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Risk, Resilience, and Success in College for Students with Vision Disabilities

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Risk, Resilience, and Success in College
for Students with Vision Disabilities

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Counselor Education

by

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B.S.R.C., Louisiana State University Health Sciences Center, 1990
M.H.S., Louisiana State University Health Sciences Center, 1992

December 2007

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DEDICATION

I dedicate this dissertation to my mother, my husband Kenneth and daughters Rebecca and Rachel. To my mother, you always told me that I was going to be a doctor and that I had a book in me. Thank you for planting the seed and helping me realize my potential. Thank you for fostering my resilience. To my husband Kenneth and daughters, Rebecca and Rachel. Thank you for your constant support and encouragement of my doctoral journey. May we continue to be blessed by my endeavors.

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ABSTRACT

College students with visual disabilities are less likely to graduate than their sighted counterparts. The purpose of this study was to understand the life experiences of successful college students with visual disabilities. Concepts of risk and resiliency were used as a conceptual framework for understanding how people can have positive outcomes in spite of adversity. Individual, family, school, and community influences were explored. In-depth interviews were conducted with six participants who have vision impairments and were nearing the completion or had recently completed a college degree. Data were analyzed for common themes and meanings using a phenomenological method advanced by Moustakas (1994). Validity threats were minimized through triangulation, member checks, and thick data. Risk and protective factors in the context of family, school, and community for successful college students with visual disabilities were identified. Implications for rehabilitation counselors, college counselors, and special education teachers were discussed. Interventions to move students with visual disabilities toward resiliency and minimize the impact of risk factors that impede success were proposed. Suggestions for future research were offered.

Key Words: college students, higher education, blind, visually impaired, transition, success, resilience, qualitative research.

CHAPTER ONE

INTRODUCTION

In an effort to prepare students with visual disabilities to be successful in college, I wanted to know what successful students attribute to their success. I conducted a qualitative study of six successful college students with visual disabilities to understand what they attribute to their success. The goal was to identify factors that move students toward successful college experiences. By understanding student experiences, counseling interventions may be designed to maximize a student's potential for success and minimize experiences that may have negative consequences on a student's decision to remain in college and complete a degree. This chapter provides an overview of literature related to the topic under study, the conceptual framework for the conducted study, my research questions, and the methodology used. Relevant terms found in the literature and used in this study are defined.

In a 1998 survey of over 275,000 college freshmen, 1.1% of students identified themselves as being partially sighted or blind (Henderson, 1999). According to a 1992-1993 Bureau of the Census survey, it was estimated that only 16% of visually impaired college students graduate compared to 26% of their sighted peers (Statistics and Sources for Professionals-American Foundation for the Blind, n.d.). Both governmental resources and the skill and energy of many professional service providers are expended to promote the success of individuals who are blind or visually impaired. The federal-state vocational rehabilitation program financially sponsors many students with disabilities to attend college as part of job preparation. Tax dollars are spent on tuition, books, transportation, housing, readers, scribes, interpreters, personal care attendants, and assistive technology. In addition to the actual costs of attending college, the government pays for students with disabilities to attend training in

specialized college preparatory programs for independent living skills and assistive technology skills. Despite the U.S. Government's investment in these individuals, students with visual disabilities are less likely to graduate from college than their sighted counterparts.

Background

Rehabilitation professionals have believed for years that the participation of people with disabilities in higher education can enhance their employability and vocational success (DeLoach, 1992). As a result, the government has invested in students with disabilities attending college. Several researchers have studied college students with disabilities to determine factors of success or profiles of successful students.

Monahan, Giddan, and Emener (1978) conducted a 10-year, longitudinal study of blind prospective college students and studied factors including age, sex, intelligence, academic ability, extent of blindness, mobility skills, motivation for academic/vocational work, anxiety, blind mannerisms, and social interaction skills. They found that 25% of these students completed college degrees and 32% dropped out of college. They found no statistical differences for any of the factors to predict success in college. To promote success in college, they recommended that blind college students participate in pre-college orientation programs, mobility training, social interaction, and peer counseling with other students with and without visual disabilities.

Two studies have examined the impact of self-concept as a predictor of college success for students with disabilities. Martinez and Sewell (1996) conducted a quantitative study to examine self-concept of blind and sighted college students. They hypothesized that students with visual impairments would have a more negative self-concept than sighted peers. Their hypothesis was not substantiated. They found that competence was a stronger influence on self-concept than an individual's perception of being different by peers. Another study by Beaty (1994) examined

the relationship between psychosocial adjustment and academic success of college students with and without visual impairments. The author did not find a significant difference between the psychosocial adjustment and social provisions for visually impaired and non-visually impaired college students. Blind students did score higher than non-blind students on self-esteem and had higher grade point averages (GPAs). Beaty did find that there was a statistical difference between blind and non-blind participants in academic success and GPA. Beaty also found that there was a significant relationship (although circular) between blind students' self-esteem and GPA, such that high GPA and self-esteem coincided.

Another approach has been to examine the impact of student perceptions of external events and the control or meaning attributed to external influences. Roy and Mackay (2002) examined self-perception and locus of control of college students with visual impairments. The authors found that the group possessed high external locus of control and suggested that this was a result of a variety of life experiences, vision loss, and possibly depression. The authors further suggested that the presence of a positive self-perception and negative self-statement of visual impairment may indicate that participants subconsciously continue to fear failure based on traumatic experiences from vision loss. Another study by Martinez and Sewell (2000a) examined explanatory style as a predictor of college performance for students with disabilities (including students with vision impairments). The authors found that college students with and without disabilities were more alike than different in regards to explanatory style outcomes. Results indicated that explanatory style was a valid predictor of GPA. As individuals' explanatory style became more pessimistic, corresponding GPAs were lower. Explanatory style was also found to be a valid predictor of having specific academic goals for students with disabilities. The authors also found that individuals with higher pessimistic explanatory styles had lower goal efficacy.

Martinez and Sewell (2000b) also compared the explanatory styles by gender and disability. Their research revealed that women with disabilities had the most optimistic explanatory style.

Only one qualitative study by McBroom (1997) examined skills, knowledge, and preparation of successful students with vision impairments. Respondents identified positive behaviors that led to their success in college and they shared advice for future students. These findings are detailed in Chapter Two.

Both individual and environmental characteristics of college students with learning disabilities have been studied. Field, Sarver, and Shaw (2003) described a qualitative study of in-depth interviews with college students with disabilities. Results indicated that students with disabilities who possess self-determination are more successful in college. Similarly, Hall, Spruill, and Webster (2002) studied motivational and attitudinal factors in college students with and without learning disabilities. The researchers compared college students with and without disabilities on emotional resiliency, stress levels, locus of control, and need for achievement. Results indicated that students with learning disabilities scored significantly higher on resiliency and need for achievement and reported fewer stressors than non-disabled peers. Heiman and Kariv (2004) examined the perceptions of college students with learning disabilities. Students described academic, behavioral, and emotional difficulties and discussed coping strategies and compensatory skills.

Several researchers have examined the influence of parents and professionals on the success of students with learning disabilities. Lichtenstein (1993) conducted in-depth interviews with individuals with learning disabilities who dropped out of high school, their families, and other professionals involved in their educational and vocational plans. Results indicated that poor grades were not necessarily the primary reason for leaving school. School problems, personal

problems, and family and social concerns contributed to poor grades and low self-esteem. Despite these problems, participants exhibited resiliency in their ability to seek employment, make friends, continue education and training, complete alternative credentials, and pursue career ambitions.

Two studies focused on the influence of parents/family on college success for students with learning disabilities (Morningstar, Turnbull, & Turnbull 1995; Graham-Smith, English, & Vasek, 2002). Morningstar et al. used qualitative research methods to study the importance of family involvement on transition from high school to adult life for students with learning disabilities. The researchers conducted four focus groups that examined participant perspectives regarding the influence of their families on the creation of a vision for their future, the transition planning process, and the development of self-determination. For these participants, both immediate and extended families were the predominant influence on career and lifestyle options. Most participants planned to live near their family for continued support beyond high school. Many participants did not recognize the relevance of the development of individualized education plans (IEPs) and reported little to no involvement in the planning process by them or their family members. Participants did not discuss ways in which their families supported or taught autonomy or fostered self-determination.

Similarly, Graham-Smith et al. (2002) studied student and parent involvement in the transition process for students with learning disabilities. The authors surveyed freshmen with learning disabilities. Results indicated that a large portion of the participants reported feeling “no good” (22 out of 61 participants) or “useless at times” (25 out of 61 participants). Negative self-talk does not promote self-advocacy—a key ingredient in college success for students with disabilities. In addition, 38% of participants reported parental involvement in choosing classes

and 39% reported parental involvement in choosing college activities for their college-age children.

Conceptual Framework

A few authors have used the concepts of risk and resilience to conceptualize success of students with disabilities (Arman, 2002; Gardynik & McDonald, 2005). Disability is an adversity which can make an individual more susceptible to other risks and adversities which can lead to negative outcomes. People with disabilities who have positive outcomes despite vulnerability and high risks are considered to be resilient (Murray, 2003). Murray recommended using risk and resilience as a conceptual framework for studying transitions to adulthood for students with disabilities. Gardynik and McDonald supported the study of conditions of resiliency and the development and implementation of preventative interventions that foster resilience for students with disabilities.

The conceptual framework for this study is based on risk and resilience. A person's individual characteristics and experiences in the context of family, school, and community shape development and outcomes (Murray, 2003). Risk and resilience has not been examined specifically with college students with visual disabilities. This study was important because research was needed to clarify the relationship between risk factors/processes and outcomes for students with visual disabilities following their exit from high school.

Research Questions

The conceptual framework for a study is operationalized through research questions (Miles & Huberman, 1994). Students with vision impairments may not be successful or complete college for a variety of reasons. The conceptual framework of risk factors and resilience can assist in understanding the life experiences of successful college students with vision

impairments. Understanding the experiences of successful students may assist professional counselors in developing interventions to assist students with vision impairments in moving toward resiliency and reducing risk factors that might inhibit their success in college.

The overall research question was:

- What are the experiences of successful college students with visual disabilities?

Using the model for risk and resiliency, there were several subquestions.

- What are individual characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are family/friend characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are school environmental characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are risks/adversities experienced by successful college students with visual disabilities?
- To what do successful college students with visual disabilities attribute to their success?

Overview of Methodology

Qualitative research is used to describe and answer questions about a group of participants in a specific context. Beliefs, events, and practices are examined from the perspective of the participants. Qualitative research allows the researcher to explore complex situations in which little is known. Research of this nature can begin to explain a phenomenon and yield theories about the phenomenon studied (Gay & Airasian, 2003).

Phenomenological researchers look for meaning in each individual's story and derive general and universal meanings across participants. It was believed that phenomenology was the most appropriate research method by which to gather data about successful college students with vision disabilities. Participants that met the criteria were interviewed and data were analyzed using a phenomenological method advanced by Moustakas (1994).

Definition of Terms

Americans with Disabilities Act (ADA): The ADA is a civil rights law that prohibits discrimination based on disability in regards to employment, state and local government, public accommodations, and telecommunications (HHS - Your Rights Under the Americans with Disabilities Act, n.d.).

Alternative Formats: Alternative formats refer to the conversion of standard printed materials into large print, Braille, or audio recording.

Assistive technology: Assistive technology is any product that is used to improve functional capabilities of individuals with disabilities (Assistive Technology Act of 1998).

Disabled Student Support Staff: Disabled student support staff are personnel designated on college/university campuses that coordinate and provide support services to registered students with disabilities (Graham-Smith & Lafayette, 2004).

Explanatory Style: Explanatory style refers to the way an individual typically explains the occurrence of negative events (Seligman, 1990).

Federal-State Vocational Rehabilitation Program: The Federal-State Vocational Rehabilitation Program is sponsored by the Rehabilitation Services Administration and helps individuals with physical or mental disabilities to obtain employment and live more independently. Services provided may include counseling, medical and psychological services,

job training, and other individualized services (Rehabilitation Services Administration (RSA) - Home Page, n.d.).

Independent Living Skills: Independent Living Skills refer to the ability of an individual to perform daily living tasks such as cooking, cleaning, bathing, dressing, etc.

Individualized Education Plan (IEP): An Individualized Education Plan is a written plan that details special education and related services to be provided to a child with a disability. The plan should include goals and objectives and considerations for accessible instructional materials, and assistive technology devices/services. Ideally, special education teachers and counselors work in collaboration with parents and students with disabilities to develop the plan (Howells, Peverini, & Almeida, 2004).

Individuals with Disability Education Act (IDEA): The Individuals with Disability Education Act is a civil rights law that mandates free and appropriate public education for children with disabilities. IDEA requires identification and evaluation of children with disabilities, provision of appropriate services, and the development of an individualized education plan (IEP) (Howells et al., 2004).

Interpreter: An interpreter is a person who assists with communication for students with hearing (and sometimes speech) disabilities by translating spoken word into sign language and/or sign language into the spoken word.

Learning Disability: A learning disability is a neurological disorder that results in difficulties in reading, writing, spelling, reasoning, recalling, and/or organizing information (LD Online: What is a Learning Disability?, n.d.).

Locus of Control: Locus of control refers to an individual's expectations regarding who or what is responsible for events that happen. Locus of control is measured on a continuum from internal

to external control. People with internal locus of control believe that future outcomes are dependent on their actions. People with external locus of control expect that the future is controlled by other people or fate (Rotter, 1966).

Orientation and Mobility: Orientation and mobility refers to the techniques taught to individuals with diminished vision to travel safely, comfortably, and confidently at home or in the community. People with visual loss use their remaining vision, sighted assistance, white canes, and/or assistance animals to travel. Training includes the gathering of environmental cues (visual, auditory, and tactual) and learning specific travel routes (Scholl, 1986).

Peer counseling: Peer counseling is the pairing of two people who have similar experiences (such as disability or college) to create a mentoring relationship (Monahan et al., 1978).

Personal Care Attendant: A personal care attendant is a person who assists an individual with a physical disability in daily living tasks including meal preparation, bathing, laundry, and housekeeping.

Protective Factors: Protective factors are resources or influences that modify or alter a person's response to an environmental hazard (risk) that predisposes them to a maladaptive outcome (Murray, 2003).

Reader: A reader is a person who reads printed materials to individuals with vision impairments.

Rehabilitation Act of 1973: Section 504 of the Rehabilitation Act of 1973 requires employers and institutions receiving federal financial assistance to provide qualified individuals with disabilities equal access to information, programs, activities, and services (HHS - Your Rights Under Section 504 of the Rehabilitation Act, n.d.).

Rehabilitation Counselor: A rehabilitation counselor is a professional counselor who facilitates the personal, social, and economic independence of individuals with disabilities. Rehabilitation

counselors provide services including counseling; vocational exploration; vocational assessment/testing; evaluations of social, medical, vocational, and psychiatric information; and job development/placement (Code of Professional Ethics for Licensed Rehabilitation Counselors, n.d.).

Resilience: Resilience is the ability of an individual to successfully adapt and develop social, academic, and vocational competence in the face of adversity and stress (Henderson & Milstein, 1996) Resiliency is seen as the successful completion of age appropriate developmental tasks despite the experience of adverse conditions (Sandler, 2001).

Risk Factors: Risk factors are biological, psychosocial, and environmental factors that can lead to maladaptive outcomes. Risk factors are characteristics, traits, and experiences that can negatively affect an individual's development and life outcome (Murray, 2003).

Scribe: A scribe is a person who assists an individual with a disability by writing the verbal responses given by the individual with a disability.

Self-Advocacy: Self-advocacy is the ability of an individual to understand his/her disability as well as the strengths and limitations imposed by that disability and to effectively communicate his/her needs (Hartman, 1993).

Self-Concept: Self-concept refers to how individuals perceive, accept, and describe themselves. Self-knowledge can be influenced by social interactions and inner reflection (Roy & Mackay, 2002).

Self-determination: Self-determination refers to the skills, knowledge, and beliefs that allow a person to behave in a goal-directed, self-regulated, and autonomous way (Field, Martin, Miller, Ward, & Wehmeyer, 1998).

Successful College Students: For the purpose of this study, successful college students are those who have continued beyond the critical first year of college when students with disabilities have a tendency to drop-out (McBroom, 1997). Successful college students are more likely to be juniors and seniors who are likely to graduate, or those students who have graduated from college.

Transition Plan: A transition plan is a plan designed for students with disabilities starting at age 10. This plan identifies and implements transition services to facilitate the successful transition from high school to post secondary education or work (Furney, Hasazi, & Destefano, 1997).

Triangulation: Triangulation is a validation method of collecting information from a variety of individuals and settings through a variety of methods (Maxwell, 2004). This process involves corroborating evidence from different sources to further understand a theme or perspective (Creswell, 1998). It reduces the risk of chance associations and systematic bias and improves generality (Maxwell).

Thick Data: Rich or thick data is a validation method that requires that interviews be taped and transcribed verbatim and observations be written descriptively (Maxwell), 2004. Rich data counters issues with respondent duplicity and observer bias. Description of participants and settings allow the reader to determine the transferability of a study's conclusions (Creswell, 1998).

Vision Impairment: For the purpose of this study, the following terms are used synonymously: visual disability, visually impaired, blind, and partially sighted. These terms refer to people with varying degrees of visual loss. Legal blindness is based on a visual acuity of 20/200 measured in the better eye with best correction or a decrease of visual field of 20 degrees or less (Scholl, 1986).

CHAPTER TWO

REVIEW OF THE LITERATURE

The purpose of this chapter is to examine the research and literature related to the success of college students with disabilities. The first section presents what is known about college students with vision impairments or blindness. The second section presents what is known about college students with learning disabilities. The third section discusses the phenomenon of transition from high school to college for students with disabilities. The fourth section discusses the conceptual framework of risk factors, protective factors, and resilience and how it may be used to study people with disabilities. The fifth section summarizes the literature and offers recommendations for future research.

Success of College Students with Vision Impairments

In a 1998 survey of over 275,000 college freshmen, 1.1% of students identified themselves as being visually impaired. Of the freshmen population of students with disabilities, 13.3% reported being visually impaired. This is a decrease from a survey conducted a decade before in which 31.7% of the disabled freshmen reported being visually impaired (Henderson, 1999). According to the National Longitudinal Transition Study (NLTS), 57% of youth with visual impairments had attended postsecondary schools as compared to 68% of sighted peers (Blackorby & Wagner, 1996). In a 1992-1993 Bureau of the Census survey, it was estimated that only 16% of visually impaired college students graduate compared to 26% of their sighted peers. Data also indicate that visually impaired men and women graduate at the same rates, but differ by race with 62% white, 41% black, and 44% Hispanic (Statistics and Sources for Professionals-American Foundation for the Blind, n.d.).

Several researchers have posed questions about college students who are blind or visually impaired and the factors that led to their ability to successfully complete college degrees. Monahan et al. (1978) conducted a 10-year, longitudinal study of blind prospective college students in Florida. While in high school, 200 blind students were evaluated on a variety of characteristics and skills. Factors studied included age, sex, intelligence, academic ability, extent of blindness, mobility skills, motivation for academic/vocational work, anxiety, blind mannerisms, and social interaction skills. Of the 200 students evaluated, 78% were regarded as having academic potential. After 10 years, the authors conducted a follow-up study with 87 of the original sample. They found that only 25% of these students completed college degrees and 32% dropped out of college. No statistical differences were found for any of the factors to predict success in college. Ironically, the graduation rate for blind students in this study is similar to that of the current general college population (Statistics and Sources for Professionals-American Foundation for the Blind, n.d.). Success in college has been a topic of interest for some time; however, factors that predict success have not yet been identified while graduation rates for these students appear to have declined. Monahan et al. recommended that blind college students participate in pre-college orientation programs, mobility training, social interaction, and peer counseling with other students with and without visual disabilities.

Some researchers have examined psychological factors that may contribute to students with disabilities successfully transitioning from high school to college and having successful college experiences (Beaty, 1994; Martinez & Sewell, 1996; Martinez & Sewell, 2000a; Martinez & Sewell, 2000b; Roy & Mackay, 2002). Two of the studies have examined self-concept of visually impaired adults and its impact on success in college. Martinez and Sewell (1996) conducted a quantitative study with 19 blind/visually impaired college students and 19

sighted peers. Participants were matched on age and gender. Data were collected through the Tennessee Self-Concept Scale and the Wechsler Adult Intelligence Scale (information and vocabulary subscales). No statistical differences were found between age, IQ, and GPA for the two groups and were therefore assumed to be functioning at the same level of competence. The authors hypothesized that the blind/visually impaired students would hold a more negative self-concept; however, this was not substantiated. The authors noted that competence was a stronger influence on self-concept than being perceived differently by peers. Martinez and Sewell offered several explanations. One explanation is that developmental maturation had diminished the importance of how one is seen by others and "fitting in." An alternative explanation for the findings is that only adults with visual impairments who have positive self-concepts attend college and those with lower self-concepts do not. Martinez and Sewell reminded readers that professionals who work with blind college students have the assumption that blind students need help with self-concept in order to be successful in college. They reported that the findings in their study indicate that blind individuals who need assistance with building self-concept are more an exception and not the norm.

The influence of other individual characteristics on success in college was studied by Beaty (1994). Beaty examined the relationship between psychosocial adjustment and academic success of college students with and without visual impairments. Psychosocial adjustment was measured through the Coopersmith Self-Esteem Inventory (Coopersmith, 1981) and the Social Provisions Scale (Russell & Cutrona, 1984). The study did not find a significant difference between the psychosocial adjustment of visually impaired and non-visually impaired college students. The study further did not find a significant difference between social provisions for visually impaired and non-visually impaired students. Blind students did score higher than non-

blind students on self-esteem. Beaty did find that there was a statistical difference between blind and non-blind participants in academic success and grade point average (GPA). Blind students had higher GPAs than sighted peers. Beaty also found that there was a significant relationship (although circular) between blind students' self-esteem and GPA.

Another approach has been to examine the impact of student perceptions of external events and the control or meaning attributed to external influences. Roy and Mackay (2002) examined self-perception and locus of control of college students with visual impairments. Sixteen participants who either were blind or had low vision were administered the Twenty Statements Test (TST) (Rees & Nicholson, 1994), Rotter's (1966) internal-external control scale, and an open-ended question regarding their perception of the effect of visual impairment on how they saw themselves. Participants were regarded as successfully transitioning from high school to college and were performing well both socially and academically. In general, participants viewed themselves positively. Some participants gave negative TST responses focusing on disability which appeared to be associated with deteriorating vision and recency of onset. Locus-of-control responses were highly external across the group. The authors suggested that high externality scores were a result of a variety of life experiences, vision loss, and possibly depression. The authors further suggested that the presence of a positive self-perception and negative self-statement of visual impairment may indicate that participants subconsciously continue to fear failure based on traumatic experiences from vision loss.

A second study involving perceptions of external events was conducted by Martinez and Sewell (2000a). The authors examined explanatory style as a predictor of college performance for students with disabilities (including students with vision impairments). Explanatory style refers to the way an individual typically explains the occurrence of negative events. Adaptive or

maladaptive perceptions can influence one's quality of life (Seligman, 1990). When faced with aversive situations, individuals will attribute the situation to a cause (Abramson, Seligman, & Teasdale, 1978). Causes are attributed to three polar dimensions: internal (caused by oneself) or external (caused by someone or something else); stable (permanent condition) or unstable (temporary condition); and global (impacting everything one does) or specific (impacting this situation only). Individuals who attribute negative events to internal, stable, and/or global causes use a pessimistic explanatory style. Participants included 38 disabled and 32 non-disabled college students and were administered a demographic questionnaire, the Academic Goals Questionnaire (Peterson & Barrett, 1987), an Academic Attributional Style Questionnaire (Peterson & Barrett), and the Revised Beck Depression Inventory (Beck & Steer, 1987). Results indicated that explanatory style was a valid predictor of GPA. As individuals' explanatory style became more pessimistic, corresponding GPAs were lower. Explanatory style was also found to be a valid predictor of having specific academic goals for students with disabilities. The authors also found that individuals with higher pessimistic explanatory styles had lower goal efficacy. Results indicated that college students with and without disabilities were more alike than different in regards to explanatory style outcomes. The authors recommended that students with disabilities who exhibit pessimistic explanatory styles receive cognitive remediation and training in college success skills such as time management.

Martinez and Sewell (2000b) also compared the explanatory styles by gender and disability using the same procedures as described in the previous study noted above (Martinez & Sewell, 2000a). The authors reviewed the literature and reported that literature has found women to exhibit pessimistic explanatory styles more than men. Their review of the literature also found women with disabilities to be described as passive and dependent and more likely to possess a

pessimistic explanatory style. In contrast, their research revealed that women with disabilities had the most optimistic explanatory style of the college participants. This might indicate that disabled, female, college students probably would not be characterized as passive and dependent as literature might suggest.

A retrospective study conducted by Emener and Marion-Landais (1995) found that former blind or visually impaired college students were aware of their academic preparedness, academic abilities, competence, and confidence. The authors developed and conducted a follow-up survey by mail with blind and visually impaired vocational rehabilitation clients who had received postsecondary education services. A total of 41 participants responded to the survey yielding a 35% return rate. Respondents in general indicated that attending college was beneficial and had a positive impact on their personal growth or development, their careers, their independent lifestyle, and meaning to their life. Respondents reported being well prepared academically entering college and being confident about their ability to succeed. The majority of respondents lived with families prior to attending college while half of the respondents lived independently in the community while attending college. Many respondents reported being employed prior to entering college and currently being employed in jobs related to their education. Participants believed that their needs would have been better met with access to assistive technology, increased contact with rehabilitation counselors, and greater job placement assistance. The authors believe that clients who are prepared, ready, and motivated should be selected for assistance with college and that this study illuminated factors that contribute to success. They urged professionals to look at the profiles of respondents and develop interventions to increase a student's chance for success.

Adding to the profile of successful college students with vision impairments, McBroom (1997) conducted structured interviews with 102 visually impaired college juniors and seniors to identify the skills, knowledge, and steps necessary for students with visual impairments to participate in college and complete required coursework. Interview topics included: demographics; educational history; use of computers, specialized equipment, and adaptive equipment; resources; preparation for college; college adjustment problems; work history; and orientation and mobility skills. Results indicated that participants were enrolled as full-time students, maintained a B+ average, had some kind of work experience, and regularly engaged in extra-curricular activities.

Successful college students with vision loss believed it was important to prepare for college and identified steps that students can take (McBroom, 1997). Textbooks should be identified and ordered early so alternative formats (large print, audio recording, or braille) can be located or produced. Learning to travel to and on campus should be accomplished before starting classes. Students should attend campus orientations and college preparatory programs. Appropriate housing should be located to meet an individual's travel needs and allow space for blindness-related accommodations such as computer equipment and/or a service animal. Working relationships with service providers such as personnel from the vocational rehabilitation agency and the campus disability service coordinator needs to be established. Finally, pre-registering for classes and communicating needs to professors are essential.

College students who were blind or visually impaired were asked for advice for visually impaired high school students considering college training (McBroom, 1997). They advised that high school students should: take advanced placement courses; make good grades; learn and use various reading media/assistive technology; choose a college major and career; and develop good

study habits and time management skills. One's choice of college should be based on evaluation of academic programs, disabled student support offices, transportation facilities, campus layouts, and program size. Transportation and orientation and mobility skills should be practiced and resolved prior to starting college. Service delivery offices such as vocational rehabilitation and the campus disability service office should be contacted to identify what services can be provided. Communication with professors and visually impaired peers can provide valuable information and assist in resolving problems. Development of assertiveness and self-advocacy skills along with an awareness of legal rights are important in being successful in college.

Success in College for Students with Learning Disabilities

Researchers have also been interested in the factors that contribute to success in college for students with learning disabilities. Several researchers have examined the perceptions of college students with learning disabilities. Heiman and Kariv (2004) conducted in-depth interviews with 30 college students with learning disabilities about their perceptions of current difficulties and adjustment to college compared to past experiences with their disabilities. Students described academic, behavioral, and emotional difficulties. They discussed coping strategies and compensatory skills used now and in the past. Expectations for the future were optimistic and students held positive emotional functioning and less negative self-perceptions. This study highlighted that college students with learning disabilities appear more optimistic about their futures than literature suggests.

Studies have examined individual characteristics of students with learning disabilities and environmental characteristics including college setting, professionals, and social networks. Field et al. (2003) reported that students with disabilities who possess self-determination are more successful in college. Self-determination referred to the skills, knowledge and beliefs that allow a

person to behave in a goal-directed, self-regulated, and autonomous way. Self-awareness of strengths and limitations as well as self-confidence allows one to take control of one's life and be more successful as an adult (Field et al., 1998). The authors detailed a qualitative study in which four college students with learning disabilities were interviewed about self-determination, post-secondary environmental factors, personality markers, and academic success. Self-determination in higher education settings was influenced by institutional infrastructure, information access, social support systems, and availability of faculty. Environmental factors that promote self-determination included self-determined role models, self-determination skill instruction, opportunities for choice, positive communication patterns and relationships, and availability of supports. The identified personality markers related to success included autonomy, locus of identity, goal selection and implementation, and resilience following failure. The authors took the position that college disability support personnel should foster student self-determination in students with disabilities, the campus environment, and in faculty teaching styles.

Similarly, Hall et al. (2002) studied motivational and attitudinal factors in college students with and without learning disabilities. The researchers compared college students with and without disabilities on emotional resiliency, stress levels, locus of control, and need for achievement. Results indicated that students with learning disabilities scored significantly higher on resiliency and need for achievement and reported fewer stressors than non-disabled peers. Differences for locus of control were not found between the two groups. The findings suggested that students with learning disabilities were very goal directed and showed problem-solving initiative.

Other researchers have asked college graduates with learning disabilities to reflect on their experiences in college. Greenbaum et al. (1995) conducted telephone interviews with 49

college graduates with learning disabilities about their educational and social experiences. Participants were asked about their graduation from college, reasons for attending college, disclosure of disability, history of number and types of colleges attended, college majors, accommodations/services used, extra-curricular activities, living arrangements during college, family support, and opinions on what was most and least helpful during college. Factors contributing to educational success were identified as: the presence of mild/moderate disabilities as opposed to severe; higher than average IQ; higher than average socio-economic status; the knowledge of and ability to explain one's disability and learning problems; determination and perseverance; financial and emotional support from family; and support from friends, significant others, or faculty members. Barriers to success included personal factors (i.e., too much socialization or lack of motivation) and institutional factors (i.e., discrimination because of a lack of understanding of the disability by faculty and administrators). Participants provided recommendations for improving college experiences for people with learning disabilities. Recommendations included: educating students about their legal rights; educating faculty/administrators about working with students with learning disabilities; advertising available services; offering support groups; improving existing services; preparing high school students to make informed decisions about colleges being considered; and working with students for greater self-understanding and self-determination.

In a qualitative approach to the research on disabilities, Nelson (1998) used the case study method to compare and contrast one successful college student with a learning disability and one at-risk college student with a learning disability. Characteristics of successful college students described by Nelson and Blumenthal as cited in Nelson served as a framework for the study. Successful college students: attend class, complete assignments, view their instructors as

experts, have an organized study routine, have a variety of study skills, and take responsibility for their own learning. Nelson described how each student met or failed to meet each characteristic and supported these observations with thoughts, beliefs, and attitudes expressed in the words of the participants. Nelson discussed how some students may benefit from academic and career counseling when they are not having successful college experiences. Often there are discrepancies in a student's behavior, attitude, and academic outcomes.

Environmental factors including family, school, and community were critically examined in a qualitative study by Lichtenstein (1993). The author presented case studies about postschool outcomes based on a longitudinal study through in-depth interviews with four adults with learning disabilities who had dropped out of high school. Interviews gathered information regarding the participants' personal lives, work lives, school experiences, and involvement with adult service agencies. Interviews were also conducted with family members, employers, school and agency personnel, and friends. Student records were reviewed. Results indicated that poor grades were not necessarily the primary reason for leaving school. School problems, personal problems, and family and social concerns contributed to the achievement of poor grades and low self-esteem. Participants reported that continued academic pursuits would have caused anxiety and humiliation. Participants exhibited resiliency in their ability to seek employment, make friends, continue education and training, complete alternative credentials, and pursue career ambitions.

Two studies specifically examined the influence of parents and family on transitions to adulthood for students with learning disabilities. Morningstar et al. (1995) used qualitative research methods to study the importance of family involvement on transition from high school to adult life for students with learning disabilities. The researchers conducted four focus groups

that examined participant perspectives regarding the influence of their families on the creation of a vision for their future, the transition planning process, and the development of self-determination. For these participants, both immediate and extended families were the predominant influence on career and lifestyle options. Most participants planned to live near their family for continued support beyond high school. Many participants did not recognize the relevance of the development of individualized education plans (IEPs) and reported little to no involvement in the planning process by them or their family members. Participants did not discuss ways in which their families supported or taught autonomy or fostered self-determination.

Similarly, Graham-Smith et al. (2002) studied student and parent involvement in the transition process for students with learning disabilities. The authors surveyed freshmen with learning disabilities. Results indicated that a large portion of the participants reported feeling “no good” (22 out of 61 participants) or “useless at times” (25 out of 61 participants). Negative self-talk does not promote self-advocacy—a key ingredient in college success for students with disabilities. In addition, 38% of participants reported parental involvement in choosing classes and 39% reported parental involvement in choosing college activities for their college-age children. The authors reiterate the need for self-advocacy training to begin in high school.

Additional studies regarding students with disabilities in higher education have been reviewed by Paul (2000). Research topics included the college life experiences of students with disabilities, academic and social integration of students with disabilities, and awareness and attitudes toward students with disabilities.

The Phenomenon of Transition from High School to College for Students with Disabilities

Rehabilitation professionals have believed for years that the participation of people with disabilities in higher education can enhance their employability and vocational success (DeLoach, 1992). The federal-state vocational rehabilitation program financially sponsors many students with disabilities to attend college as part of job preparation. Postsecondary education is costly in terms of both time and money (Emener & Marion-Landais, 1995). Tax dollars are spent on tuition, books, transportation, housing, reader/scribe/interpreter/personal care attendant services, and assistive technology. In addition, some students with disabilities attend specialized college preparatory programs which can include an orientation to campus life, physical fitness, recreational activities, and training in independent living skills and communication skills (Monahan et al., 1978). Students with disabilities who receive some preview of the college experience manage their freshmen year with fewer adjustment problems (HEATH Resource Center, 2006). Such programs assist students in preparing for college and enhancing their college experience. Monahan et al. discussed that pre-college programs may reduce a student's anxiety about attending college, transition students from the regimentation of high school to the non-regimentation of the college environment, and provide social peer interaction. Pre-college programs may allow students to become familiar with the campus, take increasing responsibility for themselves, and address their independent living, technology, and social needs prior to the addition of academic pressures. Addressing some of these life changes prior to beginning academic work may reduce the possibility of students being overwhelmed and allow focus on academic success.

Discrepancies in the service delivery systems may impact the successful transition of students with disabilities from high school to college. Skinner and Lindstrom, (2003) discussed

differences in student responsibilities and service delivery systems for students with disabilities in high school and college. In high school, teachers, counselors, and parents bear the larger responsibility for arranging accommodations and advocating for students. Students with disabilities may not be able to explain their disability to a teacher, know their legal rights, be able to request appropriate accommodations, or to acquire appropriate resources to attend class. In high school, individualized education plans (IEPs) are developed for students with disabilities. Students are provided with a free and appropriate public education tailored to individual needs based on the provisions of the Individuals with Disabilities Education Act (IDEA). The Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 are civil rights legislation that ensures accessibility and non-discrimination for qualified individuals with disabilities. Accommodations are only provided to students who request accommodations, make their disability known, and provide documentation of their disability. The K-12 system fosters dependency in that students with disabilities are passive recipients of service (Schutz, 2002). In contrast, the higher education system expects students to be active initiators in requesting accommodations and services.

The transition from high school to college is further complicated by several other factors (Schutz, 2002). Disabilities can be defined differently for children and adults. Freedom in college leads to social differences from that in high school. Academic differences include fewer hours spent in class, less contact with teachers, fewer tests, different teaching styles, and increased responsibility for acquiring and learning materials presented. There is confusion about the types of services that students with disabilities need, services that postsecondary institutions are required by law to provide, student's actual expectations and behaviors, and the disability service provider's expectations of student behaviors.

Eaton and Coull (1997) reported the top 10 difficulties faced by freshmen with learning disabilities. Students with disabilities are not prepared for the responsibility of college life and can be overwhelmed by the work load. College students need to learn how to manage free time and learn time management skills. Students may be distracted and have difficulty focusing. Academic support from parents can be missed and classes can be failed. Students may have difficulty in making new friends. Students may also have difficulty in telling others about their disability and are not realistic about the impact of disability on ambitions and goals.

Skinner and Lindstrom (2003) discussed strategies for successful transition to college and college success for students with learning disabilities. They reported that students with learning disabilities are more likely to have deficits in study skills, organizational skills, specific academic areas, and social skills as well as low self-esteem and higher school drop-out rates. Based on current literature, they compiled a list of factors that lead to success in college for students with disabilities. Factors included the severity of a disability, student motivation, a student's willingness to persevere under adverse conditions, emotional and academic supports available, a student's understanding of his/her own disability and effective coping strategies, and the ability to proactively manage disability in terms of self-advocacy and goal setting.

Skinner and Lindstrom (2003) compiled a list of strategies that teachers and counselors can employ to promote the successful transition of students with learning disabilities. Professionals can teach students about their disability, coping strategies, the law, and how to advocate for themselves. To be a self-advocate students must understand their disability and be able to communicate their needs effectively with authorities. A comprehensive psycho-educational assessment should be conducted in high school. Students need to be taught how to organize for learning at the college level and for life. Professionals may also help facilitate a

support network for the individual. Finally, students may need help in selecting a college that best meets their needs and may need encouragement to attend college preparatory programs.

Benz, Lindstrom, Unruh, and Waintrup (2004) suggested the following transition practices to promote retention and success in high school and postsecondary outcomes for students with learning disabilities. Students need to be supported in exploring postsecondary options, developing meaningful postsecondary goals, and connecting goals and resources. Students should participate in vocational educational classes and paid work experiences during their last two years in high school. Students should receive tutoring to complete homework assignments, attend classes and stay focused on their education. Students need competence in both academic skills as well as life skills (money management, self-advocacy, personal/social/career awareness, and goal setting). Students should participate in a transition planning process that promotes self-determination.

Risk, Resilience and Research with People with Disabilities

Resilience is the ability of an individual to successfully adapt and develop social, academic, and vocational competence in the face of adversity and stress (Henderson & Milstein, 1996). Resiliency is seen as the successful completion of age appropriate developmental tasks despite the experience of adverse conditions. Murray (2003) explained that a person's individual characteristics and experiences in the context of family, school, and community shape development and outcomes. It is the relationship between risk and protective factors/processes within these contexts that shape one's development and life course. Individuals, in turn, influence the contexts in which they live.

Sandler (2001) discussed the mechanisms and processes of adversity and resiliency resources. According to Sandler, adversity occurs when an individual experiences a threat to

satisfying basic human needs (physical safety, sense of self-worth, efficacy, and belonging to a positive social network) and alteration of the completion of age appropriate developmental tasks. Murray (2003) identified characteristics, traits, and experiences that may be risk factors (or adversities) that have the potential to impact an individual's development. Individual risk factors may include: gender, race, history of medical problems, poor academic skills, low school attendance, low IQ, low levels of self-determination, poor social problem-solving skills, emotional problems, and stressful life events. Family risk factors may include: low socioeconomic status; inconsistent, harsh, and disorganized parenting style (authoritarian); family composition, family history of mental illness, and history of child maltreatment. School risk factors may include: poor quality of instruction, few opportunities for involvement in school activities, low levels of bonding to school, dangerous or unsafe school environment, poor peer relationships, and school dropout. Community risk factors may include: few opportunities to participate in social activities; few viable employment opportunities and options; few opportunities to develop and sustain meaningful relationships with positive adult models; and high levels of crime, violence, and poverty.

Sandler (2001) conceptualized adversity in terms of quality and ecology. Quality refers to how environments impact an individual's satisfaction of basic needs and goals and an individual's competence to play valuable social roles. Some basic needs include a sense of physical safety, a belief in one's self-worth, a sense that one can control important events in the environment, and a sense of social relatedness. The ecology of adversity refers to the time, place and social context in which needs are satisfied or threatened. Sandler proposed that adverse conditions occur within social and historical contexts; occur for some period of time at a particular time in the life course; and are dynamic in that they may lead to other adverse

conditions. Adversities can be characterized at the individual level, the micro level (family and school) or the macro level (community and culture). At the individual level, adversity is a transaction that occurs between the individual and the environment such as the acquisition of illness or disability. At the microsystem level, adversity describes the conditions of family, school, and peer networks such as the disruption that occurs from a family member having an accident or illness. At the macro level, adversities describe cultural, community, and national conditions such as the degree to which discrimination against subgroups (such as people with disabilities) is practiced. Adversities are transmitted from one level of the ecology to another and the effects of adversities across settings are cumulative.

According to Sandler (2001) protective resources are enduring characteristics at the individual, micro, and macro level that prevent and counteract the effects of adversity. Resources affect the quality and ecology of adversity. Resources may prevent the occurrence of adversity, protect against adversities that have already happened, and promote positive internal motivational states and developmental competence. Protective factors are resources or influences that modify or alter a person's response to an environmental hazard (risk) that predisposes them to a maladaptive outcome (Murray, 2003). Individual protective factors may include: positive temperament, high self-esteem, moderate to high intelligence, internal locus of control/high levels of self-determination, strong academic skills, strong social problem-solving skills, and a positive/optimistic outlook on the future. Family protective factors may include: secure child-caregiver attachment relationship, warm but demanding parenting style (authoritative), family composition, parent level of education, parent employment, and high expectations for child. School protective factors may include: positive and supportive teacher-student relationships; a clear focus on building academic, social, and emotional competencies; a focus on building self-

determination and internal locus of control; consistent school-home communication; and consistent and well-designed transition planning. Community protective factors may include: accessible social organizations within the community; opportunities for employment during high school; and access to mentors and adult role models in the community.

Murray (2003) recommended using risk and resilience as a conceptual framework for studying transitions to adulthood for students with disabilities. People who are vulnerable--such as persons with disabilities--may be more susceptible to negative outcomes (Gardynik & McDonald, 2005; Murray). People with disabilities who have positive outcomes despite vulnerability and high risks are termed resilient (Murray).

A learning disability can be a risk factor or an adverse condition that increases an individual's vulnerability (Gardynik & McDonald, 2005). There is usually a discrepancy between academic achievement and intellectual ability. Difficulties with receiving and processing information result in problems with reading, writing, sequencing, and understanding. There may be social and emotional difficulties because of distorted perceptions and interactions. Peer rejection, academic difficulty, frustration, low self-esteem and low self-confidence are common experiences. Life events may be experienced at different developmental times than students without disabilities. Students with learning disabilities may also experience depression and anxiety at higher rates than their non-disabled peers. School itself can be a risk factor that leaves a student with a learning disability even more vulnerable (Gardynik & McDonald).

Gardynik and McDonald (2005) reported on several research studies that identified protective factors for students with learning disabilities. The studies indicated that protective factors for students with learning disabilities included: temperamental characteristics that elicited positive responses from adults; special skills and talents; motivation; realistic educational and

vocational goals; responsibilities during childhood; a safe and nurturing home environment; rules and structure during childhood; role models; a sense of control over their lives; an internal locus of control; ability to take responsibility for decisions; and self-determination and perseverance.

More understanding about the mechanisms and processes of resiliency and identification of the conditions that encourage resiliency is needed (Gardynik & McDonald, 2005). Both teachers and counselors should use preventative interventions to foster resiliency in students they serve (Arman, 2002; Gardynik & McDonald). Gardynik and McDonald encouraged teachers to foster resiliency through preventive interventions and programming by teaching children to have an internal locus of control, facilitating self-understanding, and developing meaningful relationships with students. Arman discussed how school counselors are required to provide guidance and counseling services to students with disabilities. A key function of the school counselor is to provide group counseling to students with disabilities. Arman suggested using a brief group counseling model to promote resiliency for students with disabilities to become successful in their academic, career, and personal/social lives.

According to Sandler (2001), successful interventions provide the level of resources to match a person's need and are implemented at multiple levels (individual, family, school, and community). Interventions promote self-efficacy, support, and self-worth for the prevention of future adversities. Sandler reminded helping professionals to recognize that people experiencing adversity choose if they want help through interventions and resources. Individuals are free to choose whether they wish to be helped. They may or may not recognize the impact of adverse conditions or the benefits that professionals may have to offer. People who experience dramatic changes (such as divorce, death of a significant other, or accident/injury) are more likely to request assistance than those with chronic adverse conditions (such as living in poverty or with a

chronic condition). The goal of successful interventions is to help people assess their needs, believe in their abilities, and provide access to needed resources.

Summary and Recommendations

Much of the research regarding the success of college students with learning disabilities focuses on factors outside the individual (Hall et al., 2002). In contrast, the majority of the research on the success of college students with visual impairments focuses on individual characteristics (Beaty, 1994; Martinez & Sewell, 1996; Martinez & Sewell, 2000a; Martinez & Sewell, 2000b; Roy & Mackay, 2002). The majority of the studies on individual characteristics of blind college students was quantitative in nature and affirmed or disconfirmed deficits within an individual. Many of the studies regarding students with learning disabilities were qualitative in nature. The studies by Heiman and Kariv (2004) and Greenbaum et al. (1995) shed a more positive light on college students with learning disabilities than other literature would suggest. Qualitative methods provided rich data about the lives and perspectives of these students and described the total person and not a narrow glimpse of one aspect of a person. Anzul, Evans, King, and Tellier-Robinson (2001) promoted the use of qualitative research methods to study people with disabilities. Studies make many recommendations about how professionals and systems can increase student success. Research findings would provide useful information to individuals with disabilities, parents, special educators, school counselors, college counselors, rehabilitation counselors, and career counselors in assisting individuals in making decisions about life plans.

Schutz (2002) recommended that future research look at the phenomenon of transition for students with all types of disabilities. Murray (2003) recommended using risk and resilience as a conceptual framework for studying transitions to adulthood for students with disabilities. The

relationship between risk and protective factors/processes within the context of individual characteristics, family, school, and community shapes one's development and life course.

Gladieux and Swail (2000) reported that success in college is influenced by many factors: prior schooling and academic achievement, the rigor and pattern of courses taken in secondary school, family and cultural attitudes, motivation, and awareness of opportunities with aspirations, academic preparation, and the influence of a mentor being the greatest influences. Researchers need to look at the personal, social, and educational development of students with disabilities to determine what developmental interventions can be utilized to increase chances for success (Emener & Marion-Landais, 1995).

Reflection on my 20 years of professional encounters with blind/visually impaired college students brought to mind several ingredients for success. Most have lost vision progressively, were academically successful in high school, had supportive families, set goals, held high standards, on the surface appeared to hold positive self-concepts, and possessed optimistic explanatory styles. They were organized and were independent in terms of daily living. They were self-determined, had self-advocacy skills, and could effectively communicate with others about their visual problems. In my recent experience, the majority of successful students seemed to be women. The women were definitely not passive or dependent as literature suggests. The less successful students encountered were not as organized with their approach to college life and were not as strong in self-advocacy and self-determination skills. Families for males seemed less involved or too involved. Some who dropped-out of college sought short-term, alternative training programs, such as massage therapy, and did complete alternative training. Both successful male and female blind college students appeared to be involved with on campus friends whereas the less successful male college students were not involved in campus

activities. This researcher found no research that directly studied disabled students who dropped out of college. Researchers should examine the influences of family, school, community, and gender roles as influences on the success (or lack of success) of visually impaired college students.

CHAPTER THREE

METHODOLOGY

This chapter describes the methodology that was used in this study. Organization of this chapter incorporates subsections that explain the purpose of the study, the conceptual framework from the theoretical and personal perspectives, research questions, setting and sampling, methods of data collection, and methods of data analysis.

In a 1998 survey of over 275,000 college freshmen, 1.1% of students identified themselves as being partially sighted or blind (Henderson, 1999). According to a 1992-1993 Bureau of the Census survey, it was estimated that only 16% of visually impaired college students graduate compared to 26% of their sighted peers (Statistics and Sources for Professionals-American Foundation for the Blind, n.d.). Both governmental resources and the skill and energy of many professional service providers are expended to promote the success of individuals who are blind or visually impaired. The federal-state vocational rehabilitation program financially sponsors many students with disabilities to attend college as part of job preparation. Tax dollars are spent on tuition, books, transportation, housing, readers, scribes, interpreters, personal care attendants, and assistive technology. In addition to the actual costs of attending college, the government pays for students with disabilities to attend training in specialized college preparatory programs for independent living skills and assistive technology skills. Despite the U.S. Government's investment in these individuals, students with visual disabilities are less likely to graduate from college than their sighted counterparts.

In an effort to prepare students with visual disabilities to be successful in college, I wanted to know what successful students attribute to their success. I conducted a qualitative study of six successful college students with visual disabilities to understand what they attribute

to their success. The goal was to identify factors that move students toward successful college experiences. By understanding student experiences, counseling interventions may be designed to maximize a student's potential for success and minimize experiences that may have negative consequences on a student's decision to remain in college and complete a degree.

Conceptual Framework

A conceptual framework describes what is to be studied and the presumed relationships between what is studied (Miles & Huberman, 1994). The following sections describe the theoretical perspective on risk and resiliency, my personal perspective, and my research experience in relation to college students with disabilities.

Theoretical Perspective

A person's individual characteristics and experiences in the context of family, school, and community shape development and outcomes (Murray, 2003). People have basic human needs including physical safety, a sense of self-worth, efficacy, and belonging to a positive social network (Sandler, 2001). Risk or adversity occurs when there is a threat to satisfying one of these basic needs. Risk factors (or adversities) are characteristics, traits, and experiences that can negatively affect an individual's development and life outcome (Murray). Risk factors are biological, psychosocial, and environmental factors that can lead to maladaptive outcomes. Protective factors are resources or influences that modify or alter a person's response to an environmental hazard (risk) that predisposes them to a maladaptive outcome. It is the relationship between risk and protective factors/processes within these contexts that shape one's development and life course. Individuals, in turn, influence the contexts in which they live. Chapter Two provides examples of risk and protective factors for the general population and those unique to students with learning disabilities.

Resilience is the ability of an individual to successfully adapt and develop social, academic, and vocational competence in the face of adversity and stress (Henderson & Milstein, 1996). Resiliency is seen as the successful completion of age appropriate developmental tasks despite the experience of adverse conditions. Disability is an adversity which can make an individual more susceptible to other risks and adversities which can lead to negative outcomes. People with disabilities who have positive outcomes despite vulnerability and high risks are considered to be resilient (Murray, 2003).

Much of the research regarding the success of college students with learning disabilities has focused on factors outside the individual (Hall et al., 2002). Several researchers have qualitatively examined individual characteristics and environmental factors contributing to the success of college students with learning disabilities (Field et al., 2003; Greenbaum et al., 1995; Heiman & Kariv, 2004; Lichtenstein, 1993; Nelson, 1998). Two studies focused on the influence of parents/family on college success for students with learning disabilities (Morningstar et al., 1995; Graham-Smith et al., 2002). In contrast, the majority of the research on the success of college students with visual impairments has focused on individual characteristics only (Beaty, 1994; Martinez & Sewell, 1996; Martinez & Sewell, 2000a; Martinez & Sewell, 2000b; Roy & Mackay, 2002). The majority of the studies on individual characteristics of blind college students are quantitative in nature. Individual characteristics studied have included self-esteem, academic ability, locus of control, and explanatory style. Studies have looked at deficits within the individual as reasons for a lack of success. Only one qualitative study by McBroom (1997) examined skills, knowledge, and preparation of successful students with vision impairments. Respondents identified positive behaviors that have led to their success in college and shared advice for future students. Results of McBroom's study are detailed in Chapter Two.

A few authors have used the concepts of risk and resilience to conceptualize success of students with disabilities (Arman, 2002; Gardynik & McDonald, 2005). Murray (2003) recommended using risk and resilience as a conceptual framework for studying transitions to adulthood for students with disabilities. Gardynik and McDonald supported the study of conditions of resiliency and the development and implementation of preventative interventions that foster resilience for students with disabilities. According to Murray, there are currently very few studies on the impact of risk factors on the life outcome for people with disabilities. Risk and resilience has not been examined specifically with college students with visual disabilities. This study was important because research was needed to clarify the relationship between risk factors/processes and outcomes following a student's exit from high school. Risk factors that were studied included: student characteristics, family experiences, school experiences, and neighborhood/community experiences. This study has advanced what is known about risk factors, protective factors, and resilience for college students with vision disabilities.

Personal Perspective

I was interested in the experiences of successful college students who are blind or visually impaired. My goal was to understand experiences of successful students and what influences in their life have contributed to their success and retention in college. As a rehabilitation counselor with 20 years of experience in the preparation of college students with disabilities, I was concerned about the retention of these students. Specifically, I wanted to know what factors contributed to the successful retention of students with disabilities in higher education. Through interviews with students with visual disabilities, I learned the factors they regard as contributing to their successful completion of a degree.

From a professional standpoint, I am a Rehabilitation Training Specialist at the Training, Resource, and Assistive-technology Center at the University of New Orleans. For over 20 years, I have assessed and trained persons with disabilities in the use of assistive technology and Braille. I have served as adjunct faculty for the Department of Special Education and Habilitative Services and the Department of Computer Science at the University of New Orleans. I have a Masters in Health Sciences in Rehabilitation Counseling from Louisiana State University Health Sciences Center. I have been working on my doctorate in Counselor Education. I am a Certified Rehabilitation Counselor, a Licensed Rehabilitation Counselor, a Licensed Marriage and Family Therapist, and a Certified Vision Rehabilitation Therapist. I have presented and published on disability-related issues and have served on many committees and boards regarding disability and counseling matters.

I have also been a student with a disability. My vision impairment began at the age of two which progressed to a complete loss of vision at the age of 17. I attended private school through the eighth grade and a private Catholic high school.

In reflecting on my own experience, I regard support systems both off and on campus as contributing factors to my success. My parents and friends presented positive messages about me attending college and attaining a degree. My family provided necessary accommodations to assist me in getting accessible materials so I could complete assignments. I have had access to needed computer equipment and assistive technology to increase my independence. Housing and transportation were not major concerns. I have had supportive teachers prior to college and in college. I have been self-motivated and always strive to do my best. My grades have traditionally been above average. I generally have set and completed goals. I have not easily quit on a commitment or goal. I generally have been happy and have enjoyed accomplishments. I have

taught myself many of the skills I have used to cope with my vision loss. I did not experience any particular adjustment issues in regards to vision loss. I know that I have been very fortunate.

Realizing that not all students with disabilities are like me, I wanted to know more about what keeps them moving toward their goals. As a counselor, what could I do to help facilitate success?

Related Study Conducted by Researcher

I received a small grant to promote diversity at the University of New Orleans in spring, 2005. The project promoted retention of students with disabilities through leadership training. Leadership training was provided to eight students with disabilities. Training efforts resulted in the formation of a campus organization for students with disabilities. Throughout the training and organizational meetings, data were collected through observations, interviews, and a focus group. Student experiences and concerns were illuminated. Themes that emerged were accessibility and attitude/awareness. Accessibility included access to information, independence, housing, technology, construction/other physical barriers, readers/scribes, and personal safety. Attitude/Awareness was explored through positive and negative experiences with faculty, the Office of Disability Services, and self-advocacy. Other themes that were identified included student involvement, student leadership, and campus bureaucracy.

One research question answered in the project was what factors do students with disabilities attribute to their success. Participants attributed success to their ability to self-advocate or communicate one's needs effectively with faculty, Disability Services, and other campus support services. Self-advocacy is widely supported in the literature as being a key ingredient for success for students with disabilities (Graham-Smith et al., 2002; Lichtenstein, 1993; McBroom, 1997; Schutz, 2002; Skinner & Lindstrom, 2003). Students with disabilities

must take responsibility for their own success. More is accomplished by asking instead of demanding. Overall the project confirmed what I suspected would be experiences and concerns of students with disabilities through anecdotal evidence and my own personal experience. Students in this project realized that self-advocacy was a way to cope with the everyday frustrations of being a college student with a disability which led to their continued success as college students. Sadly, one of the participants in the study found too many overwhelming concerns in his college experience and chose to drop out of school. What gave others the strength to continue while their freshman counterpart chose to discontinue his education?

Research Questions

The conceptual framework for a study is operationalized through research questions (Miles & Huberman, 1994). Students with vision impairments may not be successful or complete college for a variety of reasons. The conceptual framework of risk factors and resilience can assist in understanding the life experiences of successful college students with vision impairments. Understanding the experiences of successful students may assist professional counselors in developing interventions to assist students with vision impairments in moving toward resiliency and reducing risk factors that might inhibit their success in college.

The overall research question was:

- What are the experiences of successful college students with visual disabilities?

Using the model for risk and resiliency, there were several subquestions.

- What are individual characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are family/friend characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?

- What are school environmental characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are risks/adversities experienced by successful college students with visual disabilities?
- To what do successful college students with visual disabilities attribute to their success?

Direct interview questions were designed to elicit descriptions of experiences in the context of individual characteristics, family experiences, and school experiences. Interview questions included:

- Please describe your disability and its meaning and impact on your life.
- How did you decide to attend college?
- What influence, if any, did your parents have on your decision to attend college?
- What influence, if any, did elementary and high school teachers have on your decision to attend college?
- What influence, if any, did friends have on your decision to attend college?
- What steps did you take to prepare yourself to attend college?
- Once in college, how would you describe the adequacy of your preparation?
- Describe your support system (both on and off campus) while attending college.
- Other than school, in what activities were you involved (employment, clubs/organizations, etc.)?
- Describe disability-related challenges you faced in college.
- Describe how you handled the challenges identified.
- What beliefs and expectations do you hold for yourself in life?

- To what do you attribute your success in college?
- What advice would you give to other people with vision impairments to have a successful experience in college?

I designed my research questions by assessing their value against the conceptual framework of risk and resiliency. When I first considered this research topic, I reflected on my professional experience in the field of vision impairment and my own personal experiences. Many of my original questions based on my reflections matched concepts in the development of resiliency.

Methods

This section describes the nature of qualitative inquiry, setting and sampling, data collection methods, and data analysis methods.

The Nature of Inquiry

Qualitative research is used to describe and answer questions about a group of participants in a specific context. Beliefs, events, and practices are examined from the perspective of the participants. Qualitative research allows the researcher to explore complex situations in which little is known. Research of this nature can begin to explain a phenomenon and yield theories about the phenomenon studied (Gay & Airasian, 2003).

The focus of a phenomenological study is to understand the essence of experiences about a phenomenon. It describes and compares the meaning of the life experiences for several individuals. It is rooted in the traditions of philosophy, sociology, and psychology (Creswell, 1998).

Phenomenological researchers look for meaning in each individual's story and derive general and universal meanings across participants. Research is presented as a narrative that

describes the essence of the experience, what was experienced, and how it was experienced. The goal is for the reader of the research to have a greater understanding of what it would be like to have a similar experience (Creswell, 1998).

Much of special education research has used quantitative methods and has taken a deficit perspective. Anzul et al. (2001) discussed how qualitative research is very relevant for special educators who wish to move beyond the deficit perspective. They indicated that qualitative research can illuminate a student's total personality, talents, interests, coping strategies, and ways they function in natural settings. The authors discussed how using qualitative research methods (case studies) allowed them to discover findings beyond the original focus of their research. Further, the authors advocate that qualitative research has the potential to increase teacher effectiveness and the success of students with disabilities.

It was believed that phenomenology is the most appropriate research method by which to gather data about successful college students with vision disabilities. Qualitative research methods naturally accommodate participants who would have difficulty in completing written surveys and/or other measurement instruments because of functional limitations. Data were collected through interviews and observations and analyzed through a variety of qualitative research methods.

Setting and Sampling

Phenomenological studies seek participants who have experienced the phenomenon being studied and can convey what they have experienced (Creswell, 1998). Individuals to be studied were selected using purposive sampling strategies. Most phenomenological studies rely on criterion sampling, a type of criterion sample, in which all participants meet a specified criterion--experiencing the phenomenon.

This study examined factors that have contributed to students with vision impairments remaining in college and completing a college degree. Purposive sampling was used to identify participants who met the criteria. The criteria for participation was that individuals (a) Had a visual disability prior to entering college and (b) were either classified as a junior or senior or have recently graduated (within three years) from a four year college. The rationale for the criteria was to locate individuals who had demonstrated a level of success and commitment to attaining a college degree.

Six participants were solicited from a variety of sources. Requests for volunteers were sent to university personnel who serve students with disabilities, counselors with the Louisiana Rehabilitation Services who serve college students with disabilities, and state rehabilitation centers who prepare people with disabilities to attend college. A cover letter explaining the study was sent via e-mail to identified professionals following a phone call explaining the study. A recruitment flier to be distributed to potential participants was included as part of the documents electronically sent to professionals. The recruitment cover letter and the participant flier can be found in Appendix B. By using snowball or chain sampling (Miles & Huberman, 1994), professionals who work with people with disabilities identified participants who provided rich information.

Also, participants were solicited from different regions in the state of Louisiana. This was for a variety of reasons. First, students with blindness or low vision are considered a low-incidence population. One university might not have enough students willing to participate in the study because of the small pool of participants from which to draw. Second, students in the New Orleans region have been and continue to be impacted by the aftermath of Hurricane Katrina. I wanted to minimize the impact of this national disaster on the validity of this study. Third, since

I am a service provider in the New Orleans area, soliciting participants in other parts of the state reduced the likelihood that I had had previous contact or provided services to the participant in the past. I did not exclude participants that have worked with me in the past; however, I was aware of my potential influence on the validity of their reports. I solicited participants through contact with colleagues--some regarded me as a competitor. I do not believe that this influenced participants they directed to me for participation. I believe, in general, when competition is set aside that I was respected as a professional in the field.

In order to access participants, I had to gain the participant's written permission to be studied. Before a study can be conducted, a proposal containing the written procedures of the study and a consent form had to be reviewed by the University of New Orleans Institutional Review Board for any anticipated harmful effects to participants. Consent forms contained the following elements: notification that participants can withdraw from the study at any time, the purpose of the study, procedures for data collection, confidentiality, risks, benefits, and signatures of the participant and researcher. The Institutional Review Board approval document can be found in Appendix B and the consent form can be found in Appendix C.

Data Collection Methods

In a phenomenological study, data are collected by conducting multiple, in-depth interviews of participants who have experienced the phenomenon under study. Phenomenology relies on a relatively small sample of approximately 10 or fewer participants. Interview questions are aimed at collecting participant experiences based on memory, image, and meaning (Creswell, 1998). Creswell recommended preparing an interview protocol to guide the interview and serve as a tool for recording data. Protocols include space for recording participant responses and

contain reminders to the interviewer for discussing elements of the consent form, concluding statements to close the interview, and thanking the interviewee for his/her participation.

To further document the research, researchers should maintain journals to capture observations and self-reflective notes (Creswell, 1998). These notes can help prepare the researcher for conducting interviews and begin analyzing data collected. Observation protocols can be helpful in organizing the researcher's observations and self-reflections of the observations. Observation protocols allow the researcher to record descriptive and reflective data. Descriptive data include a description of participants, activities, experiences, and maybe even a drawing of the physical setting. Reflective data includes the researcher's hunches, notes about the observational process, reflections on activities observed, and any conclusions drawn that help identify themes.

For this study, six individuals who met the sampling criteria were interviewed. Two, 60-minute semi-structured interviews were conducted individually in person. Each semi-structured interview followed an interview protocol and was audio recorded and transcribed into an electronic file. Audio recordings were destroyed upon preparation of the transcript. A third, follow-up interview was conducted with each participant either in person by phone, and/or by e-mail to serve as a member check and clarify information gathered. A personal journal and field notes kept by the researcher supplemented data gathered through interviews. The interview protocol can be found in Appendix D.

During the first interview, participants were asked to complete a demographic data collection sheet. Demographics included questions about individual risk/protective factors (gender, race, socioeconomic status, disability status, onset of disability, high school grade point average, college grade point average, educational status, educational major, extra-curricular

activities, and work history) and family risk/protective factors (family composition, parental educational level, and parental occupation). The demographics data sheet was orally administered as part of the first interview session. The demographic data collection sheet can be found in Appendix E.

Data Analysis Methods

Data were analyzed through the method of reduction, analysis of participant statements, and analysis of emerging themes. The phenomenological researcher searches for all possible meanings. Interview data were supplemented by the researcher's observations and self-reflections as well as concepts from literature review. Phenomenological researchers must separate or bracket their own assumptions and opinions and focus on the experiences shared through the voices of the participants. They use intuition and imagination to paint a picture of the experience (Creswell, 1998).

Data in this study were analyzed using a phenomenological method advanced by Moustakas (1994). Field notes, memos, and reflective journals were integrated into the analysis process. A composite description across all interviews led to generalized information to build on theory or draw inferences. The final goal was to tell a coherent story about successful students with disabilities and issues surrounding their success. The steps for data analysis were as follows.

- I began by writing a full description of my own experience of the phenomenon.
- I identified and listed through a process of horizontalization non-repetitive statements about how individuals experienced the phenomenon under study.
- I then grouped the statements into meaning units and wrote textural descriptions for each unit including how the phenomenon was experienced with supporting quotations.

- I then constructed a description of how the phenomenon was experienced based on imaginative and structural description by looking at all possible meanings and divergent perspectives.
- I then constructed a description of an overall meaning and essence of the experience for my account and that of each participant.
- I then prepared a composite description.

Validity and Generalizability

Qualitative researchers seek understanding (Creswell, 1998). When gathering data and seeking understanding, it is important to know if the study is believable, accurate, and right. The accuracy and believability of a study can be tested through methods of verification and use of standards of quality. Verification is a process that is used throughout data collection, data analysis, and report writing. Standards allow the researcher to examine the quality of a study once it has been completed.

Validity is the correctness or credibility of a description, conclusion, explanation, or interpretation (Maxwell, 2004). In research design, validity should include the strategies that will be used to identify and rule out validity threats. The qualitative researcher uses evidence collected during research to test for the implausibility of validity threats.

Two threats to validity in qualitative studies include researcher bias (subjectivity) and the effect of the researcher on the individuals studied (reactivity) (Maxwell, 2004). Threats to validity involving researcher bias are the selection of data that match the researcher's existing theory or preconceptions and the selection of data that seem important to the researcher. Qualitative researchers are concerned with how researcher values and expectations influence the

conduct and conclusions of the study. It is important for a researcher to examine how bias and reactivity will be handled.

Creswell (1998) urged researchers to clarify their researcher bias from the beginning of the study. The researcher should comment on past experiences, biases, prejudices, and orientations that have likely shaped the interpretation and approach to the study. I have worked as a rehabilitation counselor serving students with disabilities at the college level for twenty years. I also have experienced being a college student with a disability directly. I needed to separate personal feelings and experiences in reacting to respondents. Journaling and memoing helps clarify researcher bias from data collected.

Creswell (1998) recommended that qualitative researchers use at least two procedures to test validity and give credibility to their studies. I used several procedures including: triangulation, thick description, and member checks.

Triangulation is a method of collecting information from a variety of individuals and settings through a variety of methods (Maxwell, 2004). This process involves corroborating evidence from different sources to further understand a theme or perspective (Creswell, 1998). It reduces the risk of chance associations and systematic bias and improves generality (Maxwell). In this study, data were collected through interviews, observations, and a researcher journal.

Rich data are detailed and varied enough that they provide a full and revealing picture of what is going on (Maxwell, 2004). Description of participants and settings allow the reader to determine the transferability of a study's conclusions (Creswell, 1998). Rich data requires that interviews be taped and transcribed verbatim and observations be written descriptively (Maxwell). Rich data counters issues with respondent duplicity and observer bias. In this study,

data were presented as thick description so that readers would be able to draw their own conclusions.

Respondent validation or member checks are a systematic way of requesting feedback from participants about data and conclusions (Maxwell, 2004). Member checks is the most important way to establish credibility (Creswell, 1998) and the most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do (Maxwell). Member checks also help identify researcher bias and misunderstanding what was observed. Participants were asked to review narratives developed from their interviews to verify the correctness of the data being reported.

Generalizability is another factor that impacts credibility in qualitative studies. According to Maxwell (2004), generalizability can be either internal or external. Internal generalizability is the generalizability of a conclusion within the setting or group studied. External generalizability is generalizability beyond that setting or group. Qualitative studies have "face generalizability" in that there is usually no reason to believe that the results cannot be generalized beyond the studied setting. Generalizability for qualitative studies relies more on the development of a theory that can be applied beyond the studied setting. Other factors that increase the credibility of a study's generalizability include respondents' own assessments of generalizability, the similarity of dynamics and constraints to other situations, the presumed depth or universality of the phenomenon studied, and corroboration from other studies. Participants in this study came from different settings and had different backgrounds--expanding the transferability and generalizability of the data. The use of a variety of tests for validity, the review of the literature, and the presentation of results have attempted to support generalizability.

Summary

The goal of this research was to understand the experiences of successful college students with visual disabilities. There is a discrepancy between blind and visually impaired college students (16%) compared to their sighted counterparts (26%) who attend college and do not graduate (Statistics and Sources for Professionals-American Foundation for the Blind, n.d.). Using concepts from risk factors and resiliency, successful college students with disabilities were studied. Factors and processes that have led to resiliency for these students were identified as well as risk factors that can arise in the college experience. Appropriate intervention with students may increase their likelihood of remaining in college and successfully completing a degree. Completion of a college degree demonstrates skill acquisition and commitment on the part of the person with a disability. Successful completion of a degree should ultimately increase employability.

CHAPTER FOUR

RESULTS

The purpose of this study was to understand the experiences of successful college students with visual disabilities. Risk and resiliency were used as a conceptual framework for understanding how people can have positive outcomes in spite of adversity. Individual characteristics/experiences within the context of family, school and community were explored. Participant attributions of success and advice for future college students were also solicited. This chapter reports experiences of the participants and results of the data analysis.

Participant Profiles

Six successful college students and/or college graduates with visual disabilities were interviewed for this study. Participants learned of the study through their vocational rehabilitation counselors, adjustment to blindness training centers, and through direct recruitment by this researcher. Participants are presented through their profiles below.

Elizabeth

Elizabeth is a 22-year-old female of mixed ethnicities from a middle class family. She has experienced a life-long progressive vision loss due to Retinitis Pigmentosa or some variation of the retinal disease.

Elizabeth's father works in the service industry and her mother works in education. Her father attended one year of college but did not complete a degree. Her mother earned an associate's degree after Elizabeth was born. Her parents were divorced when she was four-years-old. At the age of 12, Elizabeth's father remarried. Elizabeth's stepmother recently completed an associate's degree and works in the medical field. In all, Elizabeth has four brothers and two sisters. Two of her older siblings attended college but have not completed degrees. Elizabeth

lived with her mother until she graduated from high school and then moved in with her father and stepmother.

Elizabeth attended public school and received support in her mainstream classes from a special education teacher a few times per week. She did receive a year of Braille training when she was very young but never was encouraged by her teachers to use Braille as a primary reading media. Special education teachers mainly provided her with large print materials to utilize in the regular education classroom. She did take some honors courses in high school. Elizabeth graduated third in her high school class with a 3.8 GPA.

Elizabeth was not involved in extra-curricular activities other than Beta Club (honor society) in high school. In college she was involved with a sorority and Circle K through which she spent many hours providing service to the community. She was employed the summer between high school and college at a grocery store. She did not work while attending college

Elizabeth did attend a transition program for visually impaired teens the summer between her junior and senior year of high school. The program was located on a college campus and offered training in technology, mobility, Braille, independent living, and recreational experiences.

Elizabeth earned a Bachelors degree in Business Administration with a minor in Management. She graduated with a cumulative GPA of 3.1.

Dannie

Dannie is a 22-year-old, white female from an upper middle class family. She has low vision due to retinopathy of prematurity. Her vision was further reduced with the development of a cataract and subsequent cataract removal. She wears contacts and glasses to accommodate her remaining vision.

Growing up, Dannie's father held a professional-technical position and her mother was a homemaker. Her father participated in three years of vocational training and on-the-job training. Her mother had a high school education. Dannie has one younger brother.

Dannie attended public school and received special education services. She visited a resource room for English, reading, math, Braille and orientation and mobility through the sixth grade. During elementary school she attended regular education classes for social studies and science. In seventh grade, Dannie began honors coursework, attended regular education classes, and only relied on the resource room for enlarging reading materials. She graduated high school with a 3.1 GPA.

Dannie participated in extra-curricular activities in high school including: the National French Honor Society, Teens for Christ, and two years in school musicals. In college she participated in a service organization with a religious affiliation, the National Honor Society, the French Honor Society, and the English Honor Society.

Dannie did not attend a transition program for blind college students. She did not work during high school; however, she did work during college. She worked as a note-taker for the Office of Disability Services and also as a personal care assistant for a disabled student who lived near campus.

Dannie graduated with a Bachelors degree in English with a minor in French with a 2.9 GPA. She returned to college to pursue a Masters degree in English.

Brandon

Brandon is a 25-year-old, white male who grew up in an upper middle class family. At the age of four months he was treated for retinoblastoma. He has experienced stable vision since that time.

Brandon's parents both were employed in managerial positions. Both of Brandon's parents attended two years of college. Brandon has a younger sister who also has attended college.

Brandon attended public school and received special education services in elementary, junior high, and high school. He attended mainstream classes and was seen by an itinerant teacher a few times per week for Braille and computer instruction and other academic supports. He primarily used a closed circuit television system to accomplish his reading and writing assignments. Brandon graduated high school with a 3.1 GPA.

In high school, Brandon participated in the science club, track, and a scouting organization through his church. He held leadership roles and served as a mentor to younger members of the scouting organization. In college, Brandon was a member of a campus Christian organization.

Brandon's first job was working at a Christmas tree lot in high school. During college, he had summer jobs providing office support at a seafood company and a blood bank.

Brandon attended a transition program/adjustment to blindness training program between his graduation from high school and beginning college six months later. He did have the opportunity to take one college course while attending the training program.

Brandon completed a Bachelors degree in Computer Information Systems. He graduated with a 3.1 GPA. He went on to complete a Masters degree in Business Administration.

Tori

Tori is a 24 year-old, white female who grew up in an upper middle class family. Her vision loss was due to congenital glaucoma that has resulted in a progressive decrease in vision throughout her life.

Tori's parents both had high school educations. Her father worked in the automobile industry and her mother was a homemaker. Tori has no siblings.

Tori attended public school and received special education services from an itinerant teacher. She primarily used print as her reading media throughout her elementary and secondary education. She received orientation and mobility training since kindergarten; however, she was not given a cane until the age of 10. Braille training began in fifth grade after Tori's parents advocated for their daughter. She was no longer able to read print upon graduation from high school. She graduated high school with a 3.9 GPA.

Tori attended transition/adjustment to blindness programs and had the opportunity to take a college course while attending the program.

Tori participated in several extra-curricular activities in high school including: Quiz Bowl, National Honor Society, drama club, Spanish club, and philosophy club. In college, she participated in several women's organizations, literary magazine, and the National Federation of the Blind (NFB). She held leadership positions in several of the organizations in which she participated.

Tori babysat and worked as a receptionist while in high school. While in college, Tori worked summers as a counselor in adjustment to blindness programs for children and teens. During the semester, she worked as a note-taker for other disabled students.

Tori attended several colleges/universities to complete her undergraduate degree. She graduated with a Bachelors degree in Women's Studies with a 3.9 GPA. She returned to college to pursue a Masters in Education to become a teacher of visually impaired children.

Rebecca

Rebecca is a 25-year-old white, female who grew up in a middle class family. Her vision loss began at birth as a result of congenital cataracts.

Rebecca's parents each attended a year of college. Her father worked in marketing and sales while her mother held a clerical position. She has an older brother who attended college.

Rebecca attended public school and received special education services through an itinerant teacher. She received training in typing and was provided with enlarged reading materials. She did not receive training in Braille or cane travel. She graduated high school with a 3.0 average.

Rebecca did participate in extra-curricular activities in high school including ROTC, Quiz Bowl, Saber Team, student council, Beta Club, drama club, and Key club. College extra-curricular activities included: several honor societies, college council, Residence Hall Association, Circle K, and the National Federation of the Blind (NFB). Rebecca held leadership positions in many of the organizations in which she participated.

Rebecca attended a transition program for blind students between her junior and senior year of high school. She completed one year of college and decided to return to a blindness training center for a six-month training program.

Rebecca did not work during high school. She did work during college as support staff for her college. She also worked several summers as a counselor to blind youth in summer training programs and directed the youth training program last year.

Rebecca completed a Bachelors degree in Elementary Education with minors in History and Sociology. Her undergraduate GPA was a 3.1. She returned to college to pursue a graduate

degree in Family and Consumer Sciences with a concentration in Family and Child Development.

Roy

Roy is a 22-year-old, white male from an upper class family. He reported experiencing vision loss starting at the age of five due to optic neuritis secondary to hydrocephalus.

Roy's parents both have college degrees. His father worked in sales while his mother worked in the medical field. Roy has an older brother who also attended college.

Roy received special education services through an itinerant teacher. In elementary school, he was given Braille instruction. Itinerant teachers provided support for test taking and alternative formats in middle and high school. He graduated from high school with a 2.8 GPA.

Roy participated in extra-curricular activities in high school including acting in three plays and being the drummer at church and in a local band. In college, Roy has acted in several plays and plans to direct one later this semester. He participates in a campus ministry organization and plans to apply for a leadership role in the organization upon graduation.

Roy participated in a transition program for blind high school students. Part of the program is attaining work experience. He worked at a college radio station. In subsequent summers, he taught cane travel to children and teens attending adjustment to blindness programs.

Roy plans to complete a Bachelors degree in Theater with a concentration in performance next year. His current GPA is 2.9.

Summary of Participant Profiles

Table 1 summarizes the demographics of the participants in this study. Four females and two males were interviewed. All grew up in middle, and upper-middle class households. The majority of the participants were white while one claimed multiple ethnicities. The majority of

participants experienced vision loss within a few months of being born. One participant did not experience vision loss until the age of five. The majority of participants experienced progressive vision loss.

Table 1

Participant Visual Status

Name	Gender	Race	SES	Cause of Visual	
				Loss	Age of Onset
Elizabeth	Female	Two or	Middle	Retinitis	Birth
		More	Class	Pigmentosa	
Dannie	Female	White	Upper	Retinopathy of	Birth
			Middle	Prematurity	
			Class		
Brandon	Male	White	Upper	Retinoblastoma	4 months
			Middle		
			Class		
Tori	Female	White	Upper	Congenital	Birth
			Middle	Glaucoma	
			Class		
Rebecca	Female	White	Middle	Congenital	Birth
			Class	Cataracts	
Roy	Male	White	Upper	Optic Neuritis	5 years
			Middle		
			Class		

Table 2 summarizes the educational experiences of the participants. Participants completed degrees in a variety of fields. Four of the participants had either been working on graduate degrees or had already attained a graduate degree. For some participants, high school and undergraduate GPAs remained relatively stable. Parental education levels ranged from no college to completion of a four-year degree. Most participants had at least one sibling who attended college.

Table 2

Educational Profile

Name	Undergraduate	Graduate Work	High School	Undergraduate
	Field of Study		GPA	GPA
Elizabeth	Business Administration with a minor in Management	None	3.8	3.1
Dannie	English with minor in French	English (in progress)	3.1	2.9
Brandon	Computer Information Systems	Business Administration (Completed)	3.1	3.1
Tori	Women's Studies	Teacher of the Visually Impaired (in progress)	3.9	3.9

Table 2 *Educational Profile(continued)*

Name	Undergraduate	Graduate Work	High School	Undergraduate
	Field of Study		GPA	GPA
Rebecca	Elementary Education with minors in History and Sociology	Family and Consumer Sciences with a concentration in Family and Child Development	3.0	3.1
Roy	Theater with a concentration in Performance	N/A	2.8	2.9

Interviews were conducted with participants to learn about the experiences of successful college students with disabilities. Emerging themes highlighted resiliency in the context of individual, family, school, and community experiences. Risk and resilience are presented through the voices of the participants. Participant's stories are highlighted as the following research sub questions are answered.

- What are individual characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are family/friend characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?
- What are school environmental characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?

- What are risks/adversities experienced by successful college students with visual disabilities?
- To what do successful college students with visual disabilities attribute to their success?

What are individual characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?

Participants identified personal characteristics that they believed facilitated their success in college. They also discussed the preparation and skills that supported their college experience.

Personal Characteristics

Participants described personal characteristics that they believed facilitated their success in college. These included discipline, flexibility, creativity, decisiveness, humor, being outgoing, patience, and confidence. Brandon stated, “You have to be a creative problem solver.”

Dannie, Elizabeth, and Brandon referred to themselves as stubborn or being determined. Stubbornness was used in reference to a drive to accomplish goals when others questioned the participant’s abilities. Brandon believed that vision loss contributed to his having a life-long state of determination and motivation. Rebecca and Elizabeth expressed stubbornness when it came to adjustment to blindness. Both rely on that same stubbornness now to be successful.

Maintaining high expectations and a belief in oneself is also important. Tori explained, “There’s going to be things people tell me I can’t do and I have to believe that I can do them. Cause at the end of the day I have to believe that. Like, no one else can really do that for me. I have friends and family who build me up; but, the truth is I, at the core, I have to believe that I can do that. And, cause there are going to be people who just think you can’t do it. I try to have high expectations for myself.”

Participants' view of disability may be important to success in college and in life. All participants had over-riding positive views of their disability. Rebecca stated, "Well. it went from me not even seeing myself as blind, to now not only seeing myself as blind, but believing that it's respectable and that its not something to be ashamed of." Tori shared this belief.

Several participants viewed blindness as a limitation. Roy commented,

It's not a defect. It's a disability. It's a limitation, but it's not like a defect. We're not broken. A lot of people see blindness as a mere nuisance. And I don't. To me a nuisance is a mosquito bite. And I don't think that blindness is that small. It's something that you can work around. If you accept your limitations, understand your limitations, and do what you can do.

Dannie reflected, "I've never felt like it's really kept me from doing a whole lot." Tori shared,

The NFB (National Federation of the Blind) has always taught me to believe in blindness as a characteristic. I don't always believe that; but, I tell myself that a lot because if you reduce it to a characteristic, it doesn't over shadow your life and you don't think about it so much. You don't let it limit you so much if you try to view it as a characteristic.

Blindness was not separate from participants' existence. Elizabeth believed, "It is who I am. It is not separate from me. It is part of me now." Dannie shared, "I guess I was always encouraged and knew that my existence wasn't qualified by my disability." Tori remembered an important concept that she learned during her adjustment to blindness training. "The amount of success that I have is not directly proportional to the amount of sight that I have."

Rebecca and Elizabeth began to view their vision loss as opportunities. Rebecca reflected,

I guess in life you can choose to see things as a blessing or as a curse. And I guess I've come to see it kind of a blessing because I realize that as a blind person that I have had opportunities that I wouldn't have had as a sighted, or wouldn't have necessarily had as a sighted person. Opportunities to travel--and different leadership opportunities.

Elizabeth shared, "Now I see it like an opportunity more than a disadvantage. I used to think of it as a disadvantage and I hated it."

Participants admitted daily frustrations living with blindness. One participant reported dealing with anger and resentment over a lifetime. Others reported being impatient with themselves, placing hard expectations on themselves, and trying to control circumstances that were out of their control. Brandon commented,

It's put me into a life situation where I know that, whether I like it or not, the reality is that I have to push harder and achieve more than people in my same level to really be able to succeed in life.

Tori shared,

It's certainly annoying. It certainly impacts how I get through school. It does complicate things. But I try not to let that stop me. I realize that it's not going to change, and if I want to do anything with my life I have to do it. You have to deal with it or you don't.

And I'm choosing to deal with it because it's either that or do nothing. I don't want to do nothing. So. And that's just a choice I've had to make. And it doesn't mean it's not hard.

It means that you work through it.

Preparation for College

Four participants reported taking advanced placement or honors courses in high school to prepare to attend college. Dannie shared,

Besides like studying like crazy, I took two advanced placement courses in high school because I was finished with history and English by the time that I got to senior year. I did all the ACT prep stuff . . . and studied books and all that.

All of the participants discussed training that they received from special education teachers to compensate for the sensory deficit of blindness. All but one participant had received some Braille training prior to the completion of high school. All but one participant relied on large print as their reading media prior to attending college. Two participants expressed regret for not having Braille training early enough and believing that their skills were still somewhat lacking. Half of the participants received orientation and mobility training as part of their special education services.

Five of the participants interviewed attended adjustment to blindness training programs while still in high school. Four of the five attended additional adjustment to blindness training following graduation from high school. Tori stated,

That was a big prep for kind of getting out on my own. And I learned better travel skills. I learned a ton about computers because I hadn't really had computers. I got living skills. I hadn't really gotten a lot of living skills like cooking and cleaning.

Several participants discussed how they did not believe that they needed the adjustment to blindness training prior to attending college. Tori and Brandon reported that attendance in an adjustment to blindness training program was required by vocational rehabilitation before sponsorship in college or purchase of assistive technology for college was provided. Tori shared,

I didn't really want to do it at all. I really didn't think I needed it. I did. But I didn't think I needed it. I thought I had good enough skills. Since they told me to do it, I figured, "Ok, if I'm going to do it, I'm going to do it really well. I'm going to go for the best."

Instead of attending the adjustment to blindness training in her state, she researched other training programs and chose to participate in a National Federation of the Blind training program outside of her state. Her request was granted.

Rebecca attended an adjustment to blindness program between her junior and senior year of high school and believed that she was well equipped for college. She had received training under blindfold and reportedly believed in the techniques; however she believed that she saw too well to use the training.

Rebecca admitted,

I spent a long time in denial. And it wasn't until mid-way through my freshmen year in college that I finally . . . You know, I couldn't fake it anymore. I just . . . I couldn't keep up with the reading and it just got to be really hard. . . . I guess I was just afraid to admit that I need help, because I wasn't ready to refer to myself as blind and to accept everything that came with that.

Rebecca suspended her college training following her freshmen year to return to an adjustment to blindness training program.

For Tori and Rebecca, attending adjustment to blindness programs became easier when they attended the programs with friends. "Just knowing that there would be people here that I already knew and that it wouldn't be . . . that I wouldn't have to walk through it completely by myself." Connecting with blind peers and mentors was important for Tori. Special education and rehabilitation professionals did not successfully connect her with blind college students in her state. She made connections through her participation in the National Association of Blind Students (NABS) which is a division of the National Federation of the Blind. Through NABS

she met other blind college students at conventions, interacted on a listserv, and read *The Student Slate* (the organization's publication written for and by blind students).

Brandon and Tori took the opportunity to attend a college class while they were still participating in adjustment to blindness training programs. Both regarded the experience as helpful. Tori stated, "That was good because I had people around me I could ask if I ran into something in the class that I didn't know what to do about. I was surrounded by people at the center, who most of them were college graduates, who could tell me what they had done."

Despite some participants' reasons for attending adjustment to blindness training prior to college, none of the participants deemed the training as non-beneficial. Besides gaining skills, participants grew as individuals. Brandon explained,

The program was mainly about building confidence. It wasn't so much a focus on the skills so much except to show that you don't need your sight to do all the things they were teaching you to do. ... It built my confidence. I had confidence before I went in, but there were a lot of life skills that I learned when I was there. And it built my confidence even more.

Tori and Rebecca cited financial reasons in influencing their decisions to attend particular colleges. Rebecca was concerned with the location. "I didn't want to live at home and go to school. I didn't want to be six hours away from home." The compromise was to attend the university her brother attended a little over an hour away from home. Tori was also concerned about university location and size.

Had I had more confidence I probably would have gone there. I just didn't want to be that far away from my family. That was the biggest thing, but also I just . . . it just seemed so

overwhelming. I was nervous about going to a big university. I kind of thought I would get lost in the crowd.

Attending adjustment to blindness training programs located on or near college campuses had some influence on some participants' decisions to attend particular colleges. Elizabeth reported making her decision based on her interactions with the campus while attending an adjustment to blindness program. "I knew the campus. I felt more comfortable. It made me feel more comfortable." Roy shared, "I just had met people in [the community] and I know the people at the [adjustment to blindness] Center and I figured why not."

All participants reported making their own decisions about their college major. Two mentioned that parents had some aspirations for their majors; however, they did not allow themselves to be influenced by parental aspirations. Elizabeth wished that her parents or a counselor had provided more vocational guidance.

That's almost something I wish they would have. I think before anyone goes to college, they need to honestly sit down and think about what they want to do for the rest of their lives and find a major that goes accordingly.

She urged others to get vocational guidance.

Right now I feel like I wasted four years. I honestly don't know what I am going to do with my degree. So, just make sure to get the right vocational guidance. Make sure that you know when you graduate you know exactly what type of job you want and have an idea of where you want to work and have all of these things in mind.

Skills

Participants discussed several skills they had to develop and possess to be successful in college. Strategies for reading, completing assignments, note-taking, and test-taking were

critical. Mobility and independent living skills were also important to support life on campus. Participants also discussed communication skills needed to request accommodations and advocate for themselves.

Strategies for Reading/Writing/Completing Assignments.

Roy, Tori, and Rebecca reported hiring readers to accomplish reading and writing assignments. Participants identified potential readers by placing ads in the campus newspaper, getting referrals from friends, and hanging flyers on campus bulletin boards. Tori reported, “I used readers a lot. Just human readers. Especially for maths and foreign languages.” Tori explained the advantage to using readers.

Readers are good for skimming. That’s one of the benefits of them. They can take a look at a chapter and pull out the highlighted words or skim a couple of paragraphs and give you the main idea. That’s one thing I like about readers.

She also added, “Sometimes they are just convenient if you’re filling out paperwork or something.”

In contrast, Brandon preferred to read with his residual vision.

I did use readers. When I first started college, I tried readers for the traditional use that blind students use them for--to read textbooks, chapters. To me it was just a lot easier to read it on my own rather than to coordinate with somebody to come over and read something to me. Just get on the CCTV (closed circuit television) and manage it on my own.

Brandon relied on visual reading techniques to optimize his reading.

Most books give you the consolidated definitions, charts, bar graphs, etc. For visual learners, there are a lot of different techniques in there. I would try to pick the ones that would most summarize it and hit the main things.

Elizabeth also read assignments with a closed circuit television system. Prior to college, she was provided with large print textbooks. “I had to get accustomed to using the CCTV which I had never used for long periods of time.” The amount of reading caused Elizabeth’s vision to be blurry at times making it even more difficult to read. “I had to cut back on a lot of the reading. It was a big problem for me to be able to read.” Dannie was also challenged by the volume of reading.

The only thing that I really wish I would have had for my undergrad years would have been some of the reading programs [assistive technology] because it was very, very difficult to keep up with the reading. It made things kind of difficult. Cause, I spent, you know, ten hours on an assignment that maybe should have taken about an hour to read.

Both Brandon and Elizabeth reported making determinations of what to read after talking with professors, attending class lectures, and reviewing course handouts. Elizabeth explained, I can’t even tell you like how many books, that by the time I started school . . . I mean started the class and finished the class . . . were still in plastic, because I wouldn’t even open it. I had to honestly prioritize which books--where I wanted to focus. . . . Like I would feel the class out. If the class were based more on lecture, I wouldn’t even open a book. I wouldn’t even look in the book. I’d just make sure I went to class everyday and paid attention.

Brandon followed the same strategy. “There were some classes where I barely even cracked a textbook open because the teacher gave enough notes and enough information on the side where the book wasn’t even necessary.”

Both Dannie and Rebecca were reading with their glasses and hand-held magnifiers. It was the challenges of reading that brought Rebecca to realize that she needed alternative techniques. When she first began college, she relied on a magnifying glass to read. “I was finishing up the Spring semester and I was trying to read a geography book and I got so frustrated that . . . I gave up, and I think I threw the book across the room. It was bad!” She jokingly reported that to read, “I’ve got to make sure that the light is right and all the planets are aligned correctly.”

None of the participants relied on pre-recorded texts through collections held by organizations such as Recordings for the Blind and Dyslexic®. Participants did not use recorded books as frequently because of the inability to use skimming techniques, the quality of the recording, difficulties in moving between specific pages, and the lack of availability of specific editions of requested texts. Elizabeth was discouraged from using recorded texts.

[A Disability Service staff member] kind of discouraged me from it only because I had never used tapes before. Like books on tape are kind of hard, especially, with me not, I mean, to go from not using tapes at all to doing textbooks.

Some participants believed that recorded books have improved with the use of compact disks and new recording techniques.

Tori and Rebecca also used computers with synthetic speech to read. Rebecca reported, “I use pretty much everything in electronic format and just read it off my computer. Cause I can read a lot faster that way than I can using Braille.” Elizabeth agreed, “Technology was so

important. Everything was so computer based.” Rebecca explained, “I think the best thing they ever invented was the wireless access to the Internet so now all the person has to have is the laptop with JAWS™ and you can pretty much do what you need to do.” Roy regretted his lack of interest in technology when training was offered during his adjustment to blindness training. If I could go back, . . . I would have definitely paid more attention when I was at the Center before I came to college because it has held me at a huge disadvantage not being good with computers.”

Tori and Rebecca discussed using optical character recognition to convert printed text to an electronic format. Tori reported, “For some of my other reading, for just straight texts I would scan. I used Kurzweil [1000]™. And, I’ve certainly scanned books before . . . or scanned handouts.” Tori acquired electronic texts from a service called Bookshare.org where others share documents they have scanned. Tori’s campus disability service also scanned textbooks for her.

Handouts distributed the first day of class posed continued challenges. Tori discussed how professors would distribute the syllabus and other course materials during the first day of class and ask the class if anyone had questions. This caused some frustration as the handouts could not be read until after class was over and questions posed to the professor were then out of context. Tori handled this by sending e-mail to professors if she had questions regarding what she read.

Participants cited other challenges in regards to participation in “visual” classes including math, science, geography, and statistics. Tori discussed the challenges of lab work.

I took two science labs. Both of them I just found good lab partners. That’s pretty much how I did them. There really wasn’t . . . I don’t know of a really good way for blind students to do science labs. Because I never found that I could do a lot of it on my own. So I just made friends in class and got good lab partners and got through it.

Note-Taking Strategies.

Participants reported a variety of strategies for note-taking. Many participants reported taking notes themselves through handwriting (provided they had enough vision), using a portable electronic note-taking system (such as a Braille Note™), or brailleing notes with a slate and stylus or manual brailewriter. Rebecca reported, “I used a Braille Lite to take notes and if I was having issues with that, I would use a slate and stylus.” Tori agreed, “Once in a while I have to use a slate and stylus because sometimes I’m not that good about remembering to have to charge my Braille Note™.” Roy preferred to use a brailewriter instead of an electronic note-taking device for math classes. “In math classes that I have taken, I bring my brailewriter into class which is just kind of loud but I usually ask the teacher’s permission. I’ve taken three math classes and it’s not bothered anybody.”

Dannie and Brandon found assigned note-takers to be helpful in attaining class notes. Note-takers were especially helpful in copying notes from the board or overhead projectors. Dannie commented, “I can keep up with writing my own lecture notes; but, the board stuff--especially for math--I couldn’t do that.” Once Dannie received notes from her note-taker, she sometimes had to get further explanations from professors. “They did a lot of charts and stuff on the board that they drew. I would go to the professor’s office after class and would spend the whole hour--an entire class period basically going over all of the charts because I had a note-taker, but in order to understand the charts I would have to have them explained to me. So basically, I was getting the lecture twice.” Elizabeth did not find note-takers to be effective. “I tried [Note-takers]. I felt better with my own notes. I was afraid that they wouldn’t write something that I would have written.” Elizabeth had the need for a note-taker eliminated in one class because the professor chose to share his lecture notes with her. “He actually would copy

and give me his notes that he lectured from. Because a lot of it was on the board and I couldn't see." Brandon discussed the benefit of study groups where notes were shared and combined among classmates.

Participants had mixed feelings about the usefulness of recording lectures. Elizabeth believed that recording lectures was very helpful. "That was awesome. That really helped me out too." Roy and Brandon did not find recording lectures valuable. Roy stated, "I don't record lectures because I don't want to hear it twice." Professors also have mixed feelings about having lectures recorded. "Some of them were kind of skeptical about the tape-recorder. Some didn't really like that."

Participants offered several words of advice to share regarding note-taking. Roy emphasized the importance of note-taking over relying on memory. "A lot of time I listened without taking notes. Which is kind of a stupid idea, because growing up I thought I had this amazing memory . . . and it turns out I really don't." Brandon shared,

I'd say probably one of the biggest adjustments at first was figuring out a system, and this really had to be customized for each class . . . but, just figuring out a system for taking notes and keeping up with any paper assignments that they gave us.

Participants related multiple note-taking strategies. Brandon shared, "I implemented a variety of tools for note-taking."

Brandon shared his note-taking strategies. "I found that I didn't have to take a whole lot of notes. What I focused on more were jotting down key points on what was important. Not getting into writing every word that the professor was saying." He advised, "Learn how much information you need to put down and just focus on the minimum necessary."

The introduction of online course management tools, such as Blackboard™, changed Brandon's note-taking habits.

They started bringing PowerPoint presentations and online materials a lot more which was like a Godsend to me. That eliminated a lot of note-taking to be done. That was like the best thing that could have happened. So I would just get on there and read the lecture for the day. When you get to class the professor would elaborate on it a lot more than what was actually typed out. You could go to class having a pretty good idea about what was going to be discussed before you even got there. And there were also the PowerPoint presentations just to back things up.

Test Taking Strategies.

Participants reported a variety of ways by which they took tests. Some participants were able to visually read the test with minimal accommodations and were able to remain in the classroom. "For most things I could read just the regular 12-point. For things that had charts and math, they would enlarge it for decimal points and all. The professors would just do that on their own." Other participants preferred to use large print or closed circuit television systems to magnify the test. This would require the student to take the test at a testing center for students with disabilities. Elizabeth explained, "They enlarged the tests. I was able to take my tests there. And like have my extended time like I was used to." A majority of participants had tests read to them orally at times. Oral testing was accomplished through readers hired by the participant, readers hired by disability service offices, department student workers/graduate assistants directed by instructors to read, and professors themselves. Another option was to use computers either in class or at a testing center to read electronic versions of tests.

Several participants reported using different procedures depending on the type of test or a professor's comfort. For multiple choice tests, some preferred having a reader read the test orally and mark the responses. For essay tests, many chose to use a computer with screen-reading and/or screen-magnification software. Several participants reported that they would often discuss test-taking procedures after the first class session and would explain to professors several ways in which they could be accommodated for test taking. Participants generally had positive experiences with professors accepting what students reported as effective test taking methods. Many participants recalled only one or two professors that insisted on specific test taking procedures.

Testing procedures presented their own inherent challenges. Physically writing responses to test questions and/or marking answer sheets were challenges faced by participants. Elizabeth remarked, "Sometimes my handwriting gets bad, so I would just type it." Several participants discussed experiences with Scantron™ answer sheets. Brandon remarked, "I can manage with a Scantron sheet. It's something I really preferred not to have to do. Managing multiple papers under a CCTV, I could do it if I really had to. It does slow things down. I definitely prefer to write just on the test." Dannie echoed the challenge, "Scantrons were an issue because they were so tiny. I would often not be able to line up where I was supposed to be marking it." Participants preferred to write answers directly on a test and have another person, such as a representative from the campus disability service office, transfer their answers to a Scantron™ answer sheet. Dannie stated, "For the multiple choice, I would write on the test and they would fill out the Scantron for me."

Oral testing also presented challenges. Brandon explained,

For some tests, particularly multiple choice tests, you have four really long answers where there is one punctuation or one word that is different. A lot of times I would have to get them to repeat the question a few times. It seemed like they didn't mind doing it. It can be kind of annoying. It is just something you have to learn to deal with.

Tori recalled negative experiences when it came to test-taking.

I wanted to use my own readers on tests and the disability office didn't like that. They wanted me to use their readers for tests and I didn't think that was a good thing; because if you have a brand new reader on a test, you are not only being tested on the material, but you are being tested on your ability to work with a new reader.

Rebecca agreed, "Test day is not the time to train a reader."

Testing through technology was also a challenge and concern. One participant discussed how it is important to consider accommodations available for standardized entrance tests such as the ACT and GRE. The majority of these tests are now offered in computerized versions. Low vision students can use screen magnification software to access these tests; however, those with little to no vision do not have this option. Online courses conducted through a course management system, such as Blackboard™, presented test taking challenges in terms of providing extended time.

Strategies for Communicating with Professors.

All participants reported that they typically spoke with their professor at the end of the first class session. Only Tori reported that she contacted professors before the start of the semester when she needed to know information regarding textbooks so that she could order pre-recorded books from Recordings for the Blind and Dyslexic. All participants reported mostly positive experiences in talking with professors. Typically participants introduced themselves to

the professor and discussed test-taking procedures that had been effective for them in other classes. Brandon shared,

I would have to sit through the first day of class and then once class let out I would talk to him at the end. . . . I'd let them know that I'm legally blind and just give them a general overview of what's been effective for me as far as the two main things--taking notes and taking tests.

Brandon would discuss the style of tests, the possibility of pop quizzes, the availability of electronic notes, and the way that course information would be transferred to students.

Communicating competence was regarded as important in communication with professors. Rebecca explained,

I just didn't feel like there was a need to contact them before the first day. I guess part of that was that I really didn't feel like there was a need, but I didn't want to be like, "Hi, I'm a blind student." and let them have time to think all of these preconceived notions. Like, "Oh, my gosh, I have a blind student. What am I going to do?" I just felt like it was easier for them to see me in person as--as competent.

Tori agreed,

Most of my professors were really approachable. I found that if I was confident, then they were ok with me. And if I sounded like I knew what I was doing...If I went to them unsure and said, "I really don't know how to do this class. I don't know what to do.", they'd get nervous. But if I went up and said, "Here's some suggestions of how I could do this class. What do you like?" they responded a lot better.

Tori reported that she no longer believed it was necessary to communicate with professors on the first day. "The further I got into school the more confident I got and it really

didn't matter. I would just talk to them eventually about testing because that just had to happen.”

Tori also found that corresponding with professors through e-mail throughout the semester was more effective than calling or trying to find them during office hours.

Orientation and Mobility Skills.

Participants independently traveled on campus. Tori discussed the importance of travel skills.

I mean I was really scared when I started college. Even with all of my prep. I was really, really, nervous. I was worried about getting lost at the school. I was always worried. I'm not the best traveler. I've had some good travel training. Even with the best of training, I'm just not that good a traveler.

Vocational rehabilitation hired someone to orient her to the campus. Brandon usually familiarized himself to the campus through exploration. “I learned where a lot of places were by taking different routes every once in a while to and from the dorms. Then I'd just naturally learn where things were.”

Elizabeth did not travel with a cane when she first started college. She later learned the benefits of using her cane.

Right before I graduated I was using it all the time. But going into buildings from outside to inside--it was horrible. Like I would just stand there and wait for my eyes to adjust. I was like “This ain't working anymore.” Get my cane out and I was like, “Move out [of] my way. I'm going to class.”

Tori reported one of her on-campus mobility challenges.

One thing that's kind of hard is college cafeterias. It's really crowded. It's really loud.

And really disorienting. I went through it ahead of time on an off hour. Not during busy

time to kind of orient myself to it--to learn vaguely where things are. But it's hard. I just ask a lot of questions. Some places you went up to a counter and got stuff. But a lot of it was just buffet style so I had to ask people around me. "What's this?" Or, "Where's that?" I memorized where certain things were that I liked to eat. But, a lot of times I just have to ask people around me.

She reported that dining with friends eased the challenge of negotiating the cafeteria.

Transportation off campus can sometimes be an issue. Small college towns sometimes have limited public transportation options. Dannie and Brandon reported using taxis for off campus travel. Brandon discussed that establishing a network of friends may also facilitate transportation.

Definitely get in an organization where you are going to make a lot of friends and get to know a lot of people. If you have a couple of friends to call on to go to Wal-Mart, chances are that somebody else is going to need to go to Wal-Mart, too. So they won't mind taking you along with them. And then not only do you have a ride to Wal-Mart but you have somebody you know that you can hang with and help you shopping. They can help you find things.

What are family/friend characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?

Participants reported parents as being influential in their attending college and gaining independence. Parents were deemed as important as life-long supports. Friends gained importance as more of a support system once in college. Blind peers were viewed as invaluable.

The Influence of Parents on College

The majority of participants reported that early in their educational experiences they recognized their parents' expectations for them to attend college. Dannie stated,

I was always expected both from my grandparents and my parents that I would go to college. They were always just really adamant about grades and coming home directly and getting your work done. Anything less than a 'B' wasn't acceptable.

Parents emphasized the importance of education. Tori reported,

They always said that education was important. They wanted me to get a good job and college was just the way of my doing that. They just saw it as a means to that end. They really always encouraged me to do well in school and to focus on education.

Roy's parents instilled the message, "If you don't go to college, you work."

Several participants reported how their parents did not attend or complete college degrees and wanted more for their children. "They always encouraged both me and my brother to go to college because they wanted us to do better than them. They definitely both saw the importance of education." Tori reported, "Neither of them had been to college. They are really excited that I'm in school and they are really proud of that. That means a lot to them. That they have a daughter that's going further in education."

All participants with siblings reported that parents held the same expectations for them as their non-disabled siblings. Elizabeth reported conflicting expectations from her parents. "She [mother] didn't really expect me to go to college. She expected me to live with her for the rest of my life." This expectation was counter-balanced by her father's expectations of her ability to attend and succeed in college. These conflicting expectations were further complicated by the fact that her parents were divorced and she lived with her mother. Her father's expectations were

still known as he remained active in making decisions about her educational experiences and being a part of her life.

All participants cited their parents as sources of support and encouragement when they felt stressed during their college experience. Dannie reported, "If I got too bogged down . . . I would call them up and say, 'Look, this is stressing me out.' They were always just telling me how good I was doing and they were proud of me and all." Rebecca shared,

Even today, my parents are still my biggest encouragers when I say, "Oh, my gosh, I can't do this." They are just still there pushing me and encouraging me . Saying, "Yes, you can. There's never been anything that you've tried that you haven't been able to do."

The Influence of Parents on Independence

Parental expectations for children to attend college were also accompanied by expectations for their children's independence. Dannie recalled that her mother instilled independence at an early age. "She had taught me how to cook and stuff--always let me help her out with things." Rebecca recalled, "My parents definitely always encouraged me to get out there and do things. Blindness was never an excuse for not doing something."

Parental involvement and advocacy were important to facilitating independence. This was first accomplished by parents educating themselves about how to help their children to be successful adults with visual disabilities. Tori stated,

I guess I consider myself lucky that I had parents who were diligent and who got involved with the organization [NFB] and met other parents and met blind people and really checked out the resources. They didn't know any blind people, you know, before I was born. And for years they didn't know what blind people did. They had to search out what blind people did . . . what I need to know to be a successful adult.

Several participants reported that once their parents were equipped with the knowledge, parents advocated for their children in planning educational services through the IEP process. Roy stated, "They really fought to get me Braille in school, cause in the first grade I was reading large print and it wasn't working. They definitely wanted me to have that and have the cane and have all that stuff." Tori reported that her parents brought in a successful blind adult to participate in the IEP meeting to further advocate for Braille and cane travel training for her.

Dannie and Elizabeth experienced some "over protectiveness" from grandparents or parents. This "over-protection" was always counter-balanced by another parental influence with a contrasting view. Elizabeth recalled,

They always fought especially when it came to me. He pushed for everything. She didn't push for all the stuff. He's the one who wanted me to do the Braille and all of that. She's the one who didn't want that. She did not want me to be different than other kids.

This conflict had an impact on preparations for independence while in elementary and secondary education.

I hated going to IEP meetings because he would be there and she would be there and they are like, "What do you want?" I would side with my birth mom because I was living with her. I had to go home with her. I was scared of her. Are you crazy? I'm not going to disagree with her.

A parent's low expectations can negatively impact independence. "She did everything for me. Everything! When I graduated from high school, she brushed my hair. I didn't do anything for myself. I was still like a kid." Elizabeth overcame this negative influence by moving out of her mother's home upon graduation from high school and surrounding herself with people who

promoted her independence. Elizabeth attributes much of her independence to the support of her stepmother.

She's the one who taught me. When I graduated from high school, I didn't know a lot of stuff. Especially like doing things for myself. She's the one who taught me how to do everything for myself. She's the one pushing my independence.

The Influence of Friends on College

Participants' decisions to attend college were influenced by peers to the extent that they attended high school classes with other students who were preparing to go to college. Tori remarked,

All my close friends were going to college. It was just something we were all going to do. We all took our ACTs together. We took [advanced placement] AP classes together. We all applied to colleges around the same time. It was just something that we were all doing.

Dannie reflected,

Being in honors classes I guess I hung out with the more brainy kids so it was always kind of a competition. Everybody checked their GPA's every 9 weeks. See who was like in the top 10 of the class. What the class rankings were. And who was getting the most scholarships senior year. So it was kind of competitive and everybody knew everybody was going to go to college.

Beyond peer competition, few regarded friends as being an influence on their decision to attend college. The majority of participants had friends going to college but most did not attend the same college as their friends.

In contrast, friends made in college were viewed as influential in acting as a support system during college and beyond. Participants reported making friends through classes, social

organizations, service organizations, former readers, and on-campus jobs. Elizabeth reported, "I had all kinds of people on campus to help me." Dannie explained, "I had a friend in grad school, we both read each others' papers and did that for each other. And help each other in the library looking for stuff, like looking for books and all."

Blind Peers/Mentors

As discussed earlier, making connections with blind peers and mentors were important as students transitioned to college. All but one participant discussed the importance of maintaining those connections throughout their college experience and beyond. Blind peers were regarded as important for having friendships, venting frustrations, and seeking advice for handling situations from a blind perspective. Tori reported, "That's who you get your best answers to questions from. It's from people who've lived it themselves."

Tori connected with blind peers through her participation in a blind consumer organization and an adjustment to blindness training program. She explained,

You meet a lot of people and become friends with other college students and those friends become your major supports. Who else can understand certain things like, "Oh I got really lost finding this class today." or, "Oh, I have a million handouts." or, "Oh my gosh. I'm not finding readers." Nobody could understand that quite like another blind student. It's just the sort of things that you can't quite share with your sighted friends.

Sometimes talking with students who have other disabilities was beneficial, too. Dannie shared the importance of one of her friendships.

I had this one friend who I was the PCA for. She understood because she had people pat her on the head. She was in a wheelchair. So every once in a while we would get together

and say, “This happened to me this week.” Kind of vent with each other. Just kind of get it out.

What are school/environmental characteristics/experiences that have shaped resiliency in successful college students with visual disabilities?

Participants discussed the influence of regular education and special education teachers’ influence on their attendance in college and independence. Other influential members of the school or community included college professors, vocational rehabilitation counselors, and campus disability service staff. Participants discussed their involvement in the community through campus/community organizations and work experience. Combating public attitude and negotiating social interactions were identified as challenges by the majority of participants.

Influence of Teachers

The majority of participants remembered mostly positive experiences and influences from regular education teachers. Dannie recalled, “Some of my teachers wrote in my yearbooks...that I was going to succeed. They knew that I was a good student.” Rebecca remembered, “Most of my teachers were really, really positive influences to me. . . . There are only a couple that babied me or treated me different than the rest of the class. Roy recalled negative influences.

A lot of teachers in elementary school let me get away with a lot of stuff. And so I kind of became a bit of a spoiled little brat. And I became very lazy. A lot of times they just let me run wild and be loud, obnoxious.

Elizabeth, Roy, and Tori were able to identify a regular education teacher that positively influenced them. Elizabeth traced her initial interest in being an education major to two teachers in high school.

They thought I was going to be a teacher. They loved what they were doing. I wanted to be like them. And I think that is what pushed me. I think they influenced me in a more indirect way. I just saw me more doing what they did.

Roy recalled,

In high school was where it improved. There was a lot more expectations. One teacher especially really just stuck out to me because she really reached out to me and just had high expectations for me. She was a speech kind of drama teacher. She really worked with me. She really just had a lot of expectations of me. Treated me like I could do stuff.

Tori remembered,

My English teacher my junior year was also my Quiz bowl coach. She was really encouraging. She really had high expectations for me. She told me that I was good in literature. And she told me I could do well with that. She definitely encouraged me to pursue an education. She would constantly tell me that I did have good academic skills and I really could go far with them.

Dannie and Brandon remembered positive influences and support from their special education teachers for the visually impaired (VI). Brandon remarked,

My VI was definitely a strong influence in that area. She definitely had a high expectation of me. She knew from the beginning, even though I was quite stubborn at times, that I was going to be one of the ones that made it.

Dannie shared, “[My special education teacher] was very supportive. They encouraged me to try the honors courses and to try the mainstream courses and to get out of the resource [room].”

Other participants reported that special education teachers did inform them of blind consumer

organizations and vocational rehabilitation services. Tori's orientation and mobility instructor took her to college campuses her senior year to expose her to travel on a college campus.

A few participants remembered experiences with special education teachers that they did not believe facilitated their transition to college. Brandon informed,

In my IEP transition they originally wanted to put me on a five-year high school plan.

Take five classes a day with one big study hall instead of six classes. I said, "No!" I was graduating in four years just like everybody else, and I did.

Tori discussed,

I was usually trying to convince them of what I needed to do, not the other way around.

They had lower expectations for me. When I told my teacher that I wanted to go to college, then she was supportive.

Tori prepared herself for college by taking advanced placement courses in high school. She recalled her special education teacher's reactions, "They never discouraged me from taking those classes. I had to come up with the idea myself. But they never told me to not take them." She reported being disappointed that her special education teachers did not emphasize Braille and assistive technology training which she believed would have better prepared her for college.

The majority of participants discussed that professors in college served as part of their support system. Roy shared,

Definitely professors and other students encouraging me. Having high expectations of me saying like, "I know you are blind but you can learn a lot of this stuff. I mean there is a lot of stuff that is possible for you." So, that's been really good.

Tori reported, "I had a couple I could talk to. Like after I had them as a professor, I'd go back and ask them questions. Mostly through e-mail." Brandon reflected,

I did have certain professors that were willing to take the time to talk to me about certain projects that I was working on. Just like they would do with anybody. It is really good when you get a good professor that takes their student's education seriously. They are not just there to teach. They want you to learn.

Relationships with professors require effort on the part of the student. Tori explained, "You have to work at those kinds of relationships. If you work at it, you're going to have a better relationship with that professor than if you don't. If you're keeping in touch with them, they are going to respond to you."

Vocational Rehabilitation Services

All participants in this study were clients of their state vocational rehabilitation program. Positive aspects of vocational rehabilitation services reported by participants included sponsorship in transition/adjustment to blindness programs and purchase of assistive technology. Unfortunately half of the participants reported negative experiences with their vocational rehabilitation counselors. Dannie chose not to participate in an adjustment to blindness program and believed as a result was denied other services such as the purchase of assistive technology. Rebecca reported that she was not properly informed of what the agency could provide until she transferred her case to another region in the state and requested a different counselor. Participants reported difficulties with attaining assistive technology and financial support for reader services.

Rebecca reported that her vocational rehabilitation counselor questioned her technology requests. "She was just like, 'You're spending all of this money.' I just wanted to say, 'It's not your money.'" The process for vocational rehabilitation to purchase technology takes time. Rebecca reported,

Even when I did finally get a technology assessment done. It took them six months to get my stuff in. We'd filled out all of the stuff in September and I didn't get it until March. And I had been in school half a semester at this point.

Tori reported that the vocational rehabilitation agency in the states where she attended college expected college students to register with the campus disability service office. She reported difficulty in attaining financial support to hire readers because the vocational rehabilitation agency either believed that it was the responsibility of the campus disability service office or did not wish to duplicate services that may be provided by campus disability service offices. Self-advocacy ultimately resulted in financial support for hiring readers.

Campus Disability Services and Other Non-Academic Concerns

Participants were equally split on their views of the campus disability service office. Elizabeth, Dannie, and Brandon found services provided to be beneficial to them during their college experience. They reported that services included identifying and assigning note-takers and readers, enlarging test-taking materials, providing letters to instructors regarding accommodations, and priority registration. Only one participant reported contacting the campus disability service office prior to attending the university. One participant discussed that the adjustment to blindness training program he attended discouraged him and others from using campus disability services. "At first I was like discouraged from utilizing those services. They were really helpful. They solved a lot of problems."

Tori and Rebecca reported clashes with directors of campus disability service offices. This was mainly due to differences in opinion regarding test-taking and readers. Participants wanted to use their own readers for test-taking and the campus disability service office wanted to provide university hired readers for test-taking. Tori felt so strongly about her desire to use her

own reader for test-taking that she had to speak with the Dean to resolve differences with the disability service director.

Participants did cite campus disability services as part of their support system while attending college. Two participants found some other campus services to be supportive to them as well. One participant utilized a program that offered academic counseling and support for achieving certain grades in classes and planning for the next semester. Another participant found campus counseling services to be supportive in working through personal issues.

Working with campus housing staff was another facet of the college experience. All participants experienced living in a dormitory on campus. Tori and Rebecca reported getting apartments later in their college experience. Brandon and Elizabeth reported paying for private rooms to accommodate the space they needed to set-up their assistive technology. Brandon reported,

I actually had a private room for the whole time I was there. I had my assistive equipment which took up a little more desk space. So I figured since I am going to have this stuff here, I need more free space to have all of that set-up.

Despite a willingness to pay extra for a private room, Elizabeth still experienced challenges with housing staff.

They gave me a lot of hassle a lot of times. They always wanted to put somebody in my room. I'm like where am I going to fit someone with all this stuff. That was my biggest problem. They always wanted to put somebody else in my room.

Campus and Community Organizations

Profiles of participants describe how all participants were involved in extra-curricular activities both in high school and college. Many of the organizations to which participants

belonged were service-based with religious affiliations. Belonging to organizations provided a support system, a way to meet friends, recreational opportunities, and a means for students to help others. Roy related his experience,

They were very accepting, very nice . . . and they loved me through a lot of stuff. The [organization] has been very supportive emotionally for me when I am going through hard times. Like heart break or things like that. Definitely have been there a lot for me.

Brandon shared,

[I] had a lot of friends through there. And they had a house, pretty much like a Christian fraternity. The house was right off of campus and anytime between classes that I needed a place to go hang out, just do homework, talk to people . . . I could just go over there. I could just walk in and walk out. People were just hanging out over there.

Elisabeth commented that her participation in a service organization contributed to her personal growth and compassion for others. It gave her more confidence that she could give back to other people.

Dannie discussed how her affiliation with a local church was a great support to her during her time at college. “It was like my grounding. Like whenever I got home sick. You know, when everything got too much I just went.”

Learning about campus and community activities was a challenge because so much information is posted on fliers. Tori reported that she tried to get information about social activities by calling the campus activities office and having residential assistants e-mail her about announcements. Campus e-mail distribution was also helpful.

Facing social situations on campus posed some challenges. Participants had to decide whether to disclose vision loss to roommates and professors prior to face-to-face meetings.

Sometimes new acquaintances do not realize that blind students will not notice them on campus and therefore will not greet them as they pass them on campus. Other people will greet blind students and leave them wondering who said “Hello.” Tori did not hesitate to get involved.

I had to put myself out there because people aren’t necessarily going to come to you. You have to come to them. If you’re at meetings, and you’re at activities, and you’re at functions, that’s how you are going to meet people and make friends.

She realized, “Sometimes people . . . want to help you but they don’t really want to hang out with you.” Tori shared her strategy, “It’s also hard sometimes when you’re in a new group to get people comfortable with blindness. I always told myself that if I acted comfortable with blindness, they’d be comfortable with blindness. And for the most part that works.”

Work Life

All participants reported having work experience at the college level. All felt confident in their ability to work. Rebecca shared,

I expect and believe that all things being equal I should be able to go out, and because of the training that I have received, go out and compete equally with anybody else applying for the same jobs and opportunities. I see absolutely no reason why I shouldn’t be able to do that. And maybe even in some cases perform certain things better than sighted people.

Elizabeth stressed the importance for college students with visual disabilities to get work experience either through employment in a field related to a student’s major, through an internship experience, or through an on campus job in a non-related field. “It’s not necessarily to make money--it is to get experience.”

For Tori, her job as a note-taker was a means of combating negative public attitude. “It was kind of nice for my teachers to see a disabled student doing work for another disabled

student ‘cause usually we are the recipients of, you know, help. And it’s nice to show my giving to someone else.”

Roy and Rebecca reported experiencing job discrimination when applying for jobs during college. One applied at a restaurant and the other applied with campus housing. Both had been invited to apply; however, there was reluctance when it came to hiring. Rebecca was known to her potential employer as she was quite involved in campus activities and held leadership roles. Despite this, she still experienced discrimination.

I guess I don’t struggle with being blind, but I guess just people’s attitudes and how people perceive me as a blind person. If this could happen with people that know me, what’s it going to be like when I really go out and look for a job Where I’m just walking in and nobody knows me at all. It’s kind of like they imposed this glass ceiling. Like you can go this far but that’s as far as you can go. It doesn’t matter that you are the most qualified.

Many participants were frustrated by difficulties in attaining employment following graduation.

Public Attitude

Participants discussed public attitude as a challenge they faced in college. Rebecca reported,

People don’t see blindness as just a limitation. I feel people see me coming with my cane and automatically they want to deduct like 20 years off of my life, and start talking to me like I am a six year old.

Participants reported that people often spoke to them as if they were less intelligent or could not hear. Several reported that people often touched them without asking in order to provide assistance. These participants had strong feelings against being touched by others.

Participants were surprised by attitudes and expectations held by some professionals that work in the blindness field. Dannie was surprised when her eye doctor seemed surprised that she completed a college degree.

Some people are even amazed that I have been able to accomplish it. I was kind of stunned and confused by that. Well, I can kind of understand that people who don't know how I see, whatever. But this is somebody that works with visually impaired people all of the time and he has a pretty good idea even if he doesn't see things this way. He's got a good idea about what I can and can't see. It just surprised me that he was kind of making a big deal about it. 'Cause I guess I never figured that it was that big of a deal to get through college. I thought that's just what you did.

Tori had a vocational rehabilitation counselor who discouraged her from getting a degree in education.

Someone who works with blind people who was actually saying don't do this because you are blind. That was really discouraging--especially to come from somebody who is in the blindness field. You really shouldn't have to put up with that from someone who should know better. I can expect that from maybe sighted professors I encountered or sighted teachers, but I never met that much resistance as I did from that counselor.

Nobody else ever said that to me but her.

A few participants encountered professors that commented that their work was good for someone who was blind.

Participants combated public attitude through assertiveness and self-advocacy. Dannie reported that she responds to people using manners or verbal responses containing obscure words. Roy reported understanding people feeling intimidated by someone with a disability

because he felt intimidated by people with other types of disabilities. His advice was, “Have patience with other people and understand that not everybody knows other people’s ignorance about blindness. But you have to understand that the majority of people in the world don’t know blind people.”

What are risks/adversities experienced by successful college students with visual disabilities?

Most participants presented “risks” they had to take in order to be successful. All left their homes to live residentially on campus. Most went away without knowing anyone on campus or being familiar with traveling on campus.

Rebecca and Elizabeth took “risks” to increase their independence. Elizabeth recalled, “I had to learn to do a lot of things for myself. I had to break away from my biological mom. I had to not be around her and grow as a person.” Rebecca had to recognize that she needed additional skills to be successful and decide to attend an adjustment to blindness training program.

Roy and Tori took “risks” by talking to people. Roy reported not knowing how to reach out to people on campus.

It’s almost like you have to make yourself be outgoing. You can still be an introverted person but you’ve got to make yourself be outgoing, because the world is not going to come to you.” . . . There have been a lot of times where I’ve had to do things, talk to teachers I didn’t want to have to talk to. Talk to people I didn’t want to have to talk to that ended up being good friends of mine.

Tori had to talk to many professionals and administrators to advocate for herself, communicate her needs, and get the accommodations she needed. She had to speak to the Dean after she had conflicts with disability service staff regarding the use of her own reader for tests.

“I mean, that’s pretty extreme going to the Dean of Students. That’s a little scary.” Tori reported that the Dean was receptive to her request and outlined the conditions and responsibilities that could make her request possible. She reflected, “That was a time I had to take initiative and really do something that was kind of scary to get what I needed done.”

To what do successful college students with visual disabilities attribute to their success?

Participants in this study attributed several factors that they believed led to their success. All participants noted a support system as a factor for success. A support system provided encouragement from others to succeed. Elizabeth stated, “I attribute good family--people encouraging me. Not necessarily being there for you and doing things for you. [They] encouraged me to do things on my own.” Roy, Rebecca, and Tori stressed the importance of blind peers and mentors gained through consumer organizations and participation in adjustment to blindness training programs. “Part of it is parents, but a lot of it is also the NFB and the blind friends and blind role models I have. I’d say that’s really essential for doing well in college and in life.” Rebecca agreed,

My going to the Center and my involvement with the NFB. ‘Cause I know that, had I not found the NFB, I never would have made it to the Center and I definitely wouldn’t be sitting here as a grad student right now. [The Center] gave me the skills, the necessary skills in travel, Braille, the tools to succeed and the confidence and not only that but the support.

Tori and Brandon noted some important skills that they believed helped them be successful. Tori discussed how students need to seek resources when they do not have answers to questions. To seek resources requires a willingness to do so and good communication skills.

You also have to be willing to talk to people even sometimes when it's scary. You have to learn to talk to people. You have to be able to learn how to communicate your needs and present yourself well. And look confident. And look like you know what you are doing. You just have to be a good communicator because that's the only way to get what you need and to get people to believe you can do things if you present yourself well.

Brandon reported what he believed to be a strong asset,

Constantly, constantly, be looking for faster, better, easier ways to accomplish the same task. Instantly when I start doing something, I'm not looking at it as how hard I'm going to have to work to accomplish this task; but, how smart I am working. It's not how much time you spend on doing something. It's the end result that really matters. Having a disability, you have to learn to take mundane tasks and break them apart and find a way. How can I spend less time on doing this 'cause it is not really adding any value to what I am doing? So, it has to become a hard wired skill for you to be successful.

A personal desire to succeed was reported as a factor contributing to success. Elizabeth reported,

Even though I was burnt out on studying, I was ready to learn. I wanted to go to college. I really wanted to go to college. I just wanted to be that person--the one in our family to say I really want to do this. And I did it. You just have to want to do it. And you have to want to do it, and do it for you.

Tori held similar beliefs, "I just have this belief that I want to do things with my life. I wanted to get a degree enough that I made it happen even when it was hard." Dannie shared, "It was always up to me whether I wanted it or not. No one tried to force it on me." Brandon remarked,

Going to college just wasn't even an option. It was one of the necessary tools to set myself up for a successful life. I did recognize that if you are legally blind you definitely and unfortunately have to go above and beyond what sighted people do to . . . you not only have to prove that you have the education and you can do the job that you are going to be hired to do, but you have to prove also that you have the skills as a blind person to compete on the same level as a sighted person does. So, I saw that early on and college was just one of the steps towards doing that.

Underlying personal desire and belief by others, one must have a belief in oneself. Tori explained,

Just don't give up. You have to believe you can do it. Nobody else is going to, the way you need to believe in yourself. Nobody can actually do the day to day getting through college for you. You have to believe that you can do it. You have to actually be willing to do it. And you have to realize that sometimes it is going to be hard.

Advice

Participants were asked to give advice to other people with visual disabilities who are considering attending college. What follows is a compilation of their advice.

- Start preparation early. "Definitely start preparing in high school. Be in as many mainstream courses as possible. Just socialize with other people and get away from being in the sheltered environment of just the resource class."
- Attend adjustment to Blindness Training. "If you know that you are lacking in skills to do just normal household stuff or get around. Go somewhere to learn it." "You need to get training before you go to college. I mean no matter how skilled you think you are. It is

still a good idea to go through a center 'cause I don't think you can ever have too much confidence."

- Contact vocational rehabilitation.
- If you are not ready for a four-year college, attend a community college.
- Balance coursework and fun. Do not let yourself get overwhelmed. "Relax your first semester to get the feel of college."
- Being Responsible. "Students need to keep in mind that they can't ask for equal rights without being willing to take equal responsibility. You can't use blindness as an excuse not to get stuff done. . . . If you are not acting like an equal then why should that professor treat you like an equal?"
- Multiple skills. "Have as many tools and resources available to you as you can possibly have. Be creative and flexible in your methods for managing classes, taking notes, taking tests. Learn to read and figure out based on the professor that you are dealing with how, what method is going to work out for that class."
- Establish a support network. "Reach out to people. Get to know people. Get connections. Get friends." "And if it's not your parents. Find friends or teachers or somebody. There has to be somebody that will encourage you.
- Mobility. "Learn your way around early on. Even if it involves taking a walk randomly and getting yourself lost on campus."
- Blind Peers/ Mentors. "If you don't know how to do something, get somebody that has been through what you've been through and see how they did it."

Summary

By analyzing the experiences, attributions, and advice provided by the participants, risk and protective factors were identified in the context of family, school, and community. Figure 1 summarizes risk and protective factors illustrated in individual characteristics and experiences. Risk factors included: ongoing anger and resentment for being blind, impatience with oneself, inability to cope with a lack of control, and placing hard expectations on oneself. Protective factors included personal qualities, beliefs, and skills. Personal qualities included: discipline, flexibility, creativity, decisiveness, humor, being outgoing, patience, confidence, stubbornness/determination, and willingness to take risks. Participants held high expectations and believed in themselves. They had a personal desire to succeed. Participants held positive views of blindness and described blindness as: respectable, a limitation, a characteristic, or an opportunity. Participants had many skills: braille, assistive technology, independent living, orientation and mobility, reading strategies, note-taking strategies, and test-taking strategies. They were able to effectively communicate wants and needs to others. They also had access to assistive technology. Some had vocational guidance.

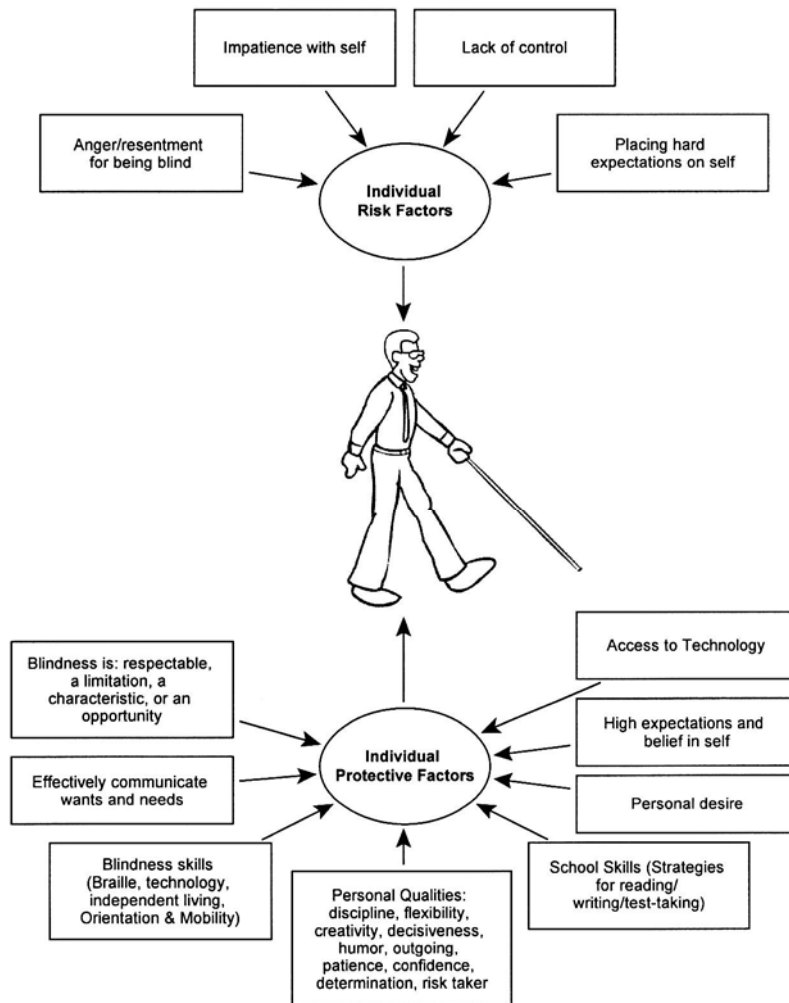


Figure 1. Individual risk and protective factors.

The family posed both risk and protective factors as illustrated in Figure 2. Risk factors included low expectations from parents regarding independence and/or attendance in college as well as over-protectiveness. Parental protective factors included parental expectation for independence and attendance in college, parents serving as advocates for participants in their youth, and continued support from parents while attending college.

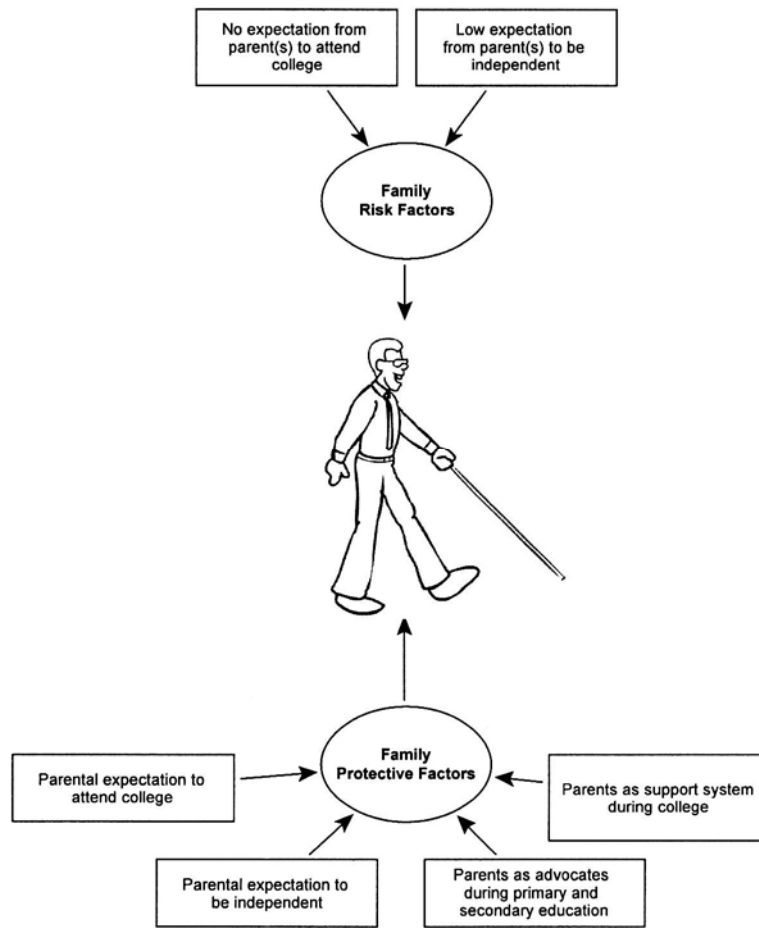


Figure 2. Family risk and protective factors.

Risk and protective factors related to school and peers are presented in Figure 3. Risk factors included low expectations from teachers in primary and secondary educational experiences regarding college attendance and independence. Participants reported a lack of preparation for blindness-specific training such as reading Braille. Once on college campuses, participants lacked awareness of campus activities which limited social interaction with peers. Protective factors included: high expectations and beliefs from primary, secondary, and post-secondary teachers; provision of blindness preparation training/skills during primary and secondary educational experiences; completion of advanced placement courses in high school;

being surrounded by peers preparing for college; participation in campus organizations; friends as support while in college; connection with blind peers; and support of campus services such as disability services, academic counseling, and personal counseling.

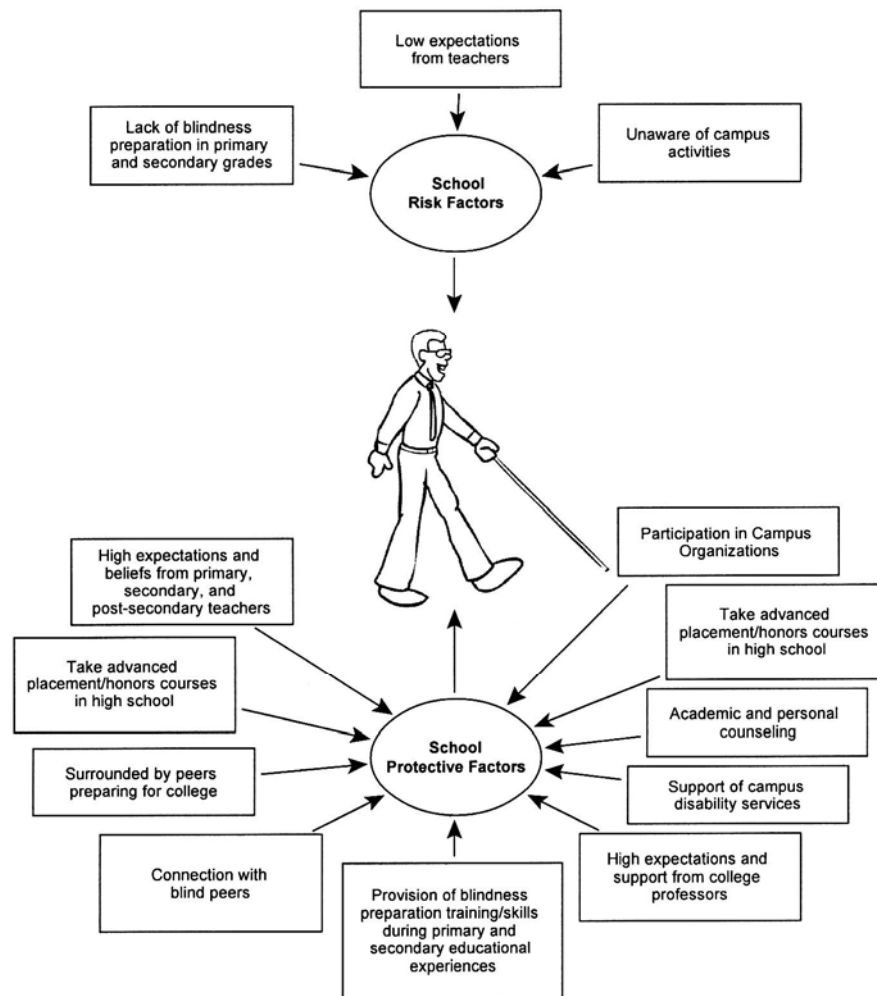


Figure 3. School risk and protective factors.

The community risk and protective factors identified are outlined in Figure 4. Vocational rehabilitation policies and procedures for purchase of books and assistive technology caused challenges for participants while in college. Participants also were limited in social interactions because of a lack of knowledge of community activities. Challenges to everyday life and attainment of employment are still hampered by public attitude. All of these challenges put

participants at risk during their college career and educational and vocational experiences. Several of the challenges posed had counter-balancing protective factors. Vocational rehabilitation was very beneficial in sponsoring participants through adjustment to blindness programs and purchasing assistive technology and other college-related products and services. Participating in community organizations and having work experience brought social opportunities, support, and increased confidence. Being part of a church or the “blind” community were also sources of support.

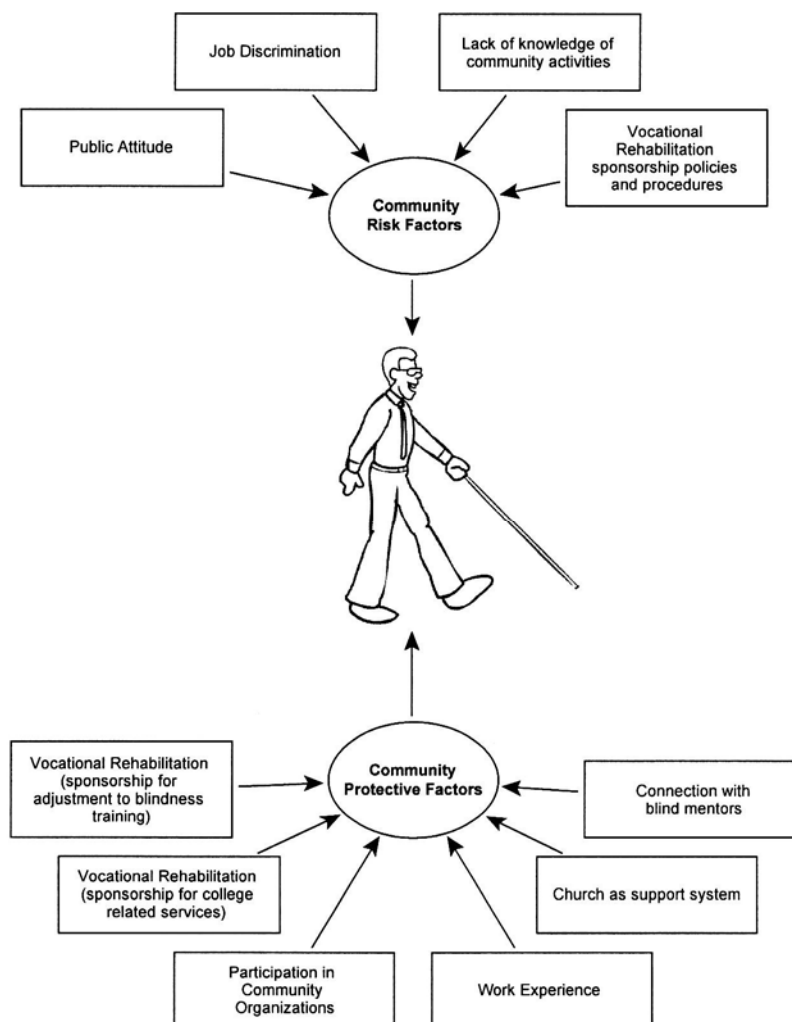


Figure 4. Community risk and protective factors.

Participants provided rich data regarding their college and life experiences. Many of their experiences support the literature regarding successful college students with disabilities. For these participants, protective factors outweighed the risks. They were also able to overcome risk factors by taking risks and moving toward the protective factors. These successful college students with visual disabilities have demonstrated resiliency.

CHAPTER FIVE

DISCUSSION

Chapter Five includes a summary and discussion of the findings in this study. Results of this study are discussed in light of prior research. Limitations of the study are noted. Implications for rehabilitation counselors, school counselors, special education teachers, and the counseling profession are provided. Recommendations for future research are offered.

Purpose of Study

The purpose of this study was to understand the experiences of successful college students with visual disabilities. Risk and resiliency were used as a conceptual framework for understanding how people can have positive outcomes in spite of adversity. Individual, family, school, and community influences were explored. In-depth interviews were conducted with six participants who have vision impairments and were nearing the completion or had recently completed a college degree. Data were analyzed for common themes and meanings using a phenomenological method advanced by Moustakas (1994). Results can help counselors and teachers identify interventions and to move students with visual disabilities toward resiliency and minimize the impact of risk factors that impede success.

Summary of Results

By analyzing the experiences, attributions, and advice provided by the six participants, risk and protective factors were identified in the context of family, school, and community. Factors associated with individual characteristics and experiences that put individuals at risk included: ongoing anger and resentment for being blind, impatience with oneself, an inability to cope with a lack of control, and placing hard expectations on oneself. Factors related to individual characteristics/experiences that served to protect individuals included personal

qualities, beliefs, and skills. Personal qualities included: discipline, flexibility, creativity, decisiveness, humor, being outgoing, patience, confidence, stubbornness/determination, and a willingness to take risks. Participants held high expectations and believed in themselves and had a personal desire to succeed. Participants held positive views of blindness and described blindness as: respectable, a limitation, a characteristic, or an opportunity. Participants possessed many skills: braille, assistive technology, independent living, orientation and mobility, reading strategies, note-taking strategies, and test-taking strategies. These participants were able to effectively communicate wants and needs to others. They also had access to assistive technology. Some had vocational guidance.

The family posed both risk and protective factors. Risk factors related to one's family included low expectations from parents regarding independence and/or attendance in college as well as over-protectiveness. Family protective factors included parental expectation for independence and attendance in college, parents serving as advocates for participants in their youth, and continued support from parents while attending college.

Experiences with school and peers also produced both risk and protective factors. Low expectations from teachers in primary and secondary educational experiences regarding college attendance and independence were a threat to success for participants in this study. Participants reported a lack of preparation for blindness-specific training such as reading Braille. Once on college campuses, participants indicated they lacked awareness of campus activities which limited social interaction with peers. High expectations/beliefs from primary, secondary, and post-secondary teachers and the provision of blindness preparation training/skills during primary and secondary educational experiences were protective factors that promoted resiliency and success for participants in this study. The completion of advanced placement courses in high

school prepared students for the demands of college. Being surrounded by peers preparing for college, participation in campus organizations, friends as support while in college, and connection with blind peers promoted resiliency for participants. Campus services such as disability services, academic counseling, and personal counseling provided additional support.

The community also produced risk and protective factors. Vocational rehabilitation policies and procedures for purchase of books and assistive technology caused challenges for participants while in college. Participants also were limited in social interactions because of a lack of knowledge of community activities. Challenges to everyday life and attainment of employment are still hampered by public attitude. All of these challenges put participants at risk during their college career and educational and vocational experiences. Several of the challenges posed had counter-balancing protective factors. Vocational rehabilitation was very beneficial in sponsoring participants through adjustment to blindness programs and purchasing assistive technology and other college-related products and services. Participating in community organizations and having work experience brought social opportunities, support, and increased confidence. Being part of a church or the “blind” community were also sources of support.

Theoretical Implications

The six participants provided rich data regarding their college and life experiences. Many of their experiences support the literature regarding successful college students with disabilities. As expected for the participants selected for this study, protective factors outweighed the risks. They were also able to overcome risk factors by taking risks and moving toward the protective factors. These successful college students with visual disabilities have demonstrated resiliency.

Individual Characteristics/Experiences

Several researchers have looked at self-concept as a predictor of success in college. Martinez and Sewell (1996) conducted a quantitative study with 19 blind/visually impaired college students and 19 sighted peers. No statistical differences were found between age, IQ, and GPA for the two groups and were therefore assumed to be functioning at the same level of competence. The authors hypothesized that the blind/visually impaired students would hold a more negative self-concept; however, this was not substantiated. They concluded that competence was a stronger influence on self-concept than an individual's perception of being different by peers. These findings were supported by my study. Participants in my study made many references to being competent and being perceived as competent by others.

Emener and Marion-Landais (1995) conducted a retrospective study with blind and visually impaired vocational rehabilitation clients who had attended postsecondary education. They found that the 41 participants that responded to the mailed survey were aware of their academic preparedness, academic abilities, competence, and confidence. Respondents reported being well prepared academically entering college and being confident about their ability to succeed. My study was also a retrospective study that asked blind and visually impaired individuals who had recently graduated from college or were nearing the completion of college to reflect on experiences prior to and during college. Like Emener and Marion-Landais (1995), participants in my study were able to identify their academic preparedness for college, self-confidence, and skills underlying their competence.

Field et al. (2003) reported that students with disabilities who possess self-determination are more successful in college. Self-determination referred to the skills, knowledge and beliefs that allow a person to behave in a goal-directed, self-regulated, and autonomous way. Self-

awareness of strengths and limitations as well as self-confidence allows one to take control of one's life and be more successful as an adult (Field et al.). My study was similar to the study related by Field et al. in that in-depth interviews were conducted with a small number of students who had a specific disability. Like Field et al., I found that participants in my study demonstrated self-determination and acquired the skills they needed to be competent in college and in life. Participants displayed confidence in themselves and their abilities.

Another approach has been to examine the impact of student perceptions of external events and the control or meaning attributed to external influences. Roy and Mackay examined self-perception and locus of control of 16 college students with visual impairments who were regarded as having successfully transitioned from high school to college. They found that the group possessed high external locus of control. Like Roy and Mackay (2002), participants in my study generally had positive views of blindness. They were realistic about their strengths and limitations. Participants believed in themselves and their abilities. Although locus of control was not directly measured in my study, participants seemed to possess a stronger internal locus of control based on their being able to make decisions independent of influence from family, friends, and teachers. Participants did rely on parents, teachers, and friends for support but did not report making major decisions based on their influences. They were very aware of public attitude and its potential negative impact on educational and employment outcomes. Gardynik and McDonald (2005) suggested that protective factors for students with learning disabilities included a sense of control over their lives and an internal locus of control. Results of my study would suggest that an internal locus of control is also a protective factor for individuals with visual impairments and that positive views of blindness, self-confidence, and competence served to promote an internal locus of control.

Motivation, perseverance, and determination have been found to be part of the profile for successful college students with disabilities (Gardynik & McDonald, 2005; Greenbaum et al., 1995; Skinner & Lindstrom, 2003). These findings were corroborated by the findings in my study. Participants in my study reported being motivated to succeed in college and had determination. Hall et al. (2002) studied motivational and attitudinal factors in college students with and without learning disabilities. They found that college students with learning disabilities were goal directed and showed problem-solving initiative. Participants in my study reported the need to be decisive and the ability to problem-solve. Researchers have also suggested that successful college students with disabilities take responsibility for their learning (Gardynik & McDonald, 2005; Nelson, 1998). Participants in my study took responsibility for attaining the necessary skills needed for success in college.

McBroom (1997) conducted structured interviews to examine skills, knowledge, and preparation of 102 successful college juniors, college seniors, and college graduates with vision impairments. Respondents identified positive behaviors that led to their success in college and they shared advice for future students. Similarly, my study used the same participant criteria as McBroom. Many of McBroom's findings are supported by the results of my study. Academic preparedness was viewed as important to college success by participants (McBroom). Participants in my study supported this recommendation. They reported taking advanced placement and honors courses during high school and advised that potential college students with visual disabilities do the same.

Students with disabilities who receive some preview of the college experience manage their freshmen year with fewer adjustment problems (HEATH Resource Center, 2006). Such programs assist students in preparing for college and enhancing their college experience.

Monahan et al. (1978) conducted a 10-year longitudinal study of the progress of blind and visually impaired college students. They discussed that pre-college programs may reduce a student's anxiety about attending college, transition students from the regimentation of high school to the non-regimentation of the college environment, and provide social peer interaction. Pre-college programs may allow students to become familiar with the campus, take increasing responsibility for themselves, and address their independent living, technology, and social needs prior to the addition of academic pressures. Addressing some of these life changes prior to beginning academic work may reduce the possibility of students being overwhelmed and allow focus on academic success. Participants in McBroom's study (1997) advised that transportation and orientation and mobility skills should be practiced and resolved prior to starting college. Monahan et al. (1978) recommended that blind college students participate in pre-college orientation programs and mobility training prior to entering college. These recommendations are supported by my study. Participants also advised that people with visual disabilities considering college training should participate in adjustment to blindness programs to develop mobility, Braille, assistive technology, and independent living skills. Adjustment to blindness programs provided a preview of college life by connecting individuals with college campuses and supporting individuals while enrolled in college courses. Participants also reported the added benefit of gaining confidence prior to entering college.

Successful blind college students recommended that blind high school students planning to attend college learn and use various reading media/assistive technology (McBroom, 1997). Nelson (1998) presented two case studies about college students with learning disabilities and reported that successful college students have a variety of study skills. These findings and recommendations are also supported by my study. Participants in my study reported having a

variety of methods by which they could read, write, take notes, and take tests. Assistive technology skills were viewed valuable by all participants.

McBroom (1997) reported that textbooks should be identified and ordered early so alternative formats (large print, audio recording, or braille) can be located or produced. This recommendation was not supported by the findings in my study. Participants in my study largely relied on readers and their own residual vision to read. Therefore, few were concerned about course materials prior to the first day of class. One participant with residual vision did attempt to purchase textbooks before the semester began to “get ahead” on reading prior to the start of the semester. The bureaucracy of having vocational rehabilitation as a third party payer for textbooks quickly ended the practice of purchasing texts prior to the start of class. Those students relying on audio tape or optical character recognition/scanning made occasional attempts to identify texts ahead of time. Participants in my study relied on residual vision or live readers. McBroom’s study surveyed a greater number of college students. McBroom’s sample may have included more individuals with little to no vision who might rely more on scanned, digital, or audio reading materials.

Participants in McBroom’s study (1997) advised that appropriate housing should be located to meet an individual’s travel needs and allow space for blindness-related accommodations such as computer equipment and/or a service animal. Participants in my study lived either on or nearby campus. Participants did discuss the need for additional space to accommodate their assistive technology.

According to McBroom (1997), one’s choice of college should be based on evaluation of academic programs, disabled student support offices, transportation facilities, campus layouts, and program size. In contrast, participants in my study based their choice of college/university on

financial matters, familiarity with the campus/community, quality of education for the desired major/field, and distance from parents.

Discrepancies in the service delivery systems may impact the successful transition of students with disabilities from high school to college. Skinner and Lindstrom (2003) discussed differences in student responsibilities and service delivery systems for students with disabilities in high school and college. In high school, teachers, counselors, and parents bear the larger responsibility for arranging accommodations and advocating for students. Students with disabilities may not be able to explain their disability to a teacher, know their legal rights, be able to request appropriate accommodations, or to acquire appropriate resources to attend class. Several researchers found that self-advocacy skills and the ability to communicate the impact of disability were factors that led to educational success for college students with disabilities (Graham-Smith et al., 2002; McBroom, 1997; Skinner & Lindstrom). Similarly, participants in my study reported experiences in which they had to advocate for themselves and had to explain to professors the impact of their disabilities on academic performance.

The Influence of Family and Friends

The research on the success of college students with visual impairments make little to no references regarding the influence of parents (Beaty, 1994; Martinez & Sewell, 1996; McBroom, 1997; Martinez & Sewell, 2000a; Martinez & Sewell, 2000b; Monahan et al., 1978; Roy & Mackay, 2002). Several researchers have examined the influence of parents on the success of students with learning disabilities (Graham-Smith et al., 2002; Greenbaum et al., 1995; Lichtenstein, 1993; Morningstar et al., 1995). Greenbaum et al. conducted telephone interviews with 49 college graduates with learning disabilities about their educational and social experiences. They found that financial and emotional support were factors contributing to

educational success for students with learning disabilities. This finding is supported in my study as participants pointed to parents for life-long emotional support.

Morningstar et al. (1995) used qualitative research methods to study the importance of family involvement on transition from high school to adult life for students with learning disabilities. The researchers conducted four focus groups that examined participant perspectives regarding the influence of their families on the creation of a vision for their future, the transition planning process, and the development of self-determination. They found that students with learning disabilities reported little to no involvement of themselves or their parents in developing educational plans. In contrast, participants in my study reported parents acting as advocates during their primary and secondary educational experiences. Morningstar et al. also found that both immediate and extended families were the predominant influence on career and lifestyle options for students with learning disabilities. This finding was not supported as participants in my study appeared to make college and career decisions independent from their parents.

Graham-Smith et al. (2002) studied student and parent involvement in the transition process for students with learning disabilities. They found that parents of students with learning disabilities were still involved at the college level in choosing classes and activities for their children with learning disabilities. This finding was not supported in my study as participants did not relate any involvement of parents in choosing their classes or choosing their activities.

Gladieux and Swail (2000) reported that success in college is influenced by family and cultural attitudes. Participants in my study reported that parents held high expectations for their success in college and their independence. In contrast, literature regarding parental involvement for students with learning disabilities identified several factors that contribute to dependence and poor self-esteem. Successful college students with visual disabilities may be more resilient

because of high expectations from parents, parents serving as advocates during primary and secondary education, parents fostering independence and self-advocacy skills in their children, and parents serving as life-long emotional support.

The influence of friends and social supports were discussed in literature regarding success in college for students with learning disabilities. Greenbaum et al. (1995) identified the support of friends and significant others as a factor contributing to success in college. Field et al., (1998) also found that self-determination was influenced by social support networks. Monahan et al. (1978) recommended that people with visual disabilities planning to attend college have social interaction and peer counseling with other students with and without visual disabilities. McBroom (1997) reported that successful blind and visually impaired college students believed that blind peers were a valuable source of information for resolving problems. For participants in my study, friends had little influence on participants' decisions to attend college; however, friends gained importance as a support system once in college. For participants in my study, blind peers were especially viewed as invaluable in terms of support throughout college. Thus, the findings regarding the importance of blind peers by Monahan et al. and McBroom are supported by my study.

The Influence of School/Environment

Participants in my study reported having to initiate contact with potential friends and had to develop social networks through participation in social and service organizations. McBroom (1997) noted that participation in extra-curricular activities was part of the profile for successful college students with vision disabilities. My study supports this characteristic as all participants were involved in campus and community organizations.

Several researchers noted that successful college students with visual disabilities had work experience prior to entering college (McBroom, 1997; Monahan et al., 1978). This was also a finding in my study as participants all had worked either prior to entering college or during college. Very few studies discussed the impact of public attitude on success in college, social interactions, and opportunities to work. Greenbaum et al. (1995) discussed that discrimination was a barrier to success for college students with learning disabilities. Similarly, discrimination was a recurrent theme for the participants in my study. Participants discussed how public attitude had impacted their experiences in college and their job opportunities. Participants combated negative effects of discrimination with self-confidence and competence.

Participants in McBroom's study (1997) encouraged students to contact and establish working relationships with service delivery offices such as vocational rehabilitation and the campus disability service office. Participants in a study by Emener and Marion-Landais (1995) believed that their college experience would have been enhanced by increased involvement with their vocational rehabilitation counselors. Field et al. (1998) took the position that college disability support personnel should foster student self-determination in students with disabilities, the campus environment, and in faculty teaching styles. Recommendations for the development of relationships with service providers were corroborated to some degree by my study.

Participants had mixed feelings about service providers through vocational rehabilitation and campus disability service offices. All participants received vocational rehabilitation services; however, some were disappointed in the services received and relationships held with vocational rehabilitation counselors. Most participants had received services from the campus disability service office. Again, some participants were disappointed with services provided. Ironically, some participants were even discouraged from using campus disability service offices by other rehabilitation professionals.

Several authors have suggested interventions that teachers or counselors can do to promote the success of students with disabilities (e. g., Arman, 2002; Gardynik & McDonald, 2005; Skinner & Lindstrom, 2003). Participants in my study had both positive and negative experiences regarding their involvement with teachers and counselors. Ironically, professionals that entered the field presumably to help people did not always provide the skills or support thought by participants to promote success.

Limitations

Qualitative studies are based largely on data collected through in-depth interviews. Interviewers ask participants to share their own observations on the phenomenon under study (Weiss, 1994). Limitations to interview research include researcher bias and an interviewee's wish to be socially desirable (Vaughan, Schumm, & Sinagub, 1996).

Advantages of using qualitative research methods include the ability to gather rich, thick data and offer suggestions for future quantitative research. Disadvantages can include: the length of time needed to conduct a qualitative study, threats to validity, and generalizability (Creswell, 1998). When gathering data and seeking understanding, it is important to know if the study is

believable, accurate, and right. The accuracy and believability of a study can be tested through methods of verification and use of standards of quality.

Validity is the correctness or credibility of a description, conclusion, explanation, or interpretation. In research design, validity should include the strategies that will be used to identify and rule out validity threats (such as triangulating among different data sources, writing with detailed and thick description, and taking the written narrative back to participants through member checks). Threats to validity in qualitative studies include researcher bias (subjectivity) and the effect of the researcher on the individuals studied (reactivity) (Maxwell, 2004).

Qualitative studies have “face generalizability” in that there is usually no reason to believe that the results cannot be generalized beyond the studied setting (Maxwell, 2004). Generalizability for qualitative studies relies more on the development of a theory that can be applied beyond the studied setting. Other factors that increase the credibility of a study’s generalizability include respondents’ own assessments of generalizability, the similarity of dynamics and constraints to other situations, the presumed depth or universality of the phenomenon studied, and corroboration from other studies.

My study had certain limitations. Volunteers who participated for this study did not represent as much diversity as could have been represented. Participants were similar in regards to ethnicity, socioeconomic status, and visual status. Literature does corroborate many of the themes that emerged from this study. Broadening the participant base in terms of diversity may further expand the profile of successful blind college students. Another limitation was that participants were asked to look retrospectively at experiences from childhood. Accuracy of data collected may be limited because data were based on memory which can fade over time.

Participants sometimes commented that it was difficult for them to remember specific experiences from elementary and high school.

Self-monitoring assisted me in not imposing my own views or experiences. Some of my experiences and strategies for success were different from those reported by participants. My own experiences and strategies are not reflected in the results of this study. Transcribing and coding data help further separate participant response from researcher bias. Individuals who are blind may ascribe to various consumer organizations with differing philosophies. Two of the leading blind consumer organizations are the National Federation of the Blind and the American Council of the Blind. Several of the participants in this study reported affiliation with the National Federation of the Blind. Some participants in this study did not ascribe to philosophies of either organization. It should be noted that the NFB has a large presence in the region in which this study was conducted.

Several steps were taken in this study to increase validity. Triangulation, thick data, and member checks strengthened the validity of this study. Triangulation is a method of collecting information from a variety of individuals and settings through a variety of methods (Maxwell, 2004). This process involves corroborating evidence from different sources to further understand a theme or perspective (Creswell, 1998). It reduces the risk of chance associations and systematic bias and improves generality (Maxwell). Triangulation showed how participants had similar beliefs and experiences. The study appears to have generalizability as literature corroborated some of the results.

Rich, thick data are detailed and varied enough that they provide a full and revealing picture of what is going on (Maxwell, 2004). Description of participants and settings allow the reader to determine the transferability of a study's conclusions (Creswell, 1998). Rich data

requires that interviews be taped and transcribed verbatim and observations be written descriptively (Maxwell). Rich data counters issues with respondent duplicity and observer bias. In my study, data were presented as thick description so that readers can draw their own conclusions.

Respondent validation or member checks are a systematic way of requesting feedback from participants about data and conclusions (Maxwell, 2004). Participants are asked to comment on the credibility of the findings and interpretations of the study. Member checks are the most important way to establish credibility (Creswell, 1998) and the most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do (Maxwell, 2004). Member checks also help identify researcher bias and clarify understanding what was observed. Participants, therefore, were asked to review narratives developed from their interviews to alleviate any misunderstanding.

Practical Implications

Anzul et al. (2001) promoted the use of qualitative research methods to study people with disabilities. They discussed how qualitative research is very relevant for special educators who wish to move beyond the deficit perspective. Qualitative research can illuminate a student's total personality, talents, interests, coping strategies, and ways they function in natural settings. The authors discussed how using qualitative research methods (case studies) allowed them to discover findings beyond the original focus of their research. The authors advocated that qualitative research has the potential to increase teacher effectiveness and the success of students with disabilities.

Research studies have made many recommendations about how professionals and systems can increase student success. Both teachers and counselors should use preventative

interventions to foster resiliency in students they serve (Arman, 2002; Gardynik & McDonald, 2005). According to Sandler (2001), successful interventions provide the level of resources to match a person's needs and are implemented at multiple levels (individual, family, school, and community). Interventions promote self-efficacy, support, and self-worth for the prevention of future adversities. Sandler reminded helping professionals to recognize that people experiencing adversity choose if they want help through interventions and resources. Individuals are free to choose whether they wish to be helped. They may or may not recognize the impact of adverse conditions or the benefits that professionals may have to offer. People who experience dramatic changes (such as accident/injury) are more likely to request assistance than those with chronic adverse conditions (such as living with a disability). The goal of successful interventions is to help people assess their needs, believe in their abilities, and provide access to needed resources. Practical suggestions emerging from my findings for promoting success in college students with disabilities are listed below.

- Counselors and teachers can work with individuals with disabilities and their families to promote a positive view of disability. This may be accomplished through connecting individuals with disabilities with positive role models with disabilities and consumer organizations.
- Several authors promoted the development of self-advocacy skills (e. g., Benz et al., 2004; Greenbaum et al., 1995; Skinner & Lindstrom, 2003). Counselors and teachers can foster self-advocacy skills through leadership training. This training should include knowledge of legal rights, understanding one's own disability, assertiveness skills, and effective communication skills. This training should be available to both high school and college students with disabilities.

- Teachers and counselors should facilitate the development of academic and life skills (Benz et al., 2004). Parents and students with disabilities should be encouraged to participate in the planning and decision-making process when such goals are set. Not all goals can be accomplished within a school system; therefore, counselors and teachers need to connect students with rehabilitation agencies or other community partners to assist students in acquiring additional skills. Students with disabilities should be encouraged to attend adjustment to disability programs to enhance life skills.
- Counselors and teachers should facilitate paid or volunteer work experiences in the community starting in high school (Benz et al.).
- High school students with disabilities may benefit from assistance in making career and college decisions (Benz et al., 2004; Greenbaum et al., 1995; Skinner & Lindstrom, 2003). Teachers and counselors can provide vocational guidance and facilitate a network of support through vocational rehabilitation counselors, campus disability service personnel, and potential employers.
- Counseling and education professionals can educate other professionals and the public about working with people with disabilities through disability awareness training. Training should include information about the law, communication tips, and suggestions for accommodations in the school or work environment. Educating campus faculty and administrators was supported by participants in the study by Greenbaum et al. (1995).
- Relationships with peers with disabilities were viewed as valuable by participants in my study. Counseling professionals can facilitate the development of a peer organization for students with disabilities on college campuses.

- Teachers and counselors should promote social interaction throughout a student's educational life. Students with disabilities should be encouraged to participate in school and community organizations and events.
- Academic and career counseling may be beneficial to some students with disabilities not experiencing success in college (Arman, 2002; Gardynik & McDonald, 2005; Nelson, 1998)

Implications for Counselor Education Training Programs

As noted above, participants in my study had both positive and negative experiences regarding their involvement with teachers and counselors. Ironically, professionals that entered the field presumably to help people did not always provide the skills or support thought by participants to promote success. Practical implications emerging from this study suggest that counselors need to promote a positive view of disability and facilitate academic, life, and self-advocacy skills in their clients with disabilities. The ability to promote a positive view of disability and the acquisition of skills to work with clients with disabilities should be addressed throughout a counselor's professional training. Suggestions for preparing counselors to work with clients with disabilities and infusing disability awareness into the counseling curriculum are offered below.

Increasing attention has been given to multicultural issues in counseling. The multicultural counseling competencies outline the knowledge, skills, professional awareness and personal awareness counselors need to effectively work with clients of diverse backgrounds (Sue, Arredondo, & McDavis, 1992). Ivey and Ivey (1997) suggested that the multicultural competencies have been focused primarily on racial/ethnic issues and need to be expanded to include women's issues, gay/lesbian concerns, disability issues, and other key multicultural

concerns. Over 49 million people in the United States have a disability. This represents 19% of the population or approximately one in five Americans (U.S. Census Bureau, 2000). Disability is the one minority group that people can join at any point in life. Based on these statistics, it is likely that a counselor will encounter clients with disabilities or clients who have family members with disabilities. To be effective with these clients, it is important for counselors-in-training to examine their own assumptions and biases regarding disability and how these assumptions impact the counseling process.

The American Counseling Association (ACA) Code of Ethics calls for counselor educators to infuse multicultural issues/diversity (including disability) into the counseling curriculum (American Counseling Association, 2005). This can be accomplished through the presence of a diverse faculty, a diverse student population, and direct and indirect instruction in the counseling curriculum. The use of case examples, role-plays, discussion questions, and other classroom activities that represent various cultural perspectives are recommended. It is therefore a counselor educator's ethical responsibility to include disability as a multicultural counseling concern in the curriculum.

Counselors use the ACA Code of Ethics to guide professional behaviors. The Preamble states that members are aware of diversity and support the worth, dignity, potential, and uniqueness of people within social and cultural contexts through a cross-cultural approach. Counselors do not knowingly and willingly discriminate against clients on the basis of disability. The professionals are further called to advocate for their clients at individual, group, institutional, and societal levels. Counselors attempt to understand cultural backgrounds of clients and examine their own cultural identities and its potential impact on the counseling process (American Counseling Association, 2005).

A course in counseling techniques lays the foundation of the core beliefs about counseling. Principles of working with clients of diverse cultures can be subtly introduced as basic interview skills are being learned. Appropriate interaction, communication, language, and accommodation can be practiced through case vignettes and role-plays in counseling technique classes. Role-plays portraying a client with a disability can help students recognize choices they make about interventions and techniques that might be influenced by the presence of a disability.

Group members participating in group counseling can be a reflection of society. Society shapes attitudes and beliefs about self and others. A group counseling course may offer opportunities to explore societal attitudes. The presence or simulation of a student with a disability as a group member may facilitate the exploration of societal attitudes toward people with disabilities. Attitudes can be identified and processed with group members.

Societal attitudes shape the assumptions and beliefs that helping professionals hold about people with disabilities. People with disabilities face many barriers on a daily basis with the most difficult barrier being that of attitudes held by others (President's Committee on Employment of People with Disabilities, 1999). Attitudes can stem from fear, misunderstanding, hate, or ignorance. One attitude is that people with disabilities are seen as inferior or "second class citizens" because of a physical or mental impairment. Another attitude is to feel sorry for or pity for a person with a disability. Some believe that when a person is impaired in one area that this impairment "spreads" to other areas of that person's functioning. Others, through ignorance, dismiss the abilities of a person with a disability and do not give them an opportunity to highlight their abilities. Still others measure people with disabilities against different standards and provide "hero worship" to a person with a disability accomplishing an everyday task, hold positive and negative stereotypical ideas, or feel that people with disabilities are given unfair

advantages. Still others deny the fact that some people even have disabilities because their disability is "hidden" in nature. Participants in my study relayed negative experiences with professionals and potential employers involving many of these publicly held attitudes.

The ACA Code of Ethics also addresses the employment needs of clients (American Counseling Association, 2005). It calls for counselors to assist clients in seeking jobs that consider a client's abilities, vocational limitations, physical restrictions, temperament, interests, aptitudes, social skills, and education. It further states that counselors involved in job placement will place clients in jobs that are compatible with the client's interests and culture while considering the welfare of clients, employers, and the public. The same standards should be used when working with students with disabilities who are making decisions regarding their attendance in college and choice of college major. With these ethical standards in mind, counselors need to explore expectations they hold for clients with disabilities and increase their knowledge about the abilities of people with disabilities.

Societal attitudes shape expectations. The President's Committee on Employment with People with Disabilities (1999) discussed an insidious societal attitude that people with disabilities are not expected to perform up to standards. Those that do can be seen as courageous or at times "over-achievers." Sometimes standards can be set too low and alienate coworkers. Again, participants in my study relayed negative experiences with professionals who were either surprised that an individual with a visual impairment was being successful in academic pursuits or did not foster an individual's skills and independence because of low expectations. Counselors-in-training may challenge their expectations of people with disabilities through coursework that incorporates case studies, multimedia presentations, and/or panel presentations involving people with disabilities.

In a career counseling course, counseling students could receive information about the types of jobs people with disabilities are holding. For example, the American Foundation for the Blind maintains a database called Career Connect that gives profiles of blind employees and identifies mentors available to talk about their careers in relation to their disabilities. Counselors should also be aware of assistive technology available to people with disabilities. Consideration of assistive technology and other accommodations can broaden career options for clients with disabilities. Students should receive a presentation on assistive technology to understand the opportunities and limitations of such devices.

Career counseling and related classes should also address the role of the rehabilitation counselor and services available through the state vocational rehabilitation program. The state vocational rehabilitation system offers many training and placement options for clients. Counselors should become familiar with legislation such as the Americans with Disabilities Act and the implications for employees with disabilities and potential employers. Counselors should also be prepared to work with clients about disclosure of disability, self-advocacy, and how to request accommodations.

People with disabilities and other cultural groups continue to feel discriminated against even by those professionals who aspire to help. Several writers attribute a lack of multicultural awareness to a lack of multicultural training (Wendell, 1997; Constantine, 2001). Wendell outlined several recommendations for increasing multicultural awareness. These included increased in-depth coursework in multicultural counseling, increased active recruitment and retention of minority counselor educators and students, internships and practicums involving multicultural populations, and making sure that counselor educators and internship supervisors have a solid foundation in multiculturalism. Sensitivity training should be provided to students,

faculty, and off-campus supervisors to increase their knowledge about specific disabilities and comfort levels for working with individuals who have disabilities. All coursework could include more case vignettes describing people with disabilities and practical laboratory work could include counseling practice with people with disabilities. Additional assignments in the curriculum could include students assuming disabilities for a day (provided roles can be assumed safely) or students participating in advocacy projects involving access or barrier removal for people with disabilities. Increasing disability awareness in the counseling curriculum would better prepare counselors to work with clients with disabilities and should foster more positive experiences and outcomes for clients with disabilities.

Suggestions for Future Research

Much of the research regarding the success of college students with learning disabilities has focused on factors outside the individual (Hall et al., 2002). In contrast, the majority of the research on the success of college students with visual impairments has focused on individual characteristics (Beaty, 1994; Martinez & Sewell, 1996; Martinez & Sewell, 2000a; Martinez & Sewell, 2000b; Roy & Mackay, 2002). Emener and Marion-Landais (1995) encouraged researchers to look at the personal, social, and educational development of students with disabilities to determine what developmental interventions can be utilized to increase chances for success. My study focused on individual characteristics/experiences and the influences of family, school, and community on college students with visual disabilities. Qualitative methods provided rich data about the lives and perspectives of these students. My study has expanded what is known about factors that have led to success for college students with visual disabilities. Further research is needed to expand our knowledge. A list of suggestions for future research follows.

- A limitation of this study was a lack of participant diversity in terms of ethnicity, socioeconomic status, and visual status. The study could be expanded by replicating research methods with additional participants.
- My study focused on individuals in the United States. Future research could examine individuals who live in other countries. Research could also examine individuals who were raised in the United States but have parents who were born in a foreign country.
- This study focused on students with visual disabilities who acquired a visual disability in elementary school. Several participants who lost vision later in life volunteered for the study but were not chosen to participate because of the focus of the study. A similar study could be conducted with individuals who lost vision later in life who attended college following the onset of vision loss.
- Schutz (2002) recommended that future research look at the phenomenon of transition for students with all types of disabilities. Murray (2003) recommended using risk and resilience as a conceptual framework for studying transitions to adulthood for students with disabilities. This study should be replicated with individuals with other types of disabilities including those with physical, neurological, or mental disabilities.
- All of the participants noted involvement in faith-based service organizations. Participants reported that involvement provided a social outlet, support, and a means of giving to others. It was unclear if participation was driven by faith and to what degree. Future research could examine the role of faith or spirituality as a protective factor.
- A similar study could be conducted with individuals with visual disabilities who dropped out of college. Interviews with individuals could illuminate characteristics/experiences that put individuals at risk for not completing degrees.

- All participants were concerned about attaining employment following college. Additional research is needed regarding choice of college major, vocational guidance, and employment outcomes for college students with visual disabilities.
- There were discrepancies between my study and those of Morningstar et al. (1995) and Graham-Smith et al. (2002) regarding the influence of parents on children with disabilities. Future research could examine similarities and differences in attitudes of parents who have children with various disabilities.

Summary

Risk and resilience has been an effective lens through which to understand the factors that contribute to success for students with visual disabilities. Field et al. (2003) reported that students with disabilities who possess self-determination (knowledge, skills, and beliefs) are more successful in college. McBroom (1997) identified skills, knowledge, and preparation of successful students with vision impairments. Findings from my study also identified skills, knowledge, beliefs, and preparation as well as personal qualities that participants believed led to their success. It is these individual characteristics and a belief in self along with a belief by others in the individual's support system that fosters success in college students with visual disabilities. Figure 5 illustrates interaction between individual characteristics and the system of support (family, school, and community) that fosters resilience for individuals with disabilities.

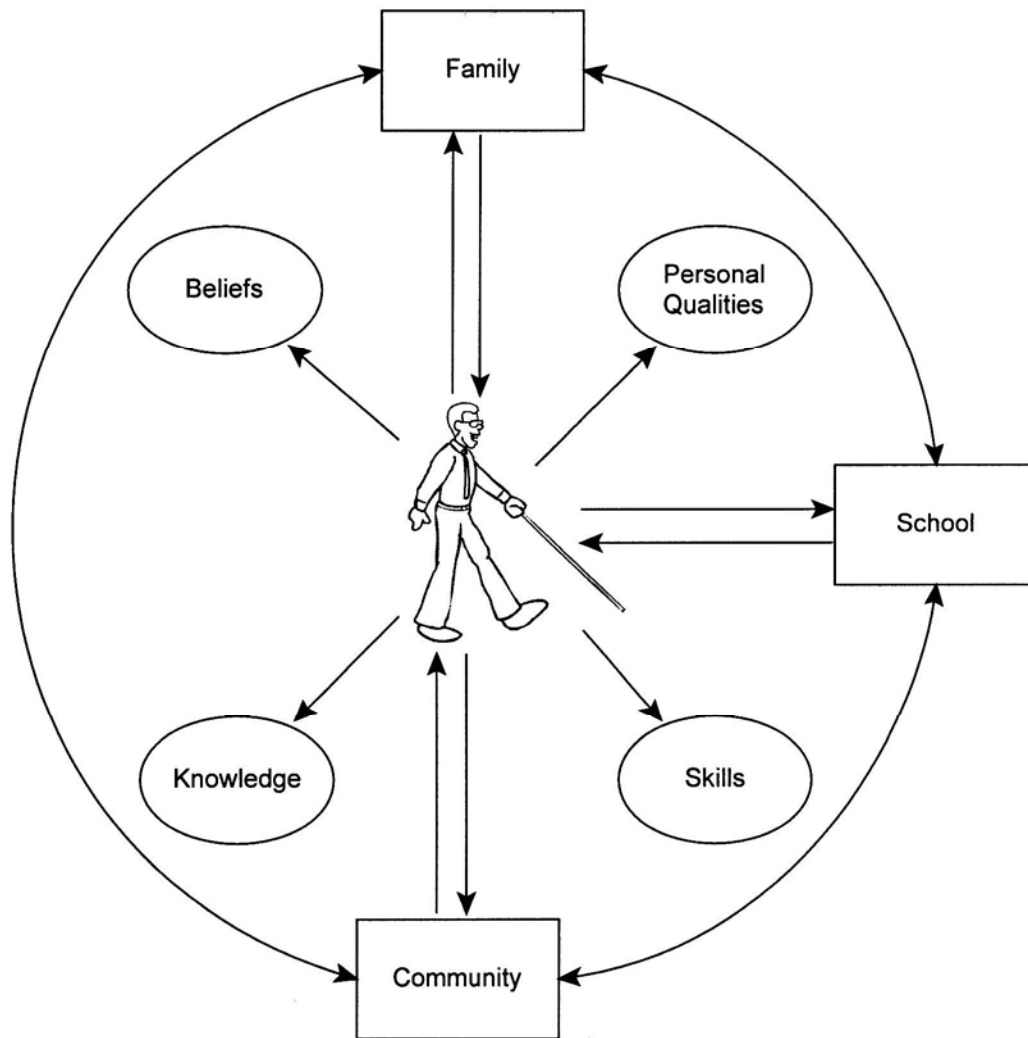


Figure 5. Interactions between the individual and support system influencing success.

A belief in oneself allows an individual to acquire the skills and knowledge necessary to succeed. A belief by others in the support system further increases a belief in self. In turn, this increased belief in self draws more individuals to join the support system. Counselors and teachers have the opportunity to help individuals acquire the knowledge and skills as well as expand an individual's support system. Counselors and teachers need to evaluate their clients/students through the lens of risk and resilience to identify risk factors and to develop interventions to turn risks into protective factors or create protective factors to counter balance

the risks. Family, school, and community supports not only influence the individual, but influence each other as well. Counselors and teachers need to provide the skills, knowledge, and support to foster resilience. With appropriate intervention, counselors and teachers can assist clients/students in achieving their potential and being resilient as they face each new challenge that life presents. Counselors and teachers have the opportunity to foster resilience not only for success in college but for success in life.

REFERENCES

- American Counseling Association. (2005). *ACA code of ethics*. Retrieved June 06, 2006, from ACA Web site: <http://www.counseling.org/Files/FD.ashx?guid=cf94c260-c96a-4c63-9f52-309547d60d0f>
- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49-74.
- Anzul, M., Evans, J. F., King, R., & Tellier-Robinson, D. (2001). Moving beyond a deficit perspective with qualitative research methods. *Exceptional Children*, 67(2), 235. Retrieved June 25, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000081502>
- Arman, J. F. (2002). A brief group counseling model to increase resiliency of students with mild disabilities. *Journal of Humanistic Counseling, Education and Development*, 41(2), 120+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5002501942>
- Assistive Technology Act of 1998. Retrieved November 15, 2006 from <http://www.section508.gov/docs/AT1998.html#3>
- Beaty, L. A. (1994). Psychological factors and academic success of visually impaired college students. *Psychological Review*, 26, 131-139.
- Beck, A. T., & Steer, R. A. (1987). *Beck depression inventory*. San Antonio, San Diego, New York, Chicago, Toronto: Psychological Corporation.
- Benz, M. R., Lindstrom, L., Unruh, D., & Waintrup, M. (2004). Sustaining secondary transition programs in local schools. *Remedial and Special Education*, 25(1), 39+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5002099972>
- Blackorby, J., & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the national longitudinal transition study. *Exceptional Children*, 62, 399-413.
- Code of Professional Ethics for Licensed Rehabilitation Counselors. (n.d.). Retrieved November 19, 2006, from <http://www.lrcboard.org/LRC%20code.pdf>
- Constantine, M. G. (2001). Perspectives on multicultural supervision. *Journal of Multicultural Counseling and Development*, 29, 98-101.
- Coopersmith, S. (1987). *Manual: Self-esteem inventories*. Palo Alto, CA: Consulting Psychologists Press.

- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Deloach, C. P. (1992). Career outcomes for college graduates with severe physical and sensory disabilities. *The Journal of Rehabilitation*, 58(1), 57+. Retrieved June 25, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5002177978>
- Emener, W. G., & Marion-Landais, C. A. (1995). A follow-up study of division of blind services clients who received post-secondary educational services. *The Journal of Rehabilitation*, 61(1), 55+. Retrieved June 25, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5002229724>
- Field, S., Martin, J., Miller, R., Ward, M., & Wehmeyer, M. (1998). *A practical guide to teaching self-determination*. Reston, VA: Council for Exceptional Children.
- Field, S., Sarver, M., & Shaw, S. (2003). Self-determination. *Remedial & Special Education*, 24(6), 339-349. Retrieved February 12, 2006, from Academic Search Premier database. <http://ezproxy.uno.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=11398991>
- Furney, K. S., Hasazi, S. B., & Destefano, L. (1997). Transition Policies, Practices, and Promises: Lessons from Three States. *Exceptional Children*, 63(3), 343+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000413270>
- Gardynik, U. M., & McDonald, L. (2005). Implications of risk and resilience in the life of the individual who is gifted/learning disabled. *Roeper Review*, 27(4), 206+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5012081060>
- Gay, L. R., & Airasian, P. (2003). *Educational Research: Competencies for analysis and applications*. (7th ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Gladieux, L. E., & Swail, W. S. (2000). Beyond access - Improving the odds of college success. *Phi Delta Kappan*, 81(9), 688. Retrieved June 25, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001220721>
- Graham-Smith, S., & Lafayette, S. (2004). Quality Disability Support for Promoting Belonging and Academic Success within the College Community. *College Student Journal*, 38(1), 90+. Retrieved 2/12/06 from Questia database. <http://www.questia.com/PM.qst?action=print&docId=5006016945>
- Greenbaum, B., Graham, S., & William, S. (1995). Adults with learning disabilities: Educational and social experiences during college. *Exceptional Children*, 61(5), 460+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001645638>
- Hall, C. W., Spruill, K. L., & Webster, R. E. (2002). Motivational and attitudinal factors in college students with and without learning disabilities. *Learning Disability Quarterly*,

- 25(2), 79+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000765474>
- Hartman, R. C. (1993). Transition to higher education. *New Directions for College Student Services*, 64, 31-43.
- HEATH Resource Center. (2006). *Summer pre-college programs for students with disabilities — 2006*. Retrieved June 20, 2006, from HEATH Web site: [http://www.heath.gwu.edu/PDFs/ Summer%20Precollege%202006.pdf](http://www.heath.gwu.edu/PDFs/Summer%20Precollege%202006.pdf)
- Heiman, T., & Kariv, D. (2004). Manifestations of learning disabilities in university students: Implications for coping and adjustment. *Education*, 125(2), 313+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5008813862>
- Henderson, C. (1999). *1999 college freshman with disabilities: A biennial statistical profile*. Washington, DC: American Council on Education.
- Henderson, N., & Milstein, M. (1996). *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA: Corwin Press.
- HHS - Your Rights Under Section 504 of the Rehabilitation Act. (n.d.). Retrieved November 15, 2006, from <http://www.hhs.gov/ocr/504.html>
- HHS - Your Rights Under the Americans with Disabilities Act. (n.d.). Retrieved November 15, 2006, from <http://www.hhs.gov/ocr/ada.html>
- Howells, S., Peverini, R., & Almeida, C. (2004). Children with Disabilities' Rights to Individualized Education Programs (IEPs) under the Individuals with Disabilities Education Act (IDEA). Retrieved November 15, 2006, from http://www.advocacycenter.org/FactSheets/IDEA_fact_sheet/IDEA_Fact_Sheet.pdf
- Ivey, M. B., & Ivey, A. E. (1997, April). And now we begin: Multicultural competencies gaining approval. *Counseling Today On-line*, 39, 10. Retrieved November 5, 2002 from American Counseling Association website: <http://www.counseling.org/ctonline/archivesvol39.htm>
- LD Online: What is a Learning Disability? (n.d.). Retrieved November 15, 2006, from <http://www.ldonline.org/ldbasics/whatislid>
- Lichtenstein, S. (1993). Transition from school to adulthood: Case studies of adults with learning disabilities who dropped out of school. *Exceptional Children*, 59(4), 336+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000155057>
- Martinez, R., & Sewell, K. W. (1996). Self- concept of adults with visual impairments. *Journal of Rehabilitation*, 62, 55-58.

- Martinez, R., & Sewell, K. W. (2000). Explanatory style as a predictor of college performance in students with physical disabilities. *The Journal of Rehabilitation*, 66(1), 30. Retrieved June 4, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5002338710>
- Martinez, R., & Sewell, K. W. (2000). Explanatory style in college students: Gender differences and disability status. *College Student Journal*, 34(1), 72. Retrieved June 4, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001752466>
- Maxwell, J. (2004). *Qualitative Research Design*. Thousand Oaks, CA: Sage.
- McBroom, L. W. (1997). Making the grade: College students with visual impairments [Electronic Version]. *Journal of Visual Impairment & Blindness*, 91, 261-270. Retrieved May 5, 2006 from Academic Search Premier: <http://ezproxy.uno.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=9709183940&scope=site>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Monahan, L. H., Giddan, N. S., & Emener, W. C. (1978). Blind students: Transition from high school to college. *Journal of Visual Impairment & Blindness*, 72, 85-87.
- Morningstar, M. E., Turnbull, A. P., & Turnbull, H. R. (1995). What do students with disabilities tell us about the importance of family involvement in the transition from school to adult life? *Exceptional Children*, 62(3), 249+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000367025>
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Murray, C. (2003). Risk factors, protective factors, vulnerability, and resilience: A framework for understanding and supporting the adult transitions of youth with high-incidence disabilities. *Remedial and Special Education*, 24(1), 16+. Retrieved April 29, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000629470>
- Nelson, R. (1998). Using a student performance framework to analyze success and failure. *Journal of College Reading and Learning*, 29(1), 82. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001408046>
- Peterson, C. (1988). Explanatory style as a risk factor for illness. *Cognitive Therapy and Research*, 12, 119-132.
- President's Committee on Employment of People with Disabilities. (1999, July). *Educational kit 1999--Think ability*. Published by the President's committee on employment of People with disabilities.

- Rees, A., & Nicholson, N. (1994). The twenty statements test. In C. Cassell & G. Symon (Eds.), *Qualitative methods in organizational research* (pp. 37-54). London: Sage.
- Rehabilitation Services Administration (RSA) - Home Page. (n.d.). Retrieved November 15, 2006, from <http://www.ed.gov/about/offices/list/osers/rsa/index.html>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), Whole No. 609.
- Roy, A. W. N., & MacKay, G. F. (2002). Self-perception and locus of control in visually impaired college students with different types of vision loss [Electronic Version]. *Journal of Visual Impairment & Blindness*, 96, 254-267. Retrieved May 25, 2006 from Academic Search Premier: <http://ezproxy.uno.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=6533659&scope=site>
- Russell, D. W., & Cutrona, C. E. (1984). Social and emotional loneliness: An examination of Weiss's typologies. *Journal of Personality and Social Psychology*, 46, 1313-1321.
- Sandler, I. (2001). Quality and ecology of adversity as common mechanisms of risk and resilience [1]. *American Journal of Community Psychology*, 29(1), 19. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001032699>
- Scholl, G. (Ed.). (1986). *Foundations of Education for Blind and Visually Handicapped Children and Youth*. New York: American Foundation for the Blind, Inc.
- Schutz, P. F. (2002). Transition from secondary to postsecondary education for students with disabilities: An exploration of the phenomenon. *Journal of College Reading and Learning*, 33(1), 46+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001505438>
- Seligman, M. E. P. (1990). *Learned optimism*. New York: Pocket Books.
- Skinner, M. E., & Lindstrom, B. D. (2003). Bridging the gap between high school and college: Strategies for the successful transition of students with learning disabilities. *Preventing School Failure*, 47(3), 132-137. Retrieved June 6, 2006 from Academic Search Premier database: <http://ezproxy.uno.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=10424061&scope=site>
- Smith, S. G., English, R., & Vasek, D. (2002). Student and parent involvement in the transition process for college freshmen with learning disabilities. *College Student Journal*, 36(4), 491+. Retrieved May 24, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5000610638>
- Statistics and sources for professionals--American Foundation for the Blind. (n.d.). Retrieved April 29, 2006, from <http://www.afb.org/Section.asp?SectionID=15&DocumentID=1367>

- Sue, D. W., Arredondo, R., & McDavis, R.J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling & Development*, 70, 477-486.
- U.S. Census Bureau. (2000) *Disability Status: 2000 - Census 2000 brief*. Retrieved June 10, 2006 from U.S. Census Bureau website: <http://www.census.gov/hhes/www/disability/disabstat2k/table1.html>
- Vaughan, S., Schumm, J. S., & Sinagub, J. (1996). *Focus group interviews in education and psychology*. Thousand Oaks, CA: Sage.
- Weiss, R.S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York: The Free Press.
- Wendel, P. (1997, Oct.). Cultural bias among minority counselors. *Counseling Today Online*, 40. Retrieved November 5, 2002 from American Counseling Association website: <http://www.counseling.org/ctonline/archives/ct1097/ct1097a2.htm>

Appendix A
Recruitment Letter/Flyer



DEPARTMENT OF EDUCATIONAL LEADERSHIP,
COUNSELING AND FOUNDATIONS

[Date]

[Business Address]

Dear Rehabilitation Professional:

My name is Rose Angelocci and I am a doctoral student in the Counselor Education program at the University of New Orleans. I have worked in the field of rehabilitation for the last twenty years. One aspect of my work experience has been to prepare individuals with visual disabilities to attend college.

Rehabilitation professionals have believed for years that the participation of people with disabilities in higher education can enhance their employability and vocational success. Both governmental resources and the skill and energy of many professional service providers are expended to promote the success of individuals who are blind or visually impaired. The federal-state vocational rehabilitation program financially sponsors many students with disabilities to attend college as part of job preparation.

I am conducting a study to explore experiences of successful college students with visual disabilities to identify factors that contribute to an individual's success. It is hoped that results of this study will assist rehabilitation counselors and college counselors in developing interventions to move students with visual disabilities toward success in college and minimize the impact of risk factors that impede success.

I am requesting your assistance in identifying individuals with visual disabilities to participate in this study. I am looking for individuals who

- Had a visual disability prior to entering college and
- Are either classified as a college junior or senior or have recently graduated (within three years) from a four year college.

Participants will be asked to complete three, 60-minute, one-on-one interviews with me that will explore life experiences and beliefs about factors that have contributed to success in college.

If you know individuals who meet the criteria for the study and feel that they could provide rich information about their life experiences, please notify them about the study and need for participants. A description of the study to be shared with participants is attached.

Thank you for your assistance. If you have any questions, please contact me at the e-mail address or telephone number at the bottom of this letter.

Sincerely,

Rose Angelocci, MHS, CRC, LRC, CVRT, LMFT
Doctoral Candidate, Counselor Education
University of New Orleans
(xxx) xxx-xxxx (cell)
xxxxxxxxx@uno.edu

Volunteers Are Needed for Research Study

Volunteers are needed to participate in a research study being conducted by the University of New Orleans.

The research study is being conducted to understand the experiences of successful college students and college graduates who have visual disabilities.

If you are a college junior, college senior, or have graduated from college in the last three years and have a visual disability, we are interested in talking to you about your college experience. Individuals participating in the study will be asked to complete three one-on-one interviews about experiences in college.

For more information contact:

Rose Angelocci

Appendix B
Human Subjects Committee Approval

*University Committee for the Protection
of Human Subjects in Research
University of New Orleans*

Form Number: 04jan07

(please refer to this number in all future correspondence concerning this protocol)

Principal Investigator: Louis Paradise
Rose Angelocci

Title: Professor
Graduate Student

Department: ELCF

College: Education

Project Title: Risk, resilience and success in college for students with vision disabilities

Dates of Proposed Project Period From 1-22-07 to 6-01-07

Approval Status:

☐ Full Board Review

☒ Expedite

☐ Exempt

☐ Project requires review more than annually. Review every _____ months.

☒ Approved Date: 1-24-07

☐ Deferred Date:

☐ Disapproved Date:

**approval is for 1 year from approval date only and may be renewed yearly.*

1st continuation Signature of IRB Chair

Date:

2nd continuation Signature of IRB Chair

Date:

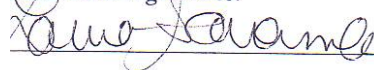
3rd continuation Signature of IRB Chair

Date:

4th continuation Signature of IRB Chair

Date:

Committee Signatures:



Laura Scaramella, Ph.D. (Chair)

James Evans, LCSW

Pamela Jenkins, Ph.D.

Isabelle Maret, Ph.D.

Ann O'Hanlon, Ph.D.

Richard B. Speaker, Ph.D.

Kari Walsh

Kathleen Whalen, LCSW

Appendix C
Consent Form



DEPARTMENT OF EDUCATIONAL LEADERSHIP,
COUNSELING AND FOUNDATIONS

Consent Form

1. Title of Research Study

Risk, Resilience and Success in College for Students with Vision Disabilities

2. Project Director

Louis V. Paradise, Ph.D.
Professor
Educational Leadership, Counseling, and Foundations
348 Bicentennial Education Center.
(xxx) xxx-xxxx
e-mail: louis.paradise@uno.edu

Rose Angelocci, MHS, CRC, LRC, LMFT, CVRT
Rehabilitation Training Specialist, TRAC
Doctoral Candidate, Counselor Education
xxx-xxx-xxxx
e-mail: rangeloc@uno.edu

3. Purpose of the Research

College students with visual disabilities are less likely to graduate than their sighted counterparts (16% vs. 26%). The purpose of this study is to understand the life experiences of successful college students with visual disabilities.

4. Procedures for this Research

Participants will be asked to complete three, 60-minute, one-on-one interviews with the co-investigator. Interviews will be conducted in a setting that offers privacy, is conducive for audio recording, and is convenient and accessible to the participant. Such settings may include: public libraries, college campuses, or agency offices serving people with disabilities. Interview locations will be made with the convenience of the participants in mind at the time of scheduling. The interviews will be audio-taped.

You will be asked to discuss your educational, social, and work experiences both prior to and during college; your family and their educational background; interactions with parents, teachers, and friends regarding your attendance in college; your beliefs about your success in college; and your beliefs about your disability and its meaning in your life.

5. Potential Risks or Discomforts

Participants may experience negative emotions and/or discomfort when relaying experiences during the course of this study. If you wish to discuss these or any other discomforts you may experience, you may call the principal investigator listed in #2 of this consent form.

You may request a break if you feel you need one during the interview. You may also choose not to answer any questions that you do not wish to answer. You may withdraw from the study at any time as well.

6. Potential Benefits to You or Others

Your participation in this project may give you an opportunity to voice your concerns, opinions, thoughts, and ideas about being a successful college student with a visual disability. It is hoped that results will assist counselors in developing interventions to move students with visual disabilities toward success and minimize the impact of risk factors that impede success.

7. Alternative Procedures

There are no alternative procedures to this research. Your participation is entirely voluntary and you may withdraw consent and terminate participation at any time without consequence.

8. Protection of Confidentiality

Your identity will be kept confidential and will be maintained with an identifying alias of your choosing. You will be asked to provide a name (other than your real name) to identify your responses to interview questions and to be used in publications. All identifying information will be stored separate from information collected for added security. Audiotaped interviews will be transcribed into Microsoft Word™ documents and saved with a password. Audiotapes and transcripts will be kept in a locked cabinet accessible only to the investigator and co-investigator. Audiotapes will be destroyed upon completion of data analysis and transcripts will be destroyed three years later. Your identity will be protected in the reporting of data to any publication.

9. Signatures

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact Dr. Richard Speaker at the University of New Orleans at (504) 280-6660.

I have been fully informed of the above-described procedure with its possible benefits and risks, and I have given my permission of participation in this study.

_____ Signature of Subject	_____ Name of Subject (Print)	_____ Date
_____ Signature of Person Obtaining Consent	_____ Name of Person Obtaining Consent (Print)	_____ Date

Appendix D
Interview Protocol

Risk, Resilience and Success in College for Students with Vision Disabilities

Interview Protocol

Interview 1:

- How did you decide to attend college?
- What influence, if any, did your parents have on your decision to attend college?
- What influence, if any, did elementary and high school teachers have on your decision to attend college?
- What influence, if any, did friends have on your decision to attend college?
- What steps did you take to prepare yourself to attend college?
- Once in college, how would you describe the adequacy of your preparation?

Interview 2:

- Describe disability-related challenges you faced in college.
- Describe how you handled the challenges identified.
- Describe your support system (both on and off campus) while attending college.
- Other than school, in what activities were you involved (employment, clubs/organizations, etc.)?
- What advice would you give to other people with vision impairments to have a successful experience in college?

Interview 3:

- Please describe your disability and its meaning and impact on your life.
- What beliefs and expectations do you hold for yourself in life?
- To what do you attribute your success in college?

Appendix E
Demographics Data Collection Sheet

Risk, Resilience and Success in College for Students with Vision Disabilities
Demographic Data Collection Sheet

Chosen Alias	
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Race	<input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Hispanic <input type="checkbox"/> Asian <input type="checkbox"/> Native American <input type="checkbox"/> Other
Socioeconomic status	
Vision status	<input type="checkbox"/> Partially sighted <input type="checkbox"/> Totally Blind
Age of onset of disability	
Cause of Vision Loss	
Father's Occupation	
Father's Education Level	
Mother's Occupation	
Mother's Education Level	
Family History/Composition	
High school grade point average	
Special Education Services Received	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, please describe.
College grade point average	
Extra Curricular Activities in High School	
Educational status	<input type="checkbox"/> Junior <input type="checkbox"/> Senior <input type="checkbox"/> Graduate
Educational major	
Extra Curricular Activities in College	
Work History	

VITA

Rose M. Angelocci earned a Bachelor of Science in Rehabilitation Counseling in 1990 and a Master in Health Sciences in Rehabilitation Counseling in 1992 from Louisiana State University Health Sciences Center. She completed the Doctor of Philosophy degree in Counselor Education at the University of New Orleans in December, 2007.

Rose is a Certified Rehabilitation Counselor, a Licensed Rehabilitation Counselor/Supervisor, a Licensed Marriage and Family Therapist, and a Certified Vision Rehabilitation Therapist. She has held memberships in organizations including the American Counseling Association (ACA), the Louisiana counseling Association (LCA), and the Association for the Education and Rehabilitation of the Blind and Visually Impaired (AER).

Rose has over 20 years experience in assessing and training persons with disabilities in the use of assistive technology and Braille. She has served as adjunct faculty for the Department of Special Education and Habilitative Services and the Department of Computer Science at UNO. Rose also provides disability awareness training to community businesses and cultural groups to assist them in understanding the Americans with Disabilities Act and to be more aware of how to effectively communicate with people with disabilities. She has been instrumental in providing people with vision impairments access to cultural facilities by developing descriptive narratives including a walking tour for the Aquarium of the Americas and supplemental audio description for I-Max film "Into the Deep".

Rose has served on several state and local advisory committees regarding the accessibility needs of people with disabilities. She has served on the Louisiana Rehabilitation Advisory Council, as Chairperson for the Louisiana Statewide Independent Living Council, as graduate student representative for the Louisiana Counseling Association, and on the board of

Directors at WRBH Reading Radio for the Blind. She is President-Elect for the Louisiana Chapter of the Association for the Education and Rehabilitation of the Blind and Visually Impaired. She has given numerous presentations at local, state, national, and international conferences as well as published work in professional journals, newsletters, conference proceedings, a book chapter, and audio and video productions in the areas of assistive technology, disability awareness, and counselor supervision.