogren, Davies, and Stock (2011) indicated that students who demonstrated enhanced self-determination also achieved more positive transition outcomes, such as higher rates of employment and independent living, a better quality of life, and a higher level of life satisfaction. The authors contend that when students are involved in the transition planning process, they experience a greater level of self-determination, which in turn contributes to a higher level of involvement in transition planning (Wehmeyer et al., 2011).

Lindstrom, Doren, and Miesch (2001) found that the best career outcomes are obtained when students are active participants in the transition planning process and when they are educated on the continuum of career options that they are able to pursue. Students with disabilities were found to be most likely to pursue and maintain employment following their graduation from high school when they had completed vocational coursework and had participated in community-based work experiences. Students who had received vocational rehabilitation services and/or participated in some level of post-secondary education/training were found to earn a higher income than were peers who had no involvement from adult agencies (Lindstrom et

al., 2011).

A review of previous research from 1984 through 2009 (Test, Mazzotti, Mustian, Fowler, Kortering, & Kohler, 2009) indicates that in a review of 162 articles focusing on the topic of transition, only 22 articles were found to be of high enough quality to generate empirical evidence on the effectiveness of transition planning services. Within these 22 articles, 16 predictor variables were found to have any correlation with enhanced post-secondary outcomes. Of those 16 predictor variables, only four had even moderate correlations with post-secondary employment outcomes. These four variables were found to be the inclusion of students with disabilities in the general education environment/curriculum, paid employment/work experience in the secondary setting, vocational education in the secondary setting, and work study experience in the secondary setting (Test et al., 2009).

For students with disabilities, Witte (2002) cited research that identified the following essential components in transition planning: Individualized Transition Plans (ITPs), work experience, vocational education and training, social skills training, parent involvement, interagency coordination, integration with non-disabled individuals in work settings, academic support, vocational counseling, job-seeking and job-placement services, personal counseling, advocacy, and program

evaluation, including follow-up and follow-along evaluations. Educators and families should work together to determine the most appropriate employment setting for an individual, one that will enhance the individual's quality of life. Frequently, students are placed in job experience sites based not on their interests and abilities, but on the availability and convenience of the job sites themselves. Housing and independent living supports needs should also be carefully evaluated by the team to avoid housing that is more restrictive than necessary. Leisure activities must also be considered, to provide an opportunity for exercise, socialization, and relaxation, comparable to the leisure activities of non-disabled peers (Steere et al., 1995).

While transition planning has been mandated in the IEP for nearly 20 years, transition planning is not often considered by parents and educators to be as important as are the academic goals and objectives of the IEP (deFur, 2003). Within the IEP, transition should be planned for in a way that employment, living, post-secondary education/training, and community/social life are all addressed. Planning should take into consideration the strengths, needs, interests, and preferences of the student, as well as the appropriateness of their long-term goals. While most IEPs are found to meet the technical requirements of IDEA, follow-through of goals, objectives, and transition planning is often lacking. Frequently, the transition plan is written in

vague or unclear terms, leading to inadequate or non-existent follow-through. IEPs provide few links to adult agencies and/or services, as well as little direction as to how the transition plan will be implemented or updated as the student progresses throughout their school careers (deFur, 2003).

Though there has been a concerted effort to improve transition planning for students with disabilities, there has been little attention paid to an individual's quality of life post-graduation, which would include living independently, becoming involved in their community, or maintaining social relationships. Instead, the transition process has focused mainly on training for and securing employment. While many of the studies examining transition have focused on employment and education outcomes for individuals with disabilities, few have focused on quality of life and independent living (Sitlington, 1996).

It becomes the responsibility of the Local Education Agency (LEA) to determine minimum standards for competencies that students should be expected to master before graduating from high school. Transition should be viewed as life-long process that will be in motion years before the student actually graduates from high school (Witte, 2002).

### Community-Based Instruction

Historically, individuals with significant disabilities who

remain in high school through age 21 receive community-based instruction. These same individuals generally participate in supported employment, utilize independent living services, and/or attend adult day programs upon graduation from high school (Neubert, Moon, & Grigal, 2002). The authors purport that these same individuals were found to comprise the group with the greatest unmet needs. More recently, re-examination of transition planning has indicated the need for more differentiated transition services. The emphasis has been shifted to more "meaningful options for choice by individuals in the pursuit of education, career training, and individualized services and supports" (Neubert et al., 2002, p. 1). While employment varied substantially by type of impairment, employment outcomes were consistently better for all students when they had participated in community-based instruction while still in high school (Wittenburg & Maag, 2002).

For students aged 18 to 21, IEP teams should specifically examine the type and frequency of community-based instruction and employment training the individual will receive. By engaging in community-based instruction, individuals with disabilities may experience functional academics, job training and coaching, assessment of progress toward goals, self-determination and self-advocacy training, social and recreational skill development, community mobility training, and collaboration with

the family and adult service providers before leaving school (Neubert et al., 2002). Post-secondary employment is more likely to be maintained when the student has received vocational training and a job has been secured for them at the time of graduation (Blalock, 1996). With home-school collaboration, the team can work together to identify the most meaningful and realistic community-based experiences for the individual, generating a skill set and interests that may transfer into post-secondary living.

Test (2000) reviewed a survey sent to all 119 school systems in North Carolina examining the outcomes of the North Carolina Transition Project for Youth Disabilities (a five year transition systems change grant). This survey indicated that school systems with a 'coordinated program' for transition were more likely to provide regular community-based training, to provide trial work sites for students with mental retardation and the other health impaired, as well as to collect post-graduation data. The two most frequently cited best practices of these programs were the provision of transition plans to students and the in-service of educational professionals on transition planning. Students who had work experience during high school were found to be employed at higher rates following high school than were their peers who had not worked previously.

## Transition Planning

Though the transition planning process for students with learning disabilities has been instituted for nearly two decades in education, transition plans are often found to be lacking in their consideration of and planning for independent living, career exploration, job seeking skills, and the maintenance of employment (Dowdy, 1996). In a review of the literature, research demonstrated that when transition planning begins at the age of 14, the best outcomes are obtained (Steere, Gregory, & Heiny, 1995).

Bassett & Smith (1998) indicate that while there have been a number of efforts aimed at educational reform and the reform of teaching, there has been little specific attention given to the reform of special education teaching. Bassett and Smith (1998) purport a great need to reduce drop-out rates, increase the number of students receiving a regular high school diploma, increase participation in post-secondary opportunities, and increase inclusion in a variety of settings with non-disabled peers. While students are being included at increasing rates with their non-disabled peers within the school setting, direct efforts are not being made to prepare them for the transition to post-secondary living, in which their inclusion with non-disabled peers is dependent on their ability to function with their community.

There exist a number of barriers to effective transition planning for students with disabilities. Due to the increased academic rigor for general education students, students with disabilities are often spending more of their time in the general education environment, receiving remedial academic services designed to enhance their academic performance, rather than having time devoted to transition planning, which could include independent living or vocational skills. The extra time dedicated to academic remediation also leaves less time to be dedicated to transition planning activities (Lindstrom et al., 2011). As a result, students with disabilities will frequently find themselves unprepared for entering the world of work, with little to no instruction in their own unique skills and abilities, the accommodations that they require to experience success in the work setting, insufficient self-determination, self-advocacy, and communication skills, lacking interpersonal skills, and an inability to keep pace with the decision-making and cognitive flexibility required for acceptable on-the-job performance (Lindstrom et al., 2011).

The most beneficial activities for successful transition for students with disabilities include participation in their transition planning, participation in general education courses and extracurricular activities, support for post-secondary education, person-centered planning, preferred community-based

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work experiences, consideration to multicultural issues, enhanced self-advocacy and self-determination skills, home-school collaboration, and interagency collaboration (Powers, Gil-Kashiwabara, Geenen, Powers, Balandran, & Palmer, 2005).

While IDEA 2004 does not require that a new educational evaluation be completed for students leaving the high school setting, it does now require the Summary of Performance (SOP) (Madaus & Shaw, 2006). The SOP should include input from all team members regarding the strengths, needs, preferences, and interests relating to work and independent living, as well as their levels of functioning and behavior (LeConte, 2006). The SOP now mandated by IDEA 2004 should be completed as a team process, and should reflect the strengths and needs of the individual with regard to transition to post-secondary living. The SOP can be constructed in such a way that it includes all relevant transition assessment in one cumulative document that will help to enhance the transition of the student from high school to post-secondary living. The SOP should be written in such a way that those involved with the student's life after they leave high school know best how to interact with and accommodate the student in the post-secondary environment. However, if the SOP is vague or poorly written, it, like the evaluation report, may not be accepted as meeting the requirements of the post-secondary institution which would allow

the student with a disability access to reasonable accommodations and/or support services (Madaus & Shaw, 2006). The school psychologist can work to enhance the knowledge base of the student and their family as to how to use the SOP in order to facilitate a smooth transition (LeConte, 2006).

The post-secondary education institution will generally require the student with a disability to provide documentation of their disability as defined by both Section 504 of the Rehabilitation Act and the ADA, as well as to identify and request needed services and accommodations. The student with a disability must prove that their disability substantially limits a major life activity and must also demonstrate that they are capable of meeting the requirements for successful completion of the program when provided with reasonable accommodations (Sitlington & Payne, 2004).

The Association of Higher Education and Disability (AHEAD) purports that documentation of a disability should include the qualifications of the evaluator, recency of documentation, documentation of the disability, and evidence of the rationale for the suggested accommodations. While some post-secondary programs may consider the student's IEP, thorough documentation should include a comprehensive assessment and resultant diagnostic report (Sitlington, 2003). When this documentation is not provided for a graduating student with a disability, the

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entire transition process can be delayed or brought to a halt. School psychologists may want to consider completing a thorough transition evaluation which will aid the student in their transition endeavor as being best practice.

Though school psychologists are not mandated to provide transition evaluations for exiting special education students, students with disabilities are required to provide specific documentation to post-secondary education and training institutions in order to receive necessary supports and accommodations. Well-constructed and current psychoeducational evaluations are considered to be the gold-standard for students with disabilities seeking services and accommodations within the post-secondary setting. When students leave high school with an outdated or poorly written evaluation report, the post-secondary institution that they are entering may require the student to obtain a new evaluation, which may need to be completed at the family's expense, in order to secure necessary services. If the student is unable to secure this evaluation, they may be denied the accommodations necessary for their educational and/or training success (Madaus & Shaw, 2006). Even before leaving high school, it may prove beneficial for students with disabilities, especially those with learning disabilities, to have updated assessments and recommendations. The College Board and Education Testing Services (ETS) may require specific documentation in

order to allow the necessary accommodations for taking tests such as the SATs (Madaus & Shaw, 2006).

Lightner, Kipps-Vaughan, Schilte, and Trice (2012) suggest that at the post-secondary level, disability service coordinators are often dissatisfied with the preparation of students with disabilities on the expectations and differences they would encounter in the post-secondary setting, as well as their education on their own disability and needed accommodations, as well as their general participation in the transition planning process during high school. The authors also found that these students were uninformed of how their unique set of strengths and weaknesses would affect their academic and social participation at the post-secondary level.

As students with disabilities draw closer to their transition to post-secondary living, schools and families should begin to shift responsibility, self-care, and decision-making to the student in order to facilitate the greatest level of independence possible. This independence has a great impact on future employment and independent living outcomes. It becomes especially important at this time for school staff, including school psychologists, to work within a multidisciplinary framework and to facilitate this shift in responsibility.

**Family Involvement**

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Research demonstrates that in order for transition planning to be effective, students must be active participants in the planning process. Families must be involved, inclusive environments must be assessed, work opportunities should be provided prior to graduation, courses of vocational study should be meaningful and appropriate, academics must be maintained, pragmatics and independent living skills should be explicitly taught, assistive technology should be explored as necessary, and administrative support should be provided. Students prove to be far more effective participants when they have been exposed to and have participated in previous IEP meetings throughout their high school careers, and are even more effective when they have been trained in self-advocacy and self-determination skills. When the LEA finds that they are lacking in the area of vocational planning, a school psychologist may be integral in developing or improving a transition framework (deFur, 2003).

School psychologists could be valuable members of the IEP team, becoming engaged in transition planning through using psychoeducational information to contribute to decisions being made with regard to suitable careers, identification of appropriate educational/training options, identification of suitable living options, determination of necessary vocational supports and/or accommodations, and in the preparation of the

student in moving from high school to post-secondary life (Fives, 2008).

Post-school outcomes for individuals with disabilities are influenced by a variety of factors, including: characteristics of the individual and of the family, vocational education, rehabilitation participation, work characteristics, and community characteristics. The results of the NLTS2 underscore the importance of the school, family, and community working collaboratively in order to obtain the best outcomes for individuals with disabilities (Wittenburg & Maag, 2002). With all youth, the family is the variable which has been found to have the greatest influence on career development. Both family process variables (relationships, aspirations, support) and family structural variables (parent education, occupation, socio-economic status) impact career development (Lindstrom, Doren, Metheny, Johnson, & Zane, 2007). When parents assist in career exploration, planning, and job seeking, individuals are more likely to be successful. However, it has been found that these family variables are often lacking for individuals with disabilities. The school psychologist may represent a core member of the transition team by facilitating the career development process, aiding the family in seeking appropriate supports, or linking the student with necessary agencies when the family is not active in the transition process.

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Wittenburg and Maag (2002) illustrated the importance of family-school collaboration, as individuals with disabilities were more likely to enroll in post-secondary education when they were satisfied with the transition planning efforts and academic preparation that they had received in high school. Students with both mild mental retardation and learning disabilities had better employment and higher education outcomes when transition planning had been thorough.

While educators and families must collaborate in transition planning, families are of especial importance as they are the constant throughout the individual's lifetime. Parents frequently fail to become active participants of transition teams, as they are not aware of the importance of family involvement. Blalock (1996) reported that parents were not always involved in transition planning and often experienced difficulty in accessing adult services. Dowdy (1996) indicated that in order for more successful transition planning for students with disabilities to occur, educators must collaborate more effectively with parents and adult service agencies, such as vocational rehabilitation (VR). The Vocational Rehabilitation Act of 1992 was established to help individuals with disabilities find and maintain competitive employment. The Act also specifies that VR will work with community agencies, and

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outlines the requirements for special education services provided through IDEA (Rehabilitation Act of 1973).

Schools may collaborate with families to create individualized transition plans (ITPs), and may include vocational skill profiles (strengths-based), transition goals for the school and community, supports to the family throughout the transition process, and post-secondary follow-up procedures. The ITP meeting can be incorporated into the annual IEP meeting, with contact with adult service agencies increasing each year. The school psychologist may play a key role in the development of the ITP, contributing information on the student's assessed vocational interests and abilities, observations of the student's performance on the job site, and information on all other aspects of functioning (cognitive, educational, emotional, communication, and adaptive). The school psychologist can be an active participant in the creation of transition plans and can be the one to provide transition education to the schools they serve (Witte, 2002).

### Importance of Transition Services

The NLTS2 (Newman et al., 2009) indicated that following their graduation from high school, 60% of individuals with disabilities enrolled in some post-secondary education training program, though only 28% disclosed their disability and 19% received accommodations in their post-secondary

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education/training. Ninety-one percent of individuals with disabilities had been employed on some level, having held an average of four jobs and 94% reported some level of community engagement.

A comparison of individuals with disabilities was made to young adults in the general population. The NLTS2 revealed that individuals with disabilities were less likely to pursue post-secondary education than their non-disabled peers (60% versus 67%), were more likely to have attended a two-year college (44% versus 21%) or a vocational, technical, or business school (32% versus 20%) than their non-disabled peers, were less likely to have completed their post-secondary education/training than those in the general population (41% versus 52%), earned less per hour on average ($10.40 per hour versus $11.40 per hour), were less likely to live independently of their families than non-disabled peers (45% versus 59%), were less likely to be married than peers in the general population (13% versus 19%), and were less likely to have a checking account (59% versus 74%) or a credit card (41% versus 61%) than their non-disabled peers (Newman et al., 2009).

A comparison of results from the original NLTS and the NLTS2 indicates that individuals with disabilities remained involved in their communities at generally the same levels (engagement in work and participation in post-secondary

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education and training activities), there were several notable improvements. From the NLTS to the NLTS2, students with disabilities were found to participate in both post-secondary education and employment (an increase from 6% on the NLTS to 22% on the NLTS2) and to be involved in paid-employment experiences only (an increase from 34% on the NLTS to 44% on the NLTS2; Brewer, Karpur, Pi, Erickson, Unger, & Malzer, 2011).

Sheehey and Black (2003) found in follow-up studies of individuals with disabilities three to five years post-graduation that fewer than 70% were employed. Of those who were employed, most were employed only part-time, earned below minimum wage, and received fewer benefits, such as sick leave. Less than 40% of individuals with disabilities were reported to live independently 3 to 5 years after graduation, with approximately 50% still living with their parents.

Individuals with disabilities are at a disadvantage with respect to post-secondary education. Sitlington (2003) reported that, as of 1996, 6% to 9% of college undergraduates reported a disability, with 29% to 35% of those individuals reporting a learning disability (LD). While the number of individuals diagnosed as LD has increased with the institution of disability legislation, those with disabilities are still less likely to attend and graduate from college than are their non-disabled peers (Sitlington, 2003). The possibility of obtaining a post-

secondary education is further complicated by national educational reform, which means an increase in graduation requirements. More challenging requirements for graduation will be even more difficult for students with disabilities to meet. While extra effort is being provided to help students meet the educational standards, even less attention is being given to transition planning and preparation (Bassett & Smith, 1998).

The National Joint Committee on Learning Disabilities (NJCLD, 2007) reports that many students with learning disabilities give little consideration to post-secondary outcomes. Recently, post-secondary educational institutions have begun increasing the programs and services available to students with learning disabilities. While the number of students with disabilities who are attending college has increased, they still attend college at lower rates than do their non-disabled peers. As a result, there is a significant impact on the career and employment options for individuals with learning disabilities (Sitlington & Payne, 2004). In order to improve outcomes for individuals with disabilities, more consideration needs to be given to transition planning, including the necessary accommodations to promote success for students with disabilities in the post-secondary education setting (Sitlington & Payne, 2004).

The NJCLD (2007) reported in 1994 and again in 1999 that individuals with disabilities frequently fail to consider a post-secondary education endeavor. While 56% of non-disabled high school graduates attend post-secondary education within two years of exiting high school, only 14% to 19% of students with disabilities attempt post-secondary education within this same time frame. Within 3 to 5 years of graduating from high school, 68% of non-disabled students will enroll in post-secondary education, while only 27% of students with disabilities will do the same. The NJCLD also found that while individuals with disabilities are less likely to attend post-secondary education, they are also less likely to complete their post-secondary education than are their non-disabled peers. While 56% of non-disabled students had not completed their post-secondary education within five years of graduation from high school, 80% of students with disabilities had not completed their post-secondary education within five years. After ten years, 32% of non-disabled students had not completed their post-secondary education, as compared with 56% of students with disabilities (Sitlington, 2003). It appears that even when individuals with disabilities attempt to further their education, they are less successful in doing so than are their non-disabled peers.

A literature review completed by Thoma, Lakin, Carlson, Domzal, Austin, and Boyd (2011) indicates that individuals who

had completed an associate or bachelor degree earned a higher salary than did individuals who had completed high school only. Individuals with a college degree were also more likely to receive a pension and have health insurance coverage and were less likely to be unemployed. Additional benefits to having completed a college degree included better overall health, a longer lifespan, self-reported greater happiness and self-esteem, greater rates of participation in social/community activities, expanded social networks, and higher rates of professional relationships. Students with intellectual disability (ID) who participated in post-secondary education/training programs reported learning more (academically, socially, and functionally) in post-secondary courses than they did in secondary courses. Additionally, non-disabled peers who interacted with students with ID reported that they had also benefitted from their inclusion in the post-secondary setting.

## History of School Psychology

Special education began appearing in large United States cities as early as 1905. In the United States, the Binet method of measuring intelligence became widely accepted as a tool to diagnose individuals with mental retardation and allow them to gain entrance in to special education programs (Reschly, 2002). The widespread use of intelligence tests allowed psychologists

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to classify individuals with learning problems with a greater degree of accuracy. Psychologists were able to examine both low achievement and low ability, as well as to recommend educational placement accordingly.

Reschly (2002) posits that it was the origination of special education programming and the growing popularity of the intelligence test which contributed to the development of school psychology as a subspecialty. The early work of the school psychologist involved mainly the assessment of individual children referred for academic difficulties using both formal and informal measures, as well as helping to determine the appropriate educational placement of students based upon those assessment results.

**Vocational School Psychology**

In the 1960's and 1970's, special education was provided in much more regularity in elementary schools than in the secondary setting. When special education was provided at the high school level, it often appeared to be an extension of elementary school programming, with an emphasis on academic skills. The vocational legislation of the 1970's led to an increase in vocational education. Parent groups also contributed to the increase in vocational education. Parents began to realize and report that they wanted their children to be independent and functional members of society upon leaving school. Another cause for the

increase in vocational education was the work of Assistant Secretary of Education Madeleine Will, who encouraged educators to include vocational goals in IEP's, to facilitate the integration of disabled students with their typical peers, and to link special education, vocational education, and vocational rehabilitation services (Hohenshil, 1984).

Hohenshil (1982) is considered to be the father of vocational school psychology. He was the first to recognize the need to blend the fields of school psychology and vocational counseling in order to meet the needs of students with disabilities. Hohenshil (1982) strongly encouraged school psychologists to seek further training in the area of vocational and career education in order to strengthen their abilities to meet the needs of students with disabilities in their transition to adult life.

Hohenshil's 1974 review of the professional literature found no research on the role of the school psychologist in relation to vocational education. It had been believed that school psychologists would begin to involve themselves in vocational education programs as nearly all students who qualified for special education services also qualified for financial supports under the Vocational Education Amendments Act of 1968, in addition to their entitlements though vocational rehabilitation statues (Hohenshil, 1974).

Hohenshil (1982) emphasized the need for students with disabilities to leave high school with a skill set which would increase their chances of being productive members of society. Hohenshil (1982) pointed to the social and economic cost of graduating students with disabilities who were unprepared for post-secondary employment and living, indicating a need to improve upon this situation. As the number of students with disabilities attending public schools increased, a growing number of students with disabilities were also attending vocational schools. Vocational teachers and schools were unprepared to meet the unique needs of this set of learners. It was believed that no single group of professionals was completely able to meet the vocational needs of students with disabilities. Vocational and school counselors were not familiar with working with students with disabilities, special education teachers were not well-versed in career education, and school psychologists and rehabilitation counselors were unfamiliar with school vocational programs. Hohenshil (1982) introduced the concept of vocational school psychology, which provided school psychologists who were already trained in diagnostics and assessment additional training in the areas of vocational and career training, vocational assessment, and career planning. Hohenshil (1974) purported that school psychologists could contribute to a student's vocational education by predicting

their potential for success in vocational programs, as well as recommending the best fit between a student and a vocational placement/program. To do so, the school psychologist would need to be acquainted with necessary vocational aptitude and interest assessments that would allow them to make accurate predictions for students.

The National Commission for the Study of School Psychology in Vocational and Career Education Programs endorsed the development of a specialty in vocational school psychology. The Commission suggested that NASP create guidelines for the training and credentialing of these psychologists, who could help to identify students, place them in appropriate programs, and evaluate their vocational progress (Hohenshil, 1979). NASP embraced the concept of vocational school psychology and published a number of articles on the topic of vocational school psychology from the mid- 1970's through the mid- 1980's, even devoting a special issue of *School Psychology Digest* in 1974 to the topic. Programs were presented at national conferences during the mid-1970's, and a number of professional papers were published, as well. NASP appointed the National Commission to Study the School Psychologist's Role in Career and Vocational Education in 1977, and in 1978 another issue of the *School Psychology Digest* focused on the role of the school psychologist in career education. Virginia Tech, James Madison University,

and Oklahoma State University all developed doctoral programs with a vocational school psychology specialty. Other programs added a vocational training component to their programs during this period of time, as well (Hohenshil, 1982).

Hummel and Hohenshil (1974) advocated that success in one's career allows for a sense of adequacy and self-worth. Career education allows the individual to integrate themselves with their school and society. Career education requires the development of competencies and the mastery of skills. The United States Department of Education prioritized career education in 1971. Millions of dollars were allocated to develop and deliver career education programming.

Hummel and Hohenshil (1974) proposed that because school psychologists are accustomed to working with students with unique learning needs, they may help to better design and customize career education programs for the students that they serve. The authors suggested that school psychologists could act as curriculum consultants, teacher consultants, and educational change facilitators. With respect to curriculum, school psychologists can help to make the curriculum more individualized and successful for the student. The school psychologist can educate the team on a student's needs, learning styles, cognition, and development, which should guide their career education.

Adult vocational training programs have historically been less successful for individuals who are disadvantaged and/or disabled. Often, adult vocational training programs service those who were not suitably prepared for post-secondary living by the public school system. It was believed that school psychologists had a unique training and skill set which made them valuable potential contributors to adult vocational education (Hohenshil, 1979).

Despite its recognition, Ulmer (2004) notes the lack of empirical research on the topic of vocational school psychology. Those studies which do exist point to a moderate involvement in vocational assessment and counseling by school psychologists. In fact, while vocational school psychology found some popularity in the 1980's, this momentum appears to have waned (Ulmer, 2004).

### Training of School Psychologists

For individuals with disabilities, vocational assessment was initially intended to determine eligibility for and necessity of services provided by state and federal rehabilitation agencies, which would allow the individual to secure and maintain competitive employment (Levinson, 1994). Fives (2008) suggests that school psychologists may play a vital role in the transition planning process when data from school-age psychoeducational evaluations is integrated with

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psychological, educational, and vocational perspectives in mind. The author suggests that school psychologists may play a limited role in the transition planning process due to "time constraints and a reluctance to become involved in such activities because of limited vocational assessment training" (Fives, 2008; p 509). Fives (2008) further posits that school psychologists would benefit from educational training in career development theory, vocational assessments, and vocation-related resources, such as the Occupational Outlook Handbook (Bureau of Labor Statistics, 2006).

Staab's (1996) study appears to be the first to examine the direct involvement of school psychologists in transition activities. Staab surveyed a national sample of secondary school psychologists in order to gain insight into their participation in targeted areas of transition planning. Staab surveyed school psychologist's level of participation in the areas of consulation, assessment, direct services, and program planning/evaluation. Staab also collected data on school psychologist's perceived importance on each of these functions, how prepared they felt they had been in relation to the importance of these functions, and barriers which prevented them from the level of involvement they believed necessary in order to complete these functions.

The results of Staab's (1996) study indicated that most

respondents had been working for ten years or more. There were slightly more female than male respondents. One-third of the respondents indicated that they performed some transition function in their current role, though only 5% reported that they were their school's designated transition coordinator. Respondents were divided on whether school psychology skills were appropriately utilized or were under-utilized in the transition planning process. Few respondents indicated that school psychology services were over-utilized in transition planning. About one-half of the respondents indicated that transition planning was somewhat important in comparison to other job duties, while one-third indicated that transition planning was either an important or very important job duty. Approximately one-half of respondents indicated that they felt as if they needed more information on transition to perform their job duties adequately. Approximately one-third of respondents reported that they were adequately prepared or well-prepared to perform these duties. A majority of respondents indicated that transition-related training had been obtained through on-the-job training/experience or through working with another faculty or transition team member.

The majority of school psychologists were found to not be frequently performing transition-related job duties as they pertained to consultation, direct services, and/or program

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planning/evaluation. They did appear to be completing transition assessments regularly. Staab's (1996) study revealed a number of barriers to the involvement of school psychologists in the transition planning process, including time allotted to their secondary caseload, the demands of their current caseload, being restricted by evaluation timelines, and by the recognition of the value of the school psychologist in the transition planning process by school administration.

The effective training of school psychologists may have a direct impact on the post-secondary educational success of students with disabilities. The Association of Higher Education and Disability (AHEAD) is the nation's foremost group in providing support services to individuals with disabilities in the post-secondary setting (Sitlington, 2003). AHEAD provides guidelines for the documentation of disabilities, directly speaking to the recommended actions of the school psychologist. While AHEAD does not provide a legal definition of a learning disability, their guidelines have come to be utilized by many post-secondary education institutions. AHEAD requires that documentation be provided by a qualified individual, such as a school psychologist. The guidelines also state that information should be "recent and appropriate." In most cases, cognitive scores from initial elementary school evaluation reports will not be acceptable. School psychologists and the students that

they serve would benefit from the school psychologists' acquainting themselves with the AHEAD guidelines and composing their psychoeducational reports accordingly (Sitlington & Payne, 2004). School psychologists must be aware of the documentation required by post-secondary education institutions in order to provide meaningful and beneficial information in their psychoeducational reports. Students with disabilities must be able to provide documentation of their disability and be able to communicate what accommodations they will require to post-secondary education institutions. Having such accommodations listed within a recent psychoeducational evaluation report would be very advantageous to the student with a disability (Sitlington & Payne, 2004).

Students with disabilities should also be educated on the differences that will be encountered in their transition from secondary to post-secondary education. Students with disabilities frequently report that they fail to seek necessary accommodations for or to disclose their disability at the post-secondary level as they fear that disclosing their disability will cause others to perceive them as being "stupid,"' will cause post-secondary educators to feel as if they are not prepared or qualified to complete the course work, and/or will cause their non-disabled peers to believe that they are doing less work or are 'cheating' in courses (Lightner et al., 2012).

Post-secondary education institutions are requiring an increasing amount of documentation, as well as documentation that is recent and specific in nature, in order to provide students with disabilities reasonable and necessary accommodations. Students with disabilities are not automatically afforded the same rights and protections at post-secondary education institutions as they are in high school. While students with disabilities are protected by IDEA in high school, as adults, students with disabilities are protected by Section 504 of the Rehabilitation Act (1973) and the Americans with Disabilities Act (1990). While IDEA is intended to provide students "meaningful benefit" from their education, Section 504 and ADA provide only "equal access" to education (Sitlington & Payne, 2004). This translates to significant differences between the services an adult with a disability can expect to receive in post-secondary education as opposed to what they received as a student in high school. School psychologists can aid students with disabilities and their families by informing them of this important distinction before they leave the high school setting. School psychologists may find their own schools to be their most valuable source of education on vocational education and transition. Vocational teachers and transition coordinators can help to educate school psychologists on vocational interests, aptitudes, and skills which can help to predict success in

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vocational education programs. School psychologists can, in turn, help to educate others involved with the student on personal learning and behavioral styles, which can also have a profound influence on vocational success (Hohenshil, 1984).

School psychologists who are poorly trained in vocational assessment may benefit from contracting with vocational rehabilitation agencies, though this requires additional time and resources to be allocated to the transition planning process. This places an undue burden on the school system and/or family when a school psychologist who has been provided with sufficient training could complete this assessment independently and in a timely manner (Levinson, 1994).

### Role of the School Psychologist

A study completed by Lillenstein (2002) explored the role of school psychologists in the transition planning process within the state of Pennsylvania as indicated by school psychologists and transition coordinators. Results of this study were compared to the findings of a similar but national study completed by Staab (1996).

Lillenstein (2002) distributed his survey to 225 transition coordinators and 450 school psychologists working in the state of Pennsylvania. Results of this study indicated that school psychologists spent approximately 4.45% of their time engaged in transition-related activities. The study also indicated that

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school psychologists reported spending the least amount of this time on consultation and program planning and evaluation as they relate to transition, which was consistent with the findings of previous research. Transition coordinators reported that school psychologists are "never" or "occasionally" involved in consulation and program planning and evaluation. Transition coordinators additionally rated school psychologists as "frequently' completing re-evaluations and functional behavior assessments (FBAs) in order to meet the transition needs of students with disabilities. No significant differences were found in the amount of transition services provided by school psychologists as per transition coordinator and school psychologist ratings.

School psychologists indicated that they "probably should" perform most of the transition tasks in all four categories. Transition coordinators responded similarly, indicating that school psychologists "probably should" perform most of the transition tasks in all of the categories. Both school psychologists and transition coordinators agreed that school psychologists "probably should not" be involved in the coordination of referrals between schools and post-school agencies, which fell under the category or consultation (Lillenstein, 2002).

Lillenstein (2002) found that school psychologists and

transition coordinators agreed on the amount of time that school psychologists should spend on transition planning activities. School psychologists and transition coordinators also both indicated that they would like to see school psychologists spend more time on transition planning tasks then they were able to in their current roles.

Lillenstein (2002) found that school psychologists believed that they were prohibited from spending more time on transition activities due to their caseload and that a lack of interest in transition was not a significant barrier to their involvement in transition planning. Transition coordinators again expressed similar views in their response to this item.

In comparing the results of the Lillenstein (2002) study to the Staab (1996) study, it was revealed that Staab's respondents reported more involvement in consultation related to transition, spent more time on psychological and psychoeducational assessment, indicated greater involvement in direct services, and were more involved in the development of social skills programs (program planning and evaluation).

Huebner (1993) suggests that there appears to be minimal interest in providing school psychology services at the secondary level. Research in this area is also lacking in comparison to research of the services provided to elementary-aged students. A previous study of secondary school

psychologists indicated dissatisfaction with their roles; they reported that they spent the majority of their time conducting 'traditional' assessment, that they received little preparation to work with secondary students, and that the majority of them wanted to leave the field.

When school psychologists servicing secondary students reported spending more time in individual and family counseling and less time in assessment, their reported job satisfaction increased. Huebner's (1993) study also found that when school psychologists were asked what skills were most vital in working with secondary students and should be addressed in training programs, vocational/career training was the seventh most popular response. When asked what their current need for professional development was, vocational/career training was the fourth most popular response.

The National Association of School Psychologists (NASP) Professional Conduct Manual (NASP, 2000) states that school psychologists are to include assessment of vocational aptitudes, interests, and development in psychoeducational evaluations. Assessments may include work samples, situational assessments, and simulated work experiences. Assessment of intelligence, academic achievement, and personality also contribute to vocational assessment. A comprehensive vocational assessment examines a student's psychological, social,

educational/academic, physical/medical, and vocational
functioning. This can include measures of vocational interest,
aptitudes, work habits, career maturity, and traditional
psychoeducational assessment. Vocational assessment should best
be viewed as an ongoing process, utilize multiple assessment
types, include various professionals across disciplines, and be
considered an essential piece in the transition process
(Levinson, 2008).

Sitlington and Clark (2007) suggest that thorough
transition assessment examines a student's interests,
preferences, cognitive ability, academic achievement, adaptive
skills, social/interpersonal skills, emotional development and
mental health, vocational skills and employability, and
involvement within their community. Assessment information can
be gained through a number of channels beyond formal
assessments. Data should be drawn from existing records, which
can help to guide what areas should be explored with greater
detail. Interviews, informal instruments, curriculum-based
measures, portfolio assessments, work samples, behavioral
observations, rating scales, and situational assessments all can
provide a wealth of information to aid in the transition
planning process. Assessment data should be collected on an
ongoing basis and should be shared with all of those involved in
the student's life. The student with a disability should be in a

position that allows them to make decisions with this data being used as a tool to guide them throughout the transition process. Students will benefit from assessment data generated from a variety of areas, including employment, self-advocacy/self-determination, social and interpersonal skills, communication, and academics (Sitlington & Clark, 2001). The assessment process should be student-centered and provide information on what the student is capable of achieving, rather than focusing solely on the student's disability (Sitlington & Clark, 2001).

While school psychologists may be following the law and completing re-evaluations or re-evaluation waivers, they can complete more functional evaluations which provide valuable information to students and their families by aligning the way that they complete evaluations with consideration to the transition-planning process (Sitlington & Payne, 2004). Standardized assessments may have been replaced by curriculum-based assessments in some schools. Some states may utilize non-categorical labels in referring to eligibility for special education, rather than specifying a particular disability category. Some school psychologists may choose to waive a three year re-evaluation with the permission of the parents. While all of these practices are legal and acceptable, they will not provide students with disabilities the tools that they will need in order to make a successful transition to post-secondary

education, the world of work, or independent living (Sitlington & Payne, 2004). Sitlington & Clark (2007) suggest that while transition planning encompasses a huge number of variables, traditional assessment addresses very few of these. Present educational levels in the IEP are often limited to academics and behavior, neglecting the area of transition planning. Paper and pencil tests completed by the student may be beneficial early on in the transition assessment and planning process, directing the team to make choices regarding appropriate employment experiences, transportation options, and living arrangements, still allowing time to determine if these decisions are the best ones for the student and their family.

The information gathered by school psychologists as part of traditional psychoeducational assessments can also be beneficial to the vocational rehabilitation (VR) counselor. VR counselors can use the information from psychoeducational reports to assist in career planning and to generate vocational recommendations. A review of the literature indicates that intelligence scores can be used with persons with mental retardation to predict vocational aptitudes and success. Additional variables, such as social and behavioral deficits, adaptive behaviors, and attitudes of individuals, have also been helpful in predicting the occupational success of individuals with mental retardation (Morris & Levinson, 1995).

A review of the research indicates that VR counselors are integral contributors to the transition planning process. Their lack of participation in the transition planning process for students with disabilities is purported to be a significant contributor poor post-secondary outcomes. There are a number of explanations provided for the lack of integration of VR services in the transition planning process. The process by which funding is provided to individuals with disabilities, transition legislation, and the training programs available to students with disabilities may all inhibit the participation of VR in transition planning for secondary students (Plotner, Trach, & Shogren, 2012). Even when VR is involved in the transition planning for secondary students, it is often unclear who should assume a leadership role in the planning process and which agencies should be responsible for what services.

IEP meetings are an ideal setting for school psychologists to collaborate with students with disabilities, their families, and special education teachers. While a review of the literature indicates that special education teachers generally assume the leadership roles in IEP meetings, these meetings provide an ideal venue for team collaboration and consultation. Teachers rate school psychologists who attend and participate in more meetings as being more helpful than school psychologists who attend fewer meetings. Teachers also reported wanting school

psychologists to spend more time in consultation activities with the teachers themselves. With respect to the transition process, school psychologists could be more effective and beneficial to teachers and students by conducting relevant assessments, attending meetings, relaying assessments results, and engaging in consultation activities (Arivett, Rust, Brissie, & Dansby, 2007).

School psychologists may also assist students with disabilities by providing them with psychoeducational groups which help to prepare them for their post-secondary endeavors. Psychoeducational groups for students transitioning from high school to post-secondary education and training programs have proven effective in increasing the success of those students (McEachern & Kenny, 2007). These groups are most effective when paired with individual career counseling and vocational assessment, which can be used to generate transition goals and objectives. This process should be used in order to help to develop a plan of study for the student which links their high school coursework to their ultimate plans for post-secondary education and training.

School psychologists can provide a vital service by working with families to link them with adult services within their communities. Such adult services include VR, mental health and mental retardation (MH/MR) providers, drug and alcohol treatment

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centers, base service units, medical providers, and entitlement programs, such as Social Security. School psychologists can also work with the individual and their family to address the family factors that contribute to success in transition, such as poverty, family and community violence, and drug and alcohol use by the parents through school programs, school-family partnerships, or involvement of community agencies (Lehman, Hewitt, Bullis, Rinkin, & Castellanos, 2002).

School psychologists can also work with families to prepare them for interactions with VR counselors, who families often report as being harsh. Families report VR counselors using "blunt terms and predictions regarding future employment opportunities" (Dowdy, 1996, p. 144). School staff may also work with individuals and their families to provide them with information on the student's specific strengths and weaknesses, to educate them on their disability, and to teach them to be effective self-advocates. Additionally, school psychologists can aid in the identification of job interests and abilities, which can result in an appropriate placement in which a student's work experiences can occur.

While consultation between students' families and schools will result in the longest-lasting and most beneficial relationships in the student's transition planning (Hazel, Laviolette, & Lineman, 2010), a review of the research on the

area of consultation indicates that school psychology students are not receiving explicit instruction in all areas of consultation. Coursework contains little transition-consultation content, and school psychology students are receiving little supervision on consultation cases.

School psychologists can collaborate with students with disabilities and their families by preparing them for the changing responsibilities that come with transitioning from high school to higher education through a variety of services. Students with disabilities should be educated in the contrasting accommodations provided in higher education, which are generally more limited than the accommodations that they received in high school. Students must also be prepared to seek out the disability office of their higher education institution and educate someone there on their disability and the accommodations that they will require.

It has been found that students who receive disability services during their post-secondary education earn significantly higher grades and earn more credits by the middle of their sophomore year than do students with disabilities who do not receive disability services. Students who did not initially seek out disability services upon beginning their post-secondary education indicated that they eventually did so due to academic failure and/or academic failure preventing their

participation in other activities (such as a sport or club). The research additionally indicates that parents of students with disabilities play a significant role in the student's pursuit of disability services at the post-secondary setting (Lightner et al., 2012).

Students with disabilities and their families should also be educated in the laws and policies related to individuals with disabilities so that they are aware of their rights (Hicks-Coolick & Kurtz, 1997). Parents may find this an especially hard time, as they must learn to relinquish the control and advocacy they once exerted over their child's education, so that the student can become an effective self-advocate and self-sufficient individual.

School psychologists make ideal facilitators for person-centered planning. Psychologists can act as the point of contact for members of the team, coordinate meetings, and act as an advocate for the individual and their family in securing adult and community resources. The psychologist, who has completed a comprehensive re-evaluation, is at an advantage by being familiar with the family's history and structure, knowing the specific strengths and weaknesses of the student, and having an understanding of the student's cognitive and academic abilities. The school psychologist will also be aware of the student's aptitudes and interests, social and emotional skills, any

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behavior problems, and/or any life skills needs that may exist. In having such a broad understanding of the student and their family, the school psychologist will be able to act as a facilitator in the transition planning process by educating the family about what adult service providers should be included in the process, and even helping to establish these contacts when necessary. While other community resources may act as the facilitator in this process, the school psychologist is likely to be a more stable and accessible member of the team than will be community supports. With the caseload of community service providers and the dependence on parents to invite the necessary people to meetings, community resources are often missing from IEP and other transition planning meetings. By maintaining this position as facilitator, the school psychologist can insure some continuity of care.

## Attitudes of School Psychologists

Previous studies have suggested that the job satisfaction of school psychologists may be directly related to the services that they provide their students. VanVoorhis and Levinson (2006) report that job satisfaction has been found to be related to retention of school psychologists, as well as job turnover rates. This study found that role expansion is positively correlated to job satisfaction. That is, school psychologists who have a wider variety of job duties and experiences reported

higher job satisfaction than did school psychologists who reported a very limited, generally assessment-oriented, capacity. Transition assessment and planning is an ideal area for the role expansion of school psychologists, as this is an area that is often lacking in the training and practice of the school psychologist.

Prior studies of the satisfaction of school psychologists indicated that they were most dissatisfied with the type of assessments they administered, as well as an uncertainty that their time was being spent in useful assessment activities. Transition assessment is an activity which could be considered to be very useful to students, their families, and to their communities as a whole (Kramer & Epps, 1991), and may in turn increase the job satisfaction of school psychologists. Transition assessment and planning offers school psychologists an expanded role, as well as allowing them to spend more time directly engaged with students and their families, a factor which has been correlated with increased job satisfaction. Preparing students of school psychology programs for transition activities may benefit not only students and their families, but the profession of school psychology as a whole.

When school psychologists perceive themselves as engaging in useful and meaningful activities, such as home-school collaboration, job satisfaction increases. School psychologists

in more traditional and assessment-focused roles report less job satisfaction and often report a desire to leave the field. The shortage of school psychologists as well as the high turnover rate within the field provides evidence that the field is not fulfilling the needs of the professionals who enter it.

## Transition Planning Research

Levinson (2004) posits that vocational assessment is often inadequate and insufficient for the purposes of transition planning. Vocational assessment should not consist solely of a single measure and should not assess a single domain of a student's life. Too often, those charged with completing the vocational assessment in the school setting are uneducated and unprepared with respect to the vocational assessment field (Levinson, 1994).

Transition assessment should address not only vocational aptitudes and interests, but should also take into account community participation, civic involvement, post-secondary education and vocational training, life skills, management of finances and budgeting, transportation options, social relationships, and medical needs. Transition assessment reinforces the need for ongoing assessment and person-centered planning, as well as home-school-community collaboration (LeConte, 2006). Levinson (1994) also cites the importance of trans-disciplinary vocational assessments, which include local

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community agencies and service providers in the transition planning process. Trans-disciplinary assessment can help to enhance a seamless transition from the world of school to the world of post-secondary work and living, ensuring that all necessary services and accommodations are in place for the student before they even reach the day of their graduation. While transition assessment and planning would be beneficial for all students, with and without disabilities, moving through their high school careers, individuals with disabilities are at an even higher level of need for accurate and effective transition services (Sitlington & Clark, 2001).

Ulmer (2004) distributed a survey to a national sample of 534 school psychologists who provide services at the secondary level. Ulmer found that the training of school psychologists was the strongest predictor of their involvement in transition planning. Training was also found to have a significant effect on the attitude of school psychologists as it related to transition planning services and their views on the best practices of transition services.

Ulmer (2004) posited that school psychologists who regularly participate in transition planning activities have received training on the topic of transition during their careers, and that they generally pursue this training as a result of their personal beliefs related to the importance of

transition, a personal interest on the topic of transition, a belief that adequate transition planning contributes to quality of life for individuals with disabilities, and a belief that transition programs should instill self-determination skills in students.

Ulmer (2004) indicated that even when school psychologists are active members of transition teams, they still require specific training and related skills in the areas of assessment, consultation, direct service, and program planning/evaluation. These findings again highlight the importance of training of school psychologists with respect to their participation in transition planning activities. Ulmer also found that school which demonstrated high quality transition programs for students with disabilities would be supportive of the role of the school psychologist in the transition planning process. These high quality programs also support the continued education of school psychologists as it relates to transition planning.

Ulmer (2004) provided suggestions for garnering greater involvement of school psychologists in the transition planning process. One suggestion is that administrators support the increased involvement and utilization of school psychologist's skills in transition planning. School psychologists themselves must demonstrate a personal interest in and commitment to transition planning, as the support of the job site alone was

not able to significantly influence the participation of the school psychologist in transition planning.

In contrast to the Staab (1996) and Lillenstein (2002) studies, Ulmer (2004) found that caseload and evaluation schedules were not significant barriers to school psychologist involvement in transition planning. Ulmer suggested that school psychologists who are determined to dedicate time to transition planning are capable of doing so and may have more control over their job duties and expectations than was previously believed.

Current trends in school psychology necessitate more psychological services in the schools. The increased number of students with mental health needs will necessitate an increase in school psychology services, as these students are plagued with poor outcomes, including a lack of vocational success (Tharinger, Pryzwansky, & Miller, 2008).

Oakland (1997) cited a survey conducted across 44 countries that found that school psychologists reported using 455 different assessment instruments in their practice. Of these, 39% assessed intelligence, 24% assessed personality, and 10% assessed achievement. Respondents to this survey reported that they believed they needed additional and alternative instruments for achievement, intelligence and school readiness, vocational interest and abilities, personality, social skills, perceptual development, and motor development. However, even with the large

number of instruments being used by school psychologists, the literature indicates that very few tests of vocational aptitudes and interests are introduced to school psychology students in their pre-service training (LeConte, 2006). In a previous study conducted in South Carolina, transition assessment was reported to be included in graduate-level training, but was not explored via work-based experiences, such as an internship. Only 35% of working school psychologists answered that they believed that their school engaged in transition assessment (LeConte, 2006).

A similar study was completed with school counselors. A survey of the 64 programs that comprise the Council of Counseling Psychology Programs indicated that the Strong Interest Inventory (SII) was taught in these programs with the highest frequency of all of the available vocational assessment instruments. Fifty percent of these programs responded that vocational assessment was included as part of the required coursework. Eighty percent of the program directors rated vocational assessment as being of "substantial" or "great" importance. This study concluded that if any vocational training was required of the program, the SII is generally the only instrument taught to counseling psychology students, while other instruments, such as the Self-Directed Search or the Kuder Occupational Interest Survey, are taught in only a minority of programs (Watkins & Campbell, 1990).

Kramer and Epps (1991) suggest that the training and role of the school psychologist should be expanded and should consider a more ecological context for the students they service. Training institutions bear a certain level of responsibility for providing school psychology students with the skills needed to be effective in their roles within the schools. School psychologists are often not readily viewed as being qualified to work in health service organizations, largely due to their training. More training in assessment related to transition and vocational theory could help to expand the role and employability of students graduating from school psychology programs.

While there has been an improvement in the manner by which school psychologists are being trained and credentialed, some issues go unresolved and result in students with disabilities and their families experiencing unmet needs. Knoff, Curtis, and Batsche (1997) contend that school psychologists should link assessment to intervention, link consultation to intervention, participate in home-school-community collaboration, provide skill development, counseling, and crisis intervention to students, engage in research, program development, and evaluation, and provide organization and staff development.

The training of school psychologists tends to be dominated by federal special education legislation, namely IDEA, which

requires school psychologists to be involved in eligibility and placement decisions for students with disabilities (Larson & Choi, 2010). In a recent study, Larson and Choi (2010) found that the amount of training that students received in the areas of NASP training standards (assessment, intervention, preventive services, consultation, team collaboration, applied research/program evaluation, or systems/organizational consultation) did not parallel the actual amount of time spent in these activities by practicing school psychologists.

Effective school psychology training programs provide trainees with skills for advocacy and a respect for individual differences, with a strong knowledge base and professional competency, as well as self-awareness and a solid base of ethics from which to operate. With respect to transition, many training programs are failing to provide the knowledge base and professional competency necessary to provide suitable transition services to students and their families (Knoff et al., 1997).

Curtis and Batsche (1991) posit that both NASP and the American Psychological Association (APA) direct school psychologists to practice only in their areas of competence, being aware of their professional limitations and taking steps to remediate their shortcomings. School psychologists gain knowledge through both pre-service training at the university level and through professional development activities during

their time practicing in the field. As school psychology training programs are not currently offering a large amount of exposure to and training on transition and vocational assessment, it becomes the responsibility of the individual school psychologist to independently enhance their knowledge and competency in these areas. Curtis and Batsche cite the lack of training that school psychologists secure in preparing them to work in the secondary setting. School psychologists working in the secondary setting will require even more extensive training in transition and independent living preparedness. The authors also question the type, not the intensity, of training that school psychology students are receiving.

Trainers at the university level may need to expand their areas of expertise in order to meet the current demands of the field and to better prepare students of school psychology to serve their schools and students. Training programs should be preparing students to work in a setting which takes into consideration all student variables, their families, and their communities, not only what is occurring within the student themselves (Curtis & Batsche, 1991). The authors cite their concern that school psychology training programs are merely 'responding' to the field, rather than 'leading' it.

## Summary

By establishing a productive transition team involving educators, family, and the community prior to an student's graduation from high school, decision-making and goal setting can take place, and the entire transition process can be enhanced (Blalock, 1996). Transition planning is meant to address all facets of a student's life, and educators must involve the family and community in order to do so. Schools and community agencies should provide unconditional care to students with disabilities and their families, meaning that collaboration is an ongoing process, adapting to the changing needs and goals of the individual (Lehman et al., 2002).

A review of the existing research on the transition planning for individuals with disabilities and the outcomes they attain generally indicates less than favorable results. Much of the literature focuses on the negative outcomes and failures of the transition process, while little evidence is presented on how to obtain more positive outcomes. This literature review helps to establish the need for more clear and evidence-based means of obtaining positive outcomes for individuals with disabilities with respect to employment, education, and independent living status, as well as uncovering the home-school collaboration variables that will prove to be vital in the transition process.

In planning for a student's transition to post-secondary life, the school psychologist may serve as a coordinator for services, educate team members on learning and human development, serve as a transition specialist, provide formal and informal assessment measures, inform and educate employers and others in the community, help in the design and evaluation of the effectiveness of the school's transition program, provide in-service and continuing education for graduates, serve as a mentor and consultant for those transitioning, facilitate parental involvement, provide mental health and personal counseling, and/or teach classes or provide lectures to disabled students regarding their rights (Witte, 2002).

In order to be effective in the transition process, school psychologists must be adequately trained in and made aware of the importance of transition planning. Reviews of the professional literature suggest that both this training and a clear message on the importance of transition are lacking in the current training and practice of school psychologists.

CHAPTER 3

METHODOLOGY

**Introduction**

This chapter includes a description of the methods used to investigate the research questions. The following sections describe the research design, population, sample, assignment, measurements, and analysis that were utilized.

**Design**

This study was descriptive in design, with the data collected via a questionnaire survey and through examination of university and program website information. Figure 1 illustrates the study's population, variables, relationships among the variables, and statistical procedures which were used to analyze the data.

**Population**

The National Association of School Psychologists (NASP) approved training programs are those which have been reviewed by NASP and have been found to comply with the *NASP Standards for Training and Field Placement Programs in School Psychology* (NASP, 2000). NASP approval status may be either full or conditional, with conditional approval requiring that a program submit additional documentation demonstrating compliance with NASP standards. NASP-approved programs can be at either the

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specialist or doctoral level, with specialist level programs

providing only certification as a school psychologist. There

were 182 NASP-approved programs in the United States as of June

25, 2010 (NASP, 2010).
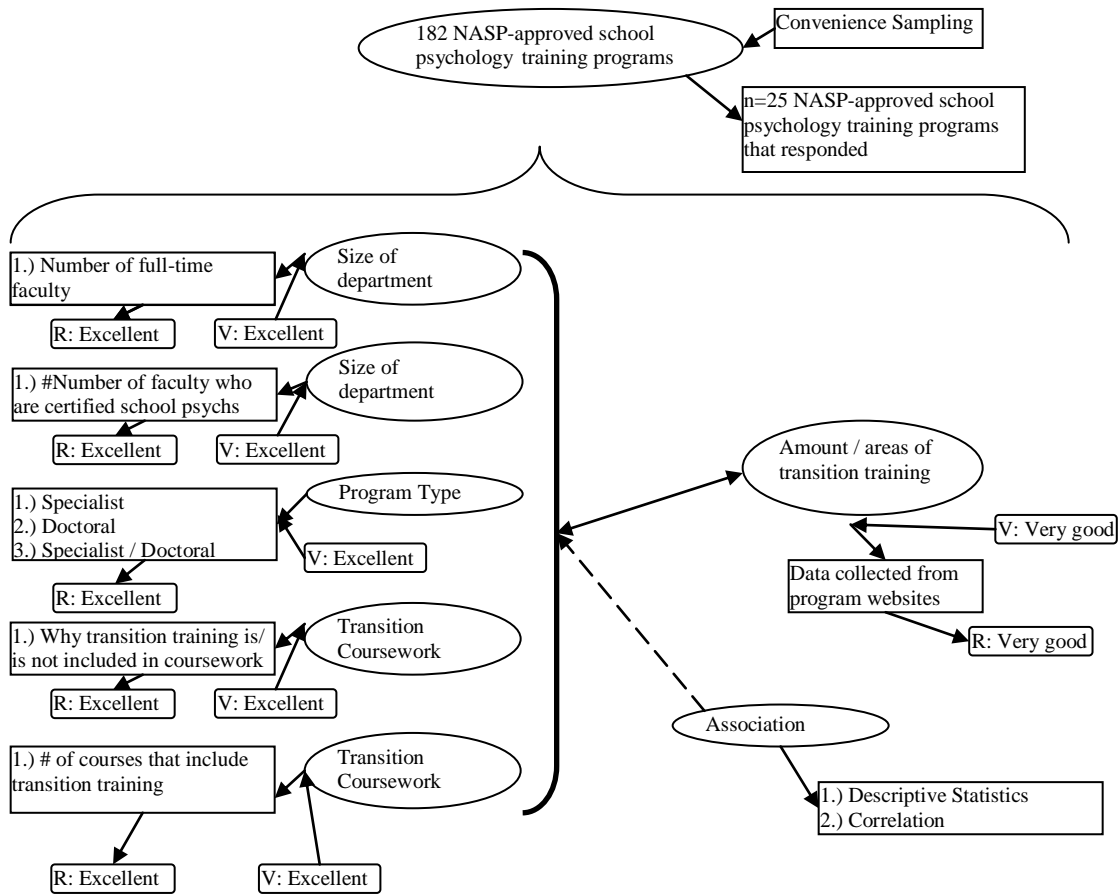


*Figure 2.* Research path diagram.

## **Sample**

To explore the transition training occurring in NASP-

approved programs, a questionnaire was created for the purposes

of this study and was sent via electronic survey

(https://iup.qualtrics.com/WRQualtricsControlPanel/, retrieved

August 26, 2010) to the chairperson of each of the 182 school

psychology programs in the NASP registry. Data was also

retrieved via a review of program websites. All 182 program

websites were bookmarked in June of 2010. The sample consisted

of all program respondents.

## Assignment

None of the NASP-approved training programs were

intentionally excluded from this study.

## Procedures

### Variables

The dependent variable was the amount of training that

school psychology students attending NASP-approved training

programs received in the area of transition. Areas of transition

training for the purpose of this study included: field

experience, models and theories of transition, consultation and

collaboration, data collection, interpretation and evaluating

outcomes, IEP development, life skills, systems and policy

development, and home/school collaboration. The presence of

transition training was determined by a search of university and

program websites, identifying coursework which included

vocational assessment, transition assessment, or transition

planning in the course name or course description. Additional

variables include the number of full-time faculty in the department, the number of full-time faculty members who are also certified school psychologists, whether or not the department offers training in the area of transition, and the reason for the provision/lack of training in the area of transition. An open-ended question was also included which offered respondents a chance to provide any additional information that they believed to be relevant to the study. Table 1 illustrates the research questions posed by this study, as well as the observed and latent variables, the instruments used for collecting data, and the validity and reliability of the data to be collected.

**Instruments**

Each of the 182 NASP-approved training programs in the United States was contacted via electronic survey which was sent to the attention of the department chair. The purpose of the questionnaire (see Appendix A for complete questionnaire) was to explore the attributes of each training program and how these variables relate to the amount of transition training occurring within the program. Each of the program websites was explored for the key terms of vocational assessment, transition assessment, and/or transition planning in the course name or course description. Data collected from program websites were recorded in an Excel spreadsheet. Information gathered included

the credential offered by the program, as well as on what topics

transition training is being offered.

Table 1

*Transition Training Project Task Table*

| # | Name | Description | Begin | End |
|---|------|-------------|-------|-----|
| 1 | Project idea | Select topic for dissertation | 6/08 | 8/08 |
| 2 | Refine study design | Develop research picture, present to Dr. Barker | 6/08 | 8/08 |
| 3 | Design survey; design data collection system for website data | Design survey questions, select question format; develop Excel spreadsheet to record website data | 6/08 | 09/10 |
| 4 | Distribute survey | Distribute survey to all department chairs | 11/10 | 2/11 |
| 5 | Collect website data | Review all 182 program websites & record targeted information | 6/10 | 2/11 |
| 6 | Data entry | Record all survey responses via Qualtrics | 12/10 | 3/11 |
| 7 | Final preparation | Check all de-identified data via Qualtrics; examine to insure it meets assumptions for analysis; interpret analysis results; write report | 3/11 | 5/13 |
| 8 | Final report presentation | Present report to dissertation committee | 4/13 | |

Confidentiality was maintained by including no

demographic information on the questionnaire. All

participant information was collected and  maintained in

confidence. Neither the names of the NASP-approved programs nor

the names of the program directors participating in the study

were identified on the survey in any way.

The electronic survey included questions relating to the training in transition practices, as well as on the specific features of the department, including the number of full-time faculty in the department, the number of full-time faculty members who are also certified school psychologists, whether or not the department offers training in the area of transition, and the reason for the provision/lack of training in the area of transition. An open-ended question was also included which offered respondents a chance to provide any additional information that they believed to be relevant to the study.

A search of university and program websites explored the actual training of students specific to transition. Information gathered included whether the program offered a doctoral credential, a specialty credential, or both, as well as the areas in which transition training was being offered. All program websites were searched for the following areas of transition training: field experience, models and theories of transition, consultation and collaboration, data collection, interpretation and evaluating outcomes, IEP development, life skills, systems and policy development, and home / school collaboration. In the search of the program websites, coursework which included vocational assessment, transition assessment, or career / transition planning in the course name or course description were also identified. Table 2 illustrates the

variables included in this study, as well as the means by which

the data were collected.

Table 2

*Research Questions, Latent Variables, Observed Variables, Instrument/Source, Validity, and Reliability*

| Research Questions | Latent Variables | Observed Variables | Instrument/ Source | Validity | Reliability |
|---|---|---|---|---|---|
| 1. What program character-istics are correlated to transition training? | Perceived Importance | Credential Offered review | Website | Very Good | Very Good |
| | | Full-time Faculty on Staff | Electronic survey | Excellent | Excellent |
| | | # of faculty Who are also Certified School Psychs | Electronic survey | Excellent | Excellent |
| | | Reason for Presence/ Absence of Training | Electronic survey | Excellent | Excellent |
| 2. For which aspects of transition are students receiving training? | Perceived importance | Training on theories & models | Program website | Very good | Very good |
| | | Training on supervised field Experience | Program website | Very good | Very good |
| | | Training on Consultation/ Collaboration | Program website | Very good | Very good |

*(continued)*

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Table 2

*Research Questions, Latent Variables, Observed Variables, Instrument/Source, Validity, and Reliability (continued)*

| Research Questions | Latent Variables | Observed Variables | Instrument/ Source | Validity | Reliability |
|---|---|---|---|---|---|
| | | Training on data collection & interpretation | Program website | Very good | Very good |
| | | Training on IEP Development | Program website | Very good | Very good |
| | | Training on life skills | Program website | Very good | Very good |
| | | Training on systems & policy development | Program website | Very good | Very good |
| | | Training on home/school collaboration | Program website | Very good | Very good |
| 3. Why is training on the topic of transition offered/not offered by the program? | Perceived importance | Additional information provided | Electronic survey | Very good | Very good |

A search of university and program websites explored the actual training of school psychology students specific to transition. Information gathered included the number of courses which included training on transition issues and in which

area(s) of transition training is taking place. Employing and expanding upon the methodology used in an exploratory study completed by Levinson, Fritz, and Conn (2009), specific methods were employed to gather the targeted information from the program websites.

The National Association of School Psychologists (NASP) website (www.nasponline.org, 2010) was utilized to locate the websites of all 182 NASP-approved programs. All program websites were bookmarked in June of 2010. Once all websites had been identified, each university website was searched for the school psychology homepage of the site. Once the department homepage had been identified, it was then searched for the list of required coursework.

Once the list of the required coursework for the school psychology credential had been identified, a search of the key terms of vocational assessment, transition assessment, or career/transition planning was completed for all courses. If these terms were found in any of the course names, the course description or syllabi (when available) was then searched for the more specific terms of: field experience, models and theories of transition, consultation and collaboration, data collection, interpretation and evaluating outcomes, IEP development, life skills, systems and policy development, and home / school collaboration. In the search of the program

websites, coursework which included vocational assessment, transition assessment, or career / transition planning in the course name or course description were also identified.

Questionnaires were distributed via electronic survey using Qualtrics, an online survey program which allows one to design and distribute a survey, as well as to analyze the survey results. Each respondent was informed that the resultant data will be held in strict confidence.

A follow-up email was sent within approximately 30 days from the date the survey was initially distributed in order to thank those individuals who had already responded and to prompt those who had not yet responded to please do so. A third email was sent approximately 60 days following the distribution of the initial survey to thank responders and act as a reminder to non-responders.

**Power Analysis**

Data collected in this study was subjected to significance testing to examine the probability of the null hypothesis. This is necessary when one is examining the characteristics of a sample of a given population. The actual effect size can only be known when dealing with an entire population. The researcher assumes that the effect size utilized in the power analysis is the same as that in the population.

For each research study, the calculated p-value is compared to the criterion or alpha. If an alpha of .05 has been selected, the calculated p-value must be .05 or less in order for the null hypothesis to be rejected and for statistical significance to be established (Leary, 1995).

When results support that the treatment is effective and the null hypothesis is rejected based on the data, or if the treatment has no effect and the data fails to reject the null hypothesis, the study results are correct. A Type I error occurs when the researcher incorrectly concludes that the independent variable has had an effect; A Type II error occurs when the researcher incorrectly concludes that the independent variable did not have an effect (Whitley, Jr., 1996).

Power should be high enough to allow the researcher to see departures from the null hypothesis. The researcher should consider what statistical test will be used, because some have more inherent power than others. Sample size must also be considered, because generally a larger sample co-occurs with greater power. Experimental effects must also be considered, because if there are substantial effects, power may be artificially inflated. Finally, statistical power can be enhanced by reducing the amount of measurement error in the study (Leary, 1995).

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Though this study distributed questionnaires to all 182 NASP-approved training programs, only 25 surveys were returned. It was therefore necessary to run multiple analyses in order to determine the sample size necessary in order to obtain meaningful results. In order to determine the necessary sample size for the questionnaire results to be considered an accurate reflection of what was occurring within the population, necessary sample size estimates were calculated using Creative Research Systems sample size calculator (www.surveysystem.com, August 26, 2010). This online sample size calculator determined that at a confidence level of 95%, 169 of the 182 NASP-approved programs needed to respond to the survey. The survey was distributed to all 182 of the NASP-approved training programs in the United States. Ultimately, the desired sample size of 169 responders was not achieved. Table 3 illustrates the research questions, hypotheses, and variables addressed by the study, as well as the statistical procedures used to evaluate them.

### Statistical Analysis

The first research question examined by this study was "What program characteristics are correlated to transition training?" It was hypothesized that programs with a greater number of full-time faculty members would provide more training in the area of transition. This study also examined the number of full-time faculty who are also certified school

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psychologists. It was hypothesized that faculty members who were also certified school psychologists would offer more training in the area of transition. This study also examined whether the program offers a specialty credential, a doctoral credential, or both. It was hypothesized that programs offering a doctoral credential would provide more training in the area of transition.

In order to examine the relationships between the program variables and the amount of transition training that is offered by the program, correlation coefficients were used. In order to use correlation coefficients, it was assumed that the survey was a valid and reliable measure of the program characteristics.

Table 3

*Research Questions, Hypotheses, Variables, Statistical Analyses, and Statistical Assumptions for the Transition Training Project*

| Research Questions | Hypotheses | Variables | Statistic | Assumptions | Assumptions Appropriateness |
|---|---|---|---|---|---|
| 1. What program character-istics are correlated to transition training? | A greater number of full-time faculty = a greater amount of training. | Number of faculty | Pearson Correlation Coefficient | 1.) Skewness 2.) Kurtosis 3.) Validity of Survey 4.) Reliability of Survey | 1.) examine the instrument 2.)descriptive statistics 3.) "rules of thumb" |

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Table 3

*Research Questions, Hypotheses, Variables, Statistical Analyses, and Statistical Assumptions for the Transition Training Project (continued)*

| Research Questions | Hypotheses | Variables | Statistic | Assumptions | Assumptions Appropriateness |
|---|---|---|---|---|---|
| | Credential programs offering a doctoral credential will provide more training. | Credential offered | Person Correlation Coefficient | same as above | same as above |
| | The more faculty who are also school psychs, the more training they will offer. | # of faculty publications | Pearson Correlation Coefficient | same as above | same as above |
| 2. On what aspects of transition are students being trained? | No hypothesis is tenable | Training on theories & models | Descriptive statistics | | same as above |
| | | Training on Supervised field experience | Descriptive statistics | | same as above |
| | | Training on consultation/ collaboration | Descriptive statistics | | same as above |
| | | Training on data collection/ interpretation | Descriptive statistics | | same as above |

*(continued)*

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Table 3

*Research Questions, Hypotheses, Variables, Statistical Analyses, and Statistical Assumptions for the Transition Training Project (continued)*

| Research Questions | Hypotheses | Variables | Statistic | Assumptions | Assumptions Appropriateness |
|---|---|---|---|---|---|
| | | Training on IEP development | Descriptive statistics | | same as above |
| | | Training on life skills | Descriptive statistics | | same as above |
| | | Training on systems & policy development | Descriptive statistics | | same as above |
| | | Training on home/school collaboration | Descriptive statistics | | same as above |
| 3. Why is training on the topic of transition Offered/not offered by the program? | No hypothesis is tenable | Descriptive statistics | | | same as above |

The Pearson product-moment correlation coefficient was used in order to examine the relationship between two continuous variables (the characteristics of the programs and the amount of transition training being offered by those programs). This study utilized one sample with multiple scores on two different measures. The Pearson product-moment correlation coefficient provides an indication of the linear relationship between

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variables. A positive correlation between the variables was predicted. That is, as the score on one variable increased, it was assumed that the score on the other variables would increase.

The data in this study were examined to determine that these assumptions were met. After determining that the assumptions were met, the appropriate statistics were run through the use of the online statistical package SPSS 19 (2011). Table 3 illustrates the research questions of this study, as well as the related hypotheses, variables included in the hypotheses, the statistical analyses used in examining the data, and the assumptions necessary for the analyses to be utilized in the examination of the data.

The second research question examined by this study was: "For which aspects of transition are students receiving training?" No hypothesis is tenable for this research question. Data were collected on the presence/absence of the following aspects of transition training: theories and models, supervised field experience, consultation and collaboration, data collection and interpretation, IEP development, life skills, systems and policy development, and home/school collaboration.

In order to examine the presence of the previously listed aspects of transition training, descriptive statistics were used.  In order to use descriptive statistics to analyze the

data collected, it was assumed that the programs' websites were valid and reliable indicators of the transition training occurring in the program. It was also assumed that errors have a value of zero. Analysis using descriptive statistics also assumes that the variables previously described are non-random and are independent. These assumptions were examined via examination of the program websites.

The third and final research question included in this study was open-ended, allowing participants to offer additional information to the question "why is training on the topic of transition offered/not offered by the program?" No hypothesis was tenable for this question.

Data were collected on the additional information provided by respondents and were examined using descriptive statistics. In order to use descriptive statistics to analyze the data collected, it was assumed that the programs' websites were valid and reliable indicators of the transition training occurring in the program. It is also assumed that errors have a value of zero. Analysis using descriptive statistics also assumes that the variables previously described are non-random and are independent. Descriptive statistic use also assumes that the disturbances are homoscedastic and are not correlated. These assumptions were examined via examination of the program websites.

Data from the returned questionnaires and the data gathered from the search of the program websites were coded through the online survey site Qualtrics (Qualtrics, 2010). Descriptive statistics were used to describe the results of the study (survey and program website information) and to provide qualitative information about the attributes of the training programs. Simple summaries of the sample and each measure were illustrated.

**Summary**

This study examined the characteristics of each training program and compared these with the amount of transition training occurring within the program via review of program websites and a survey of program chairpersons of all 182 NASP-accredited school psychology programs in the United States. This study included three research questions: "what program characteristics are correlated to transition training?," "on what aspects of transition are students of NASP programs being trained?," and "why is training on the topic of transition offered/not offered by the program?" Descriptive statistics were used to describe the results of the study (survey and program website information) and to provide qualitative information about the attributes of the training programs. Correlation coefficients were used to examine the relationships between the

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program variables and the amount of transition training that is offered by the program.

CHAPTER 4

RESULTS

**Introduction**

This chapter illustrates the results of the statistical analysis procedures that were introduced in Chapter 3. The first section of this chapter involves a presentation of the complications encountered in carrying out this study, including data about the survey return rate. The second section details the amount of transition training being offered by NASP-approved programs, and in which areas the training is being offered, with information obtained via a review of the program websites. The next section describes the characteristics of the programs that were explored via the questionnaire, including information regarding program faculty, the amount of training being offered, and the reasons for the provision of transition training. This section also provides data about the type of credentials being offered by the program. The following section offers a summary of any additional information offered by survey respondents. The means, standard deviations, medians, and ranges were all examined to provide descriptive analysis for all of the study variables. Pearson correlations and Spearman's rho analysis were conducted to analyze the relationships between the predictors and dependent variables.

In review, the research questions for this study explored the number of courses that offer training about the topics of transition assessment, planning, and related issues, the number of full-time faculty employed by the programs, the number of full-time faculty who are also certified school psychologists, the type of credential (specialist or doctoral) that is offered by the program, and the degree to which each of these variables correlates with the amount of transition training occurring in the programs. Additionally, program directors were asked to provide qualitative information on why transition training is/is not offered in their training programs.

## Complications

All of the 182 National Association of School Psychologists (NASP) - approved programs in the United States were sent the survey via Qualtrics (Qualtrics Labs, Inc., 2009). This distribution included every school psychology training program in the United States which had either full or conditional NASP approval. The list of school psychology training programs which had NASP approval as of June 2010 was taken from the NASP Communiqué (NASP, 2010). Surveys were sent to the attention of the program director as it was believed that they would have the most current and accurate data on the demographics of their respective programs. Data were collected via surveys which were distributed electronically, as well as through a structured

search of program websites. The survey was initially distributed via Qualtrics to each program director. A reminder email was distributed via Qualtrics thirty days later, in order to thank responders and act as a reminder to non-responders. Approximately 60 days following the initial survey distribution, a second thank you/reminder was distributed via Qualtrics.

Despite the reminder emails, only 25 program directors responded to the survey, resulting in a total response rate of 14%. This return rate may be attributed to the small amount of transition training that actually occurs within training programs, which would lead to faculty believing that they had little information to provide by responding to the survey. A second explanation for the return rate may be that this survey included no tangible reinforcement for completing the survey, which does tend to decrease the rate of survey completion.

Responses to the items of the survey were used to describe the characteristics of the NASP-approved training programs. The total number of respondents for each variable varied somewhat, because some respondents did not answer all of the survey questions. The small sample size lead to low power for detecting relationships between variables.

## Computer Programs

Data from the returned surveys were collected via Qualtrics (2010) and Pearson correlations and Spearman's rho were conducted and analyzed using the *Statistical Package for the Social Sciences* (SPSS), Version 19. Data collected from the program websites were recorded in an Excel spreadsheet and were analyzed using SPSS 19.

## Statistical Analysis

Responses to the items on the survey were used to examine the characteristics of NASP-approved training programs which were thought to be potential contributors to the types and amount of transition training taking place within the programs. The total number of respondents for each question varied slightly, because each respondent did not respond to every survey item.

The means, standard deviations, medians, and ranges were all examined to provide descriptive analysis for all of the study variables. Pearson correlations and Spearman's rho analysis were conducted to analyze the relationships among the variables.

## Preliminary Analyses for Statistical Assumptions

Before formal analyses were run, the dataset was examined for any possible outliers that may have had a potential effect on the results. This examination was completed via a visual

inspection of histograms of the data. Linearity assumes that there exists a straight-line relationship between pairs of dependent variables. Linearity may be assessed by visually examining a scatterplot of data (Pallant, 2005). Several outliers were found.

Sprinthall (1997) indicates that significant skewness and kurtosis are found when the positive value is greater than +1.00 or when the negative value is less than -1.00. Calculated values for skewness and kurtosis were found to be outside of acceptable limits (Pallant, 2005) for the number of full-time faculty. A kurtosis value of 5.05 was found which indicated that most scores were clustered around the mean with few extreme deviations in the data. A skewness value of 1.93 was found, indicating that the data were skewed in a significantly positive direction. This indicates that a few outliers likely had an effect by artificially increasing the mean and are not likely to be indicative of the characteristics of the population. This was caused by several data points which fell well outside of the mean; that is, a larger number of data points fell within the tail than there should have been under a normal distribution.
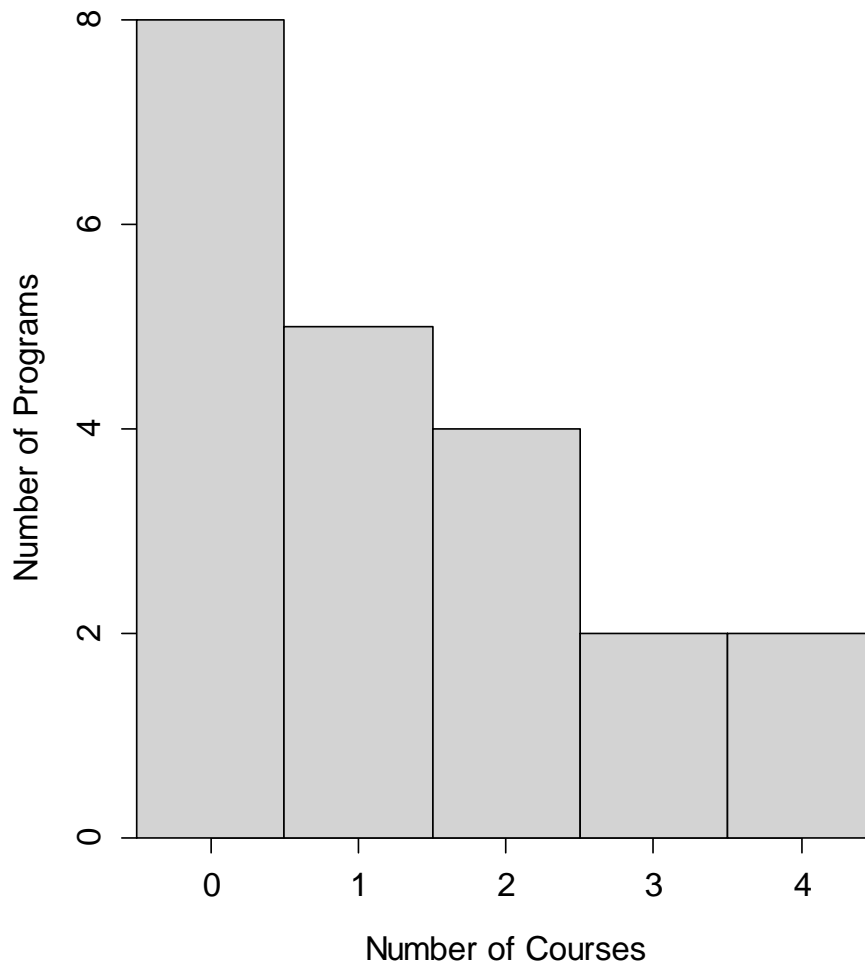
*Figure 3.* Histogram of number of programs offering courses which
include training on the topic of transition.

An acceptable kurtosis value of .41 was found for the number of

full-time faculty who are also certified school psychologists,

indicating that the data were not peaked or clustered in a

significant manner.
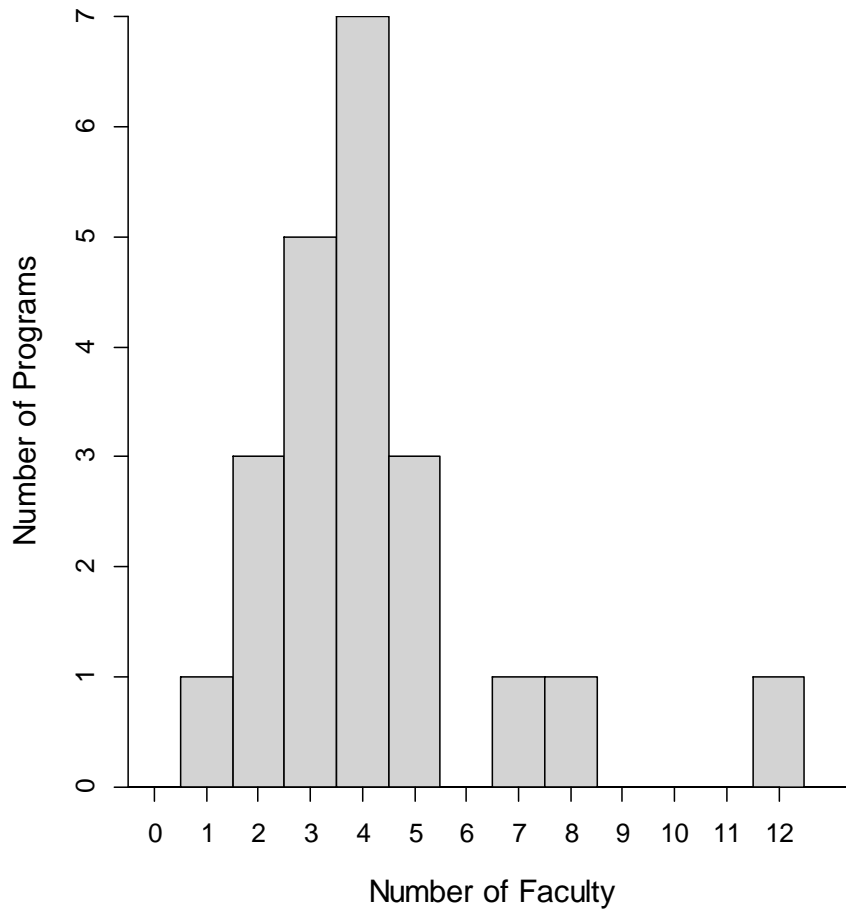
*Figure 4.* Histogram of number of full-time faculty employed by
NASP-accredited school psychology training programs.

An acceptable skewness value of .79 was found, indicating that

the data were not skewed in a significantly positive or negative

direction (more scores occurring at one end of the tail). An

acceptable kurtosis value of -.46 was found for the amount of

training on the topic of transition offered by school psychology
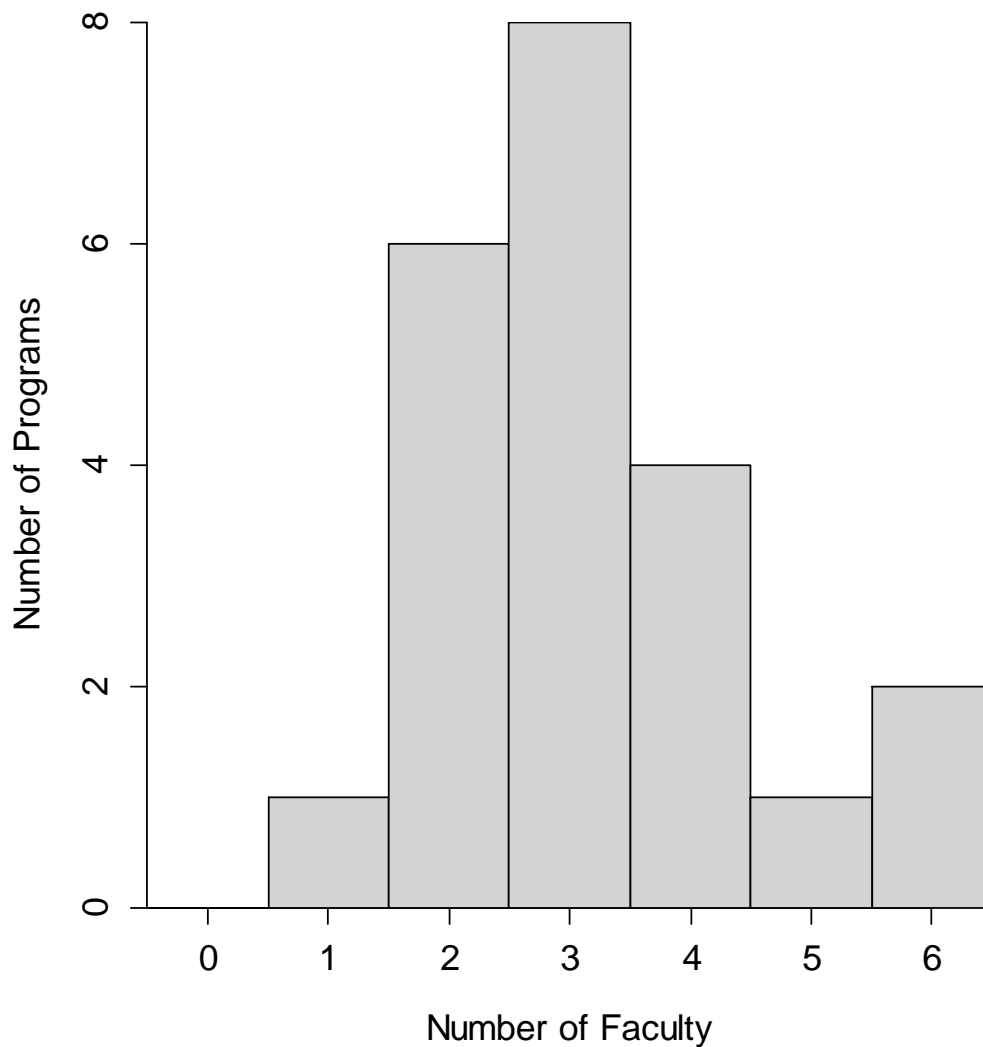
*Figure 5.* Histogram of number of full-time faculty who are
          certified school psychologists employed by NASP-
          accredited school psychology training programs.

training programs, indicating that the data were not peaked or

clustered in a significant manner. An acceptable skewness value

of .78 was found, indicating that the data were not skewed in a

significantly positive or negative direction. Correlation

coefficients may be determined through multiple methods.  The

Pearson correlation coefficient ($r$) is used most often.  To utilize the Pearson $r$, it is necessary that the variables are both continuous and normally distributed, there exists a linear relationship between the variables, and the predictor variable is able to predict at both the high- and low-score ranges.  The Spearman $r_s$ (rank difference) may be used when the assumptions required for Pearson's $r$ cannot be met.  The Spearman uses the ranks of the scores in place of the scores themselves.  Correlations are not intended to indicate cause and effect.  Pearson correlation coefficients may also be squared to indicate how much variance in the first variable is accounted for by the second variable.  This is called the coefficient of determination, and is represented by $r^2$.  Simple linear regression can be used to predict a score on one variable when the score on another variable is known through the use of a linear equation (Sattler, 2001).

**Research Question One Results**

In order to answer the first research question ("What program characteristics are correlated to transition training?"), information was gathered via both a search of program websites as well as a questionnaire sent to the attention of each program director.

This study explored how many full-time faculty were on staff in each of the programs. It was hypothesized that programs

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with a larger faculty would offer a greater amount of training in the area of transition. Each respondent was asked to report the number of full-time faculty members in their school psychology department. Respondents to the survey reported an average of 4.2 full-time faculty members.

In order to determine if the number of full-time faculty members in school psychology programs was related to the amount of transition training being provided in those programs, a Pearson correlation coefficient was used. Linearity was assessed by visually examining a scatterplot of data (Pallant, 2005). A violation of the linearity condition was not evident from the scatterplot of residuals, though this condition can be difficult to assess with such a small amount of data. Programs with a greater number of full-time faculty were not found to offer a significantly greater amount of training in the area of transition ($r$ = -.002, $p$ = .056). A one-tailed significance test was used because it was predicted that the relationship between the variables would be a positive one. The majority of data were not considered to be approximately normally distributed. Both Pearson r and Spearman rho statistical procedures were calculated and the correlation coefficients were compared. The majority of Pearson r and Spearman rho correlation coefficients differed .05 or less. Due to the minimal differences between the two statistical procedures, normality did not appear to affect

the results. Therefore, the Pearson r correlation coefficients are reported. Pearson correlations for the number of full-time faculty and the amount of transition training provided are depicted in Table 4.

In order to further explore the program characteristics related to transition training, the study examined how many full-time faculty who were also certified school psychologists were on staff in each of the programs. It was hypothesized that programs that employed a greater number of certified school psychologists would provide a greater amount of transition training. Each survey respondent was asked to report the number of full-time faculty members who were also certified school psychologists. Respondents reported an average of three full-time faculty members who were also certified school psychologists.

In order to determine if programs that employ a greater number of faculty members who were also certified school psychologists provide a greater amount of transition training, a Pearson correlation coefficient was used. A non-significant correlation was found between the number of full-time faculty who were also certified school psychologists and the amount of training in the area of transition being offered by a program ($r = -.002$, $p < .28$).

Table 4

*Summary Statistics and Correlation Matrix for Full-Time Faculty, Certified School Psychologists, and Amount of Transition Training*

| Variable | | n | Mean(SD) | Range | Skewness | Kurtosis | (1) | (2) | (3) |
|---|---|---|---|---|---|---|---|---|---|
| (1) | Full-time Faculty Members | 22 | 4.2(2.4) | 1-12 | 1.93 | 5.05 | ---- | .88 | -.002 p=.50 |
| (2) | Certified School Psychologists | 22 | 3.2(1.3) | 1-6 | .79 | .41 | | ---- | -.137 p=.28 |
| (3) | Amount of Transition Training | 21 | 1.3(1.4) | 0-4 | .78 | -.46 | | | ---- |

*Note.* Mean = number of courses.  P-values are for one-tailed tests of significance.

Pearson correlations for the number of faculty members who are also certified school psychologists and the amount of transition training provided are depicted in Table 4.

The study also examined if the type of credential offered by programs (specialist or doctoral) correlated to the amount of transition training being offered by programs. A review of all 182 NASP-approved program websites explored the type of credential offered by the program: specialist, doctoral, or both. The website review indicated that 109 of the programs offer a specialist credential only, 12 of the programs offer a doctoral credential only, and 61 of the programs offer both a specialist and doctoral credential. See Table 5 for a summary of program credential offered and for an indication of the number of courses which include transition training offered by the program. Refer to Table 3 for additional information on the specific type of transition training offered by programs.

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Table 5

*Distribution by Program Type of the Number of Courses Offered by Programs*

| Program Type | N(Percentage) | Number of Courses | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 |
| Specialist Only | 109(60.0%) | 59% | 30% | 7% | 4% | 0% |
| Doctoral | 73(40.0%) | 53% | 34% | 8% | 4% | 0% |
| Doctoral Only | 12 (6.5%) | 67% | 8% | 8% | 17% | 0% |
| Doctoral and Specialist | 61(33.5%) | 56% | 34% | 10% | 0% | 0% |

*Note.* Percentages may not sum to 100% due to rounding.

It was hypothesized that programs which offer a doctoral credential would offer a greater amount of training in the area of transition than would programs which offer a specialist-only credential. In order to determine if programs which offer a doctoral-only or a doctoral credential in addition to the specialist-only credential provide a greater amount of transition training in their programs, a t-test was used. Programs which offered a doctoral credential were not found to offer a significantly greater amount of training in the area of transition than were programs that offer a specialist only credential (t = .096, *p* = .099). Programs which offered a specialist credential only were more likely to include training on the topic of transition in their programs than were training programs which offer a doctoral credential. A one-tailed p-value was used because it was predicted that there would be a greater amount of transition training being offered by programs which offer a doctoral credential.

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**Research Question Two Results**

In order to answer the second research question ("For which aspects of transition are students receiving training?"), information was gathered via both a search of program websites as well as a questionnaire sent to the attention of each program director. Each respondent was asked to report about how many courses in their program offer training in the area of transition. The mean was calculated in order to determine the average number of courses being offered in school psychology training programs which offered some training in the area of transition. Respondents reported an average of 1.29 courses that offer some training in the area of transition. Related issues were defined as transition-related content related to NASP best practices for transition training (NASP, 2000). The responses to the questionnaire suggest that 45% of the responding training programs incorporate transition training.

A review of all 182 program websites was conducted via an internet search. All program websites were reviewed to determine if their programs offered transition-related content related to NASP Best Practices for transition training. The presence of transition training was determined by a search of university and program websites, identifying coursework which included the terms "vocational assessment," "transition assessment," or "transition planning" in either the course name or course

description. If these words were found in a course description, the course description was further analyzed to see if the course specifically offered training on one of the best practice areas related to transition as taken from the Standards for Training and Field Placement Programs in School Psychology and Standards for the Credentialing of School Psychologists (NASP, 2000). Information collected via a review of program websites indicate that 97 (or 53%) of the programs included transition training in their online program descriptions/course catalogs.

**Research Question Three Results**

Descriptive statistics were used to gather information for the third and final research question "Why is training on the topic of transition offered/not offered by the program?"

Table 6

*Summary of Transition-Related Content Being Offered by Programs (N=97)*

| Variable | All | Specialist | Doctoral | Both |
|---|---|---|---|---|
| Supervised Field Experience | 3(2%) | 3(2%) | 0(0%) | 0(0%) |
| Consultation/Collaboration | 3(2%) | 1(1%) | 0(0%) | 2(1%) |
| Life Skills | 6(3%) | 3(2%) | 0(0%) | 3(2%) |
| Systems & Policy Development | 10(5%) | 5(3%) | 2(1%) | 3(2%) |
| Theories & Models | 12(7%) | 5(3%) | 2(1%) | 5(3%) |
| Data Collection & Interpretation | 15(8%) | 8(4%) | 3(2%) | 4(2%) |
| IEP Development | 16(9%) | 11(6%) | 1(1%) | 4(2%) |
| Home/School Collaboration | 32(18%) | 16(9%) | 3(2%) | 13(7%) |
| Total | 97(53%) | 52(29%) | 11(6%) | 34(19%) |

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Thirteen respondents provided information to answer this question. Respondents reported a variety of reasons for the provision of training in the area of transition. Descriptive statistics revealed that transition training is offered by the responding programs because of faculty interest (31%), NASP best practices (54%), and other (15%). Transition training was explained as not being offered due to this training being offered in another department (such as special education), limited faculty expertise, limited time available within the curriculum, misperception of the topic, and unknown (course offering limitations or the topic not being a high priority). See Table 6 for a summary.

**Additional Survey Information**

Each respondent was provided the opportunity to provide any additional information which they believed to be relevant to the topic, but not addressed by the survey questions. Survey responses suggest that program directors are divided between perceiving transition training as being less important than a number of other topics and having decreased the amount of training provided about the topic, while other program directors perceive transition as being of some importance and would like to increase the amount of transition training currently being offered by their programs. Several respondents reported that their universities employ faculty members with an expertise in

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transition in other departments; school psychology students were

able to take these classes as electives.

Table 7

*Frequency Counts of Explanations for Training Being Offered about the Topic of Transition (N = 24)*

| Explanation for Transition Training | *n* |
|---|---|
| Faculty Interest | 4 |
| NASP Best Practices | 7 |
| Other | 2 |
| Explanation for Lack of Training | *n* |
| Offered in Another Department | 3 |
| Limited Time / Experience | 5 |
| Misperception of Topic | 1 |
| Not a High Priority | 3 |

Various explanations for the amount of transition training

being offered included their program being "focused particularly

on RtI at this point," vocational rehabilitation office

providing training to practicum students regarding transition,

or because neuropsychology and thesis options took precedence.

Response to Intervention (RTI) is a multi-tiered approach in

which students' progress is monitored at each stage of

intervention to determine the need for additional

instruction/intervention in general education, special

education, or both (Kovaleski & Pedersen, 2008). School

neuropsychology involves linking neuropsychology assessments and

principles with evidence-based interventions (Miller, 2013).

One program stated that they cover the state requirements for

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transition, but they believed transition training should be expanded upon in their training. Therefore, school psychology training programs may be less likely to offer training on the topic of transition as there is a belief that their instructional time is too limited and they feel obligated to provide training on topics such as RtI and neuropsychology, which appear to be more relevant or current to the field at this time than the topic of transition.

### Summary

Correlations were used to examine the relationships between the variables (the amount of transition training being offered in school psychology programs, the number of full-time faculty, the number of full-time faculty who are also certified school psychologists, and the type of credential offered by the program). Before formal analyses were run, the dataset was examined for any possible outliers that may have had a potential effect on the results. This examination was completed via a visual inspection of histograms of the data. Number of full-time faculty did indicate a significant degree of skewness. Analysis indicated that the data for number of full-time faculty were peaked in a significant manner. Analysis of the number full-time faculty who were also certified school psychologists were not peaked or skewed in a significant manner. Analysis of the data for the amount of training about the topic of transition offered

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by school psychology training programs were not peaked or skewed in a significant manner.

   Programs with a greater number of full-time faculty were not found to offer a significantly greater amount of training in the area of transition. Programs with a greater number of full-time faculty who were also certified school psychologists were found to offer a slightly higher, but non-significant amount of training in the area of transition. Programs that offered a doctoral credential were not found to offer a significantly greater amount of training in the area of transition than were programs that offer a specialist only credential. Correlations indicated positive but non-significant relationships among these variables. The data collected in this study suggest that little training is occurring specifically in the area of transition training.

CHAPTER 5

DISCUSSION

**Summary of the Study**

The ultimate goal of this study was to examine the training that students attending National Association of School Psychologists (NASP)-accredited training programs receive in the area of transition. This study examined the characteristics of each training program and compared these with the amount of transition training occurring within the program.

This chapter is divided into seven sections. The first section is a review of the research questions and methodology. Following that is a summary of study results and conclusions. The third section reviews the importance of transition training and examines it with respect to the role of the school psychologist. Next is a review of the implications of the study's findings. The fifth section includes recommendations for improving the training of school psychology students in the area of transition. Following this section are recommendations for future research. The final section of this chapter is a summary of the study.

**Review of Research Questions and Methodology**

This study was designed to examine the amount and type of transition training that school psychology students attending NASP-approved training programs receive in the area of

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transition and to evaluate the transition training occurring against the characteristics of each program.

Best practices indicate that school psychologists play an integral role in transition planning (Levinson, 1994). However, a review of the professional literature illustrates the minimal participation of school psychologists in transition planning process. Public education once viewed school psychologists as possessing a unique training and skill set which made them valuable potential contributors to adult vocational education (Hohenshil, 1979). However, Ulmer (2004) noted the lack of empirical research on the topic of vocational school psychology. Existing studies do point to a moderate involvement in vocational assessment and counseling by school psychologists. In fact, while vocational school psychology found some popularity in the 1980's, this momentum appears to have waned (Ulmer, 2004). Despite what is known about methods of enhancing transition for students with disabilities, thorough and appropriate transition goals and objectives are often missing from disabled students' IEPs (Witte, 2007). Bassett and Smith (1998) posited that while academic standards have become more rigorous for both regular and special education students, less attention is being given to transition planning and preparation for students with disabilities. While there are a variety of reasons for the lack of participation by school psychologists in

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transition planning for students with disabilities, one

explanation is the insufficient preparation of school

psychologists in their training programs in the area of

transition.

## Discussion of Findings

This study addressed how many courses offer training about

the topics of transition assessment, planning, and related

issues, if the number of full-time faculty correlates to the

amount of transition training being offered by programs, if the

number of full-time faculty who are also certified school

psychologists correlates to the amount of transition training

being offered, if the type of credential offered by the program

(specialist or doctoral) correlates to the amount of transition

training being offered, and to what degree each of these

variables correlates with the amount of transition training

occurring within the programs.

Participants in the study included all directors of the 182

NASP-approved programs in the United States. Distribution of the

survey included every school psychology training program in the

United States which has either full or conditional NASP

approval. The list of school psychology training programs which

had NASP approval as of June 2010 was taken from the NASP

Communiqué (NASP, 2010). Data were collected through

questionnaires sent via electronic survey format to the

attention of the program director of each department. Data was obtained through three attempts: the initial survey, a reminder/thank you email follow-up, and another thank you/follow-up in March. The overall response rate for the survey was 14%.

This return rate could be attributed to the small amount of transition training that actually occurs within training programs, which would lead to faculty believing that they had little information to provide to the survey. A second explanation for the return rate could be that this survey included no tangible reinforcement for completing the survey, which does tend to increase the rate of survey completion. Another reason for the poor return rate could be the lack of interest on the topic of transition, which was also indicated in the survey results. The manner in which the questions were posed could have decreased the likelihood of responding. Surveying the presence/absence of transition training in addition to a number of other training topics may have led to a greater response rate, as program directors may have been more likely to offer information on their training programs if they felt they offered a broad range of training topics in their programs and felt as if they had information to contribute to the survey on the present training of students attending their programs. Providing respondents with a means of rank-ordering the importance of a

variety of topics may have also served to increase the number of respondents, as well as to gauge the perceived importance of the topic of transition relative to other training topics currently being offered by NASP approved programs.

The only materials utilized in this study were the electronic forms (questionnaire and follow-up emails) which were distributed via Qualtrics. Each of the program websites was explored for the key terms of vocational assessment, transition assessment, and/or transition planning in the course name or course description. Information gathered includes the credential offered by the program, as well as on what topics transition training is being offered.

Descriptive statistics (means, standard deviations, frequency distributions, and proportions) were used to summarize data and to answer questions relating to the nature and quantity of transition training occurring with NASP-approved programs. Pearson correlation and Spearman's rho were used to examine the effect of each of the independent variables (program characteristics) on the amount of transition training occurring.

## Discussion of Results

### Research Question 1:

"What program characteristics are correlated to transition training?"

Does the number of full-time faculty correlate to the amount of transition training being offered?

Programs reported having an average of four full-time faculty members on staff. The results of this study indicated that the size of the faculty did not have a significant correlation with the amount of transition training taking place in programs. It appears that having a greater number of faculty on staff did not correlate with an increased likelihood that the program will offer training on the topic of transition. This could be due in part to the small number of respondents to this survey, as well as training programs allocating time and resources to training topics which they find to be of greater importance, as was suggested by the open-ended question included on the survey discussed below.

Does the number of full-time faculty who are also certified school psychologists correlate to the amount of transition training being offered?

Programs reported having an average of three full-time faculty members who are also certified school psychologists. The number of full-time faculty who were also certified school psychologists yielded a non-significant correlation with the amount of transition training being provided in programs. It could be concluded that even faculty who are also certified school psychologists do not include a significantly greater

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amount of training on the topic of transition in their

curriculum than do faculty who are not certified school

psychologists.

Does the type of credential offered by the program (specialist

or doctoral) correlate to the amount of transition training

being offered?

The credential offered by the program (doctoral versus

specialist-only) was not found to be directly related to the

amount of transition training offered by those programs.

Therefore, it does not appear that programs that offer a

doctoral credential provide any more training on the topic of

transition than do programs which offer a specialist-only

credential. While it was hypothesized that programs offering a

doctoral credential would provide a more thorough breadth of

training, as well as simply having more time available in the

programs, and would therefore include more training on the topic

of transition, the results of this study did not bear out this

hypothesis.

**Research Question 2:**

"For which aspects of transition are students receiving

training?"

The responses to the questionnaire suggest that 45% of the

responding training programs incorporate transition training.

Information collected via a review of program websites indicate

that 97 (or 53%) of the programs included transition training in their online program descriptions/course catalogs. Respondents reported an average of 1.29 courses that offer some training in the area of transition. These findings are consistent with previous research completed on the topic of the transition training of school psychology students. Levinson (2002) indicated that school psychologists are to include assessment of vocational aptitudes, interests, and development in psycho-educational evaluations. However, Levinson (2004) posited that vocational assessment is often inadequate and insufficient. Levinson (1994) purported that those responsible for vocational assessment and transition planning in the school setting, such as the school psychologist, are uneducated and unprepared in the vocational assessment field. Fives (2008) suggested that school psychologists may play a limited role in the transition planning process due to their lack of vocational assessment training. A review of the literature indicated that school psychology training programs are failing to provide the knowledge base and professional competency necessary to provide suitable transition services to students and their families (Knoff, Curtis, & Batsch, 1997). Another review indicated that very few tests of vocational aptitudes and interests are introduced to school psychology students in their pre-service training (Oakland, 1997).

**Research Question 3:**

"Why is training on the topic of transition offered/not offered by the program?"

Programs that offered training on the topic of transition reported that training on the topic of transition was offered in accordance with NASP best practices (64%) or because of faculty interest (36%). Programs that did not offer training on the topic of transition reported that training on the topic of transition was not offered due to this training being offered in another department (such as special education), limited faculty expertise, limited time available within the curriculum, misperception of the topic, and unknown (course offering limitations or the topic not being a high priority). Those respondents who stated that transition was not a high priority indicated that they felt that time was better spent on other topics, such as response to intervention, and that there was not enough time in the program to offer training on the topic of transition. The open-ended question included in the survey suggested that topics other than transition training are currently considered to be more vital in NASP-accredited school psychology training programs, and that this factor has a greater influence on the amount of transition training being offered than do the other variables examined for this study (number of

full-time faculty, number of certified school psychologists on faculty, and type of credential being offered by the program).

## Limitations

Results from this study are believed to be an over-representation of the transition training that is occurring within NASP-approved programs. Given the limited response rate and the possibility of a response bias (most responders did offer some amount of training on the topic of transition), it is very possible that non-responders are not offering any or are offering very limited training on the topic of transition. Therefore, these results are likely an over-estimate of the amount of transition training that is actually occurring within school psychology training programs. While several attempts were made to increase the response rate of this study, ultimately only 25 surveys were returned.

There are several limitations to the results of the current study. External validity must be considered in terms of the sample. Only NASP-approved training programs were included in this study. As such, these results may not generalize completely to those school psychology programs that do not have NASP-accreditation and may not adhere as closely to recommendations for best practice in training programs. Thomas and Grimes (2008) indicate that there are 244 institutions of higher education which offer training to become a certified school psychologist.

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Therefore, 75% of the institutions that offer a school psychology credential are NASP accredited, leaving another 25% not accredited and may not follow best practices for training as stringently as the accredited programs do. The poor response rate may have had an effect on the generalizability of the results, as the necessary sample size recommended by the power analysis was not achieved. Non-responders were not contacted to explore how they may have impacted the results of this study.

## Implications for Training

The implications of this study are important for training programs, school psychology students, and practicing school psychologists with regard to both training and practice in the area of transition. The results of this study clearly indicate that little transition training is occurring within NASP-approved training programs, which could have a direct impact on the involvement of the school psychologist's practice in the area of transition planning and assessment. The survey results suggest that only 45% of programs are offering training on the topic of transition. The results from the review of program websites indicates that 97 (or 53%) of the programs included transition training in their online program descriptions/course catalogs. The lack of transition training that the results reveal suggest that NASP-approved training programs should take a critical look at the training being offered in the area of

transition to ensure that they are meeting the needs of their students. Both school psychology students may need to supplement their knowledge and skills in the area of transition training though professional workshops and current literature on the topic of transition, as well as familiarizing themselves with the legislation of The Individuals with Disabilities Education Act (IDEA, 2007) as it pertains to transition planning and assessment.

Transition training was reported to not be offered by school psychology training programs due to the topic's being offered in another department, such as special education. However, it was not clear from the survey results if school psychology students are required to take these courses or if they are offered as electives to school psychology students. Students who do not elect to take these non-required courses may be missing out completely on the transition training that is recommended as best practices for school psychology training.

Five respondents to the survey indicated that their programs do not offer training on the topic of transition due to limited time being available or the lack of expertise on the topic by their faculty members. School psychology departments could enhance their knowledge base by pursuing additional education and training on the topic of transition, or by partnering with other departments and requiring school

psychology students to take at least one course which includes training on the topic of transition. By not offering any transition training, these programs are not acting in accordance with NASP best practices, which provide guidelines for the provision of training in this area.

Respondents to the survey also indicated that they do not offer transition training due to transition training being a minimal priority and/or misperception of the topic. School psychology training programs attempting to train students in a fashion consistent with best practices should familiarize themselves with the topic of transition and acknowledge that transition training is a vital content area in order to prepare school psychology students to best serve individuals in the school setting. Misperception of the topic of transition could be addressed by additional training and staff development on the topic.

## Implications for Practice

For students with disabilities pursuing post-secondary education or training, poor practice or non-existent transition evaluations may result in their being denied accommodations necessary for success in academic settings (Levinson, 2002). For students pursuing post-secondary employment, a lack of transition planning may cause them to be unprepared for the demands of employment, leading to continued rates of high

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unemployment for individuals with disabilities (Sitlington & Payne, 2004). For families seeking residential placement or other adult services for the student with a disability, poor transition planning may result in their being denied access to adult services or their being placed on interminably long waiting lists before services can begin (Witte, 2007). Adequate transition planning, skillfully facilitated by the school psychologist, can do much to prevent these undesirable outcomes. Best practices indicate that school psychology students should leave their training programs prepared to assist students with disabilities and their families in the transition planning process (Levinson, 1994). However, a review of the literature and the results of this study both provide evidence that school psychology training programs are not preparing their students to do so.

School psychologists who have received less training on the issue of transition may be less likely to address transition assessment and planning in their practice. Practicing school psychologists would also benefit from seeking the advice and expertise of transition coordinators and the training and technical assistance networks within their states to enhance their knowledge of the transition process. A review of the current research on the topic of transition utilized for this study as well as several of the Best Practices chapters

(Levinson, 2002, Levinson, 2008, Witte, 2002, & Witte, 2008) which focus on the topic of transition, acknowledge the importance of the active participation of school psychologists in the transition process, including comprehensive transition assessment, participation in the transition-planning process, and acting as a facilitator for effective school and community interactions. However, both the literature review and the results of this study indicate that school psychologists are being trained minimally for their involvement in the area of transition assessment and planning.

### Recommendations for Future Research

Data collected for this study indicated that while transition is viewed as being an important topic in the field of school psychology by a number of the survey respondents, it is addressed only minimally in coursework. Future research could explore means of incorporating transition training in additional courses, such as those covering legal and ethical issues, family/school relations, and testing and assessment.

Future research on the topic of transition training of school psychology students could also include gathering information from program directors about perceived areas of need. This could be done by providing a number of topics related to transition training in the survey and having program directors rank the perceived importance of each topic.

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Future research could also examine the post-secondary education and employment outcomes for students with disabilities and how students and families believe that school psychologists could have assisted them in their transition process in order for them to have attained better outcomes. This research could also explore the positive aspects of transition planning that students and their families perceived as having occurred, which may help to illustrate the strengths of transition training in school psychology training programs.

Future research could also consider surveying post-secondary education and training programs on what types of documentation they require for students with disabilities to receive services in those settings, as well as what services/documentation could be better provided by school psychologists as it pertains to students with disabilities transitioning into the post-secondary setting.

Research on transition training could also include surveying the perceived needs of school psychologists, and how these needs may be have been better met in their training. While practicing school psychologists express a desire to be more prepared on the topics of transition and vocational assessment, their training needs reportedly continue to go unmet (Ulmer, 2005).

Future research could expand the number of programs

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included in the survey and involve school psychology training programs that are not NASP-accredited. All graduate programs in school psychology could have the survey distributed to them, and participation could be enhanced by offering incentives for participation and/or mailing paper copies of the survey in addition to the distribution of the electronic survey. These same variables could then be examined to see if the transition training of these programs differs in any way. Future research should include a larger sample to more fully explore the extent of transition training occurring within school psychology training programs, including those without NASP accreditation.

A survey in a different format may yield different results. Though electronic surveys are an efficient and cost-effective means of garnering responses, a mailed survey that includes some type of tangible reinforcer may increase the response rate and lead to different results. Direct contact with non-responders may also serve to increase the response rate. Telephone interviews could be utilized to contact each program director to directly ask them the survey questions, which could help to increase the number of survey respondents.

## Summary

This chapter included a discussion of the results provided in Chapter IV. The results of this study indicated that none of the variables examined for their impact on the amount of

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transition training had a significant correlation with the amount of transition training being offered by school psychology programs. The credential offered by the program (doctoral versus specialist-only) did not have an effect on the amount of transition training taking place within those programs. Overall, the data collected in this study suggest that little training is occurring specifically in the area of transition training, which could have a direct impact on the involvement of the school psychologists in the area of transition planning and assessment. With respect to school psychology training programs and current students, the results of this study suggest that training programs should increase their training in the area of transition. For practicing school psychologists, the results suggest that professional development and consultation with professionals most familiar with transition may benefit their practice and active involvement in the transition planning and assessment process.

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Appendix A

Survey Questions:

How many full-time faculty are in your school psychology department?

Of this full-time faculty, how many are certified school psychologists?

Does your school psychology program offer training in the area of transition (vocational assessment, transition assessment, and / or career/transition planning)?
❍ Yes
❍ No


If your program does offer training in the area of transition, why?
❑ Faculty Interest _____
❑ NASP Best Practices _____
❑ Other: _____


If your program does not offer training in the area of transition, why not?

Please confirm the number of courses in your program which offer training in the area of transition.

Please share any information about your program that you find relevant to this topic that was not addressed directly by any of the survey questions.