Resilience and Thriving in Nontraditional College Students with Impairments:
Perceptions of Academic Facilitators and Constraints

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Sharon L. Reynolds
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This dissertation titled
Resilience and Thriving in Nontraditional College Students with Impairments:
Perceptions of Academic Facilitators and Constraints

by

SHARON L. REYNOLDS

has been approved for
the Department of Educational Studies
and The Patton College of Education by

_____________________________________
Jerry D. Johnson
Associate Professor of Educational Studies

_____________________________________
Renée A. Middleton
Dean, The Patton College of Education and Human Services
Abstract

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Resilience and Thriving in Nontraditional College Students with Impairments:
Perceptions of Academic Facilitators and Constraints

Director of Dissertation: Jerry D. Johnson

This research project utilized a collective case study approach to explore the lived experiences of nontraditional postsecondary students with impairments. Through the lenses of resilience theory and thriving as well as the social model of disability, it explored the challenges faced by successful nontraditional college students with impairments via semi-structured interviews with students and disability service providers. Analysis of websites and documents given to students with disabilities and nontraditional students provided additional information. The primary research question investigated the perceptions of nontraditional postsecondary students with disabilities with regard to the institutional services and supports available at their postsecondary institution. Which supports have most contributed to their academic success? Which supports have been needed, but not available? A second research question investigated the relationship between the student and institutional personnel, exploring how those relationships contribute to resilience/thriving in nontraditional college students with disabilities, how the relationships develop, and what institutional characteristics facilitate the development of meaningful supportive relationships with nontraditional college students with disabilities. The common themes of (a) achievement orientation, (b) positivity, (c) self-advocacy, (d) passion, and (e) the presence of multiple institutional sources of emotional
support emerged from the data. Challenges included dispositional, attitudinal factors and institutional policies and practices, specifically related to accessible course materials and instruction. Developing an understanding of how successful nontraditional postsecondary education students with impairments overcome barriers and utilize facilitators they have experienced, along with an understanding of the academic supports and services that have contributed to or constrained their postsecondary success can result in increased access to postsecondary education for all learners, including those with multiple barriers.

Approved: _____________________________________________________________

Jerry D. Johnson

Associate Professor of Educational Studies
Dedication

To Zach and Kyle, your love and smiles have carried me.

May you, too, find and always follow your true passion.
Acknowledgments

This has been a wonderful journey for me from the first leadership seminar with Dr. Aaron Thompson (who was the first to show me I could be successful in graduate school) through to the final revisions. There are many people who have provided support and encouragement throughout this process. I am grateful to the support and patience of my family, Mike, Zachary, and Kyle. I recognize the many sacrifices they have made to allow me to pursue this work. I am grateful to Dr. Jim Salzman for his encouragement and flexibility. I am grateful to the members of my committee, Dr. John Hitchcock and Dr. Frances Godwyll. I am especially appreciative of the many engaging scholarly conversations with Dr. Pete Mather. Finally, I will be forever grateful to my advisor, mentor, and dissertation chair, Dr. Jerry Johnson. I could not have done this without his support and encouragement. He has shown me what it means to be a scholar, an educator, and a leader. I can only hope to emulate his work ethic and commitment.

This has been a true collaboration. Thank you, Jerry, for thoughtfully considering my ideas, for treating me as a colleague, and for the patient reminders to focus on the assets. It truly has been an honor to work with you.
# Table of Contents

Abstract ........................................................................................................................................ 3  
Dedication ..................................................................................................................................... 5  
Acknowledgments ....................................................................................................................... 6  
List of Tables ................................................................................................................................ 12  
Chapter 1: Introduction .............................................................................................................. 13  
  Background of the Study ........................................................................................................... 13  
  Research Questions .................................................................................................................. 14  
  Framing the Study .................................................................................................................... 15  
    Disability Orientation .............................................................................................................. 15  
    Positive Psychology and Assets-based Approach ............................................................... 17  
    Resilience Theory ................................................................................................................. 18  
    Thriving .................................................................................................................................. 20  
  Statement of the Problem ......................................................................................................... 21  
  Significance of the Study .......................................................................................................... 21  
  Delimitations ............................................................................................................................ 24  
  Limitations ............................................................................................................................... 26  
  Operational Definition of Terms ............................................................................................. 26  
Chapter 2: Review of the Literature ......................................................................................... 29  
  Nontraditional Postsecondary Students .................................................................................. 29  
    Reconsidering Nontraditional .............................................................................................. 31  
  College Students with Impairments ......................................................................................... 32  
  Resilience ............................................................................................................................... 36  
    Early Research ....................................................................................................................... 37  
    Recent Literature – Shifting Perspective ............................................................................. 39  
    Resilience Research with Adults ......................................................................................... 40  
    Internal Protective Factors .................................................................................................... 43  
    Environmental Protective Factors ....................................................................................... 48  
    Relationships ....................................................................................................................... 49
Personal, Social, and Community Resources......................................................... 144
Relationships with Institutional Personnel.............................................................. 145
Supports and Services............................................................................................. 146
Summary................................................................................................................. 147
Case 8 – Tara .............................................................................................................148
Challenges............................................................................................................... 150
Personal, Social, and Community Resources.......................................................... 153
Relationships with Institutional Personnel.............................................................. 154
Support and Services............................................................................................... 155
Summary................................................................................................................. 156
Introduction to the Cross-Case Analysis ...................................................................157
Common Themes...................................................................................................... 158
  Common Theme 1: Achievement Orientation......................................................... 158
  Common Theme 2: Positivity ............................................................................. 166
  Common Theme 3: Self-Advocacy .................................................................... 173
  Common Theme 4: Passion ................................................................................ 182
  Common Theme 5: Multiple Institutional Sources of Emotional Support ......... 185
Challenges ............................................................................................................... 192
  Dispositional Factors .......................................................................................... 194
Institutional Factors ............................................................................................... 196
Summary................................................................................................................. 203
Institutional Supports .............................................................................................. 204
  Testing Accommodations ................................................................................... 205
Classroom Accommodations.................................................................................. 207
Accessible Textbooks ............................................................................................ 208
Assistive Technology ............................................................................................ 209
Tutoring and Academic Support Services ............................................................. 211
Counseling Services............................................................................................... 212
Summary................................................................................................................. 213
Social and Community Resources .......................................................................... 213
  Family Support.................................................................................................... 214
Support of Friends, Neighbors, and Classmates ................................................. 215
Community Resources ........................................................................................ 216
Summary ................................................................................................................. 220
Chapter 5: Conclusions and Recommendations .................................................... 221
Conclusions ............................................................................................................. 222
Research Question 1: What challenges to academic achievement confront nontraditional undergraduate postsecondary students with impairments? .......... 222
Research Question 2: What personal, social, and community resources facilitate or enable resilience and thriving in nontraditional postsecondary students with impairments? ................................................................. 226
Research Question 3: How do nontraditional postsecondary students with impairments perceive and value the institutional services and supports available at their postsecondary institution? ................................................................. 230
Research Question 4: How do relationships with institutional personnel contribute to resilience and thriving in nontraditional postsecondary students with impairments? .............................................................................. 232
Recommendations ................................................................................................. 237
Recommendation 1: Systematize Access to Course Texts through Enforcement and Broadening Application of the Chafee Amendment ............................................ 237
Recommendation 2: Employ Universal Design Principles .................................... 241
Recommendation 3: Facilitate a Culture of High-Touch ........................................ 244
Recommendation 4: Develop Comprehensive System for Providing AT ............... 247
Recommendation 5: Structure Opportunities for Social Support ......................... 248
Future Research .................................................................................................... 249
Personal Statement ................................................................................................. 251
References ............................................................................................................. 253
Appendix A: Ohio University Consent Form ......................................................... 270
Appendix B: Interview Topics - Students ............................................................... 272
Appendix C: Interview Topics – Disability Service Providers .............................. 274
Appendix D: IRB Approval Document ................................................................. 275
List of Tables

Table 1: Percentage distribution of disabilities reported by public 2-year and 4-year degree-granting postsecondary institutions (2008–2009) .................................................................33
Table 2: Internal Protective Factors that Contribute to Resilience ........................................45
Table 3: Degrees Attained and Aspired to Across Cases ......................................................168
Table 4: Identified Sources of Institutional Support .............................................................186
Table 5: Characteristics of the Offices Serving Students with Disabilities in this Study .................................................................................................................................201
Table 6: Intersection of Resilience Research (Internal Protective Factors) and Study Themes .........................................................................................................................236
Chapter 1: Introduction

Background of the Study

This study examines the experiences of nontraditional postsecondary students with impairments. All students with impairments who are registered with the offices of disability services at their postsecondary institution are protected under the Americans with Disabilities Act Amendments Act (ADAAA) and Section 504 of the Rehabilitation Act and are thus entitled to academic supports and services, referred to as accommodations. Despite the legislation intended to increase educational access for individuals with impairments, students with impairments both pursue (Newman, Wagner, Cameto & Knokey, 2009; Morningstar et al., 2010; Whelley, Hart, & Zaft, 2002) and complete (Getzel, 2008) postsecondary education at lower rates than those for students without impairments. Using a theoretical lens that relies on the construct of resilience, this study sought to better understand the experiences of those nontraditional postsecondary students with impairments who do enroll and persist in college.

Resilience is defined as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990). Using Chaskin’s (2008) definition, nontraditional postsecondary

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1 The ADAA (Americans with Disabilities Act of 1990) defines disability as an individual who has: (a) a physical or mental impairment that substantially limits one or more major life activities of such individual; (b) a record of such an impairment; or (c) being regarded as having such an impairment.

2 Other theoretical frameworks of interest inform the study as well; these will be discussed later in the narrative.
students with impairments could generally be considered resilient because they have used personal, social, or community resources to overcome or address barriers and challenges that may have exerted a stronger negative effect on less resilient individuals.

The voices of college students with impairments are largely missing from the literature and accompanying discussion (Orr & Goodman, 2010; Webster, 2004). This study, which is grounded in the words and stories of the students themselves, utilized resilience theory (Benard, 2004; Chaskin, 2008; Masten, 2001) as the primary theoretical framework through which to (a) explore and describe the barriers and facilitators experienced by nontraditional postsecondary students with impairments and (b) understand the academic supports and services that have contributed to or detracted from their postsecondary success.

**Research Questions**

The specific research questions that guided this study are:

1. What barriers/difficulties/challenges to academic achievement confront nontraditional undergraduate postsecondary students with impairments?
2. What personal, social, and community resources facilitate or enable resilience and thriving in nontraditional postsecondary students with impairments?
3. How do nontraditional postsecondary students with impairments perceive and value the institutional services and supports available at their postsecondary institution?
   a. Which supports have most contributed to their academic success?
b. Which supports have not been available?

4. How do relationships with institutional personnel contribute to resilience and thriving in nontraditional postsecondary students with impairments?
   a. How do the relationships develop?
   b. What institutional characteristics facilitate the development of meaningful supportive relationships with nontraditional postsecondary students with impairments?

**Framing the Study**

The initial interview topics and questions for this study were developed to address the research questions, and are grounded in the literature on self-determination (Konrad et al., 2007; Morningstar et al., 2010; Raskind, Goldberg, Higgins, & Herman, 1999; Thoma & Wehmeyer, 2005). As a result of engaging in the initial student interviews, a more refined version of the self-determination theoretical framework emerged: the theories of resilience and thriving (Benard, 2004; Chaskin, 2008; Masten, 2001).

In addition to the overall framework of resilience and thriving, other perspectives that provided structure to this study include (a) the social model of disability orientation (Burchardt, 2004; Mitra, 2006), and (b) the strengths-based approach and the tenets of positive psychology (Seligman & Csikszentmihalyi, 2000). Each will be explained in the following section.

**Disability Orientation**

The medical model is the oldest model used to understand the concept of disability (Brown, Hammer, Foley & Woodring, 2009). The medical model views
disability from a perspective of pathology; disability is a disease or weakness within the individual that can and should be cured or fixed. The implication is that individuals with impairments are weak, broken, or ill and require intervention from a professional to be healthy (Burch & Sutherland, 2006). In sharp contrast to the deficit perspective operationalized by the medical model, the social model (Burchardt, 2004; Mitra, 2006) emphasizes how society creates physical and social barriers which lead to exclusion of individuals with impairments. This model promotes social change by challenging longstanding societal beliefs about individuals with impairments. The social model makes a clear distinction between impairment and disability. Impairment is a condition of the body or mind of the individual. Disability is “the loss or limitation of opportunities to take part in the life of the community on an equal level with others. It arises from the social, economic and physical environment in which people with impairments find themselves” (Burchardt 2004, p. 736)

Rejecting the medical model of disability as pathology, the study approached disability from the social orientation (Burchardt, 2004; Mitra, 2006) and explored the challenges faced by nontraditional students with impairments through their own narratives, with an emphasis on understanding the relationships, supports, and services that have most contributed to their academic success. To be consistent with the social model of disability requires an operational definition of disability that makes clear that the source of disability is extrinsic (community or social) not intrinsic to the individual. To that end, I made a distinction between impairment and disability throughout this
study. Furthermore, I have used the phrase *person with an impairment* as opposed to *person with a disability* throughout.

The postsecondary students who were selected for this study exhibit resilience despite multiple barriers and challenges. Understanding and appreciating the experiences, resources, and individuals that contribute to resilience in nontraditional students with impairments can help postsecondary institutions reduce unnecessary barriers and increase access for all of their students, particularly those with multiple challenges.

**Positive Psychology and Assets-based Approach**

Similar to the medical model orientation toward disability, the field of psychology has historically operated from a disease model, focusing on curing illness (Keyes, 2007; Seligman & Csikszentmihalyi, 2000). The sub-discipline of positive psychology, however, focuses on positive traits including subjective well-being, optimism, happiness, and self-determination. At the group level, positive psychology focuses on how institutions move people towards citizenship, responsibility, altruism, tolerance and work ethic (Seligman & Csikszentmihalyi, 2000). While acknowledging the challenges faced by nontraditional postsecondary students with impairments, I engaged the tenets of positive psychology to focus on the positive assets utilized by resilient individuals and how these personal assets help students overcome challenges and barriers.

Similarly, the literature on strengths–based approaches in psychology and social work informed the focus of this research project. The strength-based approach, like positive psychology, views individuals and communities not in terms of deficits and pathology, but “in the light of their capacities, talents, competencies, possibilities,
visions, values and hopes’’ (Saleebey, 1996, p. 296). To the degree that individuals can identify and utilize their own personal strengths and resources, as well as the resources in their environments, individuals will fare better (Graybeal, 2001).

Levin (2007) states, “How we frame, identify, and understand nontraditional learners reflects our ontological preferences, and shapes how we see the behaviors or experiences of these students” (p.21). In this paper, while acknowledging and discussing the long-standing deficit-based emphasis on personal traits and risk factors used to describe the nontraditional learner (Choy, 2002; Horn, 1996), I situated the study within an assets-based theoretical framework. Consistent with the social model of disability, the framework, proposed by Levin (2007), describes the nontraditional student from a perspective that emphasizes the societal, cultural and institutional barriers that place the nontraditional student at a disadvantage. Construing these students as confronted with societal, cultural, and institutional barriers—as opposed to lacking in personal traits—shifted the focus of the study from a description of risk factors to an investigation of how resilient postsecondary students use their assets (internal and environmental) to cope with and overcome the challenges they encounter.

**Resilience Theory**

Resilience is defined as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990). Resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that threats have on less resilient individuals (Chaskin, 2008). For many years, resilience was conceptualized as resulting from rare and special qualities in extraordinary people. More recent literature on
resilience (Chaskin, 2008; Masten, 2001; Rhodes & Lowe, 2008) indicates that resilience is much more common and results not from extraordinary people with exceptional qualities, but from “basic human adaptation systems,” (Masten, 2001, p. 227) or, as Masten referred to it, “ordinary magic.” Masten contends that all people can overcome adversity and be resilient, but that it is far more likely when environmental supports are in place.

In synthesizing decades of resiliency research, Benard (2004) identified three environmental factors that contribute to resilience: high expectations, opportunities for participation and contribution, and caring relationships. Moreover, all of these factors occur (or are enacted) at varied levels—within individuals, families, schools, and communities. Several studies indicate that positive and caring relationships can contribute to resilience and even thriving in students with impairments (Miller, 2002; Orr & Goodman, 2010). Orr and Goodman (2010) found that relationships and social connectedness had a positive effect on students’ inclination to persevere through k-12 into higher education.

The importance of supportive relationships was evident in Miller’s (2002) study involving college students with learning disabilities. Miller (2002) investigated experiences of resilient college students with learning disabilities and identified the following themes (a) identifiable success experiences, (b) particular areas of strength, (c) distinctive turning points, (d) special friends, (e) encouraging teachers, (f) acknowledgement of their learning disability and (g) self-determination.
Thriving

Adaptive functioning can be understood as a continuum, with *languishing* (Keyes, 2007; Fredrickson & Losada, 2005) at the negative end of the continuum, *resilience* at the middle, and *thriving* (cf. *flourishing* [Keyes, 2002, 2005]) at the positive end. Languishing (Keyes, 2007) has been defined as the absence of mental health. People who experience languishing “describe their lives as ‘hollow’ or ‘empty’” (Fredrickson & Losada, 2005, p. 678). Resilience (Masten, Best & Garmezy, 1990) is a positive, adaptive response to adversity. Thriving refers to exceeding pre-stressor levels of functioning (O’Leary, 1998). Individuals who experience thriving “have an enthusiasm for life, are productively engaged with others and society, and are resilient in the face of personal challenges” (Schreiner, 2010, p. 4). Thriving entails acquiring new coping skills, knowledge, enhanced confidence, and enhanced interpersonal relationships. Thus, thriving is a transformation involving a fundamental cognitive shift in response to a profound stressor (O’Leary, 1998). The following characteristics have been found to contribute to thriving: hardiness, sense of coherence, cognitive resources, self-efficacy, social support systems, ability to attribute meaning to events, social processes which facilitate transitions in life (O’Leary, 1998). Methodological and ethical challenges inherent in the study of thriving exist (Massey, Cameron, Ouellette, & Fine, 1998): (a) being conscious of the influence of personal and cultural values of the researcher in defining thriving, (b) remaining aware of the “powerful social, cultural, and political contexts within which these experiences occur” (p.338), (c) recognizing thriving as a process, as opposed to a static trait.
Statement of the Problem

A substantial body of literature considers the experiences of college students with impairments (Garrison-Wade, 2009; Izzo, Hertzfeld, Simmons-Reed, & Aaron, 2001; Keith, 2007; Morningstar et al., 2010; Thoma & Whemeyer, 2005; Wessel, Jones, Markle, & Westfall, 2009; Whelly et al., 2002). There is little published research relating to postsecondary students who have impairments and also have characteristics of nontraditional students. College students who are GED graduates, have delayed their enrollment, are employed, are part-time students, have dependents or are single parents and, in addition, have a disability face multiple challenges and face many additional unique barriers. Many nontraditional students with impairments, however, exhibit resilience and thriving (Miller, 2002; Orr & Goodman, 2010). Understanding how successful nontraditional postsecondary education students with impairments overcome the barriers and utilize the facilitators they have experienced as well as understanding the academic supports and services that have contributed to or constrained their postsecondary success can aid secondary and postsecondary institutions in effectively providing the services that contribute to the academic success of all students with and without multiple barriers (Garrison-Wade, 2009).

Significance of the Study

An increased awareness and understanding of the barriers and facilitators, and academic support and services experienced by successful nontraditional postsecondary students with impairments can help postsecondary institutions increase academic access and success for all learners, including those with multiple barriers. In recent years,
postsecondary institutions, especially regional and two-year institutions, have experienced increased enrollments of nontraditional students (i.e., students with multiple barriers) (CAEL, 2008; Levin, 2007; U.S. Department of Education [USDE], 2002), including students with diagnosed disabilities, increasing the need for faculty awareness, support services, and resources (Henderson, 1999; Stodden, 2001). In 2000, 73 percent of undergraduates were in some way nontraditional and 28 percent of undergraduates had four or more barriers and would be considered highly nontraditional. There are as many highly nontraditional students in the undergraduate population as there are traditional students (USDE, 2002). Yet, postsecondary institutions have been and continue to be organized to function with the traditional student in mind (Kasworm, 1990; Levin, 2007; National Council on Disability [NCD], 2003). Nontraditional college students and college students with impairments who have the goal of obtaining a degree are more likely than their more traditional peers to leave college without degree attainment (Murray; 2003; NCD, 2003; USDE, 2002).

The traditional college student, typically defined as the student who enrolls in college full-time, right after completing high school, is dependent on parents for financial support, and does not work during school (Choy, 2002), is no longer the norm on most college campuses. In 2000, 73 percent of undergraduate college students were in some way nontraditional (Choy, 2002), having one or more of the following characteristics: (a) delayed enrollment, (b) part-time attendance, (c) working while enrolled, (d) financially independent under financial aid qualification guidelines, (e) single parent status, (f) GED graduate and (g) having dependents other than a spouse (Choy, 2002; Horn, 1996).
Horn (1996) considered students with one barrier (or characteristic) as minimally nontraditional, those with two or three barriers as moderately nontraditional, and those with four or more as highly nontraditional. In 2000, 28 percent of undergraduates had four or more barriers and would be considered highly nontraditional. Thus, the percentage of highly nontraditional undergraduate students is approximately the same as the percentage of traditional undergraduates (Choy, 2002).

More than 80% of secondary school students with impairments indicate postsecondary education is a goal (Cameto, Levine, & Wagner, 2004) and college enrollment for students with impairments has subsequently increased in recent years (Coriella, 2009; Getzel, 2008). Nevertheless, young adults with impairments pursue postsecondary education at lower rates than young adults without impairments (Whelley, Hart, & Zaft, 2002). Within four years of graduating from high school only 45 percent of students with impairments were reported to have continued on to postsecondary education compared to approximately 53 percent of similar age students without impairments (Newman, Wagner, Cameto & Knokey, 2009). Only 19 percent of youth with impairments enrolled full-time in postsecondary settings as compared to 40 percent of youth from the general population (Morningstar et al., 2010). Not surprisingly, postsecondary completion for students with impairments is significantly lower than students without impairments, and has decreased in recent years (Getzel, 2008).

Students with impairments are typically less well-prepared academically when leaving high school than students without impairments as evidenced by higher rates of remedial coursework, lower grade point averages, lower SAT scores and lower rates of
enrollment in advanced placement courses (USDOE, NCES, 1999). Students with impairments are also more likely to have earned a GED or alternative high school credential (12 versus six percent).

Some if not all of these characteristics are shared by nontraditional learners and put both groups of students at risk of lower persistence and degree attainment (USDOE, NCES, 1999). Despite legislation intended to increase educational access for individuals with impairments, both nontraditional students and those with impairments pursue (Morningstar et al., 2010; Newman, Wagner, Cameto & Knokey, 2009; Whelley, Hart, & Zaft, 2002) and complete (Getzel, 2008) postsecondary education at lower rates than those without impairments.

This study sought to better understand the experiences of nontraditional postsecondary students with impairments who do enroll and persist in postsecondary education, those who are, perhaps, exhibiting resilience and thriving by overcoming multiple barriers. Understanding the barriers and facilitators experienced by successful nontraditional postsecondary students with impairments and understanding the academic supports and services that have contributed to or constrained their postsecondary success can result in increased access to postsecondary education for all learners, including those who face multiple barriers.

Delimitations

The research design made use of several inclusionary and exclusionary delimitations.

1. This study was delimited to include only students who met the following criteria:
25

- currently enrolled, or enrolled in previous quarter or semester, at a postsecondary institution;
- Registered with the Office of Disability Services at the postsecondary institution;
- Have at least two characteristics of nontraditional learners (Horn, 1996).

In addition to having at least two characteristics of nontraditional students, the individuals in this study were registered with the Office of Disability Services at their postsecondary institution and meet the definition of disability under the Americans with Disabilities Amendments Act of 2008 (ADAA). Postsecondary participants were current undergraduate college students at two-year postsecondary institutions. Postsecondary students who were enrolled within the past 12 months and have since dropped out were not excluded.

2. Participation in the study was delimited to postsecondary disability service providers at the two and four year institutions the student participants are attending.

3. The study was delimited to investigating relationships between students and institutional personnel (and did not intentionally investigate peer relationships).

4. The study investigated the experiences of nontraditional postsecondary students with impairments at two year institutions in one Midwestern state.³

³ This delimitation was unintentional. I sent the invitation to all postsecondary institutions in the state, but received replies only from students at two year institutions.
Limitations

This study utilized semi-structured interviews to gain an in-depth understanding of the experience of postsecondary students with impairments. It is possible that certain impairments may influence or affect the ability of the individuals to recall experiences or may influence their perceptions of interactions they have had in postsecondary education. Credibility techniques, such as member checking, and utilizing multiple sources of data, that were employed in this study address the above limitation and are discussed in further detail in Chapter 3.

Operational Definition of Terms

1. Nontraditional student: Horn (1996) defined a nontraditional college student as an individual who has at least one of the following characteristics: (a) delayed enrollment, (b) part-time attendance, (c) working fulltime while enrolled, (d) being financially independent, and (e) a single parent. (f) lack of a high school diploma (GED graduate) and (g) having dependents other than a spouse. Horn (1996) considered students who had one characteristic as minimally nontraditional, those with two or three characteristics as moderately nontraditional, and those with four or more as highly nontraditional.

2. Disability: The ADAA (Americans with Disabilities Act of 1990) defines disability as an individual who has: (a) a physical or mental impairment that substantially limits one or more major life activities of such individual; (b) a record of such an impairment; or (c) being regarded as having such an impairment. Since this is the federal definition of disability, it is included here and
referred to in the literature review when discussing policy and research related to this population. The ADAAA definition of disability contends that the limitations of participation in society result from an individual’s medical condition. An alternative definition of disability, one that is consistent with the social model of disability, defines disability as “the loss or limitation of opportunities to take part in the life of the community on an equal level with others. It arises from the social, economic and physical environment in which people with impairments find themselves” (Burchardt 2004, p. 736). This is the construct of disability that was utilized throughout this study.

3. *Resilience*: Resilience is generally defined as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990). Resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that threats have on less resilient individuals (Chaskin, 2008).

4. *Thriving*: Thriving is similar to the concept of flourishing (Keyes, 2002, 2007) which is operationalized in the mental health field as mental well-being and more than just the absence of maladaptive behavior or mental illness, Whereas resilience is a return to levels of normal functioning after a stressor, thriving is

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4 Keyes (2002) describes mental well-being (flourishing) as including positive functioning in the psychological dimensions of well-being (i.e., self-acceptance, positive relationships, sense of purpose, environmental mastery and autonomy) and the social dimensions of well-being (i.e., social coherence, social actualization, social integration, social acceptance, and social contribution).
exceeding pre-stressor levels of functioning. Thriving refers to the acquisition of new coping strategies, of new confidence and enhanced relationships. Thus, thriving is a transformation: “involving a fundamental cognitive shift in response to a challenge” (O’ Leary, 1998, p.430).

5. **Accommodations**: For the purposes of this study, accommodations are those academic supports that allow a student to complete the same assignment or test as other students, but with adjustments in scheduling, setting, the time allotted to complete the assignment or test, or the format in which the assignment or test is delivered. An accommodation does not change what the test or assignment measures.
Chapter 2: Review of the Literature

The purpose of this study was to better understand the experiences of nontraditional postsecondary students with impairments who enroll and persist in school, those who are, perhaps, exhibiting resilience and thriving despite multiple barriers. This chapter begins with a review of the literature relating to nontraditional postsecondary students, as defined by Horn (1996) and suggests a new perspective for considering the experiences of these adult learners consistent with the assets-based approach of the study. A review of the literature relating to college students with impairments follows. Because research in the area of resilience provides the primary theoretical framework for the study, this chapter includes a review of early resilience research as well as a discussion of the shifting perspective of recent resilience research, including a discussion of resilience research involving adults as well as the research in the closely related concept of thriving.

Nontraditional Postsecondary Students

As discussed in Chapter 1, the traditional college student has been defined as the student who enrolls in college full-time, right after completing high school, is dependent on parents for financial support, and does not work (Choy, 2002). The traditional student is no longer the norm on most college campuses (CAEL, 2008; Choy, 2002, Levin, 2007); in 2000, 73 percent of undergraduate college students were in some way nontraditional (Choy, 2002). Nontraditional college students have been defined as having

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5 The 2002 Condition of Education report (Choy, 2002) focused specifically on nontraditional postsecondary students. There has not been a more current report on this population since then.
one or more of the following characteristics: (a) delayed enrollment, (b) part-time attendance, (c) working while enrolled, (d) financial independence (under financial aid qualification guidelines), and (e) single parent status (f) being a GED graduate and (g) having dependents other than a spouse (Horn, 1996). Horn (1996) considered students who had one characteristic (or barrier) as minimally nontraditional, those with two or three characteristics as moderately nontraditional, and those with four or more as highly nontraditional. In 2000, 28 percent of undergraduates had four or more barriers and would be considered highly nontraditional. Thus, the percentage of highly nontraditional undergraduate students, those with four or more barriers, is about the same as the percentage of traditional undergraduates (Choy, 2002).

Nontraditional students constitute the largest demographic group at two-year institutions and a substantial percentage of the student population in four-year institutions. In 2000, over 75 percent of the undergraduates at public two-year institutions and 37 percent of those undergraduates in public four-year institutions were moderately or highly nontraditional (Choy, 2002). It would be reasonable to expect that students with multiple barriers would struggle with to persist in college and take longer to obtain a degree, particularly because so many enroll part-time. NCES data support such conjecture. The bachelor degree attainment rate among nontraditional students (overall) lags behind traditional students (31 percent and 54 percent respectively). The bachelor’s degree attainment rate for highly nontraditional students was 11 percent. The associate’s degree attainment rate for highly nontraditional students was 15.6 percent and 50.3 percent for certificate attainment (Choy, 2002).
A substantial body of literature investigates risk factors associated with being a nontraditional student (Choy 2002; Levin, 2007). Much attention is paid to the failures of these adult learners. As a group, they leave college at higher rates, earn fewer credentials, and take more remedial classes (Choy, 2002; Levin, 2007). Overlooked and under-researched is the nontraditional student— even the highly nontraditional student—who persists and succeeds in postsecondary education. Understanding how these students utilize their personal, social, and community resources to overcome the challenges they encounter, that is exhibit resilience and thriving in transitioning to and persisting in postsecondary education, was the focus of this project.

**Reconsidering Nontraditional**

It is consistent with a strengths perspective to focus on the assets that nontraditional students bring to the challenges and barriers they confront as opposed to their behavioral characteristics and risk factors. Levin (2007) offers a new way of considering nontraditional college students, suggesting that these students be understood as a disadvantaged population, defined by the physical, mental, social, linguistic, institutional, and cultural barriers that they encounter and not by the behavioral characteristics they possess or do not possess. Nontraditional students are more likely to be women, black, and in the lowest income group (Levin, 2007). Using Levin’s perspective on nontraditional learners, postsecondary students with impairments would be included in the category.
College Students with Impairments

Paralleling enrollment trends for nontraditional adults, college enrollment for students with impairments has increased in recent years (Coriella, 2009; Getzel, 2008; US GAO, 2009). During 2008-2009 academic year, virtually all (99 percent) of public two and four-year institutions reported enrolling students with impairments (see Table 1); the largest disability category was specific learning disability (31 percent of students with impairments), followed by ADD/ADHD (18 percent), mental illness, psychological or psychiatric conditions (15 percent) and health impairment (11 percent) (Raue & Lewis, 2011). Postsecondary education is a goal for more than four out of five secondary school students with impairments (Cameto, Levine, & Wagner, 2004). Nevertheless, young adults with impairments pursue postsecondary education at lower rates than young adults without impairments (Whelley, Hart, & Zaft, 2002). Within four years of graduating from high school, only 45 percent of students with impairments were reported as having continued on to postsecondary education compared to approximately 53 percent of similar age students without impairments (Newman, Wagner, Cameto & Knokey, 2009). Moreover, only 19 percent of youth with impairments enrolled full-time in postsecondary settings as compared to 40 percent of youth from the general population (Morningstar et al., 2010). Postsecondary completion for students with impairments is significantly lower than students without impairments, and has decreased in recent years (Getzel, 2008). Getzel indicates that the multiple challenges associated with transitioning and adapting to a new and complex system of accommodations at the postsecondary level can contribute to student attrition.
Table 1.

*Percentage distribution of disabilities reported by public 2-year and 4-year degree-granting postsecondary institutions (2008–2009)*

<table>
<thead>
<tr>
<th>Disability Type</th>
<th>Public 2-year</th>
<th>Public 4-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing impairment</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Visual impairment</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Speech or language impairment</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mobility impairment</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Traumatic brain injury</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Specific learning disability</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>ADD or ADHD</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>Autism spectrum disorders</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cognitive or intellectual disabilities</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Health impairment</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Mental illness or psychological condition</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>


The academic risk factors experienced by students with impairments in secondary school contribute to challenges at the postsecondary level and beyond. Students with impairments are typically less well-prepared academically when leaving high school than students without impairments as evidenced by higher rates of remedial coursework, lower grade point averages, lower SAT scores and lower rates of enrollment in advanced
placement courses (USDOE, NCES, 1999). Students with impairments are also more likely to have earned a GED or alternative high school credential (12 versus six percent). Elementary and secondary students with impairments are often not partners in the decision making process regarding their accommodations and services, leaving school without the self-determination and self-advocacy skills needed to successfully navigate a postsecondary educational system (NCD, 2003).

Self-determination skills, although widely recognized as an important contributor to success in adulthood (Morningstar et al., 2010), are not widely taught at the secondary school level. Lack of explicit practice and development of self-determination and self-advocacy skills at the secondary level can make the transition period prior to enrollment in college even more challenging, potentially resulting in additional disadvantages for these students with impairments (Getzel, 2008). Services and accommodations that students may have received at the secondary level are no longer automatically provided at the postsecondary level. Parents, as well as students, are often unaware of these impending changes and the shift from parent advocacy to student self-advocacy and are unprepared to guide their children to the appropriate services. This lack of awareness and understanding can discourage or even bar students with impairments from higher education (NCD, 2003). The services provided at higher education institutions vary greatly. Locating and advocating for services at the postsecondary level requires students to navigate “inconsistent terminology, disconnected agencies, inconsistent laws, and conflicting eligibility requirements” (NCD, 2003, “Issues in Transition to Postsecondary Education,” para. 4), and is difficult even for students with strong self-determination
skills. It has been estimated that only 25 to 50 percent of students with impairments actually register with the disability service office at their colleges (Forrest, 2003). Results from the National Longitudinal Transition Study-2 (NLTS2) indicate that 63 percent of students who were identified as having a disability by their secondary schools did not consider themselves as such when they transitioned to postsecondary education. Less than one third of the secondary students (28 percent) who had been identified as having a disability chose to disclose their disability to their postsecondary institution (Newman et al., 2011). Of those postsecondary students who identified themselves as having a disability, 19 percent reported they received supports or accommodations from their postsecondary school (Newman et al., 2011).

Students with impairments encounter additional barriers once they arrive at college. Restrictive disability documentation requirements at some higher education institutions may deter or even prevent some students who may have been receiving special education services throughout elementary and secondary school from obtaining reasonable accommodations at the postsecondary level (National Joint Committee on Learning Disabilities [NJCLD], 2007). Resources for students with impairments at higher education institutions are commonly inadequate, forcing disability support offices to make decisions about accommodations and services based on budgetary constraints as opposed to best practice. Furthermore, the disability support offices are frequently understaffed, requiring a small number of people to accommodate a very large caseload of students. Furthermore, they often provide services to staff and faculty with impairments (NCD, 2003). In their 2003 report, the National Council on Disability stated
that the “understaffed conditions that exist in many academic institutions undermine the provision of appropriate support to people with disabilities” (p.12). Failure to obtain necessary accommodations, services, and supports may result in lower grade point averages (Izzo, Hertzfeld, Simmons-Reed, & Aaron, 2001) and higher attrition.

Many of these challenges are faced by nontraditional learners as well and put both groups of students at risk of lower persistence and degree attainment (USDOE, NCES, 1999). Despite legislation intended to increase educational access for individuals with impairments, both nontraditional students and those with impairments pursue (Morningstar et al., 2010; Newman, Wagner, Cameto & Knokey, 2009; Whelley, Hart, & Zaft, 2002) and complete (Getzel, 2008) postsecondary education at lower rates than those without impairments, except at two year colleges where the completion rate of students with impairments (41 percent) was greater than students in the general population (22 percent) (Newman et al., 2011). Yet, more than 50 percent of all students with impairments who enroll in postsecondary education do complete their program of study. Within five years of starting postsecondary education, 41 percent of students with impairments had earned a degree or credential (NCD, 2003; Newman et al., 2011). This group of students has managed to overcome substantial disadvantages and barriers and could be described as resilient adults.

**Resilience**

Resilience is generally described as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990). Resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that threats have on less
resilient individuals (Chaskin, 2008). For many years, resilience was conceptualized as resulting from rare and special qualities in extraordinary people. This perspective has changed and recent research indicates that resilience is a natural human adaptive process and is quite common (Chaskin, 2008; Masten, 2001; Rhodes & Lowe, 2008). Families, schools, and communities can provide external protective factors that build upon internal assets and promote resilience. This section will review several early studies that continue to inform the current research on resilience. The current perspective on resilience will be discussed as well as the factors that contribute to promoting resilience.

**Early Research**

In reviewing studies of children of schizophrenic mothers, Garmezy (1971) noted that 50 percent of the children exhibited healthy lives as adults; they had good jobs, did not exhibit mental health problems, and had low divorce rates. To extend that line of inquiry, Garmezy called for research into the factors that differentiated adaptive children and those children who experienced the similar high risk situations and exhibited maladaptive behaviors. Between 1971 and 1983, he conducted a longitudinal investigation of the children of schizophrenic mothers. The results indicated that only a very small portion of the children exhibited any deficit, resulting in a decade of research to identify the protective factors that support stress-resistant children (Cox, 2004). Garmezy (1987) concluded that a supportive environment, a supportive and cohesive family, and personal characteristics contributed to resilience in children. Family stability, socioeconomic status, IQ, and cohesion were considered assets and protected children from stressors.
Werner and Smith (1982) conducted a longitudinal study that followed over 1,000 high-risk children in Kauai, Hawaii starting in 1955 and following up with the children (first evaluated as infants) at ages 10, 18, 30 and 40. They found that one-third of the high-risk children had matured into competent and caring adults (whereas two thirds struggled with teenage pregnancies, mental health issues, and other life difficulties). They determined that the resilient group had the following personal attributes: good language skills, problem solving skills, and motor coordination, a strong sense of self-esteem and achievement orientation\(^6\) (Werner & Smith, 1977). Through a multivariate analysis of the factors that played a role in the success of the high risk group, Werner and Smith identified bonding with a nurturing surrogate adult (e.g., teacher, coach, or adult mentor) as a key factor and reported that children who developed relationships with nurturing adults, even informally, were most likely to be resilient. Most of the high risk children who were successful as adults attributed their success in overcoming adversities in life to one caring adult (Cox, 2004).

Masten and colleagues (1988) reanalyzed Garmezy’s raw data, and found that socioeconomic status, IQ, and competent parents do not make children immune to the effects of stress, but can affect how they respond. For example, Masten (1988) found that children with any of these risk factors (e.g., lower IQ, lower SES, troubled families) became disruptive when faced with stressors. Children with more assets (fewer risk factors) became withdrawn when faced with stressors. Also, gender was influential in

\(^6\) Achievement orientation is described in resilience literature as being focused on the future and/or having educational aspirations (Benard, 2004).
predicting children’s response to stress; girls were more likely to seek social support than boys. Overall, Masten and colleagues concluded that children with multiple long-term adversities were less likely to be resilient but the presence of protective factors in their environment increased the likelihood that they would experience resilience (Masten, 2001). Masten, Best, and Garmezy (1990) referred to the attributes that contributed to positive outcomes as *protective factors*.

**Recent Literature – Shifting Perspective**

While much of the early resilience research focused explicitly on the impact of risk factors on the lives of children (e.g., being in foster care, gang membership, poverty, disability, education level of parents, mental illness, substance abusing families), studies of children experiencing these risk factors indicated that more than 70 percent of children facing these adversities overcome the effects of adversity and go on to achieve positive outcomes (Benard, 2004). It is then reasonable to conclude that that assets or protective factors are more influential and have greater impact on an individual’s life chances than risk factors (Benard, 2004) and transcend “ethnic, social class, geographical and historical boundaries” (Werner & Smith, 1992, p.202). These protective factors (assets) predict positive outcomes in a range of 50 to 80 percent of a high-risk population (Benard, 2004, p. 8).

In addition to a focus on risk factors, the early researchers and current critics of resilience theory have generally conceptualized resilience as a static personality trait. Fergus and Zimmerman (2005) dispute this and contend that “resilience is not a quality of an adolescent that is always present in every situation. Rather, resilience is defined by the
context, the population, the risk, the promotive factor, and the outcome” (p.404).

Promotive factors, external to the individual, are resources such as parental support, community-based groups, and adult mentors. Fergus and Zimmerman included competence, coping skills, and self-efficacy as assets (internal promotive factors). Using assets and resources to overcome risk defines resilience as a process and not a trait.

Furthermore, recent literature on resilience (Chaskin, 2008; Masten, 2001; Rhodes & Lowe, 2008) indicates that resilience is much more common and results not from extraordinary people with exceptional qualities, but from “basic human adaptation systems,” (Masten, 2001, p. 227) or, as Masten referred to it, “ordinary magic.” Masten contends that all people can use their personal strengths (internal protective factors) to overcome adversity but are far more likely to be successful when environmental supports are in place.

**Resilience Research with Adults**

Although most early resilience research focused on young children, recent studies have explored the protective factors that can contribute to resilience in college students with impairments (Miller, 2002; Orr & Goodman, 2010). A subgroup of the Kauai children in the Werner and Smith study were diagnosed with learning disabilities. Between 10 – 18 years of age, 80 percent had a “brush with the law” (Wong, 2003, p. 68), but by age 32, the individuals were all employed, had successful marriages, and were content with themselves, their jobs and their relationships (Wong, 2003). Werner offered five clusters of protective factors to explain the turnaround experienced by these
individuals: (a) temperament, (b) self-efficacy and internal locus of control, (c) effective parents, (d) presence of supportive adults, (e) timely opportunities (Wong, 2003).

Orr and Goodman (2010) found that relationships and social connectedness had a positive effect on students’ inclination to persevere through k-12 into higher education. The college students with learning disabilities who participated in that study repeatedly attributed their successes to strong interpersonal relationships, mentioning a “turn-around teacher or mentor whose influence changed their outlook on life and its opportunities” (p.222). The students craved a nurturing relationship with their instructors.

The importance of supportive relationships was also evident in Miller’s (2002) study involving college students with learning disabilities. Miller (2002) investigated experiences of resilient college students with learning disabilities and identified the following themes as sources of resilience: (a) identifiable success experiences, (b) particular areas of strength, (c) distinctive turning points, (d) special friends, (e) encouraging teachers, (f) acknowledgement of their learning disability and (g) self-determination. In a twenty-year study of individuals with learning disabilities, Raskind and colleagues (1999) identified six attributes that contributed to success in adulthood: (a) self-awareness, (b) proactivity, (c) perseverance, (d) appropriate goal setting, (e) effective use of social support systems, and (f) emotional stability/emotional coping strategies. Their research indicated that these six factors were more powerful predictors of life success than the more commonly investigated risk factors including IQ, academic achievement, socio-economic status, and ethnicity.
Schilling (2008) studied a single case of a young African American woman who grew up in an impoverished urban area in the southeast who faced multiple obstacles: poverty, low self-esteem, a poor relationship with her mother, difficulties in school (sporadic attendance and poor grades), two teenage pregnancies, and multiple health problems. Despite the obstacles she faced, she graduated from high school and attended community college with aspirations of obtaining a nursing credential. Schilling indicates that four main factors characterized this case: (a) self-reliance, directness, and independence; (b) external support, such as participation in an afterschool program; (c) continued struggles in school and, (d) strained relationship with her mother.

The subject of Schilling’s study demonstrated several internal protective factors: autonomy, a sense of purpose, insight, independence, initiative, adaptive distancing, and a values orientation. Few external supports were present in her life; therefore, the relationships she developed with two adult mentors were critically important to her development. These two individuals “consistently reminded her that ‘everything was going to be okay—just give it enough time,’ and communicated unconditional acceptance and an unending belief in her potential” (Schilling, 2008, p.307). Schilling concludes that the internal assets and external relationships functioned as significant protective factors and contributed to her resilience in the face of much adversity.

Of methodological relevance, the conclusions and understandings gained through this research were only possible because of the longitudinal nature of this case study. Furthermore, this case highlights the importance of considering context and culture when studying resilience; detailed information over a period of years reflects a pattern of
positive adaptation when it is described in contextually appropriate terms (Schilling, 2008).

**Internal Protective Factors**

Benard (2004) synthesized key findings from decades of resilience research and indicated that the following personal strengths, or internal protective factors, contribute to resilience in children: (a) social competence, (b) autonomy, (c) problem-solving, and (d) sense of purpose. Each of the four factors includes the subcomponents listed in Table 1 and will be discussed in the following section.

Social competence or empathy includes interpersonal skills and the ability to care and feel compassion toward others, essentially the skills needed to develop healthy relationships with other people. Empathy is known as a “hallmark of resilience” (Benard, 2004). Werner and Smith (1982) found caring and compassion to be important differentiating factors in the resilient males in their study. Caring parental relationships are important to the development of social competence in children. Findings from the National Longitudinal Study of Adolescent Health found that the presence of a positive parent-family relationship was the most consistent protective factor among the 90,000 adolescents surveyed and 20,000 students interviewed (Benard, 2004). Locus of control (Rotter, 1954) refers to the degree to which people believe they have control over events in their lives. Individuals with a strong internal locus of control, as opposed to an external locus of control, believe they have control over their lives and are more likely to expect to be successful. Closely related constructs are self-efficacy (Bandura, 1977) and autonomy (Erickson, 1963). Self-efficacy is the belief or expectation that one will be
successful in a particular domain or area, whereas autonomy is the belief that one has the ability to control life’s outcomes and produce the desired results (whether it is true or not). Autonomy is the critical strength that underlies all of the others (Benard, 2004; Ryan & Deci, 2000). This belief is fostered initially through relationships within the child’s family and community. Tenenbaum and colleagues (2007) for example, concluded that there is a positive relationship between family involvement and improved academic achievement regardless of economic, racial/ethnic, and educational backgrounds.

Resilience research indicates a relationship between problem-solving abilities (including resourcefulness, planning, critical thinking, and flexibility) and successful adaptation in adulthood (Higgins, 1994; Werner & Smith, 1992). Resourcefulness includes the ability to identify external resources. When this personal strength is coupled with internal locus of control, young people understand how to locate and take the initiative to enlist the help of supportive adults (Benard, 2004). Critical thinking skills include the ability to think analytically, understand context, and see deeper meanings. Critical thinking skills can help young people overcome adversity through the development of critical consciousness. This awareness of and ability to see beyond oppression (familial, school-based, societal) can prevent internalization of oppression and a sense of victimhood (Benard, 1994; Freire, 2001).
Table 2.

**Internal Protective Factors that Contribute to Resilience**

<table>
<thead>
<tr>
<th>Internal Protective Factor</th>
<th>Subcomponents and Descriptions</th>
</tr>
</thead>
</table>
| Social competence          | • **responsiveness**: ability to elicit positive responses from others  
                              | • **communication**: interpersonal skills and relationship building  
                              | • **caring**: empathy, understanding how another feels  
                              | • **compassion**: caring for another who is suffering  
| Autonomy                   | • **positive identity**: sense of one’s self apart from others  
                              | • **internal locus of control**: being in control of one’s behavior  
                              | • **self-efficacy**: belief that one has the power to be successful (domain specific)  
                              | • **adaptive distancing and resistance**: emotionally detaching oneself from dysfunctional relationships  
                              | • **resistance**: emotionally distancing oneself from dysfunction  
                              | • **mindfulness**: self-awareness  
                              | • **humor**: enjoying laughter and play  
| Problem-solving            | • **planning**: thinking through a process  
                              | • **critical thinking**: analyzing, seeing different sides of a situation  
                              | • **resourcefulness**: “street smarts”  
                              | • **flexibility**: ability to see alternative solutions  
| Sense of purpose           | • **goal direction/achievement orientation**: focused on the future, educational aspiration  
                              | • **creativity**: special interest or hobby  
                              | • **optimism/hope**: positive emotions and feelings (about the future)  
                              | • **faith or sense of meaning**: a belief system, positive outlook on purpose of life  

*Note.* The table is adapted from Benard (2004).

The inner strengths associated with a sense of purpose and future orientation (including goal orientation, creativity, optimism, and faith) are “probably the most powerful in propelling young people to healthy outcomes despite adversity” (Benard,
In a study by Scales and Leffert (1999), young people with a strong future orientation and achievement motivation were found to have higher achievement test scores, higher grades, higher rates of high school completion, and increased college enrollment. These students were also found to have lower rates of mental health issues and problems behaviors. The National Educational Longitudinal Study found that internal locus of control and educational aspirations were highly correlated to academic success. Gerber, Ginsberg, and Reiff (1992) confirmed the importance of goal orientation. They studied highly successful adults with learning disabilities and found three themes that differentiated the highly successful from the moderately successful adults: a strong desire to succeed (often described using terms related to fire –e.g., a burning desire, or fire within), reframing of their learning disability to be able to see the positive aspects, and being highly goal–oriented.

Frederickson and Losada (2005) describe positivity as positive affect, a positive emotional state and attitude, “feeling grateful, upbeat; expressing appreciation, and liking” (p. 678). Fredrickson’s (1998, 2000, 2001) broaden-and-build theory of positive emotions holds that the broadening that is catalyzed by positive emotions builds the psychological resources of creativity, optimism, and hope. Positivity, however, is not “unbridled optimism” (Tugade & Frederickson, 2004, p.331). Individuals with high positivity are not naïve to the severity of or potential harm in stressful events or situations. On the contrary, individuals who have high positivity or positive emotionality do experience high levels of anxiety and frustration during stressful events or situations, but Tugade and Frederickson (2004) found they also experience positive emotions in the
midst of stressful situations. Individuals with higher levels of optimism and hope are more likely to experience a higher level of functioning after a stressor (Park, 1988). Additionally, a sense of optimism and hope have been associated with mental, physical, social and emotional health (Higgins, 1994; Seligman, 1992; Werner & Smith, 1992). Thus, positivity has been identified as an important component of resilience (Tugade & Frederickson, 2004).

Research indicates that resilient individuals embrace new experiences, employing an optimistic and energetic approach to life. They use humor (Werner & Smith, 1992) and relaxation strategies (Wolin & Wolin, 1993, as cited in Tugade & Frederickson, 2004) to “proactively cultivate positivity” (Tugade & Frederickson, 2004, p.320). Tugade and Frederickson (2004) propose that resilient individuals recognize the value of positive emotions in mediating the effects of negative experiences. Through experience, they are able to build “an arsenal of effective coping resources” (p.331) that buffer against adversity and negative life situations or experiences.

The attributes of creativity and imagination have been found to be related to resilience in adulthood, particularly in the lives of children who have experienced significant trauma (Higgins, 1994). Werner and Smith (1982) found that children who had hobbies or special interests that provided the children sense of mastery and with an escape when times were difficult were more likely to be resilient.

Both the resilience literature and the positive psychology literature report that a sense of optimism and hope are associated with mental, physical, social and emotional health (Higgins, 1994; Seligman, 1992; Werner & Smith, 1992). Park (1988) indicated
that people with higher levels of optimism and hope were more likely to experience a higher level of functioning after a stressor. Faith and spirituality, or “the transformational quality of meaning making” (Benard, 2004, p. 32), has been associated with positive development across the lifespan (Benard, 2004).

Benard (2004) contends that these internal strengths are not fixed or static traits, but are dynamic and adaptational. The presence or absence of environmental supports can influence the degree to which these internal assets can be realized. Benard warns against conceptualizing internal strengths as a set of character traits that can be remediated or taught through programs for “at-risk” students. Rather, schools and communities should focus resources and energy on ensuring that protective factors are in place for all individuals.

**Environmental Protective Factors**

Individuals facing stressors are more likely to successfully engage their personal strengths or internal assets when environmental protective factors are in place (Benard, 2004). Furthermore, individuals without strong internal assets must have environmental supports in place to be resilient in the face of adversity. Synthesizing decades of research on resilience, Benard (2004) identified three environmental protective factors that contribute to and facilitate an individual’s ability to be resilient: caring relationships, opportunities for participation and contribution, and high expectations. All of these factors can be enacted within individuals, families, schools (including postsecondary institutions), and communities.
**Relationships**

Benard’s conclusions, mostly based on studies conducted on children, are supported by studies conducted in higher education settings (see Schreiner, 2010; Leake, Burgstahler, & Izzo, 2011) which have shown the importance of mentoring and healthy relationships in facilitating positive postsecondary transitions for diverse students (Leake, Burgstahler, & Izzo, 2011) and for increasing student engagement and persistence (Schreiner, 2010). Additionally, Schreiner’s research on thriving\(^7\) in postsecondary students indicated the centrality of a sense of community to student success. Sense of community includes the components of (a) sense of belonging (b) positive interactions with others, (c) voice and contribution, and (d) interdependence and common goals (Schreiner, 2010).

The presence of a nurturing relationship is key to building resilience in children (Werner & Smith, 1992) and adults (Higgins, 1994; Masten, 2009). For children, this role is often fulfilled by a parent, but just as often by an adult mentor or other “surrogate parent” (Benard, 2004, p. 51). These nurturing relationships “provide the sense of security and belonging that frees a child to explore and learn” (Masten, 2009). Children who develop relationships with nurturing adults (including teachers, coaches, and adult mentors) are more likely to be resilient (Werner & Smith, 1982). Mentors can be important supports to adults as evidenced by Schilling (2008) who described the critical importance of a mentoring relationship to one disadvantaged adult who had few external supports. Although research indicates that highly successful adults with learning

\(^7\) Schreiner’s research will be discussed in more detail later with the construct of thriving.
disabilities surround themselves with supportive and helpful people (Gerber, Ginsberg, & Reiff, 1992), the support need not come from a multitude of friends. Werner’s research found that most of the high risk children who were successful as adults attributed their success to one caring adult.

Higgins’ (1994) study of adults who were severely abused as children, found that early attachment to a surrogate parent enabled individuals to feel deserving of love and maintain healthy relationships as adults. She also found that by their adolescent years, the young people in her study had internalized the support provided by the mentors and surrogate parents so that even when the mentors were not present, their “influence is profound and cumulative” (p.125). Higgins indicated that these close relationships provided the adolescents and adults with a critical consciousness, the perspective they needed to see that their experiences were not the norm, to see themselves as separate from their families, and to see that they could expect different outcomes for their futures. This adaptive distancing and a sense of one’s self apart from others are subcomponents of autonomy (Benard, 2004).

Caring relationships can be enacted at the classroom and school level as well in postsecondary environments through the maintenance a safe environment in which students can find order, create relationships, set goals, take risks, and explore their talents. In other words, schools can function as protective factors contributing to resilience (Battistich, Solomon, Watson, & Schaps, 1978; Rutter, 1981). The atmosphere and culture of the school and classroom are important. Schools with a positive climate can promote commitment which contributes to bonding and a sense of belonging in
students (Battistich et al., 1978) and can contribute to student academic performance and reduced student misbehavior (Rutter, 1981) as students internalize the values of the school. Higgins (1994) found that schools provided respite and encouragement that contributed to resilience in the young adults in her study. For those who were perhaps the most troubled, school provided safe harbor, a place of refuge.

**High Expectations**

A second environmental protective factor is the presence of high expectations within the family, school or in the community. High expectations in families or caregiver relationships can instill a feeling of self-worth and competence and can help children recognize their strengths (Benard, 2004). Parental belief that their children will be successful is one component of having high expectations. Brooks and Goldstein (2001) stated that “when parents convey expectations in an accepting, loving, supporting manner, children are often motivated to exceed those expectations” (p.134). Schools, including postsecondary institutions, can institute policies and practices that communicate either a deficit perspective or a strengths perspective (Benard, 2004). Schools with high expectations communicate their belief in their students’ abilities and potential. Decades of research has demonstrated that high expectations – along with the necessary supports – decreases the dropout rates and increases the number of students who go on to college (Meier, 1995). Schools communicate high expectations for their students through interactions and direct communication with students, but also in the way they are structured and organized, through the curriculum that is taught, and through daily practices (Milstein & Henry, 2000). Teachers, counselors, and student support
personnel, for example, communicate high expectations to students when they talk with students from a strengths perspective, helping students put their challenges in perspective, acknowledging limitations but helping students to see where they are strong. The importance of caring relationships has been discussed previously, but is worth restating here; teachers demonstrate caring by communicating high expectations to all of their students. Teachers communicate high expectations when they emphasize and value the knowledge and skills that students bring with them to the classroom and help them develop a clear path to future learning (Benard, 2004; Meier, 2000; Milstein & Henry, 2000). Morse (2004) reinforces the importance of high expectations: how community members (including nontraditional students and young people) view themselves “has everything to do with their well-being and that of their community. If they believe that change can happen, it usually does” (p.17).

**Opportunities for Contribution**

Resilient communities set high expectations for the community as an entity and all of its members regardless of social class, age, gender, culture, or other factors (Benard, 2004; Milstein & Henry, 2000). For a community to be resilient, all community members need to believe that they are valued and have something worthwhile to contribute. The community should provide opportunities for including all voices in decision-making and creating the community they desire. Postsecondary institutions can create opportunities for students, including nontraditional students, to contribute in meaningful ways by including students on campus committees, facilitating regular dialogue between student government and university leadership, and making the channels
of communication between students and their student officers (Schreiner, 2010).

Schreiner also suggests that postsecondary institutions can demonstrate that they value their students input and contribution by gathering student feedback via a satisfaction survey and then communicating what actions the institution will take to address the student concerns. She indicates that this institutional commitment to student welfare is a “powerful lever for promoting social integration, and ultimately, student persistence” (p.7).

**Thriving**

Although there is no consensus on the definition or even the general construct of thriving (Benson & Scales, 2009), some researchers have attempted to differentiate between resilience and thriving. Whereas resilience which is described as a positive, adaptive response to adversity (Masten, Best, & Garmezy, 1990) or a return to levels of normal functioning after a stressor, O’Leary (1998) for example, described the concept of thriving as functioning at a higher level than prior to experiencing a stressor. Thus, thriving is conceptualized as something more than competence and adaptive or adequate functioning. O’Leary identified the following protective factors (similar to those that promote resilience) that contribute to thriving: hardiness, sense of coherence, cognitive resources, self-efficacy, social support systems, ability to attribute meaning to events, social processes which facilitate transitions in life. Schreiner (2010) states that those college students who are doing more than just surviving, those who are flourishing, are thriving. Park (1988) indicated that people with higher levels of optimism and hope were more likely to experience a higher level of functioning after a stressor. Massey, Cameron,
Ouellette, and Fine (1998) described the challenges associated with thriving research and identified multiple manifestations of thriving including “personal growth, increased physical or mental health, new meaning, new strength or courage” (p.339).

Other conceptualizations of thriving (Benson, 1990; Benson & Scales, 2009) describe a set of “positive vital signs,” (Benson & Scales, 2009, p. 86) that include academic success, caring for others and communities, a healthy lifestyle, and embracing cultural diversity. This early work led to the development of forty developmental assets (Benson, 2006), which have been associated with the concept of thriving. The assets are grouped into the following categories: support, empowerment, boundaries and expectations, use of time, commitment to learning, positive values, social competence, and positive identity (Benson & Scales, 2009).

Schreiner’s (2010) definition of thriving was influenced by the similar positive psychology construct of flourishing (Keyes, 2007). Flourishing individuals “have an enthusiasm for life, are productively engaged with others and society, and are resilient in the face of personal challenges” (Schreiner, 2010, p. 4). Because most of the research on flourishing was with young children or adults, Schreiner used the term thriving in her research with college students who are exhibit the characteristics of flourishing.

Schreiner conducted a national study of college-student thriving, which involved over 15,000 students in over 70 postsecondary institutions. Their results indicated that college-student thriving, which she acknowledges is similar to Keyes’ (2007) concept of

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8 The first four are considered external assets. The subsequent assets are considered internal.
flourishing,⁹ has the following components: (a) positive perspective of oneself and future, (b) engagement in learning, (c) academic determination, (d) healthy relationships and connectedness to others on campus, and (e) openness to diversity and a desire to contribute. Together, these components can have a significant influence on the college experience and account for 20 percent of the variation in student success outcomes such as GPA, learning gains, student satisfaction, and intent to graduate (Schreiner, 2010).

Recognizing the need to come to a common conceptual framework around thriving, Benson and Scales (2009) reviewed recent research on thriving and concluded that each of the recent studies (a) acknowledges that thriving is not the same as happiness and that individuals who are considered to be thriving are not always “doing well,” (b) reports that significant trauma or adversity is not a required prerequisite the current conception of thriving, and (c) connects moral and ethical behavior with thriving. In attempting to integrate the disparate studies, Benson and Scales identified a general disagreement on thriving indicators, the definition of asset, and whether thriving is a process, status, or both.

To propose a unifying theory of thriving, Benson and Scales (2009) emphasize the developmental system approach and suggest the following three definitional components: (a) thriving is an interaction between the individual and context, (b) thriving is a process, (c) thriving involves current functioning as well as the path the individual is on (i.e., a person is “thriving-oriented,” p. 90). They state their conceptualization of

¹⁹ Schreiner indicates that flourishing has been primarily studied in young children or older adults not college student populations.
thriving as the “process as animated by a passion for, and the exercise of action to nurture, a self-identified interest, skill, or capacity” (p. 91). Benson and Scales refer to this core passion as a person’s spark, pursued for its own sake, from an intrinsic motivation. The framework developed by Benson and Scales uses the following thriving markers or indicators: whether the individual “can identify a passion in their lives, exhibit positive emotions, and have motivation to develop their passions, whether they report a sense of purpose, optimism about the future, and prosocial orientation and where they are in spiritual development” (p.91). These markers are similar to the protective factors described earlier in this paper that promote resilience.

In conclusion, there is still ambiguity in the distinction between resilience and thriving. Some resilience researchers discourage the search for a distinction between resilience and thriving because to do so fails “to recognize that resilience is itself normative” (Benard, 2004, p. 9). It seems that the Benson and Scales (2009) framework has addressed that concern to some extent, but as they note, more research is needed. “The continued refinement of the concepts and associated tools for assessing and promoting thriving and positive psychology can being new energy to realizing our greatest visions for young people’s positive development” (Benson & Scales, 2009, p.102). Schreiner (2010) indicates that more research is needed in the area of college-student thriving. Researchers have only just begun to explore the potential of college-student thriving for “influencing the college experience” (p.9).
Conclusion

In conclusion, this study applied an assets-based theoretical framework of resilience and thriving to the experiences of nontraditional postsecondary students with impairments who enroll and persist in postsecondary education despite multiple barriers. Working from a strengths perspective (Seligman & Csikszentmihalyi, 2000) requires a re-conceptualization of the nontraditional postsecondary student (Levin, 2007). Similarly, the disability model employed in this study is grounded in the social model of disability, and rejects disability as individual pathology, therefore bringing awareness to the societal barriers encountered by individuals with impairments. Construing these students as disadvantaged or limited by their environments— as opposed to lacking in personal traits — shifted the focus of the study from a description of risk factors to an investigation of how resilient postsecondary students use their internal and external assets to cope with the societal, cultural and institutional barriers they encounter.

Resilience research provides a framework for a deeper understanding of how some individuals use their internal assets (i.e., social competence, autonomy, problem-solving, and sense of purpose) as well as engage their external assets of family, community, and school (enacted through caring relationships, high expectations and opportunities to contribute) to overcome barriers and succeed at the postsecondary level. Understanding how successful nontraditional postsecondary education students with impairments have overcome the barriers and utilized the facilitators they have experienced and understanding the academic supports and services that have contributed to or constrained their postsecondary success can result in increased access to
postsecondary education for all learners, including those who encounter or experience multiple barriers.
Chapter 3: Methodology

This research project utilized a qualitative, primarily inductive approach to explore the challenges faced by nontraditional postsecondary students with impairments as well as the assets that contribute to their persistence and achievement. Inductive inquiry allows themes to emerge from patterns in the cases being researched without presupposing which dimensions or themes will be important (Patton, 2002). To explore the perceptions of nontraditional students with impairments, I employed a collective case study methodology (Creswell, 2007; Stake, 2006; Yin, 1994; Yin, 2009) which allows for in-depth understanding of multiple subjects. Case study methodology is used “to investigate a phenomenon in depth in its real-life context, especially when the boundaries between the phenomenon and the context are not clearly evident” (Yin, 2009, p.18). In this study, the unit of analysis was the student. That is, each student is a case.

Semi-structured interviewing is one application of the inductive approach (Patton, 2002) and thus, was utilized in this study. Semi-structured interviews allow new insights and unplanned but relevant topics for discussion to emerge from the participant. I interviewed eight students and interviewed between four disability service providers at participating two and four-year institutions in a Midwestern state. Interviews were recorded, transcribed and analyzed via the constant comparative approach, which involves “systematically examining and refining variations in emergent and grounded concepts” (Patton, 2002, p. 239).
The Researcher

As of this writing, I am employed as the director of a center that provides technical assistance, professional development, and resources to adult basic literacy programs, specifically focused on special needs and disability in the Adult Basic and Literacy Education (ABLE) population. The recent scope of work of the center has included developing resources and providing information to ABLE practitioners on supporting the needs of ABLE students with impairments in transitioning to postsecondary education and work. As discussed more fully later in the chapter in the context of describing credibility techniques, this background will be revisited as a function of utilizing reflectivity to avoid researcher bias.

Who is doing the research affects the results (Shah, 2004). To emphasize the importance of culture in interviewing, Shah (2004) stated that responses are not given to the questions, but to the person who asks them. Social identity can affect outcomes of the interview (Seidman, 1991). Interviews between individuals of different gender, social class, race, age, and ability level can complicate and create tension that “inhibits the full development of an effective interviewing relationship” (p.76). Additionally, Sands and colleagues (2007) noted that the interviewer’s position, education, or university affiliation may be intimidating to the interviewee. However, shared gender and professional background may help build rapport in cross-cultural interviews (Shah, 2004). For example, a female interviewer may be better able to build rapport with female students of a different culture, than a male researcher. Sands and colleagues (2007) noted that interviewers with inside status generally have advantages over outsiders.
For the purposes of this study, I am an outsider. I have worked with many nontraditional students and nontraditional postsecondary education students with impairments, but I have not had the experience of living as an individual with an impairment. Nor do I have the characteristics of a nontraditional learner. This outsider perspective was in my conscious mind throughout the interview process. Because I would be viewed as outsider from several perspectives (e.g., not disabled, traditional student), I was aware that rapport-building would be critical to gaining trust and facilitating an open dialogue. I intentionally spent time throughout the process attempting to develop rapport, especially prior to the interview, conveying genuine interest in the participants’ lives and experiences.

Participants

The population of interest for the research project was nontraditional adult postsecondary students with impairments. Again, Horn (1996) defined a nontraditional student as an individual who has at least one of the following characteristics: (a) delayed enrollment, (b) part-time attendance, (c) working while enrolled, (d) financially independent under financial aid qualification guidelines, (e) single parent status, (f) GED graduate and (g) having dependents other than a spouse. Horn (1996) considered students who had one characteristic as minimally nontraditional, those with two or three characteristics as moderately nontraditional, and those with four or more as highly nontraditional. Most of these characteristics present potential challenges for nontraditional students and increase the difficulty of accessing and persisting in postsecondary education.
Sampling – Student Participants

This study utilized purposeful homogeneous sampling (Onwuegbuzie & Leech, 2007) allowing for an in-depth understanding of the context yet maintaining the cultural perspective within and among the bounded systems (Creswell, 2007). Efforts were made to recruit students from two-year and four-year postsecondary institutions from across Ohio. Only students who meet the following criteria were considered eligible:

- Currently enrolled, or enrolled in previous quarter or semester, at a postsecondary institution;
- Registered with the Office of Disability Services at the postsecondary institution;
- Have at least two characteristics of nontraditional learners (Horn, 1996).

Postsecondary participants were current undergraduate students at two year institutions. The student respondents (n=8) were all from two-year institutions.

In qualitative research, and specifically in collective case study research, purposeful sampling of three to five cases is appropriate (Creswell, 2002; Creswell, 2007; Onwuegbuzie & Leech, 2007; Yin, 1994). The number of cases to include in a multi-case study is also an important consideration. Stake (2006) indicates that the benefits of the multi-case study “will be limited if fewer than four or more than 10 cases are chosen” (p.22). Ultimately, researchers make decisions about sample size based on reaching data saturation. In other words, when data saturation has been reached, the sample size can be considered adequate (Onwuegbuzie & Leech, 2007). Data saturation, which is a theoretical assumption, is said to occur when no new information or themes are found in
the data and new cases no longer add to the findings (Guest, Bunce, & Johnson, 2006; Lincoln & Guba, 1985; Strauss & Corbin, 1990). For the purposes of this research and based on the recommendations mentioned above, I intended to interview eight to 10 eligible students. The sample size was considered adequate when data saturation appeared to have been reached. To increase the likelihood of obtaining an adequate sample, several postsecondary disability service coordinators were contacted, asking for their cooperation in encouraging students who meet the criteria to participate. The following demographic data were collected at the time of the interview: age, date of enrollment, previous postsecondary attendance, date of high school graduation (if appropriate), current standing (i.e., year in school), place of residence, nature of the disability.

**Sampling – Postsecondary Disability Service Providers Participants**

I also interviewed postsecondary disability service providers (Appendix C) at the postsecondary institutions the student participants are attending. The interview topics included services and supports provided by the postsecondary institution, the relationships the personnel develop with students and their perceptions of what services are most valued by their students.

**Procedures**

After receiving approval from the Institutional Review Board (Appendix D), an email communication introducing the study was sent to the Offices of Disability Services (ODS) at the public postsecondary institutions in the state via the Disability Support Service email distribution list managed at the state Board of Regents. Because I cannot
have direct access to students who are registered with the Offices of Disability Services, the initial email communication that I sent requested that the ODS staff forward an email to their registered students, explained the research study and invited them to participate in a one-hour interview about their experiences in college.

I contacted the potential interviewees via email. The email explained the purpose of the study, how they could participate, listed potential interview topics, and included the consent to participate form. Once participants responded to the email confirming their interest in participating, I followed up with a phone call to confirm their participation, provided them with an overview of the study, described types of questions that we will discuss in the interview, reviewed the consent form, and explained the steps that will be taken to ensure confidentiality. We scheduled the one-on-one interviews. The times and locations were set based on the participants’ schedules.

I was able to schedule and conduct eight semi-structured interviews of approximately 60-90 minutes in length held at the student’s postsecondary institution in person (n = 5) or via the web-conferencing software Elluminate (n=3) which allowed the video feed to be recorded and archived. All interviews were audio recorded for transcription. At the beginning of each interview, I reviewed the consent form with the participants and provided them with an opportunity to voice any concerns or ask any questions about the study. I transcribed the interviews immediately following the interviews and made notes regarding observations or questions that occur as I transcribed. Interview transcriptions were loaded into the ATLAS.ti. qualitative data analysis software package for analysis.
Informed Consent

The initial email that I sent to the disability service providers, and they forwarded to the students registered with their offices, included a written overview of the purpose the research project and an explanation of the nature of the study. The confirmation email included information about the study and the consent form (Appendix A). In the follow-up phone call with potential interviewees, I reviewed the purpose of the study, described types of questions that we will discuss in the interview, reviewed the consent form, and explained the steps that will be taken to ensure confidentiality. I explained that they can decide to end their participation at any point, can choose not to respond to any of the interview questions and can end the interview at any point. I shared the transcripts of the interviews with interviewees as a form of member checking.

Confidentiality

The audio recordings of participant interviews were transferred from the digital data recorder to the laptop used solely by the researcher on this project and will be destroyed within five years from the time of the interview. Transcribed versions of the interviews have been saved on the hard drive of the laptop and will only be available to me, my dissertation advisor and committee. Each participant was assigned initials to protect their identity and their names have been changed in the case reports. Their initials are indicated on their consent forms with their full names for record-keeping.

Benefits

The interview process can be an enriching experience for the interviewee who may gain new insights and understandings about themselves (Kelley, 1995; Kvale &
Brinkmann, 2009; White & Epston, 1990). Society benefits when the voices of those who are typically silenced are heard, breaking down the stereotypes that marginalize and disempower.

**Interviews**

This research project uses semi-structured interviews to allow for in-depth responses from the students about their experiences in postsecondary education. The purpose of interviewing in qualitative research is to gather descriptive data in the subjects’ own words in order to understand people’s experiences and the meaning they make of that experience (Bogdan & Biklen, 1992; Patton, 2002; Seidman, 1991). Interviewing is a collaborative effort, an active process that produces a “mutually-created story” (Fontana & Frey, 2005). In this partnership, the interviewer’s role is to uncover the perspective of the interviewee though the use of rapport-building, an appropriate interview style and effective questioning (Patton, 2002). Within this context, there is a common underlying belief that other peoples stories are of worth (Patton, 2002; Sands, Bourjolly, & Roer-Strier, 2007).

Patton (2002) described six types of questions: (a) experience and behavior questions, (b) opinion and values questions, (c) feeling questions, (d) knowledge questions, (e) sensory questions, and (f) background/demographic questions. Interviewers should generally try to ask truly open-ended and singular questions. Presupposition questions can build rapport by pre-supposing that the interviewee has something to say. These types of questions lead to richer and deeper responses (Glesne, 2006; Patton, 2002). Seidman (1991) encouraged the researcher to listen more and talk less, follow up
and ask to hear more about a topic, to explore not probe. Using semi-structured interviews allows additional questions to emerge from the responses of the participants.

The interview topics and questions for this study were developed to address the research questions and were grounded in the self-determination literature (Konrad et al., 2007; Morningstar et al., 2010; Raskind, Goldberg, Higgins, & Herman, 1999; Thoma, & Wehmeyer, 2005). As a result of engaging in the initial student interviews, a more refined version of my original theoretical framework emerged: the theories of resilience and thriving (Benard, 2004).

I recorded field notes during the interview. Notes may consist of key phrases, major points, and quotations from respondents, serve to record new avenues for questioning, insights for further interviews and can be a backup to the recording device (Patton, 2002). After each interview I moved into immediate self-debriefing (Wengraf, 2001). This provides a time to record observations, feelings, and expressions and to reflect, write field notes, and ideas or thoughts. Because memories from the interview are in short-term memory and will quickly be lost, effective use of the period of time after the interview is critical to the rigor of the study (Patton, 2002).

**Document Analysis**

Students and disability service providers at the postsecondary institution were the primary sources of data. There are other sources of evidence in case studies including: documents, archival records, direct observation, participant-observation, and physical artifacts (Stake, 1995, Yin, 1994). For the purposes of this study document analysis was also conducted, with a specific focus on the services and supports indicated on the
Offices of Disability Services (ODS) websites and the documentation provided to students with impairments students at the time of registration with the ODS. Reviewing the documents that are provided to nontraditional students and students with impairments, including the relevant documents suggested by the interviewees themselves, provided a more comprehensive understanding of the services and supports that are (and are not) available at each institution. To do this, I captured an image of the home webpage of each institution, converted it to a PDF file and loaded the file into ATLAS.ti for coding. At each institutions home page, I looked for the link that would take me to the page for the office that serves students with impairments.\textsuperscript{10} I copied each of the webpages I reviewed along that path, converted them into PDF files, and loaded them into ATLAS.ti. When I landed on the Disability Service webpage, I copied and converted all webpages, documents, presentations, meeting minutes, flyers, and handbooks that were linked on the site.

**Collective Case Study**

Stake (2006) contends that the purpose for undertaking a multiple case study is to understand how a phenomenon interacts with the environment (commonalties and differences) in different contexts. In-depth understanding of each individual case in context is the primary focus in multi-case research. The phenomenon is better understood through learning about the specificity and differing contexts of each individual case. Multi-case study starts with an idea or concept that ties the individual cases together.

\textsuperscript{10} This path was different for each institution.
Each individual case is studied in its particular context, noting the effect of the context on the case (Stake, 2006).

To explore the perceptions of nontraditional students with impairments, this study employed collective case study methodology (Creswell, 2007; Yin, 1994; Yin, 2009) which allows for in depth understanding of multiple subjects. In collective case study research, the individual cases are explored in depth, emergent patterns are identified within each case utilizing the constant comparative approach (Boeije, 2002; Glaser, 1965, 2002), and then cross-case findings are analyzed and synthesized into themes (Stake, 2006). In this study, each of the eight student participants were considered a case. Complete case study reports were written for each participant, analysis of interview data was completed and patterns within and between cases were identified using the constant comparative approach (Boeije, 2002; Glaser, 1965, 2002).

Charmaz (2006) suggests that the researcher by simultaneously involved in data collection and analysis. The codes and categories emerge from the data, not from preconceived hypotheses. Although the constant comparative approach is commonly used in grounded theory methodology (Charmaz, 2006), there has not been much written specifically describing or delineating the steps in the constant comparative method (Boeije, 2002). Boeije (2002) proposes the following steps in the constant comparative approach for case study using interviews: 1. Comparison of data within an interview (internal comparison) using open coding\footnote{Open coding can be described as a beginning—asking what the data is about and looking for initial categories (Glaser, 1978).} (Glaser, 1978), in order to understand the parts.
of the interview as they relate to the entire story. 2. Comparison between interviews, using axial coding, which entails putting data back together in new ways after open coding by making connections between categories (Strauss & Corbin, 1998), to further develop concepts and discover themes, clusters or typologies. 3. Comparison between interviews of different groups, to enrich the understanding and deepening the insights provided by the first group. In this study, I compared the interviews of the disability service providers with the student interviews to address triangulation (Stake, 2006).

In all case study research and especially multi-case design researchers should pay careful attention to the selection of individual cases. Researchers should be careful not to place the highest priority on sampling by attributes of the individual cases but instead carefully considering (a) the relevance of the individual case to the overall issue, (b) whether the case contributes to the diversity across contexts, and (c) if the case provides an opportunity to gain insight into the complexity and context of the issue (Stake, 2006).

Stake (2006) emphasizes that multi-case researchers should make sure the individual cases maintain their integrity throughout the analysis and do not merge into the overall collective too soon. To accomplish this, Stake recommends employing a cross-case dialectic, described as follows: “a rhetorical, adversarial procedure, wherein attention to the local situations and attention to the program or phenomenon as a whole contend with each other for emphasis” (p.46). The cases (individually) and the overall

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Charmaz (2006) refers to this as focused coding which, “requires decisions about which initial codes make the most analytic sense to categorize your data incisively and completely” (p. 57).
phenomenon or program need to be held in mind and considered simultaneously while each are being analyzed.

In summary, I followed the procedures outlined by Boeije (2002) for the constant comparative method of data analysis which involves “systematically examining and refining variations in emergent and grounded concepts” (Patton, 2002, p. 239). I first coded the individual interviews, line by line, in ATLAS.ti qualitative data analysis software. I compared data within an interview (internal comparison) using open coding, in order to understand the parts of the interview as they relate to the entire story. After the open coding is completed for one interview, I wrote a complete case study report (Patton, 2002) for that particular case. The coding—case study cycle was repeated for the remaining cases. After the open coding was completed and the case studies are written for all interviews, I compared findings between interviews, using axial coding, which entails putting data back together in new ways after open coding by making connections between categories (Strauss & Corbin, 1998), to further develop concepts and discover themes, clusters or typologies. The cross-case analysis (Stake, 2006) was written from the themes that developed during the axial coding process. Lastly, I worked between interviews of different students and disability service providers, to enrich the understanding and deepening the insights provided by the first group.

**Credibility Techniques**

The quality of any (quantitative or qualitative) empirical research in the social sciences is judged on its validity or credibility. This includes *construct validity* – the degree to which generalizations or inferences can be made from the constructs
operationalized in the study to the theoretical constructs on which the study constructs were based. The credibility techniques that were employed during this research project are (a) cross-stakeholder and methodological triangulation, (b) triangulation of sources, (c) thick description (Patton, 2002), (d) member checking, (e) auditing themes, (f) peer debriefing (Lincoln & Guba, 1985), and (g) reflexive journaling via memo writing (Charmaz, 2006).

Credibility in qualitative inquiry depends on rigorous methods throughout all stages of the research process, during design, fieldwork and data collection, as well as during data analysis (Patton, 2002). In the planning and design stage, careful selection of cases is important because in qualitative inquiry the richness of the cases contribute more to validity and meaning than sample size (Patton, 2002). I selected cases for this study based on the potential for a rich and in-depth exploration of the primary research questions.

Yin (2009) outlines the following principles for data collection in case study research, each of which contributes to construct validity in case studies: (a) use multiple sources of evidence, (b) create a case study database, (c) maintain a chain of evidence. Each of the principles outlined by Yin have been and will be followed in this study. Yin identifies six sources of data: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. I interviewed disability service providers at postsecondary institutions as an additional source of data. Also, I reviewed documents (including websites) that are provided to nontraditional students as well as students with impairments.
Maintaining a case study database that includes case study notes, case study documents, tabular materials, and narratives, will ensure that all documentation and data are available for external reviewers and contributes to reliability. When explicit links are drawn between questions, data and conclusions, a chain of evidence exists, adding to the construct validity of the study (Yin, 2009).

There are specific techniques that can be employed in the analysis stage to increase credibility. To increase rigor and to counter the bias argument, Patton (2002) recommends making researcher bias explicit. I continued to use memo writing (Charmaz, 2006) throughout the analysis as a way of reflexive journaling and to help disclose and make explicit any biases (see previous discussion in this chapter – The Researcher). I recorded notes documenting my reactions and thoughts while interviewing, transcribing, and used memos in ATLAS.ti throughout the data analysis process to do the same. Negative case analysis (Patton, 2002) can be used to increase credibility. I intentionally sought a negative case throughout the data analysis, but none emerged. The themes that are discussed in Chapter 4 were common across all cases. Variation within the themes did exist (i.e., the particular ways in which the theme manifested differed some across participants), but holistically, the themes were present across cases. Thus, while some variation with in themes exists, negative cases, at the thematic level, were not found.

13 Participants, for example, demonstrated strong self-advocacy skills, but some seemed to bring those skills with them to their college experience, others described a process of developing these skills with support from the staff members of the Office of Disability Services.
Detailed notes from the interview and the transcription itself yielded a thick description (Patton, 2002). As a form of member checking, I sent the transcripts to the interviewees for review. If the interviewees suggested edits, those were acknowledged and recorded. Peer debriefing (Lincoln & Guba, 1985) occurred throughout the data analysis. Peer debriefing can provide a new perspective for analysis and critique. Often, the peer debriefer is a colleague, not directly involved in the study, who has some knowledge of the research topic or theories and can challenge the researcher's assumptions regarding the findings. I utilized my professional colleagues for peer debriefing.

There are four types of triangulation that can be employed in qualitative analysis (Patton, 2002): (a) triangulation of sources, (b) investigator/analyst triangulation, (c) theoretical triangulation, and (d) methodological triangulation. In the analysis phase, triangulation of sources entails utilizing various types of data, such as school records and teacher lesson plans, as opposed to limiting data collection to a single type or source. In this study, in addition to interviews, websites, and documents provided to nontraditional students and students with impairments were analyzed as alternate sources of data. Triangulation of sources may also include gathering data from different stakeholders (cross-stakeholder triangulation) within and from outside the unit of analysis, such as interviewing teachers in addition to students, or in this case, students and disability service providers. When researchers triangulate the data, the events of the cases have been supported by more than one source of data, increasing construct validity and reliability (Yin, 2009). Investigator triangulation involves using more than one researcher
to analyze the evidence. Theoretical triangulation is enacted when different theoretical
lens are used to conceptualize the cases. Methodological triangulation involves
comparing and integrating data collected through different techniques (i.e., interview,
observation, document analysis).

In summary, the credibility techniques that were employed during this research
project are (a) cross-stakeholder and methodological triangulation, (b) triangulation of
sources, (c) thick description (Patton, 2002), (d) member checking, (e) referential
adequacy and auditing themes, (f) peer debriefing, and (g) reflexive journaling. In
addition to the eight student interviews, I interviewed four disability service providers at
the two and four-year institutions that the student interviewees are attending regarding the
services and supports they provide, the relationships they develop with students and their
perceptions of what services are most valued by their students. In addition to interviews,
document analysis was conducted, with a specific focus on the services and supports
indicated on the Offices of Disability Services (ODS) websites and the documentation
provided to students with impairments students at the time of registration with the ODS.

Transferability

Flyvberg (2011) states that “formal generalization, be it on the basis of large
samples or single cases is considerably overrated as the main source of scientific
progress” (p.305), and that it is possible to generalize from a single case. Even in
situations in which is not possible or appropriate to formally generalize, transferability (to
other cases) is possible. Yin (2009) makes a distinction between statistical
generalizability and theoretical or analytical generalizability. In other words, the goal in case study research should be to generalize not to populations, but to theories.

Furthermore, attention to the particulars, to the specific context, is more meaningful in qualitative research than generalizability (Cronbach, 1975; Patton, 2002; Stake, 2000, 2006), even moreso in case study research where the “power of a case study is in its attention to the local situation, not in how it represents other cases in general” (Stake, 2006, p.8). The themes that emerged from the data in this study were analyzed and discussed in terms of the underlying theoretical framework of resilience.

In conclusion, this research project utilized a collective case study approach to explore the barriers and facilitators experienced by nontraditional postsecondary students with impairments via semi-structured interviews with students and postsecondary disability service providers. Analysis of websites and documents given to students with impairments provided additional information. Complete case study reports were written for each participant, analysis of interview data were completed and patterns within and between cases were identified using the constant comparative approach (Boeije, 2002; Glaser, 1965; Glaser, 2002). Credibility techniques, including cross-stakeholder, methodological triangulation, thick description (Patton, 2002), member checking, peer debriefing, and reflexive journaling were employed at each stage of the research design. The procedures outlined in this chapter lead to a better understanding of the factors that contribute to and detract from resilience in nontraditional postsecondary students with impairments. This understanding, grounded in the words of the students themselves, can
inform institutional policies and practices to increase access and retention of all learners, including those who experience multiple barriers.
Chapter 4. Results

Introduction

Nontraditional postsecondary students who have an impairment face multiple challenges and stressors. These challenges or stressors occur in the context of environmental factors and are mediated by personal, social, and community resources which facilitate or constrain the individual’s ability to cope with the challenges. This framework is consistent with the social model of disability that views disability as a social construct (Burchardt, 2004). In the social model, disability is not intrinsic to the individual but is the result of the interaction between an individual with an impairment and his or her environment. Thus, an individual may have a physical or cognitive impairment and yet is only disabled to the degree that he or she is limited by the social, cultural, and economic constraints imposed by the environment.

Within the context of their environments, individuals can respond to challenges and exhibit resilience and thriving to the degree that they have and can activate their personal, social, and community resources (Miller, 2002; Orr & Goodman, 2010). As defined in Chapter 1 and discussed in Chapter 2, resilience, generally described as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990), is indicated by return to levels of normal functioning after a stressor. Thriving is conceptualized as something more than adaptive or adequate functioning. Thriving refers to the acquisition of new coping skills and knowledge, of new confidence or a sense of mastery and enhanced interpersonal relationships.
The primary purpose of this study was to understand how successful nontraditional postsecondary students with impairments utilize their personal, social, and community resources to overcome challenges related to their education as well as to understand how academic supports and services have facilitated or constrained their postsecondary success and their ability to demonstrate resilience and thriving. More specifically, the focus was on understanding how the personal, social, and environmental resources available to postsecondary students with impairments facilitate their ability to cope with the challenges presented by their environments and demonstrate resilience and thriving. Such understandings can aid secondary and postsecondary institutions in effectively providing the services that contribute to the academic success of all students (Garrison-Wade, 2009).

**Presentation of the Data**

In this chapter, after a brief review of the methodology and discussion of the credibility techniques that were employed, I present a full case report for each of the eight participants. In the case reports, I explore how each participant engaged his or her personal (internal), and social and environmental (external) resources to overcome the challenges he or she encountered related to their participation in postsecondary education. I discuss how environmental variables facilitated or constrained the participant’s ability to demonstrate resilience and thriving. I discuss the relationships between students and institutional personnel, explore the institutional characteristics that may have facilitated the development of meaningful supportive relationships and consider how these relationships may have contributed to each participant’s ability to demonstrate resilience
and thriving. Finally, I discuss how the participants perceived and valued the supports and services that were available and discuss those that would have been helpful but were not available.

After the case reports, I present the cross-case analysis, present the themes that emerged and were common across all cases, and present findings regarding challenges and constraints, support services, and relationships with institutional personnel in the context of the four research questions. The results of the document analysis and interviews with the ODS directors were integrated into the cross-case analysis.

**Review of the Methodology**

This research study used collective case study methodology (Creswell, 2007; Yin, 1994; Yin, 2009) and a theoretical lens that relies on the construct of resilience to better understand the perceptions of nontraditional college students with impairments. I interviewed each participant and then coded the individual interviews, line by line, in ATLAS.ti qualitative data analysis software. I compared the data within an interview (internal comparison) using open coding, in order to understand the parts of the interview as they relate to the entire story. After the open coding was completed for one interview, I wrote a complete case report (Patton, 2002) for that particular case. The coding-case study cycle was repeated for the remaining cases. After the open coding was completed and the case studies were written for all interviews, I compared findings between interviews, using axial coding (Strauss & Corbin, 1998). I followed the procedures outlined by Boeije (2002) for the constant comparative method of data analysis which involves “systematically examining and refining variations in emergent and grounded
concepts” (Patton, 2002, p. 239). The cross-case analysis (Stake, 2006) was written from the themes that emerged during the axial coding process.

**Credibility Techniques**

The credibility techniques that were employed during this research project are (a) cross-stakeholder and cross-methodological triangulation, (b) triangulation of sources (i.e., document analysis and interviews with disability service providers), (c) thick description (Patton, 2002), (d) member checking, (e) auditing themes, (f) peer debriefing (Lincoln & Guba, 1985), and (g) reflexive journaling via memo writing (Charmaz, 2006). The results of the document analysis and interviews with disability service providers are integrated into the case reports and cross-case analysis.

**Document analysis**

Reviewing the documents and websites that are used by and are provided to nontraditional students and students with impairments provides a more comprehensive understanding of the services and supports that are (and are not) available at each institution. To that end, and as a form of triangulation, I conducted a document analysis on the websites of the four two-year post-secondary institutions attended by the participants in this study. Each document was coded using open coding. Code families were developed for each case study (n=8) and the documents were linked to the appropriate case. The results of the document analysis informed and are included in the individual cases and the cross-case analysis.
Interviews with Disability Service Providers

As another form of triangulation, I interviewed four disability service providers at the two and four-year institutions that the participants are attending. The interview questions covered the services and supports provided by their office of disability services, the relationships they develop with students and their perceptions of what services are most valued by their students. The interviews were transcribed and loaded into ATLAS.ti for review. Relevant findings from the interviews informed and are included in the individual cases and the cross-case analysis.

Case 1 – Matt

Matt has completed two years at the regional campus of a large Midwestern university and, as of this writing, is a senior at the main campus in the Social Work department. Matt, 41 years old, meets the following criteria and thus would be considered a highly nontraditional student: (a) delayed enrollment, (b) part-time attendance, (c) working while enrolled, (d) financially independent under financial aid qualification guidelines, (e) single parent status, (f) GED graduate and (g) having dependents other than a spouse (Choy, 2002; Horn, 1996). Matt graduated with his GED in 1996, having dropped out of school at 17 to care for his girlfriend and their new baby. He entered the workforce immediately and had a very successful career in sales at a truck dealership where he worked until a car accident in 2004 left him with head trauma, traumatic brain injury (TBI),\textsuperscript{14} and in a coma for several months. He had a broken back, ankle,

\textsuperscript{14} TBI can result in cognitive deficits (including memory loss, information processing problems, higher level thinking, and attention difficulties), speech and language
collarbone, shoulder blade, and hand. The right side of his body was numb. He also
suffered from post-traumatic stress disorder (PTSD).\textsuperscript{15} Matt described a long and arduous
rehabilitation process during which he had to learn to talk and walk and, eventually, drive
again.

During the long period of rehabilitation, his employer let him go. Matt believed
this was because he “cost a lot of money.” He was unemployed and without insurance.
He lost everything, including his $300,000 home. Due to his lack of insurance the
rehabilitation hospital stopped providing services. He was left to continue the process of
recovery and rehabilitation on his own, employing what he learned from the therapists at
the rehabilitation center.

The accident took a psychological as well as a physical toll on Matt. His
statements suggest that he had experienced a period of deep self-hatred\textsuperscript{16} and feelings of
anger at those who did not understand his impairment. He, however, demonstrated self-
awareness, a growing understanding of his impairment, and an ability to reflect on his
difficulties, social-emotional problems, as well as physical changes (including chronic
pain), seizures, and sensory, perceptual, vision, hearing, smell, taste deficits (National
Institute of Neurological Disorders and Stroke, 2012)

\textsuperscript{15} PTSD can result in flashbacks, avoidance of stimuli associated with the event, trouble
sleeping or nightmares, difficulty concentrating, anger, and hypervigilance (American
Psychiatric Association, 2000).

\textsuperscript{16} He stated he felt that he should not have lived through the accident and should be
“thrown away.”
thinking and actions. His reference to this period of recovery as a “cage,” suggests that he felt constrained by his state of existence. He indicated (on several occasions) that he “just wanted to be a productive member of society.” He understood his strengths and believed he had the determination and intellectual capacity to be independent and self-sufficient again. He realized, however, that he needed a college degree to achieve self-sufficiency and to pursue his career aspirations:

I was a hard worker and I was really intelligent. I could tell I was really intelligent but I just wasn’t educated. I always had a little resentment at myself for not going to college like everyone else and gaining that experience.

While in school, he volunteers at the Red Cross providing counseling and support to individuals who have lost their homes. His career goals have shifted from his previous career in sales; he wants to provide crisis intervention services in third world countries. He appears to be driven by a strong desire to contribute and help others who are struggling.

**Challenges**

In addition to struggling with the physical, emotional, and psychological issues surrounding the accident and ensuing impairment as discussed in the previous section, Matt found that the class material was not presented in a format that was accessible to him. He was frustrated because he wanted (and expected) to but could not “keep up” with the other students in his classes. One of the accommodations provided to him was a Communication Access Real-time Translation (CART) writer. The CART writer is an individual who provides real-time captioning of lectures. Matt attempted to take notes
while listening to the instructor, even though the CART writer made it unnecessary. He stated that he was hard on himself, but learned to loosen up, accept his limitations and use the supports available to him. He appreciated the encouragement from his CART writer: “You just focus on what the instructor is saying. I got your back.”

His frustration may have been compounded by the invisible nature of his impairment (i.e., language processing difficulties, as well as attention and memory problems resulting from traumatic brain injury). He reported that people did not understand why he struggled; he looked “normal.” His statements suggest that he may have internalized some of that doubt initially but has since worked through it to a point of acceptance and understanding:

I just feel like I’m complaining and it’s like, you know, I look at me and I’m healthy. I exercise. I work hard. I have my good days and then I have some really bad days. I feel like - I just feel like I should be just like everybody else. But I have worked hard for everything I have. I really have. I have just come to realize that.

After he transferred to the main campus, Matt encountered faculty at the main campus who were less understanding of his impairment. For example, he described an incident that he characterized as discrimination due to his disability. He realized that he had not studied the correct content for an exam and afterwards tried to explain his confusion to the instructor. He describes this interaction in the following statement.

And when the exam was over I walked up to her and I said to her: You know, I studied the wrong people, because I did. I studied the more modern people instead
of the civil war. I got mixed up on that. And from then on she…Well, someone said something in class before the last exam and she said, ‘Now hold on! Don’t say that with him around. He’ll study the wrong stuff!’ And I just didn’t even respond. And that’s why I say that I was discriminated against. I was judged. I know for a fact in my heart that she thought she was doing me a favor by giving me a C- in that class. And I don’t even think she looked at my grades, my papers, but that’s my opinion.

He described another interaction during which he questioned the instructor during class and felt he was the given a poor grade on the next assignment because of his comments. These incidents caused Matt to consider not returning to school the following semester. His interaction with the faculty at the regional campus had been much more positive. He did not report any incidents of discrimination or differential treatment at the two-year campus. In contrast, he reported that the instructors at the regional campus were understanding and flexible and would adapt to his needs to a greater degree than those at the main campus.

**Personal, Social, and Community Resources**

Resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that threats or stressors have on less resilient individuals (Chaskin, 2008). Matt utilized his personal (internal) strengths to overcome the challenges and barriers he encountered in college. Self-awareness and an ability to reflect contributed to Matt’s ability to see beyond his immediate frustration and keep focused on his goal of graduating from college. He was still struggling with mobility and
memory issues as a result of the accident when he went to the main campus of the large urban university near his home, ready to enroll. His internal motivation and determination were clear:

…being at the main campus hardly being able to walk or remember anything. I am walking through main campus with a piece of paper in my hand and a pencil. I could barely walk and I’m like: ‘I’m gonna go to school.’ That’s amazing to me.

At the main campus, an individual in the social work department suggested Matt consider attending the smaller two-year regional campus\(^\text{17}\) where he would get a higher level of support and attention. The staff member’s guidance suggests an understanding of the differences in services for students with impairments at the main campus and at the two-year regional campus; the size of the main campus and number of students enrolled requires students with impairments to be strong self-advocates from the start. Students with impairments have to understand and be able to navigate the complicated postsecondary system, know the supports and services they need, and have the ability to ask for it. “If you don’t ask for help here (main campus) you aren’t going to get it.” This also suggests that he recognized the impact this could have on Matt’s ability to persist in school. This staff member was one of several individuals who interacted with Matt along his journey. It may have only been a one-time meeting, a brief conversation, but the results appear to have influenced the trajectory of Matt’s postsecondary education. On the recommendation of the individual at the main campus, Matt enrolled at the two-year regional campus and then registered with the Office of Disability Services (ODS).

\(^\text{17}\) Rural campus with enrollment of approximately 4,100 students.
As described earlier, at one point during his time on the main campus, Matt was ready to quit school as a result of two frustrating experiences with faculty members. He went to speak with a faculty member\textsuperscript{18} in the Social Work department to discuss his difficulties. He describes the conversation:

I even went to one of the doctors, the head lady, and talked to her and...You know what she asked me? She said: ‘M., what did you learn from this?’ What do you mean, what did I learn? [laughing]

This interaction caused him to reflect on and reconsider his negative response to the interaction. As a result of the prompt from the faculty member Matt shifted his thinking to consider what he might learn from the experience and was able to see the interaction in a more positive light. He stated that this contributed to his decision to return to school after summer break. He even wrote a letter of apology to the instructor.

It is worth noting that Matt did not speak at length about support from his family members, other than mentioning a conversation he had with his mother when he was thinking about not returning to school. He did indicate that he has developed friendships with the other students his program and communicates with them regularly via Facebook and email. He participated in a racial awareness program and spoke positively about the experience, stating that he was lucky to have the opportunity to get to know students from many different cultures and backgrounds.

\textsuperscript{18} He refers to her as the “head lady.” She was perhaps the department chair.
Relationships with Institutional Personnel

Benard (2004) identified three environmental factors which can occur within institutions that contribute to resilience: high expectations, opportunities for participation and contribution, and caring relationships. Resilience research indicates that supportive relationships and social connectedness have a positive effect on students’ inclination to persevere through k-12 into higher education and persistence in postsecondary education (Miller, 2002; Orr & Goodman, 2010). Matt indicated that he valued the supportive relationship he had with Julie, the Director of the Office of Disability Services at the regional campus.

She pretty much carried me through the entire process the two years: my freshman and sophomore years….And she was an inspiration - an inspirational person in my entire process. I owe her a lot.

Matt and Julie describe a level of mutual respect, trust and even a sense of friendship, something that Julie indicated she values and has intentionally cultivated in her work with the students registered (and not registered) with the Office of Disability Services.

She was…she was my friend. See, I could tell her things, you know. She would tell me things. And we would talk and I felt real close to her. She’s just an awesome person, just awesome.

Like many older college students who have been away from education for some time, he struggled with college level Algebra (Bailey, Wook Joeng, D., & Cho, 2008). Julie, advised him to drop Algebra and take a remedial math class first. He was reluctant
to drop Algebra and take the remedial class. His statements suggest that the trusting relationship he had developed with Julie helped him to accept dropping the Algebra class:

And she said: ‘So many people like you come into college and they struggle right in the beginning and they end up quitting and I never see them again. And I don’t want that to happen to you. I want you to stay.’ So I dropped the class and went back to prep math. And that was the best thing that I could have ever done.

Julie stated that developing trust takes time and requires the disability service provider to be accessible and available. To that end, she maintains an “open-door policy,” intentionally structuring her time to have time for informal conversations with students who may just drop in. She has designed opportunities to entice students to stop in.\(^{19}\) Her desire to be accessible and available takes her outside of her office. She finds time to walk around campus, becoming a physical reminder to students, and informally checks in with students she encounters. Julie believes that the small size of the two-year institution allows this kind of activity to be productive; she encounters her students whenever she walks about.\(^{20}\)

**Supports and Services**

Matt reported using all of the accommodations that were available to him (i.e., extended testing time, a quiet room) at one time or another. He gradually reduced his

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\(^{19}\) She organized “Cookies and Milk Day,” focus and user groups, Meet and Greet student orientation.

\(^{20}\) She provides services for a caseload of over 200 students with disabilities. She is the only staff person in her office. Her only other support is a graduate student.
reliance on accommodations and has learned, through his work with Julie, to talk with his instructors about his needs; he has learned to self-advocate. He stated, “I feel them out now, but that’s the kind of stuff she helped me deal with, to realize that I can do it and go to school and be an advocate for myself.”

In addition to the support from the Office of Disability Services, Matt relied on the support from his counselor at the state agency that provides vocational rehabilitation services (VR) counselor. The VR provided Matt with the financial support to be able to return to school, covering the cost of classes, books, even his glasses. Although the agreement with the VR limits the income that Matt can earn on a monthly basis to $720 and stipulates that he must be employed after his education is completed, he is openly grateful for the support that the agency has provided to him. He reported that he relied more heavily on his VR counselor during his junior and senior years at the four-year institution, since he no longer had access to Julie.

After he successfully completed two years at the regional campus and enrolled at the main campus to complete his Bachelor’s degree, he found that although the formal accommodations were present, the level of attention he had received at the two-year campus was not. He was surprised and frustrated when he was told to schedule an appointment when he asked to see someone in the office of disability services. In contrast, Julie would have likely evaluated the urgency of his request and then made time to see him right away. Julie described this level of support as “high touch” and recognizes that most of the students on the regional campus require more intervention and a higher

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21 He graduated from the two-year campus with a 3.966 GPA.
degree of attention than students on a traditional four year campus. She describes the “high touch” approach:

I think that high touch just means that we deal with the student population - even if they don’t have disabilities - that really need a lot intervention in order for them to be successful. And if we can help people with that process, even getting in the door, which is so overwhelming for some of our folks, that’s our job. You know, I mean people can be successful with a little bit of help.

She speculates and Matt confirms that a high-touch approach is generally not present for students with impairments on the main campus. There are certain characteristics of small, two-year campuses and possibly small four-year institutions that may allow a high-touch approach to student service: low student enrollment, lower student case loads, ease of access for students, and physical proximity to other support offices. The small size of the campus and the physical proximity to the other support offices allow her to walk across the hall to talk with her “registration person” in order to resolve an issue for or with a student. Collaboration with other support offices, something she feels is easier on a smaller campus, was instrumental in Julie’s ability to provide this level of support to her students. She talks with the Success Coach (i.e., developmental educator) regularly to troubleshoot issues with students. She engages with the staff of the Learning Center\(^{22}\) (tutoring) to get advice in order to better help students resolve their own issues.

\(^{22}\) She refers to each of these individuals by name, indicating an established and comfortable relationship.
Summary

Matt encountered challenges during his transition to postsecondary education, while enrolled as a student at the regional campus and after he transferred to the main campus. To overcome these challenges, Matt engaged his personal resources (goal orientation, flexibility, self-reflection, self-efficacy, and self-awareness) and environmental resources (external agencies and the individuals at both postsecondary institutions). In addition to relying on his internal and external resources, Matt reported that the support and services (both formal accommodations and informal emotional support) he received from the Office of Disability Services contributed to his ability to overcome the barriers he encountered and to his persistence and academic success. This relationship between provider and student, (in this case Julie and Matt) may have developed organically, but the opportunities to develop relationships were thoughtfully and intentionally constructed by the Director of Disability Service and facilitated by the high-touch approach employed at the two year campus. Additionally, the smaller size of the regional campus and lower student enrollment may have contributed to the ability of the ODS directors ability to provide effective support and engage her resources across campus.

College-student thriving (Schreiner, 2010) has the following components: (a) positive perspective of oneself and future, (b) engagement in learning, (c) academic determination, (d) healthy relationships and connectedness to others on campus, and (e) openness to diversity and a desire to contribute. Each of these characteristics can be seen in Matt’s case. He endured a disabling car accident, job loss, and difficult period of
physical and emotional recovery and rehabilitation. Throughout the interview he articulates clear goals and a positive outlook for his future. He is openly grateful for the assistance he has received since his accident and verbalized his desire to give back, to contribute to society and to help those who are also struggling. He is engaged in his studies, appears to enjoy healthy relationships with his classmates, and identifies with his graduating class and his chosen profession: “I am a social worker.” His flexibility and openness to diversity is revealed in his enthusiasm for meeting new people through the racial awareness program.

Case 2 – Val

Val is a 41 year old student who, at the time of the interview, was in the middle of his first quarter at a regional campus of a large Midwestern university. He meets the following criteria and thus would be considered a moderately nontraditional student: (a) delayed enrollment, (b) part-time attendance, (c) financially independent under financial aid qualification guidelines (Choy, 2002; Horn, 1996). At the age of 29, Val was on the job, employed as a machinist when he had a neurological event that caused him to lose sight in his right eye and temporary paralysis. He went to the hospital and the doctors identified a swollen blood vessel in his brain\(^\text{23}\) but told him “not to worry about it.” He returned to work, and six months later he was sent home because he was acting

“confused.” He had a seizure and was rushed to the hospital where he stopped breathing. A CAT scan revealed that he had had a massive stroke. He describes the event:

…. the right frontal lobe of my brain exploded and all the blood was in my brain
… so we ended up going to … a neurosurgeon and they cut that section of my brain24 … so I pretty much lost the front quarter lobe of my brain, the right side.

He was in the hospital for two days and went home to complete the recovery process. When Val describes the event, his account suggests that he experienced a sense of relief in finally knowing/having confirmation that there was indeed “something wrong with him,” as he had suspected since the first episode. He returned to work six weeks later, but continued to have frequent grand mal seizures.

Work was difficult after the stroke and surgery. He had difficulty remembering what he heard and had to write everything down. He did not trust his ability to drive for fear of having a seizure and had to ride to work with a co-worker. He continued working as a machinist for two years following the stroke, but soon was having grand mal seizures multiple times per week. His wife and other family members intervened, confronting him with their concern for his well-being. He quit his job and filed for disability insurance, which took two years to get. His seizures continued to occur several times per week for those two years, until he was finally approved for disability insurance. He believes that the frequency of his seizures decreased at that point because the worry over his financial situation was reduced.

24 At this point, he lifted up the hair covering the top of his right forehead and showed me a deep indentation in his skull about four inches square.
His wife, who had stayed home while Val worked, went back to school, completing a four year degree in less than three years, with a sense of urgency to obtain employment. Consequently, Val stayed home, cooked and cleaned while his wife went to school fulltime. While he was home, however, he continued to mentally design machines. He built several prototypes and tried to sell one of his inventions to a company that was reportedly interested, but was not able to invest because of the sluggish economy. His statements suggest that he was not satisfied being unemployed and relying on his wife to provide income for the family. Val described his motivation to return to school and pursue postsecondary education:

And then I decided I liked it when I used to take care of my wife and she didn’t have to work… I am not going to ask my wife to quit teaching, but I want to give my wife the choice. If she wants to teach, fine. If she doesn’t, that’s great too. I just want to be the breadwinner for the family again.

He also described his desire to—and enjoyment of—work.

And I enjoy working. I am not going to lie. I like going to work. I would always show up a half hour early to my job. I was never late. I would stay over too if they wanted, no problem.

He knew he needed a degree and new skills to be competitive in his field, so he enrolled in the computer–aided design (CAD) program at the regional campus of a large Midwestern university about 20 miles from his home, the same school from which his wife graduated.
Challenges

Val has faced many challenges returning to education. Living in a rural community has presented unique challenges, the most problematic of which is the lack of public transportation options. Because Val does not drive due to his seizures, his wife has arranged for a private bus service to pick him up and bring him to the college. Val stated that getting to class on time using the bus has been the most challenging aspect of attending college. His worries about missing the bus, the bus not coming to get him, or being late for class, adds to his stress level which can worsen his seizures.

As for Matt, accessing the class material has been a stressor for Val; he too tries to take notes. The brain injury affected Val’s short-term memory, so he tries to write down what he hears in class; if he is under stress while he is writing, however, he finds that he cannot decipher his handwriting. He tries to relax and get his “mind right” before he takes notes, but is often unsuccessful. He has an accommodation to record his classes, but Val’s statements suggest a reluctance to use this accommodation and to rely on his own ability to take notes. With the encouragement of his wife, he decided to tape record his classes.

I’m allowed to record and everything, but as of now I can take my notes fine.

I recorded today for the first time, because last weekend I brought my homework and I explained to my wife. We had discrepancy over what happened there. She said, “If you don’t record, there’s no way I can understand what the teacher says because I was not there.” So I decided to record it today. So I make her happy and maybe it will end up being a beneficial tool. I don’t know.
Val experienced academic difficulties. Reading, which was never a strength for Val, has become very difficult since his surgery. He can decode words, but has difficulty trying to comprehend clusters of words and sentences. As a result, he tested into a developmental reading class which he must complete before he can take credit-bearing English. This developmental education requirement can increase the financial burden on Val and extend his time to graduation and certification and, ultimately, employment.

Val expected to do well in his computer-aided drafting (CAD) class because it is his field, but he found that he was unfamiliar with the sophisticated technology and even the basic computer applications. Because of this knowledge gap and his impairment, it takes him longer to complete his assignments than the other (younger) students in his classes, most of whom likely had CAD classes in high school. Finding time to study and complete assignments can be challenging for nontraditional students who have families and additional responsibilities. Val has been able to balance family responsibilities with attending classes and studying at least three hours each day.

Another challenge for Val was the way in which the overwhelming amount of new information was presented at the new student orientation. The orientation seminar at the regional campus lasted an hour and a half and left him feeling frustrated and uninformed. He felt the information was covered too quickly by instructors who did not take the time to check for understanding. The learning management system used by the college, called Blackboard, was demonstrated during the orientation but only as a quick overview. As a result, Val had to rely on his wife to explain the Blackboard system to him.
Personal, Social, and Community Resources

Val employed the personal strengths of self-awareness, self-efficacy, and humor to cope with the challenges he faced. He has a clear understanding of his impairment, his strengths and weaknesses, and their implications for work and school. His statement, “I don’t look at it as a handicap. I just look at it as my life now,” suggests that he has accepted his impairment.

Achievement orientation and proactivity have enabled him to excel in his classes, in spite of the difficulties he encountered. He described a process of practicing his reading, writing and typing skills at home even before returning to school also to determine if he “would make it or not.” His self-discipline is reflected in the following description of his study habits:

I actually do everything typing at home on purpose, because I want to learn...I want to learn how to put things together, how Microsoft works. I mean because I know I need it. If I take English, I’ll have to have it.

He discussed the importance of grades. His statements suggest a sense of pride in a job well-done that, in his perspective, comes with maturity and experience.

I think being an older student you’re more mature. You been through all of your crazy whatever you want to get out of your way and now you’re focusing. I think you’re more obsessed with getting that A or that 100%. If you get 100 percent, then your name goes by that. So it represents who you are. And when I was in high school, I didn’t care if I got a C or a D; It’s still a passing grade! And now it
means more. It’s a value. It’s like, okay, I am worth 100% in this class, you know?

Grades are clearly important to Val. He sets high academic expectations for himself and wants to excel. He had a seizure the first week of classes and missed his reading class in the morning. He had his wife drive him back to school in time for his afternoon CAD class because he did not want to fall behind. He completed the assignment for the CAD class but was disappointed when he received a grade of 92. His response to getting a 90 on an assignment was similar: He used a subsequent day off to work on the assignment until he got it correct.

During this time of transition, Val experienced periods of frustration and discouragement followed by successes and feelings of accomplishment. He described that the highs and lows were more extreme in the first few weeks of school and have since moderated. He has learned to anticipate them now and to work through the lows by “thinking positive.”

Val indicated that his wife and other family members have provided both emotional and academic support throughout his transition to postsecondary education. He reported that he hasn’t used the support services at the college very much, because his wife, a teacher who attended the same college, understands what is available and has been his primary support. She supports him with homework assistance and, as described earlier, has encouraged him to record his classes so she can better help him.

Val has other family members and friends who have provided academic and emotional support, including a cousin who is an English teacher who supports Val by
editing and providing feedback on his papers. None of his family lives in the same state, but he feels he can call them anytime. He knows there are many people he can reach out to when he does struggle, including his neighbors and friends. As the result of an arrangement coordinated by his wife, who was fearful of leaving him home alone, Val developed a close friendship with his neighbors. He walks to their place every day for coffee before classes.

And we ended up being good friends and I have had seizures there and they are, like cool with it. They take care of me and we go on…. They don’t think nothing of it. It’s just my life, you know. They say, ‘That’s the way it is for him.’

**Relationships with Institutional Personnel**

As noted in the previous case study, resilience research indicates that supportive relationships and social connectedness have a positive effect on students’ persistence in postsecondary education (Miller, 2002; Orr & Goodman, 2010) and contribute to an individual’s ability to be resilient (Benard, 2004). The relationships that Val has developed with the faculty members at the regional campus are very meaningful to him.

Benard (2004) identified high expectations as another environmental factor that can occur within institutions and contributes to resilience. While Val was considering enrolling in college, his wife brought him to the college and introduced him to the faculty members in the CAD department. He found that he had much in common with the faculty members at the college (one initial meeting resulted in a two hour conversation) and developed informal, supportive, and collegial relationships with faculty members there. One instructor communicated that he had high expectations for Val and believed in his
potential. With pride in his voice, Val shared his instructor’s encouraging words: “He says, ‘Your past experience will come eventually. And when it does, you’re going to shine. You’re going to move to the top of your class, you know.’”

As described previously, he experienced a seizure in his reading class during the first week of school. He was very discouraged and told his wife he felt college was too much for him. He did not want to go back. That evening he received an email from his reading teacher. He explicitly attributed his decision to return to school after a seizure to that compassionate email from his reading teacher. This communication and subsequent support and encouragement he received from the reading teacher were so meaningful to Val, that he nominated her for a college faculty award. The following text is from the nomination form and describes a faculty member who did go above and beyond, and indicates the importance of this type of supportive relationship in the lives of students who struggle:

I am so happy and proud that I did [return to school]. I am so happy because I ended up passing both of my classes with a 4.0. If it had not been for [Professor A.], I would never have achieved this. It was her encouragement, support and genuine caring above and beyond what I would expect of a professor that made all the difference for me. For that I will always be grateful to her. Please consider [Professor A.], for the Lighthouse Award for her dedication and caring. She really lit the way for me.
**Supports and Services**

As discussed in the previous section, Val relied heavily on the support of his wife, other family members and friends for support and consequently, has not needed to utilize the accommodations available to him. He has begun to record his lectures, but still takes his own notes. He has utilized the Learning Center and indicated that it was helpful to him, noting that there was a staff person there who was familiar with CAD and able to help with his problem.

**Summary**

Val faced multiple challenges transitioning to postsecondary education, the most stressful of which was getting to campus. Like Matt, Val encountered the stressor of accessing and processing the class information—which is presented verbally—requiring Val to take notes to compensate for his impairment. He relied on his personal strengths (internal assets) including self-awareness and a strong achievement orientation to work through the difficulties. He effectively engaged the social supports that were available to him, relying especially on the support of his wife and friends.

As mentioned in the previous case report, college-student thriving (Schreiner, 2010) has the following components: (a) positive perspective of oneself and future, (b) engagement in learning, (c) academic determination, (d) healthy relationships and connectedness to others on campus, and (e) openness to diversity and a desire to

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25 It is worth noting that this interview was conducted within the first quarter of his enrollment in school and it is possible that he will find he needs to utilize additional accommodations as he goes through the year.
contribute. Val overcame a traumatic stroke and subsequent brain surgery which resulted in memory loss and repeated (and continuing) grand mal seizures. Despite these substantial challenges, he has persisted and could be said to be thriving in college. Most of the thriving components indicated by Scheiner (2010) are evident in the words that Val shared, the most apparent is his academic determination and engagement in learning. He has very quickly developed healthy relationships with faculty and staff members at the college.

**Case 3- Lori**

At the time of the interview, Lori, was a 44 year old student at the regional campus of a large Midwestern university, three classes from completing her Associates Degree in Social Work. She recently developed a condition called Keratoconus, a degeneration in the structure of the cornea that causes vision problems, headaches, and sensitivity to light.²⁶ Lori meets the following criteria and thus would be considered a highly nontraditional college student: (a) delayed enrollment, (b) part-time attendance, (c) working while enrolled, (d) financially independent under financial aid qualification guidelines, (e) having dependents other than a spouse (Choy, 2002; Horn, 1996).

Lori married right after graduating from high school in 1984, and lives in a small rural community in the Midwest. She homeschooled her two children while they were young. But as they grew older and more independent, she realized a desire to continue her own education. A free course at the regional campus drew her back.

And I needed something, just that feel where I need something more. And I wasn’t into the sports or the quilters or gardeners club…Like I said, the scrapbooking and the hobbies and all the at-home women, everything they were doing, I could not relate. It wasn’t for me. And so I had taken a course; [the regional campus] offered a free course if you had been out of school for so long. You can take one course and try school. And I took a Philosophy course: Contemporary Moral Issues.

It was a positive experience for her: “I mean I loved everything about it: the professor, the book, the class.” She continued taking classes for several years, off and on, as “a hobby.”

In 2005 she was diagnosed with Keratoconus which causes, in her case, double vision, blurriness, headaches, and extreme sensitivity to light. The condition has progressed rapidly to the point that Lori is now legally blind in one eye. To be able to read without corrective lenses she would have to hold printed text just inches from her eyes. She believes the condition progressed rapidly because of the stress she was under while her husband was serving in the military in Afghanistan. The next step in treating the condition is corneal transplant, which Lori plans to undergo after she completes her degree.

In 2006, Lori’s husband, an Army sergeant, suffered traumatic brain injuries while serving in Afghanistan. For two years they “fought” (Lori’s words) with the Veteran’s Administration Service (VA) to obtain a diagnosis and proper treatment. His injuries were such that Lori felt she needed to return to college and obtain a degree in
order to support the family. In 2008, she re-enrolled at the regional campus in the Social Work program which accepted most of the credits she had completed previously and found that she enjoyed the program. After completing an internship at a psychiatric hospital she was hired as an on-call nurse. She loves the work but is very practical in her ambitions; she wants to complete her degree so she can qualify to apply for a full-time position at the hospital.

School is just —I hate to say this —but right now school is just that piece of paper so that I can get paid more. They’ll pay me more once I have these three classes complete. And I can qualify for a part-time or full-time position on the floor.

**Challenges**

The primary challenge for Lori in attending college is the physical pain caused by the fluorescent lighting found in many college classrooms. She has adapted by wearing a cap and sunglasses to shade her eyes from the glare of the fluorescent lights, but still has had to leave class on occasion to reduce the pain and discomfort caused by the lights.

Additionally, Lori encountered problematic university policies and practices regarding accessible text. Because she has difficulty seeing regular print, Lori has worked with the director of the Office of Disability Services to get her text books in large print, in electronic format, or on tape. The university requires students who need textbooks in alternate format to first purchase the print copies of their required textbooks and bring them to the ODS, who will then obtain the alternate versions of the texts. Lori explained the inequity in this policy which has financial implications for students; students without print disabilities or visual impairments can access the texts at the library at no cost. She
and others with visual impairments cannot. Textbooks must be purchased prior to the
beginning of the class (often four weeks prior) in order to have them scanned into
electronic format in time for the first day of class. There have been instances in which she
purchased the required books in advance of the class and then the class was cancelled.
Even if she sells the books back at that point, she loses money.

So that’s a problem when I can go to the library which is not always accessible
and I just might need a chapter out of this book, but I am forced to purchase a
whole book for something that everyone else can get at the library or borrow
somebody else’s book for one chapter or one story. And I am forced to purchase
the book so that they can purchase it in Disability to give it to me. And you know
when you purchase books and bring them back, it’s expensive.

In addition to the financial hardship associated with obtaining accessible
textbooks, the time it takes to create or obtain the accessible text can present an additional
stressor. Disability support offices are frequently understaffed, requiring a small number
of people to accommodate a very large caseload of students (NCD, 2003). Lori stated that
in one instance she did not have her books in time for the beginning of class. The
professors were understanding and allowed extra time, but she was still behind the rest of
the students in the class. When she does get the textbook in the format she can access, she
has to spend extended periods of time reading and straining her eyes to catch up to
everyone else.

The way that it’s an issue is that everyone else has the work done. And you don’t.

And you don’t have the computer program or the large print and you can’t get that
work done in schedule with them. Yes, you can always make it up, but that puts you behind in the beginning.

Related institutional challenges Lori faced were course prerequisites and lack of online courses. At the time of the interview, Lori was enrolled in one class. Previously, she had been taking three classes per quarter, moving quickly toward her degree and potential full-time employment. She had only three more courses to complete her degree, but some of her courses were not offered or had prerequisites. In the following statements, Lori reiterates the importance of relevant coursework (Knowles, 1980) and her frustration with (seemingly irrelevant) required electives that have slowed her progress toward her degree.

It’s really hard for me to understand why higher learning has to be comprised with so many classes that don’t fit in with the degree. They just don’t have anything to do with it. And I understand if the universities want to make money, fine. Just let us pick the classes! If we have to take 15 classes, we’ll take 15. But don’t make us take this stuff if I don’t… You know I am in Nursing and you are talking about World War II and History. Who cares? You know?

Her visual impairment further complicates the scheduling process for her; even if the courses she needs are offered, she will not take classes at the main campus because driving is too difficult.

**Personal, Social, and Community Resources**

Lori utilized her personal resources (primarily, goal/achievement orientation, resourcefulness, and self-efficacy) to persevere and overcome difficulties she
encountered related to her visual impairment. She believes she will be academically successful in the short-term (self-efficacy), but also in achieving her long-term academic goals.

That’s been my goal since I was very young, my early twenties. I told my mom:

“I’ll be going to school until I am 70 years old. I will get my PhD. I will get my doctorate. I will keep going.”

She has support systems and is successful at engaging them when necessary. She connects with other staff and students at the college and seems to have developed relationships on campus, as is likely the case for many nontraditional learners. Her primary support system, however, is her family. She mentions that she has relied on her husband for support with her coursework at times. Her parents have also been supportive throughout her husband’s impairment and her own, and have moved closer to her family to assist them. She is not being supported by any external agency such as the VR, but while she was meeting with her husband’s case worker at the VA, Lori learned about adaptive technology that would help her better use her computer and colored overlays that would help reduce the glare of black print on white paper.

**Relationships with Institutional Personnel**

Lori has developed supportive relationships with staff members at the institution. She describes a relationship with one individual named Bonnie who likely works at the Registrar or in Student Services.\(^{27}\) Lori worked with Bonnie’s husband, who suggested

\(^{27}\)Lori indicated that this individual worked at the window where she signed up for classes.
that the two meet. When Lori enrolled and registered for classes, she looked for Bonnie and they developed a friendship. Bonnie has been the person to whom Lori goes with questions. Her statements suggest the value for students of connecting with one supportive individual who can help navigate the complex postsecondary system, but also the importance of an encouraging friend. The relationship does not extend outside of the college, but her statements suggest that this relationship is valuable to Lori nonetheless.

She was just so happy when she saw me come back: ‘Oh, Lori! You’re back!’ ‘Yes, I’m back. [laughing] Again!’ And she always helped if I have had any kind of issue. She has directed me wherever I needed, whether it’s for disability or for classes or for questions, she knows exactly. And I know I can pick up the phone—it doesn’t matter where she is working at in UC campus—she will pick up my call and help me to get the right person.

**Supports and Services**

The Office of Disability services has been a source of support for Lori. Lori has utilized some of the accommodations that are available to her through the Office of Disability Services, although up to this point, she has not needed to request extended time on tests or to utilize note takers. She does request her books in alternate format, although that has been a source of frustration as discussed previously. She stated that the director of the Office of Disability Services has gone “above and beyond” to provide supports and services to students with impairments but is constrained by university policies. In the quotation below, Lori refers to the policies and practices at the University related to accessible textbooks and course scheduling.
She would do anything possible. But her hands are tied [by] University policy. But she will push that gray area as far as she can to help us out. So we’ve had really good success there with her. More than just myself. She is great in her position. She just needs more - She just needs to be let go and let her do what she needs to do. She needs the constraints taken off, because she really helps.

Lori indicated that online classes have been the most beneficial support, as they allow her the flexibility to work when her vision is not a problem. While working online from home, Lori can make the necessary lighting adjustments and utilize the accessibility features on her home computer, including a screen reader and magnification program. She has been so successful in her online classes that she is willing to, if necessary, “pay double” for an online version of the class she needed. She has looked for an equivalent course through other campuses, but she was not able to find one. Her statements suggest that the regional campus did not have a course substitution policy that allowed her to take the available online versions of similar electives.

**Summary**

The challenges Lori encountered related to her visual impairment were primarily institutional (i.e., lighting, lack of flexible scheduling, and difficulties obtaining accessible textbooks). To address these challenges, Lori successfully engaged her personal resources (goal/achievement orientation, flexibility, self-efficacy, and self-advocacy) and community resources (individuals at the postsecondary institution). In addition to relying on her internal and external resources, Lori utilized the supports and services (books in alternate format) she received from the Office of Disability Services.
and took advantage of the online course offerings that were available to her. These institutional challenges (e.g., accessible textbook policies) are most difficult to overcome and remain largely unresolved and problematic.

The components of college student thriving described by Schreiner (2010) and described in chapter 2, can be seen in Lori’s case. She returned to college while coping with a degenerative visual impairment. She articulates clear academic and professional goals, a positive outlook for her future, and describes a passion for her work at the psychiatric hospital. She has developed supportive relationships with two individuals on the campus and reports a feeling of support from each of the individuals with whom she has interacted at the college.

**Case 4 – John**

John is a 38 year old student who, at the time of the interview, was in his third quarter of coursework at a regional campus of a large Midwestern university. He lives with his wife and two daughters in a small town. He meets the following criteria and thus would be considered a highly nontraditional student: (a) delayed enrollment, (b) part-time attendance, (c) financially independent under financial aid qualification guidelines, and (d) having dependents other than a spouse (Choy, 2002; Horn, 1996). He was recently diagnosed with Sensory Processing Disorder (SPD) and at the time of the interview was undergoing evaluation for generalized anxiety disorder. Sensory processing disorder is

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28 SPD was previously called Sensory Integration Dysfunction (see the Sensory Processing Disorder Foundation [http://www.spdfoundation.net/about-sensory-processing-disorder.html](http://www.spdfoundation.net/about-sensory-processing-disorder.html))
a neurological condition which results in hypersensitivity or hyposensitivity to physical sensations. For those with SPD, the fear and anxiety that often accompany daily activities can interfere with the ability to attend school, work, and have close relationships (Ahn, Miller, Milberger, & McIntosh, 2004). For John, SPD manifests as, among other things, general anxiety about classroom seating arrangements, severe dislike or discomfort of confined spaces (including cars and small classrooms) and dislike for certain types of clothing (including shoes). The condition is not yet recognized as a disorder in the Diagnostic and Statistical Manual IV (DSM-IV-TR) but may be included in the DSM V.

After John graduated from high school in 1991, he married and started college. It was a financial hardship for both of them to go to college at the same time (John stated that he and his wife “grew up poor”). She was doing better in school than he was, so they made the decision for her to complete her degree first. When she graduated, he would return to college. During the period while his wife was in school and then looking for a job after graduation, John worked two full-time jobs as a cook and a parts sales manager at a Ford dealership. He did not particularly like what he was doing and felt that there was no upward mobility, no future for him there. He started researching postsecondary opportunities in 1999, but then, in 2000, the first of their two daughters was born; the second was born in 2002. John and his wife decided that he would stay home with their children while she returned to work. Once his daughters were old enough to stay at home for short periods of time, John felt he was able to return to college and complete his degree. He lives very close to a large university and talked with a friend about enrolling
there. Upon learning more about the program’s structure—designed for nontraditional learners—John determined that it did not suit him.

I talked to him and he’s friends with a lady there that helps older people come back to school. And, I talked to her a couple times and her program was very…they were very evening oriented. And they were … attempting to make it easier for older people. And that just wasn’t me. I don’t like evening classes at all. I don’t like to miss time with the kids. I don’t like to miss time with the wife.

Although the University was just three miles from his home and offered the classes he needed, he chose to enroll at a small regional branch campus of a different university that would allow him to take classes he needed during the day. The other aspect of the regional campus that appealed to John was the small size of the campus. His statements suggest that there is comfort in knowing the people with whom he interacts at the institution. It is possible that the small size of the campus facilitates this process.

It’s small here. I am small. I like small. I know people here. When I need something I know who to go to, and I know who’s going to be there. It’s not big, when you go into the office over there. There’s two or three people. I know who they are. I’ve seen them. There’s not twenty-five different people.

John has decided to study education (middle grades) for several reasons, primarily because he believes he has the capacity for it and enjoys teaching children. He related stories of his success in helping his daughters with schoolwork and of other parents.

Office of Student Services.

His 10-year old daughter is taking high school level math classes.
bringing their children to him for assistance with schoolwork. He also feels that the education field will be more accepting of his condition.

He plans to complete his Associate’s degree at the regional campus and then transfer to the larger university nearer to his home to complete his Bachelor’s degree. His statements suggest a reluctance to enroll at the larger campus. He is delaying his enrollment at the University for as long as he can by taking as many of the required classes as possible at the regional campus.

**Challenges**

John faces anxiety and worry over the potential of being in confined classrooms, having forced seating arrangements, and instructors not accepting his refusal to wear shoes. There were no specific instances in which these things had occurred, but the anxiety and worry were a substantial distraction.

Nobody had told me to do anything I didn’t want to do. It was the worry that somebody might. Um, and I worried a lot about it. I worried about it a lot. Well, I’d be fine with a seating chart as long as I got to sit where I wanted to sit, and I tend to get things in there and I worry about them. So I worried about that for, that was the first half of the summer quarter, I worried about it. And I worried about it a lot.

The anxiety and worry exacerbate his other difficulties. For example, on days when he is feeling particularly anxious, he is unable to wear anything but t-shirts and shorts, even in the winter, no coat, long pants, or even a sweatshirt. He cannot tolerate the sensation of the clothing touching his skin.
On several occasions John referred to the manifestations of his invisible disorder as “silly,” and seems be conflicted about the significance of its impact on his daily functioning. His statements may suggest a struggle with accepting the erratic and inconsistent nature of his disorder.

Some things bother me. Some things don’t. Some things bother me for a while and then don’t. Some things I can live with for a while. I don’t know how to explain it. I ... at first it seems silly. The whole thing seems silly. My wife says—well, but she’s known me for a long time—other people don’t think it’s silly, so maybe it’s not. I don’t know. It’s hard to explain.

John’s statements may also speak to the challenges associated with a disorder that manifests as an eccentricity or (mildly) socially unacceptable behavior. The resulting behaviors are not far enough outside the realm of socially acceptable behavior to be recognized as a “disability” by the general public. John is concerned that people just perceive him as “weird” (John’s word), although for him, the condition is very real.

To reduce the anxiety associated with confining classrooms and insensitive instructors, John has the accommodation of priority registration, a common accommodation for college students with impairments. The campus that John attends is small enough that the director of the Office of Disability Services knows the faculty well and can counsel students to register for classes with the instructors that best match their needs. John sees the benefits of registering for classes with instructors who may be more flexible and understanding of his impairment, but struggles with feelings of guilt.
And I have a hard time justifying this to myself. I get early registration, real early, and that kind of bothers me, because you know, I don’t really deserve really early registration. I’m not like crippled or anything.

So not only am I registering early, I’m taking up space and then knowing that I’m going to leave [drop a class]. So that can make you feel kind of ….guilty.

The other difficulties that John describes are likely challenges for many nontraditional college students with families. He feels that his wife is not fully supportive of him being back in school. She wants him to take classes at night so he can be home with the children during the day. He has considered attending a smaller four-year college about an hour and half from their home, a campus where he felt safe and comfortable. The distance from his home is a barrier; he would not be able to get home in time to care for his children. Additionally, he indicated that he is working within a timeline. He must finish school before his daughters are ready to attend college or wait until they finish as they cannot afford to have three family members attending college at the same time.

**Personal, Social, and Community Resources**

Resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that threats have on less resilient individuals (Chaskin, 2008). John utilizes his personal resources (self-advocacy, resourcefulness, and self-efficacy) to address the challenges he encounters in his environment. Resilience research indicates a relationship between problem-solving abilities (including resourcefulness, planning, critical thinking, and flexibility) and successful adaptation in adulthood (Higgins, 1994; Werner & Smith, 1992). Resourcefulness includes the ability
to identify external resources. When this personal strength is coupled with internal locus of control (and self-advocacy skills), individuals understand how to locate and take the initiative to enlist the help of supportive adults (Benard, 2004). John demonstrated resourcefulness, self-awareness and strong self-advocacy skills by taking the advice of his classmate who suggested he talk with Julie in the Office of Disability Service. She suggested that he take the accommodations forms to a psychologist for a diagnostic evaluation. He did. He was diagnosed with SPD, returned to the Office of Disability Services and applied for accommodations. He continues to demonstrate self-advocacy skills in classes when he is questioned by faculty members:

…he asked if I was going to wear my shoes in class and I said no. And that was right after I’d gotten my little paper, so I gave him my little paper and that was the end of that.

Another indication of how John was resourceful can be seen in how he handled the learning to correctly format his college papers. (Each faculty member has a different preference.) He went to the Learning Center and asked for support. The small size of the campus comes into play here again. The staff of the Learning Center knows the preferences of the individual faculty members and can guide the students appropriately.

This place is small. There [are] only four people in the psychology department and three teachers in the education department, so you go over there and you say, ‘I need to write a paper for Dr. Tran.’ And they say, ‘Well, Dr. Tran actually uses MLA but he calls it APA.’ The place is so small people know that.

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31 Accommodations form.
He has been very successful academically, receiving A’s in all of his classes. He is confident in his academic abilities (self-efficacy) and believes he will continue to be successful in the future. He is concerned, however, that any treatment he may undergo for his condition may require him to take medication that could negatively impact his study habits.

Benard (2004) identified opportunities for participation and contribution as environmental factors that can occur within institutions and can contribute to resilience. Postsecondary institutions can create opportunities for students, including nontraditional students, to contribute in meaningful ways (Schreiner, 2010). John felt a need to contribute and did so by volunteering to be a notetaker for other students with impairments.

It’s not a concern for me, but I do take notes. I don’t miss class. I do well in class and I volunteer. Kind of feels like I’m giving something back for some of the things that maybe don’t feel like I completely deserve.

**Relationships with Institutional Personnel**

As noted in the previous case study, supportive relationships have been found to contribute to an individual’s ability to be resilient (Benard, 2004). John developed a supportive mentoring relationship with Dr. R., one of the faculty members in the education department. Dr. R. took John on a walking tour of a four year college, encouraging John to enroll there when he finished his Associate’s degree. This instructor went above and beyond the typical support and guidance offered to students. There was

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32 He also teaches at the small four year college mentioned earlier in the report.
no other mention of relationships per se. He found the faculty and staff members helpful
and accessible, but they did not seem to develop into relationships to the degree described
by other participants.

**Supports and Services**

John reports that the individuals at the Student Services and the Office of
Disability Services were “as helpful as they could be.” The accommodation that John
utilizes is priority registration. This has enabled him to register for classes with
instructors who are perhaps more sensitive to his needs and his impairment. As
mentioned earlier, this strategy is facilitated by the small size of the institution; the
director of the Office for Disability Services knows the faculty well, understands the
needs of the students registered with her office and is able to counsel them appropriately.

The other support that seems to have been helpful to John is the accommodations
form itself. He indicated that having this form has provided relief from worrying about
being in difficult, uncomfortable or intolerable situations. He said, “So, yeah… my little
paper. That’s… that lets me not worry about it. It’s the worry. It’s the worry, because I’ve
never had a problem, but my paper that lets me not worry.”

**Summary**

John encountered challenges related to his anxiety resulting from his sensory
processing disorder (i.e., arranged seating, confined classrooms, and being forced to wear
shoes). To address these concerns, John demonstrated resilience by successfully engaging
his personal resources (e.g., resourcefulness, flexibility, self-efficacy, and self-advocacy)
and community resources (individuals at the postsecondary institution). In addition to
relying on his internal and external resources, John utilized the supports and services he received from the Office of Disability Services, primarily priority registration. It seems that the accommodations paperwork itself and the reassurance it provided John was a facilitator and contributed to his ability to be successful academically.

Several of the components of college-student thriving as conceptualized by Schreiner (2010) can be seen in John’s case. He exhibits a positive orientation toward his future and has definite academic goals. He appears to be full engaged in his studies and has developed positive social relationships with his instructors and classmates. He has a desire to contribute and support the other students with impairments at the college evidenced through his volunteer note-taking.

**Case 5 – Ron**

Ron is a 52 year old married college student who, at the time of the interview, had just completed his Associate’s degree in Communications from the regional campus of a large Midwestern University. He meets the following criteria and thus would be considered a highly nontraditional student: (a) delayed enrollment, (b) part-time attendance, (c) financially independent under financial aid qualification guidelines, and (d) GED graduate (Choy, 2002; Horn, 1996). He had retinopathy of prematurity (U.S. National Library of Medicine, 2011) at birth and has since developed retinitis pigmentosa, a progressive condition which results in decreased vision at night or in low light, loss of peripheral vision and of central vision (U.S. National Library of Medicine, 2010). It has left him legally blind. He did not learn to read Braille as a child, thus had to rely on large print materials. He found this so discouraging and frustrating that he
avoided reading altogether. He dropped out of school in 8th grade. As his sight worsened he struggled with accepting his impairment, but finally did get a cane (four years ago) and spoke at length about how difficult it was to accept this symbol of his increasing limitations. He did find, however, that once he accepted it the cane did “make a huge difference.” He has since framed it in this way: the cane is not for him, but to notify others to be aware that he has a visual impairment.

Encouraged by friends and family, he enrolled in classes at an Adult Basic and Literacy Education (ABLE) program in 2008 and graduated with his General Educational Development (GED) diploma in 2009. Ron was successful in the ABLE program and started thinking about taking college classes. He discussed this with his ABLE instructor who reassured Ron that he could be successful in college. This reassurance seems to have contributed to Ron’s confidence and decision to enroll at the regional campus. He admits that he was apprehensive at first, but gained additional confidence after he did well his in his first two classes. Grades are important to Ron. He is proud that he made the Dean’s List this past semester and graduated with a 3.3 GPA. His achievement orientation is evident as he describes his academic goals:

My goal is to make, when I graduate with my Bachelors, at least a 3.4 because that will get me Cum Laude. And that’s what I’m hoping to do. And you know I really do put a lot of importance on my GPA. It’s real important to me. Cum Laude is real important to me because my belief is that this college was—when I started this venture with an 8th grade education—college was beyond the possibilities of anything I could accomplish.
He is taking classes toward his Bachelor’s degree in Communications and intends to work in the non-profit sector “to help individuals less fortunate” than himself.

His statements suggest that the experience of being successful first in ABLE and then in college—something he never thought possible—has been transformational. In the excerpt below, Ron indicates that he sees a different/new potential future for himself.

I just didn’t think none of this was possible. And I accepted my fate. You know, I get Disability Social Security, and this is what I’m going to do until I die. This is it. You know, I didn’t feel sorry for myself; I don’t want you to think that because that wasn’t the case. But I accepted my fate. I thought that was my fate. And today I can truly see that that does not have to be my fate. Today, and in fact I am working as hard to work myself off from Disability Social Security.

His transformation has inspired him to share his experience with others who may also struggle with a lack of confidence in their academic abilities. He accepts Disability Social Security but is working to get off of it. He seems to perceive himself as separate and different from “those people” who—in his opinion—“play the system” (Ron’s phrasing). His statements suggest a distancing from those who take advantage of social supports and an underlying and subtle disdain toward those individuals who “play the system.”

I think it’s so important that… And I don’t want to point fingers at anybody specific but so many I see today…so many people are trying to find, I guess I want to call it an ‘easy way’, ‘let me get.’ And, you know, I know from personal experience there are so many people out there that need Disability Social
Security, but I also know that there’s a big group of people that play the system a little bit. I wish there was a way… I know I could just motivate these people and say, ‘Look, you don’t have to accept this.

He feels a responsibility to inspire by example, which is his motivation to achieve academically (as measured by making the Dean’s List, maintaining high GPA, and graduating Magna Cum Laude).

**Challenges**

Like Lori, the most substantial stressor that Ron experiences is obtaining his textbooks in an accessible format in time for his classes. Alternate format materials are commonly provided to students in braille, large print, audio or electronic text (e.g., Adobe Portable Document File [PDF], Rich Text File [RTF], ASCII, HyperText Markup Language [HTML], or in Microsoft Word document). The electronic text can be read aloud by software programs installed on the user’s computer. Due to his visual impairment Ron requests his textbooks in electronic format, but he stated that on more than one occasion the publisher has sent the textbook incorrectly formatted and thus his adaptive software was not able to process it. He had to return the books to the publisher and request corrected versions. This time lag put him behind in his reading and in his coursework. There is a clear inequity; his classmates without visual impairments can access the texts at the library or from their peers. His classmates have options that are not available to him. Ron must wait for his texts to arrive—correctly formatted—from the publisher. Ron explains the implications of not having accessible textbooks on time.
I took a Modeling Algebra class and I didn’t get my book until two weeks into the class. And two weeks for a traditional student is usually not a problem. They could share a book with a friend. There’s a lot of options. Go to the library. Check out the book in the library if it’s available. So there’s options. But for me there’s no options. If I don’t have my book and have it one time, I lose two weeks. It’s catastrophic. It’s like losing half of the semester because truly in that class, I never did get caught up. And I ended up dropping the class.

Ron offers an additional suggestion that, with adequate ODS staffing and equipment, could reduce the problems with accessing text from publishers: the institution could purchase a high speed scanner so the electronic texts can be created on campus from print copies. This solution is, however, unlikely to be viable for large number of students because of the time and human resources required to scan and create texts. The best solution may be a combination of increasing local institutional capacity (e.g., increased ODS staffing) and enacting new and enforcing existing state and federal legislation that address the inequity in textbook accessibility.

Another challenge Ron described is people who are ignorant of his white cane, walking in front of him, not giving him the space he needs and almost causing collisions. When asked if he noticed a difference between college students and the general public, he responded that he did in some cases experience the same ignorance on the college campus but that the college students were more pleasant about it or seemed to have better intentions (e.g., offering to “hold his hand” and lead him out of a dark room).
Personal, Social, and Community Resources

Ron has been successful in college and recently graduated Magna Cum Laude with an Associate’s degree in Communications. He is now working toward his Bachelor’s degree in Communications and plans to pursue a career in the non-profit sector. He has successfully engaged his personal (internal) resources (including resourcefulness, achievement orientation, self-efficacy, humor, and a sense of meaning) as well as his resources in his environment to overcome these challenges and exhibit resilience. He has a strong work ethic, and has not missed more than five days of class since he started college (several missed days were due to getting a heart catheterization). He spends many long hours studying and working on class assignments, and is willing to utilize the resources that are available to him on campus (resourcefulness). As discussed in the previous case report, resilience research indicates a relationship between problem-solving abilities (including resourcefulness, planning, critical thinking, and flexibility) and successful adaptation in adulthood (Higgins, 1994; Werner & Smith, 1992). For example, Ron struggles with math. He spends many hours working with the math tutors at the math center, going in on days when he didn’t have class just to work on his math. His sense of humor is evident in his statement regarding the amount of time he spent at the math center; he said he should have installed a mailbox there. Additionally, he took every paper he wrote to the Writing Center for editing. Regarding using the resources on campus, he stated: “You see, I utilize anything that we have….you know, there is no reason not to do that.”
Ron has also accessed the resources in his environment, namely the state agency that provides services for individuals with vision impairments (VI). Up until this point, Ron has taught himself to use adaptive technology. A friend suggested the speech-to-text software program called Dragon NaturallySpeaking® which he uses for writing his college papers. Through the VI he will get training on a new suite of assistive software including JAWS® screen reading software33, Kurzweil 3000®34 (both screen reading software packages) and a Victor Reader which is a handheld digital audio book reader. The VI will also provide a mobility specialist to help Ron learn to navigate his environment as his sight continues to decline. Within the next year, he intends to get a guide dog through VI. Overall, the VI has allocated $40,000 for his services and supports.

**Relationships with Institutional Personnel**

Ron did not describe supportive relationships with institutional personnel at the postsecondary level. The relationship he developed with the ABLE instructor, however, was meaningful and did contribute to his decision to enroll in postsecondary education. Ron indicated that the individual (he did not know her name) who ran the Office of Academic Services, where the Student Accessibility Services is housed, was new. At this institution there is not a separate, stand-alone office (with dedicated staff) for serving students with impairments. The Office of Academic Services, staffed by one director and two support staff members, coordinates COMPASS testing, Veterans programs, voter registration, career services, computer services, tutoring services as well as student


34 http://www.kurzweiledu.com/default.html
accessibility services (SAS) (for students with impairments). At the time of this interview, there were 87 students registered with SAS. As mentioned in a previous case study, Offices of Disability Services are commonly understaffed. The National Council on Disability released a position paper in 2003 that found that “the understaffed conditions that exist in many academic institutions undermine the provision of appropriate support to people with disabilities” (NCD, 2003, “Retention and Persistence,” para. 4). The NCD indicated that a major issue in providing quality services to college students with impairments is “the insufficient quantity of staff members handling huge caseloads to accommodate disabled students (NCD, 2003, “Retention and Persistence,” para. 3).”

**Support and Services**

The primary accommodations that Ron uses are a digital recorder and textbooks in audio or electronic format. The difficulties with alternate format text were discussed earlier in this report. The other supports and services that have contributed to Ron’s ability to be successful in college were the assistive technology that he learned to use on his own and that provided to him through VI.

**Summary**

The primary challenge for Ron was obtaining his textbooks in accessible format in time for class. Ron demonstrated resilience by successfully engaging his personal resources (resourcefulness, flexibility, self-efficacy, and self-advocacy). Components of college-student thriving as conceptualized by Schreiner (2010) can be seen in Ron’s case. He encountered social barriers related to lack of public understanding of visual
impairment but approached his education with a sense of purpose, a sense of humor, and a desire to be an example or inspiration for those who do not believe they have the ability to be academically successful. He has a positive outlook on his future and is continuing to work toward his Bachelor’s degree.

**Case 6- Sadie**

At the time of the interview, Sadie was a 50 year old student at the regional campus of a large Midwestern university. She lives with her fiancé on a farm in a rural community. She recently completed her Associate’s degree and is eight classes away from finishing her Bachelor’s degree. She has a learning disability in reading and was recently diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD). Sadie meets the following criteria and thus would be considered a moderately nontraditional college student: (a) delayed enrollment, (b) part-time attendance, (c) financially independent under financial aid qualification guidelines (Choy, 2002; Horn, 1996). Sadie had a very difficult childhood. She was molested on multiple occasions at a young age and attributes her difficulties (including her reading difficulties) to the psychological coping strategies she developed to deal with the trauma she was experiencing. She graduated from high school in 1979 but could only read at a third grade level and was not diagnosed with a learning disability until she was in her forties.

Her medical doctor started her on the path toward increasing her literacy skills when, he asked her to read some words during an appointment. When she was unable to read the words, he suspected she could not read but told her that she could learn. This information was a revelation to her; Sadie thought that everyone struggled with words
and this would never change for her. Encouraged by the thought that she could improve her reading skills, at the age of 42 she enrolled in a nurse’s aide program at a local adult education center. She was unable to read the assignments and after two weeks attempted to leave out of frustration. Her classmates, however, would not let her leave:

They went down and told the head person over this program, ‘Sadie is walking out!’ And that’s how frustrated I get, because I studied it. I know it. But I don’t know how to do it for me to tell you. So I just walked out. They come out. Even the …my classmates, ‘Oh, Sadie, don’t quit!’ I’m like, ‘I can’t read this! I can tell you.’ ‘Fine! We’ll write it down for you.’ I mean people were just like, ‘Oh, don’t quit!’

She did return and subsequently completed the nurse’s aide program. While she was in the program, the adult education program administered a brief screening assessment for learning disabilities then referred Sadie to the regional technical college for a more comprehensive assessment. She did follow up with the testing and was diagnosed with a reading disability. She struggled with accepting her impairment. For two years, she hung her head in shame, avoiding conversation and eye contact. The college referred her for counseling which helped her deal with her childhood trauma and her new diagnosis.

During this period, she met with the director of the Office of Disability Services at the technical college and learned about the accommodations that were available to students with impairments. This is when she started to believe that college might be a possibility for her. In 2004, she enrolled at the regional technical college. The instructors there worked extensively with her on reading. She used her accommodations, took
advantage of the tutoring that was offered, utilized the writing center, and spent hours in the math lab. She communicated with her professors about her challenges. Her determination and persistence paid off; she graduated with her Associate’s degree and is eight classes from completing her Bachelor’s degree in Psychology. She intends to continue on to a Masters and PhD. Her statements suggest that gaining increased literacy skills has been transformational; she describes herself as now being “a part of the world.”

Challenges

Sadie continues to struggle with reading and feels that additional tutoring in reading would help her “fill in the gaps,” but this level of tutoring is not available at the college. When she first started college, she worked with one of her instructors for four hours every week. She is a poor speller and is frustrated by trying to take notes in her classes, so she uses the accommodation of a notetaker. Similar to Matt and Val, Sadie expressed a conflict with this accommodation. While she recognizes the benefits of using notetakers, Sadie wants to be independent of others for support. The dependence on notetakers is particularly onerous to her since completing her Associate’s degree.

Once you’re in and you got a degree and then you’re on your second one, you ... I want to be more independent. I don’t want to really use, you know… I want to do it on my own.

Other difficulties that Sadie encountered were related to time management and study skills; she feels her skills are “inefficient” (Sadie’s words). She describes the study

35 Sadie indicated that this instructor provided the tutoring “on her own time,” outside of the normal expectations of her job.
strategies she uses (e.g., using notecards, putting vocabulary words on her phone, “chunking”), but expresses a dissatisfaction and a desire to improve her skills. Her dissatisfaction is possibly less representative of poor study habits than of high personal expectations and a drive to excel.

She has encountered many supportive individuals at the college but there have been others who have discouraged her from attempting the courses in which she was interested (French), indicating they would be too difficult for her. She describes how this discouragement made her try even harder. Others low expectations seemed to motivate her to prove them all wrong.

So I went to him and he says, ‘Well, this is a foreign language. You shouldn’t even be in it! You’re trying something that we told you [shaking finger accusingly] was very going to be very difficult for you.’ I said, ‘Let me take it!’ Even [the director of the Office of Disability Services] said, ‘You’d better not go down that road.’ And I said, ‘Who you talking to?’ I said, ‘Don’t tell me no, because if you tell me no, I’ll do it.’ And they told me, ‘You’ll never last but six months because of the frustration of where you are.’ They didn’t come right out and say that. But they said that this was going to be so difficult, ‘We see you getting to a point where you get frustrated and probably just drop out.’ And I was like, [wincing in disagreement] ‘I don’t think so.’

**Personal, Social, and Community Resources**

As mentioned in previous case reports, resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that
threats have on less resilient individuals (Chaskin, 2008). Sadie engaged multiple personal (internal) strengths (self-awareness, resourcefulness, determination, achievement orientation, self-advocacy, self-efficacy, positive orientation) as well as social and community resources to address the challenges she faced in college. She has accepted her learning disability and has a clear understanding of her challenges. She has resisted the low expectations of others and as previously mentioned, seems to be driven by a desire to prove them wrong. One of her strongest assets is possibly her resourcefulness. She seeks out and utilizes the supports that are available to her including math tutoring, the writing center, services through the counseling center, and accommodations offered through the Office of Disability Services (i.e., a notetaker, a reader and quiet room for exams, extended testing time, and books in alternate format). Her commitment and determination are evident in her study habits. She spent six hours per day, six days per week in the math lab when she first started college and consequently received nothing below a B+ in any math class.

In addition to accessing and utilizing the supports that are offered, Sadie demonstrates self-advocacy skills. She communicates with her instructors and has asked for help and guidance when she needs it. It is important to her that her instructors understand why she struggles and that they know she is “going to be working really hard.” Although she is not supported by an external agency (e.g., VR), Sadie has sought out resources in her community, specifically counseling and spiritual healing through her church (community resource). She continues to find support and guidance through her faith.
If it wasn’t for Him, I don’t think I would be right here today [laughing]. You know, because of… I mean I count on Him. Because I don’t see me doing this alone.

She believes she can and will be successful in her classes (self-efficacy). She understands the importance of studying and is willing to put in the extra time it takes to be successful. She has positive—yet realistic—expectations, “…A ‘C’ is an ‘A’ for me. I am a ‘C’ student. It is just how it is.” She seems to be able to positively reframe disappointments. For example, she explains that when she first started college getting a C in a class would have brought her to tears. The following statement suggests her ability to reframe: “But other than that I got A’s and B’s. Then B- and like I said this is my first C and it about killed me [laughing]. But I thought, ‘OK, C means ‘continue’ [laughing].’” Her statements suggest that she approaches her studies with a positive attitude (even a sense of humor), gratitude excitement for and love of learning. For example, she describes how she, as an older nontraditional student, approaches postsecondary education: “I can’t wait until the next quarter to start because I know I’m gonna learn something new. I mean I love it. I treasure it.”

She expressed gratitude for the services offered through the Office of Disability Services (ODS), to the faculty who have assisted her, and to the director of the ODS. She stated that the encouragement and support she has received has been “overwhelming.” She indicated that her mother and her fiancé have been supportive as well, but did not elaborate on how they have helped her.
It is possible that gratitude (for the support she has received) and the transformation she experienced have influenced her future aspirations. She chose to study psychology because she has a desire to help those who are struggling in the way she struggled: either with literacy, child abuse, or domestic violence. She feels that she would bring a deep empathetic understanding to the care of these individuals—an understanding that she believes most professionals do not have.

**Relationships with Institutional Personnel**

As mentioned in previous case reports, supportive relationships have been found to contribute to an individual’s ability to be resilient (Benard, 2004). Sadie developed many positive and supportive relationships with institutional personnel at the technical college and at the regional campus. When she first entered the technical college, she worked with one instructor on her reading for four hours per week. This was very meaningful to Sadie who said that the instructor did this “on her own time” (Sadie’s words). Several individuals have gone beyond their normal responsibilities to provide the support that Sadie needed. Sadie worked with the counselor on campus early on and returned to her office on multiple occasions without appointments when she was struggling (often in tears), because the counselor “understood.” Even though she is working on her Bachelor’s degree, she still sees the instructors who helped her initially. They will stop and talk with her, still providing encouragement. In addition to providing accommodations, the ODS staff has provided encouragement and support. She was

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36 It is worth noting that she refers to the instructors by name, even the ones she had six years previous to when she first started.
supported by two different individuals at the ODS, as she enrolled during a change in staffing there. She expressed gratitude for their assistance and support, indicating that she would not have made it this far without them.

**Supports and Services**

As mentioned earlier, Sadie utilized all of the accommodations that were available to her including a notetaker, a reader and quiet room for exams, extended testing time, and books in alternate format. Her ambivalence with notetakers was discussed earlier in the report. Sadie needs the support of a notetaker, but does not want to be dependent on another individual. She stated that she would “be complete” if she was free from this dependence. There are technological solutions (she suggested a tape recorder that would provide a transcription of the recording) that may provide the support she needs as well as the independence she desires, but she was not aware of any that were available to her. She also takes full advantage of the math tutors, the Writing Center, the counseling center and requests support directly from her instructors.

**Summary**

Sadie demonstrated resilience by successfully engaging her personal resources (i.e., self-awareness, resourcefulness, determination, achievement orientation, self-advocacy, self-efficacy, positive orientation) and community resources (e.g., her church, counselor at the institution) to overcome the academic challenges she encountered, persisting even when the necessary supports were not available to her (e.g., ongoing one-on-one reading tutoring). In addition to relying on her internal and external resources, Sadie utilized the supports and services (i.e., a notetaker, a reader and a scribe for exams,
a quiet room for exams, extended testing time, and books in alternate format.) she received from the Office of Disability Services and took advantage of the tutoring and other academic support services that were available to her.

**Case 7 – Tiffany**

At the time of the interview, Tiffany had just completed her Associate’s degree in Business Management Technology at a regional technical college. Tiffany, 43 years old, meets the following criteria and thus would be considered a moderately nontraditional college student: (a) delayed enrollment, (b) part-time attendance, and (c) financially independent under financial aid qualification guidelines (Choy, 2002; Horn, 1996). She has cerebral palsy,\(^{37}\) which affects her stamina and limits her mobility. She had a difficult childhood growing up in a rural community with parents who were mentally and physically abusive.\(^{38}\) Because of the physical impacts of the cerebral palsy, she was treated by those around her as if she had a mental impairment:

So if you’re handicapped, and you sound handicapped, and you walk handicapped, which I do, you are automatically assumed [to be] mentally handicapped. Because what we see is what you are. So [there] was not a lot of faith in me. I was pre-judged.

\(^{37}\) Cerebral palsy is an umbrella term for a group of disorders that involve the nervous system and affects movement, vision, learning, and cognition (U.S. National Library of Medicine, 2012)

\(^{38}\) This information was not obtained during the interview but in subsequent conversations I had with Tanya.
She graduated from high school and eventually found work as a night supervisor at a center for with adults with developmental disabilities. She worked there for 10 years, but saw the job as a “dead end.” Her physical limitations held her back. She wanted something more, something “better.” Four years ago she moved in with the family of her minister, with whom she had grown close over the years. This family, particularly her adoptive mother, has been instrumental in helping Tiffany develop the confidence she needed to enroll in postsecondary education. Tiffany resisted their encouragement at first; she did not believe she could be successful in college. She agreed to take a computer class at the local two year college (an area in which she was already skilled), but her mother pushed her to enroll in college Algebra instead. Tiffany resisted. Her mother took her on a strategic shopping trip to the local mall where a representative from the college was promoting a free college class. Tiffany reluctantly registered for the college Algebra class.

What choice did I have at that point? How was I going to argue with her in the middle of the mall? Oh, I was so mad at her, so mad at her. [Laughing] I mean I really thought I could not do algebra. I thought, ‘Are you crazy?’ But it worked.

Tiffany enrolled and received an A in the class. This had such a powerful impact on her that she was moved to tears when she saw her grade. Her mother knew that Tiffany had the potential to be successful in college; she just needed the opportunity to prove it to herself. This free class provided that opportunity. The instructor in the Algebra class asked Tiffany about her future plans, communicating to her that he believed she had

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39 Tanya refers to her minister as her mother.
potential to be successful in college. He suggested she consider enrolling at a nearby two-year college. Encouraged, Tiffany went to the college and spoke with an admissions office representative who happened to know Tiffany as a child. This is how Tiffany recounted the conversation with the admissions representative:

Admissions officer: ‘What are you doing here?’

Tiffany: ‘I am checking into going to college.’

She’s like, ‘You’re not college material. You’re not college material.’

Tiffany: ‘Well, aren’t you going to give me the test?’

Admissions officer: ‘I am not going to waste my time and put you through that. You can’t do college. College is for educated people. You can’t do it. You’ll fail.’

Tiffany: I told her, ‘I just passed a class at [the local two year college].’

Admissions officer: ‘Well, they had to pass you through.’

Tiffany: I went out of there sobbing like a baby.

With counseling and support from her mother, Tiffany got past the discouragement and called a regional technical college which she heard had good support services for students with impairments. They set up an appointment to visit the college. Her experience there was much more positive. She enrolled in the technical college, intending to major in digital media design. As will be explained later, she changed her major to business management technology shortly thereafter.

Throughout college she was supported by her family, the Office of Disability Services, her instructors, and the VR. At the time of the interview she worked at the college in the tutoring center but only four hours per week. She wants to work. She states,
“I would be a good worker for anybody. I would give my all. I don’t do anything unless I give my all.” Tiffany has had difficulty finding employment in her field, however. She recognizes it is a difficult time to find employment, but she is frustrated.40

I really…right now, I am kind down on myself because I went to college. I studied hard. I did all this and I really don’t have a good job. It’s the economy I know.

Challenges

The social model of disability (Mitra, 2006) suggests that individuals with impairments “face discrimination and segregation through sensory, attitudinal, cognitive, physical, and economic barriers, and their experiences are therefore perceived as similar to those of an oppressed minority group,” (Mitra, 2006, p.237). In addition to physical barriers, Tiffany faced the attitudinal barriers of her classmates, her instructors, and the other institutional personnel with whom she interacted.

Because she has limited physical stamina and cannot walk for more than a short distance without tiring, she chooses to navigate the college campus with a power wheelchair purchased for her by the VR. When she first visited the campus of the technical college she met with the director of the Office of Disability Services, Carrie, who took Tiffany and her mother on a tour. Carrie showed her the library, classrooms, elevators, restrooms, desks, as well as doors in and out of buildings. Tiffany was able to practice maneuvering her chair in these different environments. This tour assured Tiffany that the campus was accessible to her. After she enrolled, however, she encountered two

40 Since the interview she has started her own business in website design.
scenarios where she felt the accessibility was subpar. She contributed to improving one of the situations.

While she was a student a new student center was built at the technical college—without curb cuts. Although in the interview she indicates that she does not see herself as a “strong person,” she demonstrated initiative and self-advocacy skills in directly addressing this lack of accessibility.

So I went to the architect builder and I’m like, ‘You know, you see I’m in a chair and its pouring down rain outside and I have to go clear around the building because to get in because I can’t get on the sidewalk?’ You know the next week there were curb cuts put in?

She indicated that she felt “powerful” when she saw the resulting curb cuts. She expressed satisfaction in the knowledge that it would benefit others as well (e.g., people with strollers, pulling carts, or on crutches).

Tiffany described a second access barrier on her campus; the cafeteria in the same student center does not have hard plastic trays. This requires Tiffany to balance a drink and a plate of food while maneuvering her chair and trying to pay the cashier. Compounding Tiffany’s frustration with the access issues in the cafeteria, the cashier was impatient with Tiffany, and asked her to “hurry up,” while she was attempting to pay. Navigating the cafeteria was so frustrating that Tiffany has been reluctant to eat there.

As frustrating as the physical barriers may have been, her power wheelchair, which was provided to Tiffany by the VR, has facilitated her transition to college. Indeed, she said that she would not have been able to attend college without it. She is concerned,
however, that VR will take the chair back if she does not gain employment soon. Even though she is only working four hours per week and cannot find another job, the VR will not financially support any additional classes or continue to pursue an additional degree. VR told her that additional coursework “wouldn’t benefit” her. They will drop her support if she does re-enroll.

Tiffany also encountered attitudinal barriers, a lack of awareness and sensitivity, “quite often” on the college campus and in the community. For example, on multiple occasions other students entering a building did not hold the door open for her and the door “slammed in her face.” She described other situations in which the attitudinal barriers, however, went beyond lack of awareness. During a group project, her classmates expected her to complete the assignment and did not contribute anything.

But every class we were supposed to bring what we’d done. I always do my share. The guys never turned in their share. Yeah, I said to them one day, I said, ‘Where’s your stuff?’ ‘Well, we have a life.’ As if I don’t? They wanted me to give the answers. I wrote the paper. They said, ‘People won’t understand you anyway.’ I said, ‘Uh-uh [negative]. I did the work. I read the paper.’ They got po’d. After class I went to the professor. I told him I did all the work. He said, ‘I could tell, I’ve been watching.’ They got an F. I got an A.

Her statements suggest that in addition to feeling taken advantage of by the group members, Tiffany was angered by the way in which they responded when she confronted

41 This could be a reference to the speech difficulties that Tanya experiences due to her cerebral palsy.
them and asked them to do their share. She, however, demonstrated her self-advocacy skills as she had done with the inaccessible student center and addressed the problem directly, first with her group members and then with the instructor.

One final example is an incident of discrimination that resulted from the inflexibility of an instructor at an off campus site where Tiffany was enrolled in a digital photography class. The instructor gave an assignment that required the students to climb a ladder or tree and take pictures outdoors. Tiffany, physically unable to climb due to her impairment, asked the instructor if there was another way to complete the assignment. He was inflexible.

And he’s like, ‘You gotta do it.’ I said, ‘I can’t.’ He said, ‘Well, you can’t be in this field.’ You’re telling me because I can’t climb a ladder or climb a tree or crawl under a piece of equipment I can’t do this?! And Carrie even talked to him and he was the director of the degree. He’s like, ‘If she can’t do the work, she can’t have the degree.’ I had to change my major, because physically I couldn’t do it. Mentally I could. But physically, I couldn’t do what he was asking. I felt discriminated against. I could have fought that but I didn’t. I mean I am where I am supposed to be now. But at that point that was big blow to my self-esteem.

The other challenges that Tiffany faced were related to being a nontraditional student returning to college after more than 20 years. When she took the placement test at the technical college, she scored just below the cutoff for remedial or developmental courses. She was encouraged to take the placement test over to test out of the remedial
courses. She decided not to try to test out, but to take the remedial courses anyway to build her skills and be better prepared for college coursework.

**Personal, Social, and Community Resources**

Resilient individuals are able to utilize personal, social, or community resources to avoid or reduce the negative effects that threats have on less resilient individuals (Chaskin, 2008). Tiffany utilized her personal (internal) strengths (self-advocacy, self-awareness, determination, resourcefulness, achievement orientation, and faith) to overcome the multiple barriers she encountered as a college student. Her ability to advocate for herself is evident in how she handled the issues of access previously mentioned in this report. She demonstrated resilience in her ability to bounce back from situations which other less resilient individuals may not. She had a desire to prove those who doubted and discouraged her wrong. It seemed to be a source of motivation for her initially. She also found support in her faith.

I am going to prove them wrong. I am going to be somebody. I am not going to be what they think I am. I am going to be who I know I am, frankly, who I believe God made me, you know. Spirituality and God has a lot to do with it for me because He don’t make junk. And I was going to prove to myself, number one, and to others, that I could this. That developed the self-determination in me. I believed in myself even though no one believed in me.

Each small success reinforced and increased her confidence in her academic abilities.

And the more I did it, and the more I saw those grades—each class, each test, each paper—that belief within myself got stronger and stronger.
Her family, particularly her mother, provided spiritual and emotional support that pushed Tiffany to enroll initially and then to persist in college, helped her to reframe the discouraging experiences, and to address the multiple barriers she encountered. Additionally, Tiffany accessed the services of the VR which provided her with a power wheelchair and a lift for her van, so she can drive and transport the chair. Tiffany said that she would not have been able to attend college without her chair.

**Relationships with Institutional Personnel**

Tiffany developed a positive relationship with the director of the Office of Disability Services at the technical college. Carrie was the first person Tiffany interacted with at the college. As described earlier, she took Tiffany and her mother on a tour of the campus to ensure her that she would be able to access the buildings and classrooms. Tiffany often went to see Carrie when she was struggling with how to address issues with faculty who were not understanding of her abilities and limitations. Carrie pushed her to talk to her instructors directly helping Tiffany to learn to advocate for herself.

Tiffany described an encouraging and supportive relationship with an instructor named Steven who was also the coordinator of the ski club at the college. Steven approached Tiffany and suggested she go skiing with the club. She was skeptical at first, but Steven showed her a video of people in chairs on skis, tethered to a ski coach. She went on the trip. She loved it. Steven captured the experience on videotape for Tiffany, going beyond the typical expectations of a college instructor. Tiffany felt she gained acceptance and respect from her classmates as a result of this activity. Participating in
this social activity with her classmates seemed to diminish some of the attitudinal barriers that she had experienced in the past.

It was like that spoke something to the other students. I think I got respect from them. And one of them bought me a hot chocolate. And I was thinking I am actually doing something that a normal person does.

Additionally, doing an activity that “normal” people do was important to Tiffany. Her comments suggest that this activity contributed to and reinforced her self-confidence in her abilities and her sense of determination.

Where there is a will there is a way. I wanted to tell you about that because it came about because of college. I will never forget the day he said that I should go ski with him.

**Supports and Services**

As mentioned previously, Tiffany indicated that her most important support is her power wheelchair. Other supports and accommodations she utilized were Dragon Naturally Speaking, a speech to text software application, that Tiffany used for writing papers and an AlphaSmart keyboard (a small keyboard for word processing). She used a scribe in her math classes, as taking notes on the AlphaSmart was too difficult. She recorded her lectures and also received extended time on tests.

Additionally, the college success class as well as the remedial courses that Tiffany took seemed to function as supports. Through the college success course she developed an understanding of the college campus, including how to locate and use the resources that are available to students (e.g., the library and computer labs). The remedial courses
helped to prepare her academically, to improve her study skills, and increase her confidence.

Summary

Tiffany encountered attitudinal and institutional challenges and barriers during her transition to postsecondary education and while enrolled as a student at a regional technical college. Many of the institutional and attitudinal barriers seemed to result from a lack of awareness or understanding (e.g., no plastic trays in the cafeteria, and no curb cuts on new student center). The lack of awareness and understanding on the part of one instructor resulted in an act of discrimination and excluded Tiffany from participating in the class. She subsequently and regretfully changed her major.

Tiffany engaged her personal resources (self-advocacy, self-awareness, determination, resourcefulness, achievement orientation, and faith) to cope with the discouragement and discrimination she encountered throughout her postsecondary education experience and to demonstrate resilience. She exhibited strong self-advocacy skills often directly confronting the challenges. She effectively engaged her social resources (including her mother), the director of the Office of Disability Services, and other supportive instructors (i.e., Steven). Additionally, her faith played a role in her ability to reframe negative experiences.

Several of the characteristics of college-student thriving (Schreiner, 2010) can be seen in Tiffany’s case. Tiffany has a positive perspective of herself and her future. She wants to share what she has learned with others (desire to contribute) who may not see their own potential.
I know there is a calling in my life to help people, through speaking. I just don’t know where that’s gonna go... because like I said earlier people don’t know unless they’ve been there. But yet you can communicate to them somewhat if you know how. And I think I have an ability to make them laugh and make it interesting but yet get that point across that... We all have feelings. We all have value. That’s one message. This message is to the handicapped or challenged. Just because you’re different doesn’t mean you can’t do anything if you put your mind to it you. But if you want it bad enough, you can do it.

She believes in her ability to be successful and wants to work, but feels limited by her agreement with VR and a bad economy. She showed engagement in learning and seemed to develop relationships with others on campus. It is worth noting that, other than the ski trip experience, Tiffany did not speak about developing meaningful friendships with other students. Her primary support came from her family and her faith.

**Case 8 – Tara**

Tara is a 58 year-old student at a rural two-year college in the Midwest. She meets the following criteria and thus would be considered a highly nontraditional student: (a) delayed enrollment, (b) part-time attendance, (c) financially independent under financial aid qualification guidelines, (d) single parent status, (e) GED graduate and (f) having dependents other than a spouse (Choy, 2002; Horn, 1996). She has chronic and often debilitating back pain caused by arthritis and a malformation of her spine.

She grew up on the west coast and had a difficult childhood. Her mother died suddenly when Tara was 8. Her father, a heroin addict, was imprisoned. She was home-
schooled by her step-mother for some time and then was enrolled in an alternative high school. She did not like the school and withdrew after one year (ninth grade). She left home at sixteen to work. During the course of the interview, she repeatedly referred to a period of her adult life that was very difficult, but did not offer explanation. She was married and raised a son and a daughter. She recently left her husband and her home, where she had lived for twenty years, and moved to a small rural town to be near her daughter who was studying at the university there. She borrowed money to rent an apartment and started fall quarter classes at the local two-year college five days after moving in to her apartment.

She chose the college because the degree program appealed to her (naturalist historical intern). She was not employed, had no family support other than her daughter, and had no savings. She perceived college as a chance to study a subject in which she was interested, but also as a last chance to improve her life.

So I, you know…. but this is the perfect opportunity to make your life better.

Cause I tried before, this had been on my mind for a year before.

But you know …and I have to do something for me or else the ship is sinking, baby. You know, so this is what I have to do.

Despite taking classes at the adult education program where she used to live, she had not yet passed the GED. She was eager to enroll in the college and took the placement test at the college anyway. Like many nontraditional students in community

42 She did not offer explanation about the period of her life that between her adolescence and adulthood or what prompted her to move.
colleges (Provasnik & Planty, 2008), she placed into remedial courses in English and math and struggled, primarily with math. As a result of medical issues she lost most of her credits for that first fall quarter. The one credit she earned enabled her to keep her financial aid.

She believed that not having her GED was been holding her back. She went to a nearby Adult Basic and Literacy Education (ABLE) program intending to enroll and study for her GED, but found the classes too slow-paced. Her statements suggest a sense of urgency and frustration with the way the classes were taught at the ABLE program.

I was like, Oh my God, I’ll never get anywhere. I’ll be sitting back here, I’ll be seventy years old and I’ll be going... She goes, “You do very well, but I want you to practice this.” I’m a grown woman! If I could pass the GED I’m gonna pass the GED. Hey, time’s running out. I am not going to be a PhD. I am not going to be a brain surgeon. I don’t think I have that much time, but I mean, if I sit here I’m not going to have any time to do anything.

She left the ABLE program without receiving the GED, but returned at a later point to take classes with a different instructor and eventually passed the GED test.

**Challenges**

Tara faced multiple challenges. For example, she found the campus to be physically inaccessible. Her chronic back pain and other medical issues made it difficult to navigate a hilly college campus. She reported that she was often unable to find an open handicapped parking space and had to walk long distances to her classes carrying heavy
books, worsening her pain. As discussed earlier, Tara’s health problems interfered with her ability to complete her first quarter of classes and she nearly dropped out.

Even though she had left school in ninth grade and had not completed her GED, because she passed the Ability to Benefit\textsuperscript{43} test, she was able to obtain financial aid and enroll in classes at the college. She was faced with the resulting academic barriers facing many students who attend open enrollment colleges: remedial, non-credit-bearing courses. She enrolled in remedial math and English classes. The math is difficult; she puts in several hours per night working on the assignments for her class and has utilized the math tutors. She indicated, however, that the college was going to cut back on their tutoring services, especially for specialized courses such as the dendrology (the study of trees) course she was taking. Tutors will still be available for the general classes, but Tara describes the space where the tutors are located as physically uncomfortable, so she has stopped using their services.

Obtaining a computer and accessing a class on the software applications were additional challenges for Tara. She had very limited resources and was unable to afford a new computer and did not qualify for a free computer through the college. Her statements suggest a great frustration with the institutional bureaucracy surrounding the free computer program. Tara was resourceful in identifying a program through which she

\textsuperscript{43} The Ability to Benefit Test (which can be a college placement test such as the COMPASS test) is used for students lacking a high school diploma or its equivalent who wish to apply for financial aid. To be eligible for financial aid, students must pass the three test sections: Reading Comprehension, Sentence Skills, and Arithmetic.
might get the technology she needed, but encountered too many roadblocks. She stopped trying to get these resources through the institution and eventually borrowed her daughter’s laptop.

But that the reason it’s there for is for people who don’t have, but at the same time, because you don’t have and I thought that…you know, like you have to do this and do that in order to get this. And I’m like excuse me. It seemed kind of, how does that word…I can’t think, you know, like a patronizing in a way to me. I remember you have to put so many service [hours] in, you can’t use the computer. You can’t take the computer around. And they said we don’t have any available now anyway. But you have to do this. You have to jump through hoops and do things to prove that you deserve one and then do things to earn one. I’m like, okay forget that. I’m overwhelmed. I’m going to all these classes, and I don’t even know how to use a computer.

After she obtained her daughter’s old computer, Tara tried to enroll in a Microsoft Office class to improve her skills, but the classes were full. She bought a book on using Microsoft Office from another student hoping to teach herself to use the software, but she has not been successful.

Even with financial assistance, Tara faces substantial financial barriers in attending college, many related to transportation. She lives in a rural community and has a long commute. In addition to the high cost of gas to commute to college, the college recently instituted a $35 quarterly parking fee for students. Her financial aid supported the other costs associated with college (e.g., tuition and books). She went to the financial
aid office to see if the college offered gas cards or other options to help with transportation costs but it did not.

I had nothing because I didn’t have any money. Because I got here with what I had and borrowed some just to get a place [to live]. And then… literally when I walked into those classes I didn’t have a dime left. I just had gas in that truck. It was pretty funny.

**Personal, Social, and Community Resources**

Tara had very little money and no family support—very limited social and community resources—but she was able to exhibit resilience by engaging her strengths (self-awareness, self-advocacy, and resourcefulness) to cope with her challenges and try to overcome the barriers. She was overtly reflective throughout the interview and explicit about her internal thought process. She demonstrates an awareness of when her thinking becomes negative, and is able to shift her thinking to be positive and productive.

One example of how she reframes her disappointments can be seen in the following excerpt.

Yeah, and there’s no such thing as failure. Failure is not an option, and I say that even when I’m feeling right now where I just want to quit. I say to myself, “Look at what you’ve been through, where’ve you’ve gone. This [college] is the best thing that’s ever happened to you.”

Demonstrating resourcefulness, she applied for services and financial support through the VR. Her statements, however, suggest a reluctance to be dependent on
government support and a desire to be autonomous and independent. She describes her desire for self-determination in the following statements.

And I don’t want somebody telling me who I am, and what I can do, and what I can’t do. Even though I’m the worst person for the job, it’s still… I’m going to be the one in charge.

Her statements about accepting government support further suggest resistance to identifying with the “advantage-takers,” those individuals with impairments who encouraged her to just accept the financial support and not do anything with it: “I know a couple of people who had disabilities, they said, ‘Well, just don’t do anything.’ And I was like, ‘I can’t do that.’ You know, I can’t justify doing that.” Her situation was dire though; she was not eating and had, in her words, “nothing.” Her overall feeling of desperation may be reflected in her repeated references to illness and death during the course of the interview including hanging, suicide, assassination, cancer. She accepted the financial support from VR, but with a sense of responsibility to do something meaningful with the money:

So, I said to myself, ‘You take this and you do something with it.’ Well, what I’m doing with it opened a lot of doors. I’m having to pay a lot of money back, but it opened the doors so I can do something.

**Relationships with Institutional Personnel**

As discussed earlier, Tara’s health interfered with her ability to complete her first quarter of classes and she nearly dropped out. Furthermore, she was not satisfied with the academic counseling she received when she enrolled, and described a feeling of being
“railroaded” (Tara’s phrasing). The staff of the Access Center provided emotional support and a safe place to express her frustration. Her statements suggest that Tara had developed a trusting and supportive relationship with Kelly, the director of the Center. Kelly recognized that this was a crisis for Tara and communicated (verbally and non-verbally) that she cared by listening and allowing Tara to work through her frustration.

I just felt like it was all coming crashing down. And I didn’t know where to grab a hold of, what to take on first. And so Kelly, you know, literally they saw me come in and… she just dropped everything. She said, “Okay, what’s up?” Leaning forward to you, which I’ll tell you, body language says a lot. Leaning forward and coming into me and saying, you know, “Okay, take a breath. Tell me what’s up.” And she let me do that. She let me just lose it, and say what I … was just overwhelmed.

She went to talk with the assistant dean about the credits she was going to lose. He considered her case and went outside of his normal role to provide Tara with emotional support and academic advising. She stated, “It was him that said that. He said, ‘I’ll take you, I’ll be your advisor.’”

**Support and Services**

Tara used the services that were available to her: the Access Center, the tutors in the math lab, instructors (during office hours), the staff of the library (to set up her computer), but communicated a sense of dissatisfaction with the services overall. She did

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44 Similar to most postsecondary disability service providers, Kelly’s background is in counseling (NCPES, 2000).
not feel that she had been “heard” when she tried to communicate her difficulties to the academic counselors. The college promotes their accommodations and services for nontraditional students and students with impairments, but she felt these services were in actuality subpar. She believes that this was not due to the staff at the Access Center but to institutional restrictions.

They say there are [providing services to nontraditional students], but they’re not. They’re really limited. It’s amazing, you know. I mean some of the people that even have those jobs, I think they…feel that they’re going to be doing more than they actually do. And then they’re like, “What happened here?” They get…you know the University or something pulls them away from that. Even the Access Center up there, they’re great, but it’s limited. It’s very limited…

Summary

Tara faced multiple challenges including those associated with living in a rural community (e.g., high costs of commuting), obtaining adequate technology equipment and skills, and coping with medical issues that cause her to miss classes. She is resourceful and can identify, locate, and ask for what she needs. She has a strong work ethic and put hours into her studies. She enjoys learning and is determined to persist in college. The barriers she encountered, however, seem to be primarily institutional (e.g., physically inaccessible campus, lack of space in computer classes, and not enough handicapped parking spaces). In these situations, her efforts, determination and self-advocacy skills were often not enough to overcome the barriers. As a result, she was frequently overwhelmed and frustrated and was close to dropping out. The emotional
support she received from the director of the Access Center and the faculty member who
mentored may have contributed to her ability to persist despite the challenges and barriers
she encountered.

**Introduction to the Cross-Case Analysis**

In this study I employed collective case study methodology (Creswell, 2007; Yin,
1994; Yin, 2009) and a theoretical lens that relies on the construct of resilience to better
understand the perceptions of nontraditional college students with impairments. In the
previous section, I presented a detailed case report for each of the eight participants. This
section presents the cross-case analysis, presents the themes that emerged and were
common across all cases, and presents findings regarding the four research questions
(RQ):

**RQ1:** What challenges to academic achievement confront nontraditional
undergraduate postsecondary students with impairments?

**RQ2:** What personal, social, and community resources facilitate or enable
resilience and thriving in nontraditional postsecondary students with
impairments?

**RQ3:** How do nontraditional postsecondary students with impairments perceive
and value the institutional services and supports available at their postsecondary
institution?

**RQ4:** How do relationships with institutional personnel contribute to resilience
and thriving in nontraditional postsecondary students with impairments?
I followed the procedures outlined by Boeije (2002) for the constant comparative method of data analysis, which involves “systematically examining and refining variations in emergent and grounded concepts” (Patton, 2002, p. 239). After the open coding was completed and the case studies were written for all interviews, I compared findings between interviews, using axial coding, which entails putting data back together in new ways after open coding by making connections between categories (Strauss & Corbin, 1998), to further develop concepts and discover themes, clusters or typologies. The cross-case analysis (Stake, 2006) was written from the themes that developed during the axial coding process.

**Common Themes**

Five themes, common across all cases, emerged from the cross-case analysis. Within the construct of *personal resources* (RQ2) the following themes emerged: (a) *achievement orientation*, (b) *positivity*, (c) *self-advocacy*, and (d) *passion*. Within the construct of *relationships* (RQ4), the theme of *multiple sources of institutional support* emerged. The ways in which the themes manifested within the individuals differed in ways that are described in detail in the following pages.

**Common Theme 1: Achievement Orientation**

In a study by Scales and Leffert (1999), students with a strong future orientation and achievement motivation were found to have higher achievement test scores, higher grades, higher rates of high school completion, and increased college enrollment. All of the participants in this study demonstrated a strong achievement orientation. The primary academic goal for most participants (Lori, John, Val, Ron, and Tara) was degree
completion in order to obtain employment. Although these participants had a very practical purpose for attending postsecondary education (i.e., needing to provide for themselves or their family), each placed a high value on achieving at the highest level possible, their personal best. Each student had different educational aspirations and measured success differently, but each approached education with a strong sense of autonomy (Chickering & Reisser, 1993), self-efficacy (Bandura, 1977), and an internal locus of control (Rotter, 1954, 1975). Across cases, the achievement orientation of participants manifested as (a) self-efficacy, (b) self-discipline, (c) and resourcefulness.

Self-efficacy

Self-efficacy is the belief or expectation that one can perform the certain behavior required to produce a desired outcome (Bandura, 1977). Efficacy expectations affect both initiation and persistence of behavior. Thus, an individual’s self-efficacy will affect the types of activities an individual undertakes (i.e., initiation), the degree of effort individuals will put forth when faced with obstacles, and how long they will persist in their efforts (Bandura, 1977). Researchers have found self-efficacy to be a protective factor or internal personal strength that can contribute to resilience and thriving (Fergus 45 The National Educational Longitudinal Study (NELS) found that high educational aspirations and internal locus of control and were highly correlated to academic success (Choy, 2002).

46 Bandura (1977) differentiates efficacy expectations from outcome expectations. Outcome expectations are a person’s belief that “a given behavior will lead to certain outcomes” (p.193).
& Zimmerman, 2005; O’Leary, 1998; Wong, 2003). Although the participants in this study were aware of and realistic about their difficulties and weaknesses, they believed that they had the ability to achieve their academic goals (efficacy expectation) and that their efforts would result in achievement of their short and long-term academic goals (outcome expectations). For example, Val’s statement indicates a belief in his ability to be successful and his enthusiasm for the next activity: “I am not worried about the CAD again. So I think I’ll do fine. And I’m actually looking forward to my next drawing.”

Several of the participants indicated that their belief in their abilities was influenced by supportive individuals. Tiffany, Ron, and Sadie, for example, indicated that others provided the encouragement and emotional and psychological support they needed to take the initial risk to enroll in college. As the participants began to experience successes (e.g., high grades), their beliefs about their abilities were reinforced. Of interest, the four participants (Val, Tara, Lori, and John) with clear financial or economic reasons for enrolling in postsecondary education (i.e., supporting a family or themselves) did not seem to need the encouragement order to initiate their entry into higher education, but did seek out supportive individuals after they had engaged in their coursework.

Even though their statements suggest a high degree of self-efficacy, the participants experienced instances of self-doubt. Five participants (Ron, Val, Tara, Sadie, Matt) described an emotional “roller-coaster” related to self-doubt and success. Val described his experience:
And I go… I go from real high [hand up high] to, ‘Oh my God, I cannot believe I am here!’ [hand held low], to, ‘I can do this.’ The next day, ‘I can really do that’ [hand held high]. And then something goes wrong and I crash again.

The need for a supportive individual seemed to be particularly important when the students are engaged in self-doubt. Val, for example, returned to class after a grand mal seizure because of the encouragement from his instructor. As explained in the case report, Tiffany was initially devastated by the discouragement she received when she inquired about enrolling in college, but was able to move beyond it with the support of her mother.

**Self-Discipline**

The participants took their education very seriously. Obtaining high grades was important to each of the participants. Ron had the goal of graduating with honors and made the Dean’s List consistently for several semesters. Matt wanted to get a 4.0 grade point average but was satisfied with a 3.966. Sadie, who has a learning disability, was realistic about her grades; she knew she was a “C student.” She, however, framed it in this positive way:

A ‘C’ is an ‘A’ for me. I am a ‘C student.’ It’s just how it is. I would love to be a ‘straight A student.’ It’s not there [laughing] but it’s OK. I’ve come to terms.

Their grades seemed to be a reflection of not only their efforts, but also their sense of self. Val described the connection between grades and self-worth in this way:

If you get 100 percent, then your name goes by it. So it represents who you are.

And when I was in high school, I didn’t care if I got a C or a D, It’s still a passing

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47 See Bandura’s (1977) verbal persuasion.
grade! [Laughs] And now it means more. It’s a value - It’s like, ‘Ok I am worth 100% in this class, you know?’ So I think you learn values of self-esteem and who you are.

In addition to an indication of his achievement orientation, Val’s statements suggest a difference between traditional college students (those coming directly from high school) and nontraditional students. When discussing their study habits, the participants describe self-discipline which differentiated them from their younger classmates. Several participants expressed awareness of this difference: older students seem to be more invested in their education and to “take it seriously” (Sadie’s words). Sadie was frustrated when she heard the younger students say that they did not have time to get extra help or use the tutoring services that were available to them.

Val: So, I think that, right there, is maturity. It is what helps older people go through school. Even though they cannot learn at the speed of a young person can, their desire is way higher.

Sadie: I hear that all the time. I spent six hours, six days a week in the math lab because I didn’t know math. I had to learn it. So I put the time in. Well, I overly put (laughing)... but I got B+’s in all my math [classes]. So it paid off. But when I tell people that, they say, ‘Well, I don’t have that time.’ You make the time, if you want the degree. I mean, it’s not given to you.

All participants described a strong work ethic. They only missed class when their health got in the way. Ron, for example, stated that the only time he missed class was because he was undergoing a heart catheterization. Val had a grand mal seizure in a
morning class, went home to recover, and returned later that day for his afternoon class. Their work ethic is also evident in the number of hours the participants spent studying and working on assignments outside of class. For example, all but one of the participants, John, relied heavily on the tutoring services at the college. Ron joked about the number of hours he spent at the tutoring center, suggesting he should get his mail delivered there. Ron and Tiffany describe the type of commitment and work ethic that was present across all of the cases.

Ron: [She asked me] ‘How can you sit in front of that computer for eight or 12 hours?’ I said, ‘Well, that’s what it takes.’ So, yeah, I think the characteristic that make me successful is that I am too stubborn to quit.

Tiffany: I wasn’t allowed studying past nine o’clock because I was studying, studying, studying and I would make myself sick. So computers off at nine o’clock, no questions asked. That was good because I would just keep going.

The statements above (especially Tiffany’s) suggest a potential negative outcome of the degree of drive and commitment that these students exhibited: stress and possible illness or worsening of their condition/impairment. Val, for instance, recognized that the stress he experienced at the beginning of the quarter had worsened his seizures, making them more frequent and severe. Matt also recognized that he had very high expectations of himself and over time, had to learn to “let up.” In some cases, the pressure the participants put on themselves was possibly compounded by a sense of urgency to complete their degree. For four of these participants, the urgency was related to economic or financial concerns. Val expressed the desire to be the “breadwinner” (Val’s phrasing)
in his family again and needs the certificate or degree to gain employment. John wants to finish his education through to his Master’s degree before his children are ready to enroll—“a six year window” (John’s words). They cannot afford for John to be in school at the same time as their children. Lori has a husband with an impairment; therefore, she needs to find full-time employment to provide for her family. Lori’s frustration with course sequencing and the seemingly irrelevant required courses reflects her urgency to complete the degree and get a job. To her this particular degree is “just a piece of paper” (Lori’s words) that will enable her to gain employment. Tiffany knows that a college degree will enable her to gain entry into the workforce and earn a living wage. For Ron, the urgency is not related to economics, but is a “race against the clock” (Ron’s phrasing); he wants to complete his degree before his sight gets worse.

Resourcefulness

Resilience research indicates a relationship between problem-solving abilities (including resourcefulness, planning, critical thinking, and flexibility) and successful adaptation in adulthood (Higgins, 1994; Werner & Smith, 1992). When resourcefulness is coupled with internal locus of control, individuals understand how to identify supportive others and take the initiative to enlist their help (Benard, 2004). In general, the participants in this study understood their academic needs. To varying degrees, all of the participants in the study utilized the supports and services that were available to them through the office of disability services (e.g., testing accommodations, priority

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48 As explained in the case report, Lori described an intrinsic motivation for learning and wants to continue to pursue education once she has completed this degree.
registration, note takers, alternate format textbooks) and through the postsecondary institution (e.g., counseling, tutoring services). Four of the participants, however, explicitly stated a desire to reduce or eliminate their reliance on accommodations. This reliance was so onerous to Sadie, for example, that she indicated that she would be “complete” if she could just find an assistive technology device that would allow her to be independent of note takers.

Even though all of the participants were registered with the office of disability services at their respective institutions and in several cases supported by the VR or another agency, Ron, Tara, and Val had to locate and/or teach themselves to use the assistive technology and software. Ron describes the process of determining which technology would be most useful to him as “trial and error.” Tara was frustrated by being unable to obtain a laptop, with her own weak technological skills, and by the inability to get into a Microsoft class at the college, so she ordered a book and found someone to help her install the software on a laptop that he borrowed from her daughter.

Several participants described undertaking small “tests” of their abilities in preparation for college coursework, another indication of their self-discipline and resourcefulness. Bandura (1977) described this self-motivation as a process of setting goals against which to evaluate performance. Val, for instance, practiced completing online forms and worked extra problems at home before he enrolled. Even though the counselors suggested that she could test out of them, Tiffany took two remedial courses

49 Bandura (1977) indicates that individuals “create self-inducements to persist in their efforts until their performances match self-prescribed behaviors” (p.193).
so she would be better prepared for her credit-bearing coursework. Ron enrolled in the two classes he thought would be most difficult during his first semester, as a way of gauging his readiness for college. If he did well in those classes, he knew he would be able to succeed in college. In other words, the participants understood how to set themselves up for success experiences. The successes seemed to lead to increased self-efficacy, increased motivation and perseverance.

Summary

Across all cases, the participants placed a very high value on achieving at the highest level possible —defined as their personal best. Their orientation toward achievement manifested as (a) self-efficacy, (b) self-discipline, (c) and resourcefulness. The participants demonstrated a commitment to their education and exhibited a strong work ethic. The participants identified the resources (human, technological, and academic) they needed and took the initiative to access them. They took advantage of the accommodations and services available to them, but indicated a desire to be independent of these supports. The high degree of self-efficacy, self-discipline, and resourcefulness evidenced by the participants are personal strengths or protective factors that may have contributed to their persistence in spite of substantial challenges.

Common Theme 2: Positivity

As described in Chapter 2, research indicates that resilient individuals use humor and optimistic thinking to “proactively cultivate positivity” (Tugade & Frederickson, 2004, p.320). Tugade and Frederickson (2004) propose that resilient individuals recognize the value of positive emotions in mediating the effects of negative experiences.
Through experience, they are able to build “an arsenal of effective coping resources” (p.331) that buffer against adversity and negative life situations or experiences.

Each of the participants in this study experienced adversity related to their impairment and seemed to have developed the arsenal that Frederickson & Tugade (2004) describe. For some, the onset of their impairment was sudden and traumatic, with resulting effects that were sustained and life-altering (i.e., traumatic brain injury). For others, their impairment was progressive and increasingly debilitating (i.e., visual impairment). For some, the impairment was apparent (i.e., visual impairment; cerebral palsy) while for others it was invisible (i.e., learning disability; sensory processing disorder; chronic pain). Although each individual faced different challenges or barriers and approached adversity differently, commonalities exist that are consistent with the findings from research related to positivity cited above. The commonalities across cases in this study related to positivity include: (a) optimism, (b) hope, (c) gratitude, (d) humor, (e) positive thinking, and (f) positive reframing.

Each participant in this study seemed to have come to accept her or her impairment, although each may have been at a different degree or stage of acceptance. Regardless of the level of acceptance, each participant expressed a variation of “this is

It is possible that the process of coming to terms with physical and cognitive limitations resulting from a disabling condition or traumatic event require one to develop positive coping mechanisms. The converse is also feasible: individuals who are resilient and have developed positive coping mechanisms are better able to accept their disability and to recognize positive aspects of their condition.
who I am.” All participants were aware of and realistic about their limitations, but they all approached their future (immediate and long term) with optimism and hope. All of the participants started out in two-year degree programs and most intended to complete additional degrees. Four intended to complete advanced degrees (see Table 3). They approached their future professional lives with the same optimism and had clear and specific career goals.\(^{51}\)

Table 3.

 Degrees Attained and Aspired to Across Cases

<table>
<thead>
<tr>
<th>Participant</th>
<th>Degree Completed</th>
<th>Current Degree Program</th>
<th>Degree Aspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matt</td>
<td>Associate’s</td>
<td>Bachelor’s</td>
<td>Master’s</td>
</tr>
<tr>
<td>Val</td>
<td>Associate’s</td>
<td>Associate’s/Technical Certificate</td>
<td></td>
</tr>
<tr>
<td>Lori</td>
<td>Associate’s</td>
<td>Ph.D</td>
<td></td>
</tr>
<tr>
<td>John</td>
<td>Associate’s</td>
<td>Master’s</td>
<td></td>
</tr>
<tr>
<td>Ron</td>
<td>Associate’s</td>
<td>Bachelor’s</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Sadie</td>
<td>Associate’s</td>
<td>Bachelor’s</td>
<td>Ph.D</td>
</tr>
<tr>
<td>Tiffany</td>
<td>Associate’s</td>
<td>Not currently enrolled</td>
<td></td>
</tr>
<tr>
<td>Tara</td>
<td>Associate’s</td>
<td></td>
<td>Associate’s</td>
</tr>
</tbody>
</table>

In addition to an optimistic outlook, a sense of gratitude was common across all cases. Every participant expressed gratitude toward the individuals that supported them. In most cases, this was the director of the disability services office. Additionally, each of the participants expressed deep gratitude toward and appreciation for the caring demonstrated by a faculty member or administrator who went out the way to provide

\(^{51}\) Of note, most participants intended to work in a social service field (e.g., teaching, psychology, nursing, social work).
assistance. In some cases, the assistance was sustained and involved many hours of involvement (i.e., the instructor who tutored Sadie on her own time) but in other cases, the assistance may have seemed inconsequential to the one giving the assistance (i.e., the email from Val’s English instructor inquiring as to how the student was doing after a seizure). This support, however, was meaningful to the student. It was so meaningful to Val, for example, that he nominated his English instructor for a faculty award. He attributed his decision to persist in school to that small act of kindness by his instructor. His gratitude is clear and is reflective of the gratitude expressed by other participants in the study.

If it had not been for Professor A., I would never have achieved this. It was her encouragement, support and genuine caring above and beyond what I would expect of a professor that made all the difference for me. For that I will always be grateful to her.

One participant indicated that she was “overwhelmed” by how supportive individuals were of her. Another exceptionally appreciative participant expressed gratitude for the doctors and rehabilitation specialists who helped with his recovery, the financial support and resources provided by the VR, and the support and guidance from the director of disability services. His focus was not completely directed externally, though, as he also recognized his own contribution to his success. As discussed in the previous section on Achievement Orientation, the other participants in the study recognized and appreciated that their own efforts contributed to their achievement as well.
Another component of positive affect is humor. The participants were able to find humor in their own situations—situations that were often disappointing, frustrating, or traumatic. During the interviews, they often smiled or laughed while retelling experiences that were uncomfortable or distressing when they occurred (e.g., Lori felt like an “idiot” because she had to wear sunglasses in class; people thought Ron was drunk when he was trying to find the door handle). One participant with TBI (Val) demonstrated positivity as he spoke about having grand mal seizure during class, something few people would be able to find even slightly humorous: “So, I don’t recommend anyone having a seizure the first day of class. They should wait [laughs]!”

Resilient individuals recognize the value of positive emotions in mediating the effects of negative experiences (Frederickson & Tugade, 2004). In a longitudinal study of successful adults with impairments, Raskind and colleagues (1999) identified emotional stability or emotional coping strategies as one of the six attributes that contributed to success in adulthood. Several participants in this study referred to “positive thinking,” as an emotional coping strategy they had learned to employ to overcome doubt and anxiety. They encouraged themselves through positive self-talk—even when others they encountered were discouraging. Tara, for example, drew on her self-awareness when, in the midst of great frustration, she was able to talk herself out of negative thinking and re-focus on the positive aspects of her current situation.

Failure is not an option, and I say that even when I’m feeling right now where I just want to quit. I say to myself, ‘Look at what you’ve been through, where’ve you’ve gone. This is the best thing that’s ever happened to you.’
Each participant gave examples of how they relied on positive self-talk as a general coping strategy and when they encountered challenges. Ron enrolled in the two most difficult core classes his first semester and got an A and a B+. Ron said, “Once I told myself that I can do this, I said ‘Ok, there’s no excuse now. I can do it.’” These success experiences helped build self-efficacy and overall confidence in their academic abilities.

Another example of how the participants employed positive thinking or reframing was in their reaction to other individuals who doubted them. The presence of “doubting others” was common across several of the cases and seemed to be a motivating factor for the participants. The participants persevered and did not back down when presented with discouraging words, but relied on positive self-talk and responded to the doubters with a desire to “prove them wrong.” Tiffany learned to have faith in herself, to be courageous in the face of adversity despite those who doubted her abilities. Sadie enrolled in a French class—and did well— despite being advised it would be too difficult.

Cognitive reframing, a shift of mental perspective, is related to positive thinking. One’s feelings are closely related to how one interprets experiences. If individuals can change the way they perceive or interpret situations, a change in feeling and behavior can result (Beck, 1997). In therapeutic settings, this process is referred to as cognitive restructuring (Beck, 1997). Individuals can undergo this process unconsciously, on their own, outside of clinical settings. The participants in this study demonstrated this ability to shift their thinking about negative situations. For example, when Sadie received a C in one of her classes, she was initially disappointed but immediately shifted her thinking.
Instead of thinking of a C as a sign of failure, she shifted her thinking and perceived the grade in this way: “But I thought, ‘Okay, ‘C’ means ‘continue’ [laughing]. You don’t need to beat yourself up. You did the best you could.”

Matt demonstrated positive cognitive reframing when, after a very frustrating encounter with a faculty member, shifted his thinking to consider the positive aspects of the experience. Initially, the encounter was so devastating that Matt did not want to return to school. Prompted by another faculty member, Matt shifted his thinking and focused instead on the positive—what he could learn from the experience. The shift was gradual, taking place over the summer. He came to perceive the situation in this way: this difficult individual was not put in his way as a barrier, but as someone to learn from. After his perception shifted and his thinking changed, his behavior changed; he was able to return to school and take additional classes with this instructor.

Summary

Although they faced different challenges, across all cases the participants in this study exhibited a strong sense of positivity including (a) optimism, (b) hope, (c) gratitude, (d) humor, (e) positive thinking, and (f) positive reframing. The inner strengths associated with a sense of purpose (including creativity, optimism, and faith) are “probably the most powerful in propelling young people to healthy outcomes despite adversity” (Benard, 2004, p.28). If resilience is defined as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990), certainly, these individuals engaged their personal strengths and demonstrated resilience in the positive ways they responded to adversity. Furthermore, a positive perspective of oneself and future is a key concept of
Schreiner’s (2010) concept of college-student thriving, similar to Keyes’ (2007) concept of flourishing. Across all cases, the participants in this study were realistic about their situations and experiences, but exhibited a positive perspective of themselves and their futures and, thus, demonstrate this component of thriving or flourishing.

**Common Theme 3: Self-Advocacy**

Self-determination (Ryan & Deci, 2000) is widely recognized as an important contributor to success in adulthood (Morningstar et al., 2010). Self-advocacy, a component of self-determination, is the ability to understand and articulate one’s needs and then to communicate the needs to appropriate others. Self-advocacy skills are considered to contribute to postsecondary success for students with impairments (Stodden, Whelley, Chang, & Harding, 2001; Thoma & Getzel, 2008). Across all cases, the participants in this study demonstrated self-advocacy skills. Their self-advocacy skills were supported by (a) self-awareness, (b) positive acceptance of functional limitations, (c) understanding of the accommodations process, and (d) involvement of the director of disability services (in three cases). Self-advocacy skills contributed to participants’ abilities to disclose when appropriate and to confront barriers they encountered in postsecondary education.

**Self-awareness**

The participants in this study had different types of impairments; some were born with their impairments and some acquired their impairments as adults. Three of the participants had progressive conditions (Lori, Ron, and Tara); two others (Val and Matt) had experienced traumatic accidents that led to their impairments. Two more (John,
Sadie) had their conditions since childhood but had only been diagnosed as adults. Tiffany was born with cerebral palsy, a non-progressive condition. Regardless of the substantial differences in onset and variations in the recency of their diagnoses, all the participants had a deep understanding of their impairments. They articulated their functional limitations in a very specific way. For example, the participants did not simply state that they had a learning disability or a traumatic brain injury, but instead described the specific areas of reading that were difficult or the type of memory tasks that required support.

Val: I would say 99% of the words I am fine with. I don’t really have a problem understanding what a word is or figuring out what the word is. It’s the grouping of the words, after what happened to me, and trying to say them after reading the whole sentence.

This deep and specific understanding of their impairments allows the students to communicate their needs in a specific way to those who provide support. An instructor or tutor who knows that their student struggles with remembering groups of words, rather than just “has a learning disability,” can better target their intervention or instruction to meet the specific needs of the student.

Acceptance

Related to self-awareness, and perhaps a result of a deep understanding of their limitations as well as their strengths, all of the participants had come to accept their impairment as a fact of life. Val said, “I don’t look at it as a handicap. I just look at it as my life now.” Most of the participants (Ron, Matt, Sadie, Lori, and John) described
struggling with accepting their impairment. A positive acceptance of impairment may have contributed to the ability of the participants to ask for what they needed without the burden of embarrassment or shame that blocks some from being able to advocate for themselves.

Registering with the Office of Disability Services

Results from the National Longitudinal Transition Study-2 (NLTS2) indicate that less than one third of the secondary students (28 percent) who had been identified as having a disability chose to disclose their disability to their postsecondary institution (Newman, et al., 2011). This suggests that over 70 percent of students with impairments are not accessing accommodations and services at the postsecondary level. To benefit from the accommodations and services to which they are entitled, college students with impairments must understand the complex process for obtaining accommodations at the postsecondary level and have the self-advocacy skills to follow through. The participants in this study demonstrated an understanding of the accommodations process which begins with registering with the office of disability services at their postsecondary institution. Nearly all of the participants (n = 7 of 8) registered with the office of disability services upon enrollment. When she disclosed her learning disability at the time

52 Of those postsecondary students who identified themselves as having a disability, 19 percent reported they received supports or accommodations from their postsecondary school (Newman et al., 2011).

53 This study was delimited to students who were registered with the office of disability services at their respective postsecondary institution.
of registration, Sadie was directed to the office of disability services. She said: “I went in
to the advocate, or the person that gets you started, and I told her, ‘I can’t read,’ and she
marched me down to the disability service.” John, however, did not register with the
office of disability services in his first quarter, perhaps because his impairment did not
affect his ability to learn or process information. A friend recognized that he “was a little
messed up” (John’s phrasing) and encouraged him to talk with a counselor or someone at
the ODS. He followed her suggestion and did register with the ODS at the end of his first
year. He received accommodations for anxiety disorder and sensory processing disorder.
As discussed in his case report, John described a reluctance to accept accommodations,
but indicated that the ability to request accommodations has relieved the anxiety and
worry that accompany his condition.

    So, yeah, um, my little paper. That lets me not worry about it. It’s the worry. It’s
the worry, because I’ve never had a problem, but my paper that lets me not worry.
Then early registration, which lets me not worry, and then going to the doctor,
which we’re still working on.

    The director of the Office of Disability Services at the college John attends
indicated that most of the students who register with her office in their first quarter are
traditional students who come to college directly from high school. She suggested that
traditional students are more likely to register with the ODS at the beginning of their first
quarter because they are in (and familiar with) the special education system and expect
accommodations at the postsecondary level. They were likely instructed by parents and
counselors to contact/register with the ODS at the college. She indicated that the
nontraditional students tend to come to her office after the quarter has started or later in the year, and are often behind in their coursework.

Involvement of the ODS

Some of the participants came to college with strong self-advocacy skills (Lori, Ron, Tara), but others (Matt, Sadie, Val, Tiffany) learned how to advocate for themselves with support from the director of the ODS at their postsecondary institution. The participants described how the director of the ODS facilitated their independence and taught/coached them toward self-advocacy.

Sadie: [referring to the Advocate54] And I used her a lot back [then]… but you know, you kind of wean yourself and get used to it.

Matt: But she helped me evaluate what I needed to do, but she let me pull the trigger on my own, you know? …I feel them [faculty] out now, but that’s the kind of stuff she helped me deal with. To realize that I can do it and go to school and be an advocate for myself…She would let up when she knew it was time I could do something myself.

Tiffany: Advocacy, which I used at first, but as I got stronger I was my own advocate, obviously. And Carrie pushed me for that. She was like, ‘I am not going to be there to talk to them all the time. You are going to have to learn to

54 The Advocate she refers to (and Tanya refers to later) is an accommodation or support that involves having an individual (often the Director of the ODS) present during registration and at other meetings as appropriate or as requested.
communicate with them.’ She pushed me to go talk to him instead of talking to him for me.

Engaging Support from External Agencies

Four of the participants (Tiffany, Ron, Matt, Tara) were supported by external agencies (e.g., VR). Two of the participants took the initiative to seek out the agency support despite an initial reluctance to be dependent on social services. The agencies contributed financial support, technology, training and job search assistance to the participants.

Disclosure/Nondisclosure

College students with impairments have to determine when it is best to disclose their impairment and when it would be more advantageous to not disclose. Disclosing an impairment is a personal and situational decision that college students with impairments have to make with each new semester, each new class, each new work placement or internship. Each participant in this study approached disclosure differently, but had determined which approach works best for him or her. For example, Matt said, “I am learning not to disclose like I used to,” as a result of several negative interactions with faculty. He has not disclosed to anyone at the agency with which he volunteers as a receptionist, “No one there knows I have a disability. People can’t tell.”

Sadie is very open with her impairment. She discusses her impairment and discloses freely to her classmates and her instructors. This approach works for her, as she feels it is important for her instructors to understand how and why she struggles. She said
that her classmates understand her impairment and are very willing to support and encourage her. She uses disclosure as a means to build her support network.

I have a sheet that Carrie gives me. And it has everything that I need. I show it to them. And then I also go to their office. And I tell them, you know, because I think it helps them to know me. I use these students. I don’t cheat, but I use them. ‘I can’t spell that. What is it?’ I’ll look over. They don’t care, you know, because they know where I was. I think it’s good to go when the professors ask, each of us to tell our story. I think it’s good because then its gets them; Wow! And they’re more apt to …Like the guy next to me, last quarter he says, ‘Sadie, You’ll be fine.’ I said, ‘Thanks for the encouragement.’ He said, ‘Well, I’ll give it to you every day I see you, because I know you’ll make it. It might be with a C, but you’ll make it.’

John is less proactive in his approach to disclosure. He does not discuss his impairment with instructors, but uses the accommodations letter (i.e., the “little paper”) from the ODS to get what he needs. The letter seems to provide him with a sense of security and relief from the anxiety and worry of being confronted with difficult situations. He uses the letter only when the situation requires it. John said:

…he [instructor] asked if I was going to wear my shoes in class and I said, ‘No.’ And that was right after I’d gotten my little paper, so I gave him my little paper and that was the end of that.
Decision-making

As mentioned previously, the participants in this study exhibited self-awareness and a deep and specific understanding of their impairments. One aspect of self-advocacy is making decisions grounded in self-awareness and a deep understanding of the functional limitations caused by the condition or impairment. Across all cases, the participants demonstrated the ability to make (often difficult) academic decisions based on an understanding of their needs. They accessed different accommodations and used them to varying degrees, but each indicated a desire to be independent and to “wean” him or herself off the accommodations. Matt struggled with Algebra. The director of the ODS counseled him to drop the Algebra class and enroll in remedial math. He resisted, but with her encouragement, he made the decision that would best support achieving his goals.

Matt: I dropped the class and went back to prep math. And that was the best thing that I could have ever done because I ... the fractions and all that … I love math.

But I mean, I needed all that.

As described in the case report, Tiffany decided to enroll in two remedial classes (even though she could have tested out) to be better prepared for credit-bearing coursework. One of the factors contributing to John’s desire to teach special education students at the middle school level is his perception that the education system will be accepting and understanding of his condition.
For college students with impairments, the need for self-advocacy skills extends beyond interaction with the instructors. Several of the participants in the study described employing their self-advocacy skills to directly confront institutional and attitudinal barriers. Tiffany recounted an example of how she employed her self-advocacy skills. The college she attended had completed construction on a new student center but had not installed curb cuts. Tiffany confronted this barrier directly.

Ron and Tiffany (both participants with visible impairments) described situations that resulted from a lack of awareness or understanding on the part of other students and faculty members. Ron exhibited self-advocacy skills when he gently corrected a student who offered to hold his hand and guide him out of a dark room. When the students in Tiffany’s small group refused to contribute to the project (and said disparaging remarks to her), she stood her ground, confronted them and discussed the frustrating situation with the instructor.

Across all cases the participants in this study exhibited self-advocacy skills including (a) self-awareness, (b) positive acceptance of functional limitations, (c) understanding of the accommodations process, and (d) involvement of the director of disability services (in three cases). Self-advocacy skills resulted contributed to participants’ abilities to disclose when appropriate and confront the barriers they encountered in postsecondary education. Self-advocacy skills contribute to postsecondary success for students with impairments (Stodden, Whelley, Chang, &
Harding, 2001; Thoma & Getzel, 2008) and are facilitated by an internal locus of control (Morningstar et al., 2010) and the other personal strengths associated with autonomy. Therefore, self-advocacy skills may be related to resilience in college students with impairments.

Common Theme 4: Passion

Benson and Scales (2009) conceptualize thriving as a “process animated by a passion for, and the exercise of, action to nurture a self-identified interest, skill, or capacity” (p. 91). Benson and Scales refer to this core passion as a person’s spark, pursued for its own sake, from an intrinsic motivation. The framework developed by Benson and Scales offers the following set of thriving markers or indicators: (1) whether the individual “can identify a passion in their lives, exhibit positive emotions, and have motivation to develop their passions,” (2) “report[s] a sense of purpose, optimism about the future, and prosocial orientation” and (3) can describe “where they are in spiritual development” (p.91). These markers are similar to the protective factors described earlier in this paper that promote resilience. The participants in this study exhibited passion in their love for learning and a sense of vocation and altruism in their career path.

Love of Learning

All of participants in this study demonstrated enthusiasm for learning. Seven of them explicitly stated that they had a “love of learning.” Sadie stated, “I can’t wait until the next quarter starts because I know I’m gonna learn something new. I mean, I love it. I treasure it.” Lori found pleasure in learning for learning’s sake. She described it as a “hobby,” something she does for herself. She said, “Besides being non-traditional, I am a
student that loves to learn. That’s a little bit different than most students who are just in there to get what they need. I love to learn.” Lori, however, made a clear distinction between the learning she did to get her degree and gain employment and the classes she took (and will take) for personal fulfillment. She described her degree as something she wants to complete to be able to get full time employment and support her family. She plans to continue learning after she completes her degree, “Class is like a hobby to me. So I’ll go on for my personal self.”

Calling

Across all cases, the participants in this study described their chosen career field with the passion and enthusiasm described by Benson and Scales—a passion that could be conceptualized as a calling. Several examples of the passion and enthusiasm exhibited by the participants are included here.

Lori: I just love it. So that’s where I am going now. I don’t want to get a Psychology degree, because unless you go beyond Masters, there’s nothing there. It’s just a piece of paper. So I am just loving being in the world of psychology and psychiatric help. I just love it. I have kind of found my little spot after all these years [smiling]. Indeed, Sadie described a sense of being called. Sadie described her passion:

I believe in prayer and I believe in pastors and, I’ve been praying. I have. Lots of people at school said, ‘Sadie, you’re gonna be a speaker. You’re gonna be out there and say: Here is where I was and here is I am today. You can do it. And I ‘m like, ‘Me?!’…So I would love to get into that field. ..Because I have that passion
because I’ve been there. Walked it. Done it. I have what they’re coming in with.
And most people that are smart and has a PhD, they don’t know. They have no
clue of what these people coming in have.

Ron described a similar passion for the work in the non-profit sector:
And like I said, I would like the non-profit sector. I really considered the Sight
Center or St Jude’s or Make a Wish Foundation, one of those places because I
really love fundraising. Cause that’s what I really love doing. I love fundraising.

Altruism
Six of the participants in this study have chosen to pursue careers in social service
fields: nursing, education, social work, psychology or counseling, and non-profit work.
They spoke explicitly about wanting to help others who had struggled as they had or were
“less fortunate” than themselves. Matt, who experienced trauma, wants to work in
international crisis intervention. Sadie, who experienced abuse, wants to counsel adults or
children who have experienced abuse. The experience of being successful first in ABLE
and then in college—something he never thought possible— has been transformational
for Ron. He wants to use his public speaking skills to share his experience with others
who may also struggle with a lack of confidence in their academic abilities.

Summary
Benson and Scales (2009) use the following thriving markers or indicators:
whether an individual “can identify a passion in their lives, exhibit positive emotions, and
have motivation to develop their passions, whether they report a sense of purpose,
optimism about the future, and prosocial orientation and where they are in spiritual
The participants in this study exhibited the thriving markers describe in that work: a passion in their love for learning, a sense of vocation, and altruism in their chosen career paths.

**Common Theme 5: Multiple Institutional Sources of Emotional Support**

The presence of a nurturing relationship is a key to building resilience in children (Werner & Smith, 1992) and adults (Higgins, 1994; Masten, 2009). Studies conducted in higher education settings have called attention to the importance of mentoring and supportive relationships in facilitating positive postsecondary transitions (Leake, Burgstahler, & Izzo, 2011) and increasing student engagement and persistence (Schreiner, 2010). Although research indicates that highly successful adults with learning disabilities surround themselves with supportive and helpful people (Gerber, Ginsberg, & Reiff, 1992), the support need not come from a multitude of individuals. Werner and Smith’s research found that most of the high risk children who were successful as adults attributed their success to one caring adult. Across all cases, the participants in this study identified multiple supportive individuals at their postsecondary institution. Additionally, each participant named at least one individual who was exceptionally supportive and went “above and beyond” their expected job duties to provide support. These two groups of supportive individuals (supportive and exceptional) will be discussed below.

Statements by the participants (and supported by the institutional personnel) indicate that these relationships may have been facilitated by the small size of the two-year colleges. Finally, the statements from the participants and the disability service providers suggest that institutional culture can contribute to the development of supportive relationships.
Multiple Supportive Individuals

All participants identified at least two supportive individuals at their postsecondary institution (see Table 4). Two of the participants each identified six individuals at their postsecondary institution who had been supportive at various points in their education. The participants referred to supportive individuals by name (or wished they could recall the individual’s name) and were able to recount meaningful conversations or situations in which the individuals acted in a supportive manner. The supportive individuals (a) provided emotional support and encouragement, (b) encouraged/facilitated independence and self-advocacy, (c) communicated belief in the ability of the participant to be successful, and (d) communicated caring.

Each participant encountered at least two individuals at their postsecondary institution who provided emotional support and encouragement in a variety of ways. The act of encouragement may have seemed insignificant to the individual faculty member or
administrator who provided it, but was very meaningful to the participant. The email from Val’s English teacher\textsuperscript{55} inquiring about his well-being after an in class seizure is one example of a simple act that provided the emotional support and encouragement that he needed at that moment. The instructors in her nurse’s aide class encouraged Sadie to enroll at the college. Tiffany’s first experience with college classes was a free Algebra class offered by the local two year college. After she completed the class (she received an A), the teacher encouraged her to consider enrolling in the college, even as she resisted.

‘You did really well in my class.’ I said, ‘You were a really good teacher.’ He said, ‘What are your plans after the class?’ ‘Plans? I got no plans. I just did what she told me to do.’ He said, ‘I see something in you.’ ‘OK?’ ‘Have you checked about going back to college?’

Several participants encountered supportive individuals at the institution who facilitated their independence and social integration. The participants from two different institutions described how the disability service providers taught them to advocate for themselves. Matt explained that Julie would let up when she was confident that he would be successful and allowed him to pull the trigger on his own. Matt appreciated this encouragement and suggested that it increased his own self-confidence. Tiffany described how Carrie helped her learn how to talk with her instructors with confidence instead of talking to them for her. As described in the case report, Tiffany was encouraged by her instructor to join in a class ski trip. She commented on how her classmates seemed to view her in a positive light after the trip. The teacher went out of his way to encourage

\textsuperscript{55} See Case Report.
and facilitate social integration. Tiffany attributes her confidence and self-efficacy to her college experience.

I am learning you can be and do whatever you want to do. Where there is a will there is a way. I wanted to tell you about that because it came about because of college.

Several of the participants encountered individuals at their institutions who communicated the message: I care and I want you to stay. The director of the office disability service told Matt, “So many people like you come into college and they struggle right in the beginning and they end up quitting and I never see them again. And I don’t want that to happen to you. I want you to stay.” Val’s English teacher said, “I’ll work with you. I’ll do whatever it takes. I don’t want you to leave, though. I think you can do this.”

Exceptional Individuals

Each of the participants identified one exceptional individual at the institution who went above and beyond to provide support. The exceptional individual was most often a faculty member at the institution (n=4) but in other cases was an administrative staff person (n=2) or director of the office of disability services (n=1). One participant (Sadie) identified three exceptional individuals at the institution who went beyond their expected job duties to assist her. The exceptional individuals offered their time (and expertise) to support the participants academically. For example, one instructor tutored Sadie in reading for four hours each week. Sadie described another faculty member who
went out of his way to read a Biology exam to her because the student reader was having
difficulty pronouncing the words on the test.

He took time to …after he gave everybody else the exam, we walked down. He
sits back there in the quiet room with me and reads for me [incredulous]… I was
like, ‘You don’t have to do this.’ He says, ‘But if it helps you and you pass it.’

As described in the case report, Matt was very grateful for the support of the director of
the Office of Disability Services. He referred to her as “inspirational” and an “awesome
person.”

Size of the Campus

The statements of the participants suggest that the size of the two-year campus
facilitated the development of the relationships between the supportive individuals and
the participants. John spoke about how the small size of his campus allows him to get to
know the individuals at the college.

It’s small here. I am small, I like small. I know people here. When I need
something I know who to go to, and I know who’s going to be there. It’s not big,
when you go into the office over there. There’s two or three people. I know who
they are. I’ve seen them. There’s not 25 different people.

Initially, Matt went to the four year university to enroll. The academic counselor made
explicit the implications of attending a large four-year institution, advising Matt to
consider the benefits of attending the smaller regional campus.
It would be so much easier for you to start up at [the two year college]. It’s close to home. You get a lot more attention and you’re not just a number like you are here. If you don’t ask for help here, you are not going to get help.

Matt took his advice, and then transferred to the four-year college after completing his associate’s degree at the smaller two-year college. He quickly recognized the implications of the larger size of the four year university; it would change how he would have to interact with faculty and the type of service he would receive. When he stopped in to talk to the director of disability services, he was told to make an appointment. His statements describe substantive differences between the two and four-year institutions. The statements further suggest that while at the two-year campus, Matt strengthened the skills he needed to be successful at the four-year university.

…[there are] many, many more students at the main campus and [the faculty] have so much more on their plates. The student-to-teacher ratio has to be incredibly different. But I’m willing to accept that. And it’s a good thing for me because I’ve learned that…When I was in [the two-year] college, the instructors would adapt to me. I mean, they were awesome. Just a totally awesome beginning school. But now I’m learning that, like, to be a college student, you have to learn your professor and how they operate. I’m figuring it out.

Institutional Culture: High-Touch

Three of the participants (Matt, Val, and Lori) attended the two-year regional college where Julie was the director of the Office of Disability Services. In the interview, Julie described an institutional culture that defined how the two-year college approached
student services. As described in the case report for Matt, Julie described this level of support as “high touch” and recognizes that most of the students on her campus require more intervention and a higher degree of attention than students on a traditional four-year campus.

Julie speculated and Matt confirmed that a high-touch approach is generally not present for students with impairments on the main campus. There are certain characteristics of small, two-year campuses that may allow a high-touch approach to student service: low student enrollment, lower student case loads, ease of access for students, and physical proximity to other support offices. The small size of the campus and the physical proximity to the other support offices allow her to walk across the hall to talk with her “registration person” in order to resolve an issue for or with a student. Collaboration with other support offices, something she feels is easier on a smaller campus, was instrumental in Julie’s ability to provide this level of support to her students. She talks with the Success Coach (developmental education) regularly to troubleshoot issues with students. She engages with the staff of the Learning Center (tutoring) to get advice in order to better help students resolve their own issues.

Tiffany and Sadie attended the regional technical college where Carrie was the director of disability services. They describe a similar high-touch approach. Sadie described how the academic advisor did not just refer Sadie to, but instead walked with Sadie to the Office for Disability Services: “[I went to] the person that gets you started -

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56 She refers to each of these individuals by name, indicating an established and comfortable relationship.
and I told her, ‘I can’t read.’ And she marched me down to the disability service. And I am so thankful that they have that there.”

As described in the case report, Tiffany visited the campus of the two-year technical college before she enrolled. Carrie did not just send Tiffany out on a tour of the campus, but walked across the campus with Tiffany showing her the library, classrooms, elevators, restrooms, desks, as well as doors in and out of buildings. Tiffany was able to practice maneuvering her chair in these different environments. This tour assured Tiffany that the campus was accessible to her.

Summary

Supportive relationships can facilitate positive postsecondary transitions for diverse students (Leake, Burgstahler, & Izzo, 2011) and for increase student engagement and persistence (Schreiner, 2010). Across all cases, the participants in this study identified multiple supportive individuals at their postsecondary institution. Additionally, each participant named (at least) one individual who was exceptionally supportive and went “above and beyond” their expected job duties to provide support. Statements by the participants (and supported by the institutional personnel) suggest that these relationships may have been facilitated by the small size of the two-year colleges. Finally, the statements from the students and the disability service providers suggest that institutional culture can contribute to the development of supportive relationships.

Challenges

The social model of disability views disability as a social construct (Burchardt, 2004) and differentiates between impairment and disability. An impairment is a
“condition of the body or mind,” (p.736) whereas disability is the “loss or limitation of opportunities to take part in the life of the community on an equal level with others” (p.736). Mitra (2006) posits that within the social model of disability individuals with impairments “face discrimination and segregation through sensory, attitudinal, cognitive, physical, and economic barriers, and their experiences are therefore perceived as similar to those of an oppressed minority group,” (Mitra, 2006, p.237). In the social model, disability is not intrinsic to the individual but is the result of the interaction between an individual with an impairment and his or her environment. Thus, an individual may have a physical or cognitive impairment and yet is only disabled to the degree that he or she is limited by the social, cultural, and economic constraints imposed by the environment.

Research with adult learners has identified a similar construct (i.e., learners are limited by their interaction with the environment). Eckstrom (1972) identified three categories of variables that affect adult learners: dispositional, institutional, and situational. Dispositional and institutional variables are relevant for this study and are therefore applied and discussed within this section. Dispositional variables or “influences of experience,” (Quigley, 1997, p.170) include learner attitudes and perceptions. Dispositional variables or factors are not inherent or intrinsic to the individual, but are learned as a result of interactions with the environment. Attitudinal barriers refer to the negative attitudes of others. Institutional factors refer to “influences of systems” (Quigley, 1997, p.170) and include considerations such as cost, physical access, and

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57 In this study, I distinguish between dispositional (intrapersonal) variables and attitudinal barriers (interpersonal).
location. Factors in each category presented challenges and constrained the participants’ abilities to achieve academically. Each will be discussed in the following section.

**Dispositional Factors**

Most participants described personal dispositional challenges as something they had overcome. Furthermore, the dispositional challenges of most participants seemed minimal and were outweighed by their personal resources. Each of the participants described a process of coming to accept their conditions, a process which was often required them to overcome self-doubt and shame. Seven of the eight participants described this process as having occurred in the past. John, who was still undergoing the diagnostic process, was the one participant who described (current) difficulty accepting his condition. John was also the only participant who clearly stated that he felt guilty about accepting accommodations; he stated that he did not deserve priority registration and at several points in the interview described his condition as “silly.”

And I have a hard time justifying this to myself. I get early registration. Real early, and that kind of bothers me, because you know, I don’t really deserve really early registration; I’m not like crippled or anything.

His conceptualization of those who are “crippled” as more deserving of accommodations may reveal his own personal construct of *disability*. His construct is suggestive of the individual or medical models of disability (Mitra, 2006) in which the disability is inherent or intrinsic to the individual. Perhaps as a result of undergoing the process of coming to

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58 This was suggested or implied by the use of phrases that included “I was…” or “I felt…”
accept their limitations (a process that John was still undergoing), the other participants had to face and overcome their own negative attitudes and perceptions of impairment.

**Attitudinal Factors and Barriers**

An attitudinal barrier that emerged in the case reports relates to a lack of awareness and understanding by the faculty members at the postsecondary institutions. Two of the participants described interactions with faculty that could be interpreted as discriminatory. Matt encountered faculty members at the four year campus who were less than understanding of his impairment. He described two incidents with faculty members that he characterized as discriminatory and which caused Matt to consider not returning to school the following semester. His interaction with the faculty at the regional campus was much more positive. He did not report any incidents of discrimination or differential treatment at the two-year campus. In contrast, he reported that the instructors at the regional campus were understanding and flexible and would adapt to his needs to a greater degree than those at the main campus. Tiffany, who attended a different postsecondary institution, characterized the expectations of one of her instructors as discriminatory. He refused to adjust or modify the requirements of a photography assignment to accommodate Tiffany’s physical limitations. As a result, Tiffany dropped the class and changed her major. Furthermore, whereas the presence of “doubting others” —which was common across several of the cases— could have resulted in internalization and a sense of victimhood (Freire, 1993). For these participants, the doubting others seemed to be a motivating factor. The participants persevered and did not fall victim to
the discouraging words, but relied on positive self-talk and responded to the doubters with a desire to “prove them wrong.”

**Institutional Factors**

Institutional factors or variables, “influences of systems” (Quigley, 1997, p.170), seemed to present the most numerous and challenging barriers for the participants to overcome. Indeed, in most cases, despite substantial personal resources, the participants did not manage to overcome the challenges presented by the institutional factors. The institutional factors were related to: (a) costs associated with attending college, (b) campus size, (c) polices regarding accessible course materials, (d) delivery of instruction, and (e) physical, environmental, and structural factors.

**Costs**

The participants were impacted by financial stressors in different ways. For example, Tara experienced a complete lack of personal financial resources (a situational barrier) and was not able to access the resources she needed from the institution (e.g., computer and stipends for gas). The two-year college instituted parking fees put an additional financial demand on Tara’s already diminished resources. Several (n=3) participants referred to the high cost of textbooks as a barrier.

**Campus Size**

Overall campus size was an institutional factor that facilitated relationships (see *Common Theme #5*) in some cases (when the campus was small) and constrained students access to services in other cases (when the institution was large). Matt was warned by the academic advisor at the four-year university to consider attending the
smaller two-year campus first, explaining that Matt was likely to be a “number” at the larger four-year and would not get the attention he would at the two-year. Matt found these statements to be true when he transferred to the four-year university after graduating from the smaller school. He found the faculty members less attentive and the disability services more formalized and structured (i.e., he had to make appointments instead of just dropping in as needed).

*Delivery of Instruction*

As discussed earlier in the section on achievement orientation, the participants in this study had high personal expectations for their academic achievement. They placed a very high value on achieving at the highest level possible—defined as their personal best. The participants demonstrated a commitment to their education and exhibited a strong work ethic. They encountered institutional policies and procedures that presented challenges related to accessing course content/material. For example, Matt was frustrated by his inability to take notes during class. He wanted to “keep up with the other students” but his desire to take notes on his own—even though he had the accommodation of a CART writer (which *would* allow him to keep up with the other students) —suggests something other than simply wanting to “keep up.” He wanted to *function in the same way* as the other students: taking notes on his own—but the way the material was presented did not facilitate that process. While he indicated that he was his own “biggest roadblock,” he also acknowledged that “notes” were also an impediment:

I guess my biggest roadblock would be me. I learned that in Social Work. It’s my perception of things … I guess the biggest roadblock would be notes and getting
the CART writer and myself. I was so hard on myself. I don’t know. Nothing was ever good enough. Or they were always better. Which was all me.

Most postsecondary institutions have some kind of orientation for new students. This is an opportunity to help students transition to college and understand a new and often complex institutional bureaucracy. Three participants (from different institutions) felt that the orientation for new students was lacking. Tara got little from the orientation, which was a week-long process. Val attended the orientation at his postsecondary institution, but felt important items (e.g., Blackboard) were covered too quickly and in a superficial manner; it was not accessible. He described his experience at the orientation in this way:

We had something like that and we all went in there. But it was so overwhelming to me, especially with my disability already. I was just like…I was like a deer in the middle of a highway with two 18-wheelers going by with the lights on and I’m standing in the middle of the tracks, you know?

_Institutional Policies and Practices – Accessible Textbooks_

Other institutional factors that constrained the participants in this study were policies and practices related to providing accessible academic materials. Six of the participants request their textbooks in alternative format. The two participants in the study who had visual impairments spoke directly about the problems associated with accessible textbooks. The institutions require students who need textbooks in alternate format to first purchase the print copies of their required textbooks and bring them to the ODS, which will then request the alternate versions of the texts. As described in the case
reports, both Lori and Ron (who attended different postsecondary institutions) were frustrated by the institutional policy that required them to first purchase the print textbooks at an expense not incurred by students without visual impairments who can access the books at no cost in the college library. Both stated they are required to purchase textbooks months prior to the beginning of class in order to have the accessible text in time for the first week of classes. Often there are delays, putting them behind their classmates, and putting extra demands on their time when the accessible books do arrive. Ron requests his textbooks in electronic format, but he stated that on more than one occasion the publisher has sent the textbook incorrectly formatted and thus his adaptive software was not able to process it. He had to return the books to the publisher and request corrected versions. This time lag put him behind in his reading and in his coursework. Ron had to drop one class as a result of not receiving his text on time. When she does get the textbook in the format she can access, Lori has to spend extended periods of time reading and straining her eyes to catch up to her classmates.

Lori: The way that it’s an issue is that everyone else has the work done. And you don’t. And you don’t have the computer program or the large print and you can’t get that work done in schedule with them. Yes, you can always make it up, but that puts you behind in the beginning.

Ron: They could share a book with a friend. There’s a lot of options. Go to the library. Check out the book in the library if it’s available. So there’s options. But for me there’s no options. If I don’t have my book and have it one time, I lose two
weeks. It’s catastrophic. It’s like losing half of the semester because truly in that class, I never did get caught up. And I ended up dropping the class.

*Organizational Structure and Capacity of Offices that Serve Students with Impairments*

The organizational structure for providing disability services at the postsecondary level may constrain the ability of the staff to deliver effective services in a timely manner. The most common organizational structure is a separate unit, serving only students with impairments (National Center for the Study of Postsecondary Educational Supports [NCSPES], 2000). The ODS offices at three of the four institutions in this study were separate offices, providing services and supports *only* to students with impairments (see Table 5). The second most common organizational structure for providing services for students with impairments was through the office that provided services to all students (NCSPES, 2000). At one institution in this study, the Office that serves students with impairments also coordinates testing, tutoring, voter registration, career services, computer services, in addition student accessibility services.  

Most postsecondary disability service offices manage huge caseloads of students and are insufficiently staffed to provide services and supports (National Council on Disability [NCD], 2003). The average number of students requesting and qualifying for services across all postsecondary institutions is 231, but two-year institutions serve significantly greater number of students with impairments (mean= 261) than four-year

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59 This is the institution that Ron attends.
institutions (mean = 217). The number of students with impairments registered with the ODS in this study varied, but were close to the averages cited above (see Table 5).

Table 5.

*Characteristics of the Offices Serving Students with Impairments in this Study*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Participants</th>
<th>Number of Students Registered with ODS</th>
<th>Organizational Structure of ODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ron</td>
<td>87</td>
<td>General support</td>
</tr>
<tr>
<td>2</td>
<td>Tiffany, Sadie</td>
<td>300</td>
<td>Separate unit</td>
</tr>
<tr>
<td>3</td>
<td>Matt, John, Val</td>
<td>210</td>
<td>Separate unit</td>
</tr>
<tr>
<td>4</td>
<td>Tara</td>
<td>unknown</td>
<td>Separate unit</td>
</tr>
</tbody>
</table>

*Note:* The Director of the Office of Academic Services at institution 1 indicated that there are probably over 150 additional students who could benefit from services.

At one institution in this study three individuals\(^60\) appear to be responsible for all of the services that are provided through the Office of Academic Services (i.e., testing, student accessibility services, tutoring, voter registration, career services, computer services, as well as Student Accessibility Services), which has the potential to negatively impact the capacity of the office to provide high quality services to students with impairments. The other three institutions had a staff member who was titled *Director of Disability Services*, indicating that disability services their sole or primary responsibility. This may indicate a basic institutional understanding of the need for qualified personnel to provide services and supports to students with impairments; however, each office has a caseload of over 200 students, all managed by one person. The result of this type of caseload is indicated on the FAQ webpage at one institution (institution 2 in Table 5):

\(^60\) There may be additional support from student workers.
there are between 250 - 300 students registered with the ODS every year, with more than 100 students waiting to be qualify for services in any quarter. These waiting students are not able yet eligible for services or accommodations through the ODS office and do not have the same access to instruction—*at the same time as*— their peers without impairments.

The professional responsibilities of a postsecondary disability service provider typically exceed managing the large caseload of students registered with their office (NCSPES, 2000). The responsibilities of the directors of ODS as stated in the Mission Statements of most institutions reviewed in this study include access, service provision, and increased awareness. This indicates that, in addition to helping students understand and access the services and supports they need, the ODS staff are expected to create and provide professional development and support for faculty and staff. A national survey of postsecondary disability service providers supports the contention that the majority of postsecondary disability service providers consult with faculty, develop and distribute a faculty/handbook and informational products, and facilitate frequent workshops and/or presentations (NCSPES, 2000).

*Physical, Structural, and Environmental Factors*

Physical, structural, and environmental factors at the institutions presented challenges across several of the cases. The participants described challenges with physical access (e.g., no curb cuts on the new student center in Tiffany’s case) and challenges with inaccessible services (e.g., no plastic trays in the cafeteria, also in

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61 The mission statements of the two institutions are identical.
Tiffany’s case). Tara, who has chronic pain and mobility impairment, was often unable to find a handicap parking space (they were often full) and was forced to walk uphill to her classes. Lori was forced to wear dark glasses and a cap to shade her eyes from the fluorescent lights that were present throughout the college classrooms. The pain was so intense that she has had to leave class. A related institutional barrier Lori faces is the lack of available online classes. As explained in the case report, while working online from home, Lori can make the necessary lighting adjustments and utilize the accessibility features on her home computer. She has looked for equivalent online course through other campuses, but she was not able to find one. Her statements suggest that the regional campus did not have a course substitution policy that allowed her to take the available online versions of similar electives.

**Summary**

Dispositional and institutional factors, mediated by the personal, social, and community resources available to the participants, presented varying degrees of challenge. Most participants described dispositional challenges as something they had overcome in the past. The dispositional challenges facing the participants seemed to be outweighed by their personal resources. Institutional factors refer to “influences of systems” (Quigley, 1997, p.170). The institutional barriers were more numerous and more challenging for the participants to overcome. The institutional factors that functioned as constraints were related to (a) costs associated with attending college, (b) campus size, (c) polices regarding accessible course materials, (d) course delivery and (e) physical, environmental, and structural factors.
Institutional Supports

Under Section II and Section III of the Americans with Disabilities Act Amendments Act (ADAAA), postsecondary institutions are required to provide reasonable accommodations for students with an identified impairment (upon request) to ensure equal access to educational opportunities and services (Stodden, Whelley, Chang & Harding, 2001). All participants in this study were registered with the office of disability services at their postsecondary institution and utilized accommodations or support services. Some academic accommodations and services, such as testing accommodations, texts in alternate format, and tutoring/academic support services, were utilized by almost all of the participants. Each participant, however, used the accommodations and services in different ways and to varying degrees. Some other accommodations or supportive services were used by a single participant, but were very important to that individual (e.g., Matt’s CART writer, Tiffany’s wheelchair and Alphasmart keyboard). As each condition or impairment manifests in different ways in each individual based on their available personal, social, and community resources and in relation to environmental variables, the suite of accommodations and services utilized by each participant was very different. Despite the apparent importance and usefulness of the accommodations and services, a theme that was apparent across four of the case reports was the desire to be independent of accommodations and reliance on others (e.g., notetakers).
Testing Accommodations

Testing accommodations are changes made in the administration of a test to remove barriers presented by the student’s impairment but without changes to the content being tested or skill being measured. Thus, testing accommodations allow students with impairments to demonstrate content mastery and skill attainment without being limited by the effects of their impairments. The testing accommodation most requested by participants in this study (n=6) was extended testing time. The typical accommodation is one and one half times the regular testing time of the particular class but double time is possible depending on the student’s disability documentation. John and Lori did not request or use this accommodation. Matt and Ron, who used extended testing time in the past, indicated that they felt it was no longer necessary.

Matt: I’ve used all the disabilities accommodations at one time or another, like extended test-taking time, a quiet room. But I’ve slowly weaned myself off to taking the tests in class. And you know, pretty much, the teachers there will let you take as long as you need to take the test. There’s a few that are timed. I feel them out now, but that’s the kind of stuff she [Julie, Director of Disability

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62 Recent findings regarding accommodations offered at degree-granting institutions indicate that extended testing time was offered at 93% of postsecondary institutions in the 2008-2009 school year (Raue & Lewis, 2011). Julie indicated that extended testing time was the most commonly requested accommodation at her two-year college. The other three disability service providers indicated that testing accommodations and tutoring were the two most requested supports at their postsecondary institutions.
Services] helped me deal with: to realize that I can do it and go to school and be an advocate for myself.

Ron: I get extra time on tests and exams and things like that, if I need it. This semester I haven’t used that. I haven’t asked for that.

A related testing accommodation is the use of a private or quiet room. Two participants used this accommodation. A quiet room for testing was very important for Sadie, who has a learning disability and ADHD and is easily distracted.

I get a quiet room because I have ADHD. I didn’t realize how crucial that is when you’re taking an exam and you hear that tapping, the pencils, the coughing… you know ... my mind goes right there. Then I lose what I’m doing. So when it’s a sound proof room, I don’t hear none of that.

Tiffany used a scribe for exams. When using a scribe, the student dictates answers to a person (the scribe) who copies the student’s replies onto the exam. A scribe can provide an opportunity for a student to demonstrate content mastery without being restricted by the effects of his or her impairment. As such, a scribe can be beneficial to students with learning disabilities as well as mobility impairments. Sadie utilizes a scribe and a reader for exams. A reader is an individual, often a student, who reads the exam to the student. This accommodation became problematic in Sadie’s Biology class when the reader had difficulty pronouncing the words on the exam. Sadie resolved this issue by talking with the instructor who ended up reading the exam to her.
**Classroom Accommodations**

Several participants (Sadie, Matt, and Tiffany) utilized notetakers during class.

Sadie is a poor speller and is frustrated by trying to take notes in her classes, so she relies on notetakers. As described in the case report, she expressed a conflict with this accommodation. While she recognizes the benefits of using notetakers, Sadie wants to be independent of others for support. She would prefer to use an assistive technology device that can serve same purpose, but has not been able to find such a tool.

Val and Lori felt they were able to take their own notes. Lori said she felt comfortable asking her classmates for notes if she needed them on a particular day. John did not need to use a notetaker either but often volunteered to take notes for other students. He described a potential privacy issue with notetaking and felt the process for could be improved if the student who needs the notes was able to remain anonymous.

John: Usually… they need somebody to be a note taker, and you say, ‘Well I’ll do it, okay.’ ‘Well you’re the note taker and you need to take notes for this person.’

[Interviewer]: Right, who is now identified in front of the entire class.

John: Yes. And sometimes they don’t like that. It would be a lot easier if I was going to be the notetaker if I could take the notes, and just give them to the professor, and the professor do whatever he does with them… the one young lady that wanted me to just email them to her… well, give her another email address that’s just some generic email addressed that doesn’t have her name…dot [initials
of his institution] dot org. Um, and then just let me email them to that, and then I
don’t even need to know who she is.

At the two-year college and at the four year university, Matt relied heavily on a
CART writer, which is a real-time captioning service to help students who are hearing
impaired or have other language processing impairments with class lectures. Ron did not
use a notetaker, but used a digital tape recorder to record lectures, as did Tiffany.

**Accessible Textbooks**

Accessible textbooks were a highly requested, yet problematic, accommodation
for the participants in the study. Six of the participants in this study received their
textbooks in an alternate format (i.e., on CD or in an electronic format such as PDF). As
indicated in the case reports and in the section on Barriers, the two participants in the
study who had visual impairments experienced difficulties obtaining their textbooks in an
accessible format on time for their first class session. Additionally, the institutions require
students who need textbooks in alternate format to first purchase the print copies of their
required textbooks and to bring the texts to the ODS, which will then request the alternate
versions of the texts. As described in the case report, Lori and Ron were frustrated by the
institutional policies that required them to first purchase the print textbooks at an expense

63 Alternate format materials are commonly provided to students in braille, large print,
audio or electronic text (e.g., Adobe Portable Document File [PDF], Rich Text File
[RTF], ASCII, HyperText Markup Language [HTML], or in Microsoft Word document).
The electronic text can be read aloud by software programs (e.g., screen readers) installed
on the user’s computer.
not incurred by students without visual impairments who can access the books at no cost in the college library. Val experienced another problem with electronic texts; the screen reader on his computer was not able to interpret the technical language within the electronic version of the CAD textbook.

**Assistive Technology**

Assistive technology is defined by the *Assistive Technology Act of 2004* (29 U.S.C. 3001 et seq.) as “any device, piece of equipment, or product system, whether acquired commercially or off the shelf, modified or customized that is used to increase, maintain or improve functional capabilities of individuals with disabilities” (Definitions, sec. 3). The Assistive Technology Act of 2004, PL108-364 [29 U.S.C. 3001 et seq], also known as the “Tech Act” acknowledges the importance of assistive technology in the lives of individuals with impairments. Assistive technology encompasses a wide range of devices from “low-tech” items such as magnification devices to “high-tech” items such as computers and software applications that can, for example, convert speech to text or text to speech. The benefits of assistive technology for college students with impairments have been well-documented (see Riemer-Reiss & Wacker). National surveys have indicated that assistive technology (AT) is generally available—but to varying degrees—across postsecondary institutions. AT evaluations, however, are rarely offered at postsecondary institutions (NCSPES, 2000).

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64 The *Tech Act* provides funds to states to support demonstration projects in assistive technology, programs to provide loans to individuals to purchase assistive technology.

65 [http://www.ucalgary.ca/iejll/riemer-reiss_wacker](http://www.ucalgary.ca/iejll/riemer-reiss_wacker)
Other than the magnification devices (e.g., CCTV) and FM amplification systems, which appeared to be available across all institutions in this study, there is great variation in the assistive or adaptive technology that is available to college students with impairments. One campus was particularly well-equipped with many different assistive technology options for students, including different applications that serve the same purpose (e.g., multiple text to speech software applications such as WYNN, Scan and Read Pro, and Kurzweil). If there are multiple applications available, the student can choose to use the application with which they are most familiar. Based on the information presented on the DS webpages, the other institutions were very limited in the AT they had available for student use; three out of the four institutions did not indicate availability of assistive technology software that could translate speech to text or text to speech.

Most of the participants (n=6) in the study used some type of assistive technology (AT) software, primarily text-to-speech (e.g., ReadPlease®, Kurzweil 3000®) and speech-to-text software (e.g., Dragon NaturallySpeaking®). Ron, with a significant visual impairment, used additional products including JAWS® screen reading software and a Victor Reader, a digital talking book/MP3 player. It is worth noting that these additional products were provided to Ron by the VI, not the postsecondary institution. For the participants who used AT software, it was something they found on their own or were shown by outside agencies (e.g., VR)

66 One institutional website did not indicate what types of assistive technology are available to students.

67 http://www.readplease.com/
and then learned to use on their own. This is consistent with research reporting that the majority of postsecondary students with impairments (74 percent) teach themselves to use assistive technology (Sharpe, Johnson, Izzo, & Murray, 2005).

In addition to the complex software packages described above, AT can include low tech products (e.g., pencil grip, and modified keyboard or mouse) as well as other high tech devices (e.g., spell-checkers, and portable keyboards). Tiffany, who has cerebral palsy, indicated that the two most valuable pieces of assistive technology to her—that she could not have succeeded in college without—were her power wheelchair and her AlphaSmart keyboarding device.

**Tutoring and Academic Support Services**

Tutoring and academic support services (e.g., Writing Lab, Math Lab, Learning Center) were utilized by seven of the participants in this study. As described in the case report, Ron spends hours working with the math tutors at the Math Center, going in on days when he did not have class just to work on his math. Additionally, he took every paper he wrote to the Writing Center for editing. Referring to using the resources on campus, he stated: “You see, I utilize anything that we have…you know, there is no reason not to do that.” Sadie used the Writing Center frequently and spent six hours per day, six days per week in the Math Lab when she first started college and consequently received nothing below a B+ in any math class. Sadie uses the tutors to the extent that she is allowed and has asked to stay longer.

And I’ve proven myself [with] the tutors. I never cancel. I’m never late. I’m always there. I always use their resources. So they make sure they are provided. I
ask. I say, ‘Okay, I think I’m gonna need an extra hour here, you know because you’re only allowed two.’ They sit down and they think about it. They know I’m not going to abuse it.

Val, who was in his first quarter of classes at the time of the interview, used the Learning Center only once, but it served an important purpose.

I went to the Learning Center once. By the time I got to the Learning Center I actually almost figured most of it out. But it was very helpful…the …the about 30 minutes that I was there. It cleaned up… It reassured me that I was correct.

John used the Learning Center for a specific purpose as well. His statements reveal a unique and important feature of the services provided at a smaller two-year institution.

So you go over to the learning center. That’s another thing about being here; this place is small. There’s only four people in the Psychology department and three teachers in the Education department. So, you go over there and you say, ‘I need to write a paper for Dr. T.’ And they say, ‘Well, Dr. T actually uses MLA but he calls it APA.’ So, the place is small. People know that. If you…I don’t know, at a large college they’re not going to know that.

Counseling Services

Almost all of the participants (n=7) reported that they accessed academic counseling or advising, and several (n=3) reported that they used formal or informal psychological counseling services. Sadie spoke at length about how valuable the formal psychological counseling services were to her when she was starting college. Tara used the ODS staff for emotional support and counseling in a more informal way, often
dropping in at times of seeming/apparent crisis. Matt and John received academic counseling from the Director of Disability Services (same institution). As described in the case report, Matt took Julie’s advice and dropped the Algebra class and enrolled in remedial math. Julie helped John, who had the accommodation of priority registration, select and register for classes with the instructors who would be more understanding of his condition.

**Summary**

All participants in this study were registered with the office of disability services at their postsecondary institution and utilized accommodations or support services. Some academic accommodations and services, such as testing accommodations, texts in alternate format, and tutoring/academic support services, were utilized by almost all of the participants while others were only used by one participant in the study, but were important to that individual. Just as each condition or impairment manifests in different ways in each individual, the suite of accommodations and services utilized by each participant was very different.

**Social and Community Resources**

Nontraditional students engage their social, community resources to address the dispositional, situational, and institutional challenges they encounter (Eckstrom, 1972; Mercer, 1993; Quigley, 1997). Social resources, as operationalized in this study, include family members, friends, classmates, and neighbors. Community resources include community organizations, faith-based organizations, social service organizations, and other agencies that provide services and supports. Each participant differed in the degree
to which they needed and used social supports. In general, they were supported by their family members and to a lesser degree by friends and neighbors. Most (n=6) of the participants engaged the support of a community organization, faith-based organization or social service/support agency (e.g., VR).

**Family Support**

The support of family members was mentioned by most (n=7) of the participants. Maternal support was mentioned by four (Tanya, Lori, Sadie, and Matt) and seemed to be the primary source of familial support for them. Tanya’s mother, for example, pushed her to enroll in college and was a critical source of emotional support when Tanya encountered discouragement. Matt confided in his mother, the only family member he mentioned in his interview, when he was struggling with the decision over whether or not to return to school. Lori indicated that her parents moved in order to be closer and more supportive to her during a particularly difficult period. Sadie stated that her mother was her biggest source of support after her fiancé.

In addition to Sadie, two other participants mentioned spousal support. Lori’s husband often helped her with coursework and sometimes read her textbooks and assignments to her. Val relied heavily on his wife—who had recently graduated from the same institution—for assistance with his studies, transportation to class, learning technology applications (e.g., Blackboard), and navigating the complex postsecondary education system. John indicated that his wife was not as supportive, however. He described conflicts over parenting issues and professional and academic conflicts that are
likely common difficulties encountered by many nontraditional college students with families.

Tara’s and Val’s experiences illustrate the great differences in the degree of support the participants received from their family members. Outside of the institutional personnel, Tara’s sole source of support is her daughter who is attending a nearby University. Tara indicated that she does not have anyone to rely on other than her daughter and, as a result, sought financial, academic, psychological, and emotional support from the postsecondary institution (and in most cases did not receive what she needed). In contrast Val has an extensive support network of extended family members (in addition to his wife), which is especially important since both his parents and his wife’s parents live on the opposite side of the country. He has a cousin who reviews his English papers. He has an uncle who is a chemical engineer. His father-in-law studied drafting years ago and is still a source of support for Val. He has also developed collegial relationships with many of the faculty members in his department.68

Support of Friends, Neighbors, and Classmates

As with their family members, the participants in this study engaged the support of friends and neighbors to varying degrees. Ron was the only participant who did not mention the support of friends or neighbors. As described in the case report, Val had a wide support network of friends and neighbors that he called on for support. Some of these friendships were intentionally facilitated by his wife who was fearful of leaving him home alone. Matt, John, and Sadie developed friendships with their classmates who

68 This was discussed in the section Relationships with Institutional Personnel.
provided social, emotional and academic support. For example, one friend suggested to John that he seek out counseling services. He did, and as a result of this friendly recommendation, John is receiving support services. John, already a strong student academically, studies with a group of students and reports that the practice has been beneficial. Similarly, Sadie chooses to disclose her disability to her classmates and uses the students in her classes for academic support.

…and I tell the students. I use the students. Here’s where I am.

*Everybody* knows now [laughs]! When I’m sitting next to …at least the four…Oh yeah, I let them know. ‘Here’s where I was…’ ‘You’re kidding?!’ ‘No!’ Because then, when I ask, if I don’t know how to spell, ‘Here!’ I tell them. I mean I just don’t see… Why hide it? If it’s gonna get me help… Use your resources. I use these students. I don’t cheat but I use them.

**Community Resources**

As noted, most (n=7) of the participants engaged the support of a community organization, faith-based organization or social service or support agency (e.g., VR). Four of the participants (Matt, Tara, Val, and Tanya) received substantial support from the VR. The VR provides services such as evaluation, restoration,\(^69\) vocational training,

\(^{69}\) *Restoration* aims to correct or substantially modify an impairment so that the individual can attain employment. Restoration services may include treatment, including hospitalization and surgery, artificial limbs or braces, eyeglasses or hearing aids, or other services such as occupational and physical therapy.
occupational tools and equipment, adaptive technology, counseling, and job placement assistance. That support comes with stipulations and expectations; VR clients are expected to graduate and then find employment. The VR provided Matt with the financial support to be able to return to school, covering the cost of classes, books, even his glasses. Although the agreement with VR limits the income that Matt can earn on a monthly basis to $720 and stipulates that he must be employed after his education is completed, he is openly grateful for the support that the agency has provided to him. His positive outlook allows him to see the benefits of all of the paperwork and reporting that is required of him to maintain the services of VR; he has learned to be more responsible. His statements suggest that his confidence has increased as a result.

I meet with her every summer. And I meet with her once or twice through the school year. And I have to send her an update on how things are going at school, where I am at every month. And I have to…I am responsible to send her all my bills, my grades, my schedule. I have to send her my book receipts. It’s a lot. I am responsible for a lot of stuff. They’ve given me the ability to learn responsibility.

The power wheelchair that VR provided to Tanya gave her the mobility she needed to be able to navigate the campus of the technical college. Even though she can walk limited distances, Tanya indicated that she would not have been able to attend college without her power wheelchair. The VR also provided her with a lift for her car so she can transport her chair to and from campus.
I would say I could not have done college without the chair, without a doubt. There is no way I could have [navigated] a college campus, I mean, because you got what, five buildings and some of my classes were off-site.

Tanya admitted that she is worried that VR will take back the chair if she does not find adequate employment soon, a stipulation of the agreement. At the time of the interview she was working four hours per week in the college tutoring center, but was getting ready to move to another part of the state, forcing her to look for new employment. The VR will not provide any additional financial support to Tanya to further her education beyond her Associate’s degree, which may further limit her employment prospects.

Ron has also accessed the resources in his environment, namely the state agency that provides services for the visually impaired (VI). He indicated that the VI has allocated $40,000 for his service and training. Through the VI, he will get training on a new suite of assistive software and a handheld digital audio book reader. The VI will also provide a mobility specialist to help Ron learn to navigate his environment as his sight continues to decline. Within the next year, he intends to get a guide dog through VI.

While she was not supported through an external agency, Sadie sought out social support resources in her community, specifically counseling and spiritual healing through her church. She continues to find support and guidance through her faith. Tanya also finds support in her faith and the church community; her adoptive mother is her pastor.

The other type of external agency or organization that provided support to the participants (n=4) were adult education programs, including Adult Basic and Literacy

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70 She has since started her own web-based business.
Education (ABLE) programs.\textsuperscript{71} In addition to academic support, the adult education programs provided the emotional support and opportunities for students to build their self-confidence. Ron spoke at length about the ABLE program he attended to get his GED. He felt the support and encouragement he received from the ABLE instructor gave him the confidence he needed to be ready to transition to college. Sadie attended a Nurse’s Aide class prior to enrolling in college. She struggled in the class initially but encouraged by the students and instructors, persisted. After she finished the program, the students and instructors encouraged her enroll in the local technical college. Tara’s experience with adult education GED classes was not as positive; the classes were too slow-paced for her. She dropped out of the class without her GED, but returned later (to a different class) and passed her GED. She did not speak about emotional support from encouraging teachers. Her need was purely practical: take and pass the GED as soon as possible.

Lori, who was not supported by any external agency, expressed frustration with the lack of technical guidance provided by her physicians. She learned about a magnification application on her computer by chance when she took her husband to visit

\footnotesize{\textsuperscript{71} ABLE programs are funded through Title II of the Workforce Investment Act (WIA) of 1998, the Adult Education and Family Literacy Act (AEFLA) to provide free classes in the areas of GED preparation, family literacy, basic skills, English for Speakers of other Languages (ESOL), transition to college, and workplace skills.}
his VA counselor, but received no explicit guidance or instruction on assistive technology
or other adaptive technology from her physicians or eye specialists.\textsuperscript{72}

It’s sad. I go to specialists, eye specialists. And they don’t sit down and talk to
you about … They want to diagnose you and say, ‘This is your problem,’ but they
don’t send you home with paperwork on how to deal with it. That really makes
me… If you want to complain about something… What am I paying you for? Just
to tell me I can’t see?! I know I can’t see. How can I rectify this? And they don’t
say like computers, ‘Maybe you can do this.’ You know, they could probably
make a killing if they sold pieces of paper, you know, the see-through ones with
different shades. And if they were to show people that there were readers on the
computer that you can use. You can ask. But when you’re there, you’re just so
upset, ‘I can’t see!’ You just want to go home. They should send you home with
paperwork, ‘Contact our office and we will show you how to adapt more easily to
your sight problems.’ But they don’t do that.

Summary

The participants in the study differed in the degree to which they needed and used
social and community supports. They were supported by their family members and by
friends and neighbors. Most of the participants were supported by a community
organization, faith-based organization, or other social service or support agency including
churches, adult education programs, and the VR. Those participants who did not have
many community resources relied more on their personal or social supports.

\textsuperscript{72} AT evaluations are generally not provided by postsecondary institutions.
Chapter 5: Conclusions and Recommendations

A large body of literature investigates risk factors associated with being a nontraditional student, with much attention paid to the failures of these adult learners (Choy, 2002; Levin, 2007). Overlooked and under-researched is the nontraditional student—especially the highly nontraditional student—who persists and succeeds in postsecondary education. Six of the participants in this study can be considered highly nontraditional based on Horn’s (1996) criteria. Additionally, all of the participants had physical or learning impairments; they faced substantial challenges. These individuals were able to effectively engage the resources available to them and to persist in postsecondary education, however, demonstrating resilience and thriving. The narratives shared by the participants in this study indicate that the presence of personal, social, and community resources or assets can mitigate the negative effects of challenges or barriers present in the environment. Understanding how these students utilize their personal, social, and community resources to overcome the challenges they encounter and how environmental contexts facilitate or constrain their ability to be resilient in the face of challenges was the focus of this project. In this chapter, I will answer each of the research questions, present recommendations for policy and practice, and suggest areas for future research.
Conclusions

Research Question 1: What challenges to academic achievement confront nontraditional undergraduate postsecondary students with impairments?

Dispositional (including attitudinal barriers of others) and institutional factors presented varying degrees of challenge for the participants. Most participants described personal or internal dispositional challenges as something they had overcome. These challenges seemed to be outweighed by their personal resources. Although attitudinal barriers of faculty members were experienced by only two of the participants, the attitudinal barriers are worth discussion as they functioned as a constraint and seemed to be a difficult barrier to overcome. When participants (Tiffany and Matt) encountered faculty who were inflexible and insensitive, or who generally lacked understanding, it was the participant who suffered. Tiffany dropped her photography class and regretfully changed her major but persisted and graduated. Matt was on the verge of not returning to school as a result of the negative interactions he had with two of his instructors. Tiffany relied on her personal assets and the support of her family to get through the discouragement. Matt engaged his social resources as well as his strong sense of goal achievement, his self-reflection and self-awareness skills to get past the frustration and decide to return to school. To address the research questions and maintain a focus on the assets that resilient nontraditional college students with impairments bring to the challenges they encounter, the participants were selected purposefully (i.e., students who were currently or recently enrolled in college [see Chapter 3]). An individual with fewer or weaker internal (personal) or social resources may not have been able to be as resilient
when faced with these challenges. The implications for postsecondary institutions will be discussed later in this chapter.

Although two participants experienced a lack of awareness of disability by other students on the campus, overall, interactions with other students seemed to be more of a facilitator than a constraint for the participants. They knew how to engage their peers for emotional and academic support. Furthermore, whereas the presence of “doubting others”—which was common across several of the cases—could have resulted in internalization and a sense of victimhood (Freire, 1993), the doubting others seemed to be a motivating factor for these participants. The participants persevered and did not fall victim to the discouraging words, but relied on positive self-talk and responded to the doubters with a desire to “prove them wrong.”

Institutional barriers were more numerous and more challenging for the participants to overcome. The institutional factors that functioned as constraints were related to (a) costs associated with attending college, (b) campus size, (c) university policies regarding accessibility of course materials, (d) delivery of instruction, and (e) physical, environmental, and structural factors. Each of the institutional barriers discussed here are issues of access: access to postsecondary education (cost); access to information (new student orientation); access to services (campus size); access to course content (accessible textbooks); access to instruction (course delivery); and physical access (structural and environmental issues).

Although three of the participants stated that the cost of textbooks was a barrier, cost seemed to be a substantial constraint for only one of participants. Campus size
functioned as a constraint for two participants (Matt and John). Matt transferred to the larger four year university after two years at the smaller regional campus. He found that the attentive, high touch approach he experienced there was not present at the four year institution. He attributes his ability to be successful to his growth at the two year institution. His conclusion suggests that (small) campus size can function as a facilitator when small size allows for the development of a culture of high touch and personal attention (see research question four in this chapter for further discussion). Although he wanted to and was encouraged to attend the larger university which was closer to his home, the size of the campus (and the institutional characteristics that go along with a large university\textsuperscript{73}) was intimidating to John.

Institutional policies and practices related to accessible textbooks limited participants’ access to course content and thus constrained the participants’ abilities to progress in their coursework. As discussed in Chapter 4, six of the eight participants request their textbooks in alternative format. The two participants in the study who had visual impairments spoke with great frustration about the institutional policies related to accessible textbooks. Students with impairments are required to purchase their textbooks four weeks prior to the beginning of class in order to have them reformatted in time for the first class session, something not required of students who can access traditional print materials. Both participants were aware of the inequity: students without visual impairments or learning disabilities can access textbooks on reserve at the college library at no cost. Furthermore, the time associated with obtaining the textbooks in an accessible

\textsuperscript{73} See case report.
format (due in part to inefficient systems and understaffed ODS offices) resulted in the participants getting access to the course materials after class had begun. Ron dropped his class. Lori was able to catch up but had to put additional strain and stress on her eyes to get it done.

Access to course content was further limited by the way in which instruction was delivered at the postsecondary institutions. From new student orientation to class lectures, the participants in this study were frustrated in their attempts to access and retain information; they tried to change, fix, or adjust their learning styles to learn in the same manner as their peers. For example, several of the participants tried to take notes in class despite having a notetaker present. Furthermore, although accommodations were provided by the institutions and utilized by the participants, the majority of the participants communicated a desire to be free of the accommodations that enabled them to “keep up” with their peers. They accepted accommodations with a degree of reluctance and referred to “weaning themselves off” the accommodations in the near future. They utilized the available assistive technology but wished to be free of it. Sadie’s statement about AT expresses this powerful desire to be independent: “So, yeah, taking notes is the biggest, the biggest [challenge]…. And I really think if I had that, some resource instead of another person to rely on, I would be complete.”

Physical and environmental factors also limited access for the two participants with mobility impairments and for the participant with light sensitivity. Tiffany was denied access to the new student center because of the lack of curb cuts. Because of the
simple lack of plastic trays, she was limited in her ability to utilize the cafeteria. The presence of fluorescent lighting was so painful to Lori that she had to leave class.

**Research Question 2: What personal, social, and community resources facilitate or enable resilience and thriving in nontraditional postsecondary students with impairments?**

Within the construct of *personal resources* the following themes emerged: (a) *achievement orientation*, (b) *positivity*, (c) *self-advocacy*, and (d) *passion*. All students had different educational aspirations and measured success differently, but each approached education with a strong sense of autonomy (Chickering & Reisser, 1993), self-efficacy (Bandura, 1977), and an internal locus of control (Rotter, 1954, 1975). Across cases, the achievement orientation of participants manifested as (a) self-efficacy, (b) discipline, (c) and resourcefulness. The participants demonstrated a commitment to their education and exhibited a strong work ethic. The participants identified the resources (human, technological, and academic) they needed and took the initiative to access them. They took advantage of the accommodations and services available to them, but indicated a desire to be independent of these supports. The high degree of self-efficacy, discipline, and resourcefulness evidenced by the participants are personal strengths or protective factors that may have contributed to their persistence in spite of substantial challenges. These findings support previous research described in Chapter 2 that indicated that autonomy (Benard, 2004), self-determination (Miller, 2002), goal-setting and perseverance (Raskind, Goldberg, Higgins, & Herman, 1999) contribute to resilience and success in adulthood.
Although each individual faced different challenges and approached adversity differently, commonalities exist that are consistent with the findings from research related to positivity cited in Chapter 4. The commonalities across cases in this study related to positivity include: (a) optimism, (b) hope, (c) gratitude, (d) humor, (e) positive thinking, and (f) positive reframing. The inner strengths associated with a sense of purpose (including creativity, optimism, and faith) are “probably the most powerful in propelling young people to healthy outcomes despite adversity” (Benard, 2004, p.28). If resilience is defined as a positive, adaptive response to adversity (Masten, Best & Garmezy, 1990), certainly, these individuals engaged their personal strengths and demonstrated resilience in the positive ways they responded to adversity. Furthermore, a positive perspective of oneself and future is a key concept of Schreiner’s (2010) concept of college-student thriving, similar to Keyes’ (2007) concept of flourishing. Across all cases, the participants in this study were realistic about their situations and experiences, but exhibited a positive perspective of themselves and their futures and, thus, demonstrate this component of thriving or flourishing.

Across all cases, the participants in this study exhibited self-advocacy skills including (a) self-awareness, (b) positive acceptance of functional limitations, (c) understanding of the accommodations process, and (d) involvement of the director of disability services (in three cases). Self-advocacy skills resulted contributed to participants’ abilities to disclose when appropriate and confront the barriers they encountered in postsecondary education. Research indicates that self-advocacy skills contribute to postsecondary success for students with impairments (Stodden, Whelley,
Chang, & Harding, 2001; Thoma & Getzel, 2008) and are facilitated by an internal locus of control (Morningstar et al., 2010) and the other personal strengths associated with autonomy. Therefore, self-advocacy skills may be related to resilience in college students with impairments.

Benson and Scales (2009) use the following set of thriving markers or indicators: whether an individual “can identify a passion in their lives, exhibit positive emotions, and have motivation to develop their passions, whether they report a sense of purpose, optimism about the future, and prosocial orientation and where they are in spiritual development” (p.91). The participants in this study exhibited a passion in their love for learning, a sense of calling, and altruism in their chosen career paths.

Social resources, as operationalized in this study, include family members, friends, classmates, and neighbors. Community resources include community organizations, faith-based organizations, social service organizations, and other agencies that provide services and supports. Each participant differed in the degree to which they needed and used social supports. In general, they were supported by their family members and to a lesser degree by friends and neighbors. Most (n=6) of the participants engaged the support of a community organization, faith-based organization or social service or support agency (e.g., state vocational rehabilitation agency). The support of family members was important to the majority (n=7) of the participants. Maternal support was mentioned by four (Tanya, Lori, Sadie, Matt) and seemed to be the primary source of familial support for them. As with their family members, the participants in this study engaged the support of friends and neighbors to varying degrees.
As noted, the majority of the participants (n=7) engaged the support of a community organization, faith-based organization or social service/support agency (e.g., state vocational rehabilitation agency). Four of the participants (Matt, Tara, Val, and Tanya) received substantial support from the state vocational rehabilitation agency. The state vocational rehabilitation agency provides services such as evaluation, restoration, vocational training, occupational tools and equipment, adaptive technology, counseling, and job placement assistance. The statements of these participants suggest that the support from these agencies, specifically the state vocational rehabilitation agency, was so substantial that college would not have been possible without it.

The support provided to individuals who qualify for services through state vocational rehabilitation agency can be substantial and comprehensive. The challenge, however, lies in qualifying for their services; often only those who have with the most significant impairments receive services. When funding is limited, the agency enacts Order of Selection. When Order of Selection is active the individuals with the most significant disabilities (MSD)—defined as having a disability that seriously limits three or more functional capacities—are given vocational rehabilitation services first. Individuals with learning disabilities, who may be in great need of services that do not require great expense (e.g., assistive technology software), are often denied eligibility or put on waiting lists, as their disability typically affects only one or two functional capacities. Sadie, who has a learning disability, is not supported by the state vocational rehabilitation agency. She indicated she would feel “complete” if she could find the right assistive technology that would allow her to be independent of the notetaker. The
evaluation and counseling that the state vocational rehabilitation agency could have provided to Sadie may have provided that additional support she needed.

Community organizations were an important resource for the participants. While she was not supported through an external agency, Sadie sought out social support resources in her community, specifically counseling and spiritual healing through her church. She continues to find support and guidance through her faith. Tanya also finds support in her faith and the church community; her adoptive mother is her pastor. The other type of external agency or organization that provided support to the participants (n=4) were adult education programs, including Adult Basic and Literacy Education (ABLE) programs.

Research Question 3: How do nontraditional postsecondary students with impairments perceive and value the institutional services and supports available at their postsecondary institution?

1. Which supports have most contributed to their academic success?

2. Which supports have not been available?

Some academic accommodations and services, such as testing accommodations, texts in alternate format, and tutoring and academic support services, were available to and utilized by almost all of the participants. Each participant, however, used the accommodations and services in different ways and to varying degrees. Some other accommodations or supportive services were used by a single participant, but were very important to that individual. Despite the apparent importance and usefulness of the accommodations and services, a theme that was common across four of the case reports
was the desire to be independent of accommodations and reliance on others (e.g., notetakers). Accessible textbooks were a highly requested, yet problematic, accommodation for the participants in the study. Most of the participants (n=6) in the study used some type of assistive technology (AT) software, primarily text-to-speech and speech-to-text software. For the participants who used AT software, it was something they discovered on their own or were shown by outside entities or agencies (e.g., VR) and then learned to use on their own. This is consistent with research reporting that the majority of postsecondary students with impairments (74 percent) teach themselves to use assistive technology (Sharpe, Johnson, Izzo, & Murray, 2005).

Tutoring and academic support services (e.g., Writing Lab, Math Lab, and Learning Center) were very important supports to the participants. Indeed, seven of the participants in this study reported they relied on tutoring and academic support services. The director of the Office of Academic Services at one institution indicated that there were 1400 visits\textsuperscript{74} to the tutoring center last year; they only have 2,500 students enrolled. Almost all of the participants (n=7) reported that they accessed academic counseling or advising, and several (n=3) reported that they used formal or informal psychological counseling services. Sadie spoke at length about how valuable the formal psychological counseling services were to her when she was starting college. Tara used the ODS staff for emotional support and counseling in a more informal way, often dropping in at times of seeming or apparent crisis.

\textsuperscript{74} Some could be repeat visits.
Research Question 4: How do relationships with institutional personnel contribute to resilience and thriving in nontraditional postsecondary students with impairments?

a. How do the relationships develop?

b. What institutional characteristics facilitate the development of meaningful supportive relationships with nontraditional postsecondary students with impairments?

Across all cases, the participants in this study identified multiple supportive individuals at their postsecondary institutions. Two of the participants identified six individuals at their postsecondary institutions who had been supportive at various points in their education. The supportive individuals (a) provided emotional support and encouragement, (b) encouraged and facilitated independence and self-advocacy, (c) communicated belief in the ability of the participant to be successful, and (d) communicated caring. Additionally, each participant named at least one individual who was exceptionally supportive and went “above and beyond” their expected job duties to provide support. The exceptional individual was most often a faculty member at the institution but in other cases was an administrative staff person or director of the office of disability services. The exceptional individuals offered their time (and expertise) to support the participants academically. These findings further support the resilience research that found that that relationships and social connectedness can have a positive effect on students’ inclination to persevere through k-12 into higher education (Orr &
Goodman, 2010), suggesting that relationships also contribute to students ability to *persist* in higher education.

Statements by the participants (and supported by the institutional personnel) indicate that these relationships may have been facilitated by the small size of the two-year colleges. Julie speculates and Matt confirms that a high-touch approach is generally not present for students with impairments on the main campus. There are certain characteristics of small, two-year campuses that may allow a high-touch approach to student service including low student enrollment, lower student case loads, ease of access for students, and physical proximity to other support offices.

Finally, the statements from the participants and the disability service providers suggest that institutional culture can contribute to the development of supportive relationships. Julie described an institutional culture of *high touch* that defines how the two-year college approaches student services. Julie, one of the *exceptional individuals*, referred to by multiple participants, recognizes that most of the students on her campus require more intervention and a higher degree of attention than students on a traditional four-year campus. She stated that developing trust takes time and requires the disability service provider to be accessible and available. To that end, she maintains an “open-door policy,” intentionally structuring her time to have time for informal conversations with students who may just drop in. She has designed opportunities and incentives to entice students to stop in. Her desire to be accessible and available takes her outside of her office. She finds time to walk around campus, becoming a physical reminder to students, and informally checks in with students she encounters. Julie believes that the small size
of the two-year institution allows this kind of activity to be productive; she encounters her students whenever she walks about.

Carrie, the director of the ODS at another institution attended by participants in the study, strives to create a high touch supportive culture at her office as well. She provides opportunities for students to drop in as needed. Additionally, in certain cases instead of relying on the students to set up the appointments themselves, Carrie invites students (via email), those who are identified with psychiatric impairments (e.g., bipolar disorder, depression) and ADHD, to meet with her at least twice a quarter. She states that the response from the students has been positive; the students feel that someone cares about their well-being.

In their 2003 report, the National Council on Disability stated that the “understaffed conditions that exist in many academic institutions undermine the provision of appropriate support to people with disabilities” (p.12). The Office of Disability Services at the regional campus Lori attends is staffed by one full-time director and a part-time graduate student. The director is responsible for providing the requested accommodations—including converting print into electronic format— for a case load of over 200 students.

Intersections with the Literature

While there is a substantial body of literature on college students with impairments (Garrison-Wade, 2009; Izzo, Hertzfeld, Simmons-Reed, & Aaron, 2001; Keith, 2007: Morningstar et al., 2010; Thoma & Whemeyer, 2005; Wessel, Jones, Markle, & Westfall, 2009; Whelly et al., 2002), there is little published research on the
experiences of nontraditional college students with impairments. Similarly, most of the research on resilience has been conducted on children. The findings within this research contribute to the body of literature in each of those three fields: nontraditional college students, college students with impairments, and resilience.

Nontraditional college students (Horn, 1996) make up the largest demographic group at two-year institutions and a substantial portion of the population at four-year institutions (Choy, 2002). Most nontraditional learners (historically defined by the presence of risk factors) take longer to obtain a degree or credential (Choy, 2002). The findings in this study may contribute to a better understanding of the challenges and barriers faced by these students in achieving their academic goals. The recommendations offer potential solutions to the institutional and environmental barriers impeding degree attainment. Indeed, the barriers the participants found most challenging to overcome were institutional barriers (e.g., faculty attitudes and inaccessible course materials and content).

Concurrent with an increased understanding of the challenges and barriers is an increased understanding of how successful college students with impairments use their resources to demonstrate resilience. The common themes (internal resources) of achievement orientation, positivity, self-advocacy, and passion were seen across cases. The participants were able to engage those internal resources to demonstrate resilience. The subcomponents within the four common themes (see Chapter 4) are similar (see Table 6) to the internal protective factors described in resilience research recently synthesized by Benard (2004).
In a synthesis of resilience research, Benard (2004) identified three environmental factors which can contribute to resilience: high expectations, opportunities for participation and contribution, and caring relationships. Resilience research indicates that supportive relationships and social connectedness has a positive effect on students’ inclination to persevere through k-12 into higher education and persistence in postsecondary education (Miller, 2002; Orr & Goodman, 2010). The participants in this

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<th>Internal Protective Factors (Benard, 2004)</th>
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<th>Common Theme Achievement Orientation</th>
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Table 6. *Intersection of Resilience Research (Internal Protective Factors) and Study Themes*
study described the relationships they developed with institutional faculty and staff members as being very meaningful to them. These institutional relationships, as well as those with family and friends, may have contributed to the participants’ ability to be resilient and to persist in higher education.

**Recommendations**

Individuals respond to challenges and exhibit resilience and thriving to the degree that they have and can activate personal, social, and community resources (Miller, 2002; Orr & Goodman, 2010). As stated earlier, understanding how environmental factors in postsecondary education institutions facilitate or constrain students’ ability to use their resources and be resilient in the face of challenges was the primary focus of this project. In the following section I offer five recommendations for practice. The recommendations are grounded in the frameworks that have guided the study: (a) the social model of disability and (b) resilience as a process that is facilitated or constrained by the personal, social, and community resources available to the individual. Certain policies and practices within postsecondary institutions constraint while others facilitate the ability of students to demonstrate resilience. The recommendations offer suggestions for reducing the constraints experienced by postsecondary students with impairments and for facilitating the ability of students to be resilient and to persist.

**Recommendation 1: Systematize Access to Course Texts through Enforcement and Broadening Application of the Chafee Amendment**

Higher education administrators invest substantial dollars to construct accessible buildings. Yet access to course content has been largely unaddressed. Making instruction
accessible to all students must also be a priority. The Association for Higher Education and Disability (AHEAD) indicates that the “lack of effective access to print-based materials has long been one of the greatest barriers for postsecondary students with print-related disabilities” (AHEAD, 2006, “Background,” para. 2). Competing interests complicate the issue. Publishers are not held to civil rights laws or to Section 504 of the Rehabilitation Act of 1973 and Americans with Disabilities Act (ADA) of 1990. Postsecondary institutions are required to ensure access to instructional materials. This tension between the obligation of postsecondary institutions and the rights of the copyright holders and publishers has impeded progress toward a solution. In 1996, with participation from the Association of American Publishers (AAP) the U.S. Copyright Law (Section 121) was amended (referred to as the Chafee Amendment) to “allow authorized entities to reproduce or distribute copies of previously published nondramatic literary works if the copies were reproduced or distributed in specialized formats exclusively for use by blind or other persons with disabilities” (AHEAD, 2006, “The Chafee Amendment and Its Application to Postsecondary Institutions,” para.1).

The intention of the Chafee amendment was to increase access to print materials by students with print-related impairments. The AAP has since responded to the Chafee amendment (see AAP Position Paper presented at AHEAD, 2004) stating that colleges and universities—and the disability services offices within—do not fall under the “authorized entities’ covered in the Chafee amendment. AHEAD responds to the AAP referring to the intention of the amendment:
Colleges and universities, and especially their disability services offices, should be recognized as ‘authorized entities’ as defined under the Chafee Amendment. Failure to do so prevents institutions from meeting their legal obligation to provide access to their programs and services. (AHEAD, 2006, “The Chafee Amendment and Its Application to Postsecondary Institutions,” para.6)

Furthermore, the AAP argues that the Chafee amendment only applies to blind or physically disabled students and not students with learning disabilities or other impairments such as TBI. Therefore, the AAP states that institutions of higher education should receive permission from the copyright holder before scanning or converting texts. This will deny or, at best, delay access for students for whom the amendment could most benefit. Indeed, “recent surveys indicate that requests to publishers for permission to scan books are frequently denied or ignored,” (AHEAD, 2006, “The Chafee Amendment and Its Application to Postsecondary Institutions,” para.8)

Relevant legislation and examples of state initiatives exist which suggests an increasing awareness of the need for improving access to college level course materials. Section 133 of the Higher Education Opportunity Act (HEOA) (PL110-315) which took effect July 2010 requires postsecondary institutions to provide textbook information at the time a student registers for a course (as opposed to on the syllabus). This practice could reduce the time it takes to get books in accessible format, but provides no guarantees. Additionally, several states have passed laws requiring publishers to offer textbooks in alternate format. Other state education agencies give procurement priority to
publishers that offer their texts in alternate format. Yet, even in states with e-text textbook laws, there are publishers who are not willing to provide the necessary files (AHEAD, 2006). Clearly, access to electronic text by individuals with visual impairments is not only a technological issue, but a political one. Willis (2009) states that, Almost every book published today exists as computer text sometime during its production. Computer texts would dramatically increase the accessibility of books to blind readers. However, the development of electronic texts is driven by corporate profit motives, not accessibility for people with disabilities. (“Limit Situations & Limit Acts,” para. 8)

Postsecondary institutions must be considered authorized entities under Chafee. Furthermore, production of accessible text for students with print-based impairments must be considered fair use under the Copyright Act. Until those changes occur, students will have to rely on existing solutions; one promising solution will be mentioned here. Two institutions in this study were members of the AccessText network which was established in 2009 to connect postsecondary disability service providers across the

75 See the Kentucky Postsecondary Textbook Accessibility Act or California Assembly Bill 422 http://www.washington.edu/accessit/articles?216

76 “AccessText is a venture founded and supported by the Association of American Publishers and Higher Education textbook publishers. AccessText is administered through the Board of Regents of the University System of Georgia, the Georgia Institute of Technology Enterprise Innovation Institute, and the Alternative Media Access Center” (http://www.accesstext.org/about.php)
country with textbook publishers (who participate voluntarily) who provide access to college texts in electronic format. Disability service providers at member institutions can request electronic texts from the AccessText database upon request from a student. Access is instantaneous. The expanding list of publishers that participate in Access Text suggests that conflicts over copyright and access can be resolved to the benefit of the copyright holders and higher education institutions, and ultimately, the student.

**Recommendation 2: Employ Universal Design Principles**

The dominant view of disability today is rooted in the medical and individual models. In these models individuals with impairments are broken or deficient and in need of intervention (rehabilitation) from a more knowledgeable other. In the medical or individual models, “it is the incompleteness of the disabled person, certainly not the incompleteness or inflexibility of the world, which is acted upon,” (Willis, 2009, “Disability and Culture,” para. 4). Throughout this study, the institutional message that was communicated was: *to be successful here, you need to change to learn via the way we provide instruction* (primarily through large group lecture). This quotation from Matt describes the difference:

> When I was [at the two year college], the instructors would adapt to me. I mean, they were awesome. Just totally awesome beginning school. But now I’m learning that, like, to be a college student, you have to learn your professor and how they operate.

The institutions provide accommodations for students, but ultimately it is the student who needs to adjust to the institution. Those who cannot are not likely to persist
or succeed. An alternative to the focus on the student as deficient—and one that is consistent with the social model of disability that is employed in this study—is offered in the principles of Universal Design (UD) which Ron Mace\textsuperscript{77} described as “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design,” (Center for Universal Design, 2008, “Universal Design,” para. 1). Universal Design is “a goal that puts a high value on both diversity and inclusiveness. It is also a process” (Burgstahler, 2011, “Goal, Process, Principles, and Examples,” para. 5).

When UD is applied in an instructional setting it is referred to as Universal Design for Instruction (UDI) or Universal Design for Learning (UDL). UDL approaches curricular and pedagogical planning and decisions with the goal of making instruction and learning accessible to \textit{all learners} regardless of ability. Three principles guide UDL: (a) provide multiple means of representation of instructional content, (b) provide multiple means for students to demonstrate mastery of content, and (c) provide multiple ways for students to engage with the content (CAST, 2011).

The Higher Education Opportunity Act (HEOA) (P.L.110-315) includes language about UD and UDL in postsecondary education and offers this specific definition for UD:

The term 'universal design' means a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are

\textsuperscript{77}Ron Mace founder of the Center for Universal Design at North Carolina State University first conceived of the term \textit{Universal Design}. 
directly accessible [without requiring assistive technologies] and products and services that are interoperable with assistive technologies (Section 103, P.L.110-315)

As noted in the HEOA definition, UD is an approach to designing or delivering services—a conscious decision about deployment of resources in order to provide access to the greatest extent possible. Furthermore, the parenthetical without requiring assistive technologies in the HEOA definition is the key aspect of UD for the participants in this study who desired to be free of accommodations and reliance on others for assistance.

Increasing numbers of postsecondary institutions are implementing UDL approach to instruction (Stahl, 20011). Many of the strategies are inexpensive and simple to implement. Burgstahler (2011) offers the following list of ways that UD can be applied in higher education settings:

- a statement on a syllabus that invites students to meet with the instructor to discuss learning needs;
- multiple delivery methods that motivate and engage all learners;
- flexible curriculum that is accessible to all learners;
- examples that appeal to students with a variety of characteristics with respect to race, ethnicity, gender, age, and interest;
- regular, accessible, and effective interactions between students and the instructor;
- allowing students to turn in parts of a large project for feedback before the final project is due;
- class outlines and notes that are on an accessible website;
• assessing student learning using multiple methods; and
• faculty awareness of processes and resources for disability-related accommodations

And related to information technology:
• captioned videos;
• alternative text for graphic images on webpages so that individuals who are blind and using text-to-speech technology can access the content;
• procurement policies and procedures that promote the purchase of accessible products;
• adherence to standards for the accessible and usable design of websites;
• comfortable access to computers for both left-and right-handed students;
• software that is compatible with assistive technology; and computers that are on adjustable-height tables ("Examples of Universal Design in Postsecondary Education," para. 1)

**Recommendation 3: Facilitate a Culture of High-Touch**

As described in response to RQ4 above, relationships with institutional personnel and the staffs of the disability service offices contributed to the academic success of the students in this study and supported the ability of the students to be resilient in the face of challenges and stressors. The high touch culture that exists at two of the institutions facilitated the development of trusting and supportive relationships between students and faculty, administrators and disability service providers. A smaller campus may make a high touch culture more possible, although some of the characteristics of a small campus could be replicated within a larger institution.
For example, higher education administrators should carefully consider the organization of the offices of disability services. The most common organizational structure for providing disability services in higher education is a separate unit, serving only students with impairments (National Center for the Study of Postsecondary Educational Supports [NCSPES], 2000). The ODS at three of the four institutions in this study were separate offices providing services and supports only to students with impairments. The second most common organizational structure for providing services for students with impairments was through the office that provided services to all students (NCSPES, 2000). Student Accessibility Services at one of the IHE in this study are provided through the Office of Academic Services, housed on the first floor of the library. The Office of Academic Services includes testing, tutoring, voter registration, career services, computer services, as well as student accessibility services. In such a structure services are disperse; ODS staff members must respond to students needs through formal meetings and scheduled appointments. There is no time for unscheduled drop-in visits and no time to for ODS staff to walk around campus to interact and communicate with students.

A high touch culture requires human interaction. Most postsecondary disability service offices manage huge caseloads of students and are insufficiently staffed to provide services and supports (National Council on Disability [NCD], 2003). The average number of students requesting and qualifying for services across all postsecondary institutions is 231, but two-year institutions serve significantly greater number of students with impairments (mean = 261) than four-year institutions. (mean =
In fact, two-thirds of postsecondary disability service providers indicated that a “lack of specialized staff has a moderate to significant impact on their unit” (NCSPES, 2000, p.44). This may have a greater impact on two-year institutions as more services and supports are offered through the two-year than the four-year institutions.

At one institution in this study, three individuals appear to be responsible for all of the services that are provided through the Office of Academic Services (i.e., testing, student accessibility services, tutoring, voter registration, career services, computer services, as well as Student Accessibility Services), which has the potential to negatively impact the capacity of the office to provide high quality services to students with impairments. The other three institutions had a staff member who was titled Director of Disability Services, indicating that disability services their sole or primary responsibility. This may indicate a basic institutional understanding of the need for qualified personnel to provide services and supports to students with impairments, however, each office has a caseload of over 200 students, all managed by one person. As previously stated, the result of this type of caseload is indicated on the FAQ webpage at one of the institutions in this study: there are between 250 - 300 students registered with the ODS every year, and over 100 students waiting for qualify for services in any given quarter. These waiting students are not eligible for services or accommodations through the ODS office and do not have the same access to instruction—at the same time as— their peers without impairments.

Research indicates that a lack of understanding of the needs of college students with impairments among faculty and staff can negatively affect student persistence (NCD, 2003). The professional staff of the ODS can help create a campus climate that
embraces learners of all abilities. The mission statements of the ODS at most institutions reviewed in this study include access, service provision, and *increased awareness*. This indicates that, in addition to helping students understand and access the services and supports they need, the ODS staff are expected to create and provide professional development and support for faculty and staff. A national survey of postsecondary disability service providers supports concluded the majority of postsecondary disability service providers consult with faculty, develop and distribute a faculty handbook and informational products, and facilitate frequent workshops and/or presentations (NCSSES, 2000). Despite the added workload, the disability service providers in this study have found creative and innovative ways increase awareness of disability issues among faculty and staff, which can contribute to an overall positive climate for students with impairments.

**Recommendation 4: Develop Comprehensive System for Providing AT**

Most of the participants in the study relied on assistive technology devices and software applications, primarily text-to-speech and speech-to-text software, to complete assignments and access their course materials. For the participants who used AT software, it was something they discovered on their own or were shown by outside entities or agencies and then learned to use on their own. Research indicates that the

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78 The mission statements of the two institutions are identical.

79 For example, one of the disability service providers in this study reported that an average of 40 faculty and staff participate in her annual book club during which she facilitates group discussions on various disability-related topics.
majority of postsecondary students with impairments (74 percent) teach themselves to use assistive technology (Sharpe, Johnson, Izzo, & Murray, 2005). In addition to providing assistive technology (including hardware and software) for students, postsecondary institutions should provide evaluation services and training on the assistive technology that is available to students on the campus.

**Recommendation 5: Structure Opportunities for Social Support**

The nontraditional learners in this study who have been away from education for many years struggled with the transition into higher education from the standpoint of understanding and effectively accessing and utilizing technology (including assistive technology), and institutional expectations. Social support was an important resource for the participants in this study. Family members were a source of support, but peers and institutional personnel also provided emotional and academic support. Nontraditional students who do not have access to social support from family or community members must have access to supportive relationships at the institution. Some institutions have established peer coaching programs for nontraditional students (see the University of Arkansas at Little Rock Peer Mentoring program). A peer mentoring program such as the one at University of Arkansas – Little Rock for nontraditional students can function both as a facilitator or support and as an affordance (Gibson, 1977); many students in this study expressed a desire to “give back.” Indeed, a promotional announcement for the peer mentoring program at University of Arkansas reads as follows: “Pay It Forward by mentoring another non-traditional student!” (University of Arkansas- Little Rock, 2012, “Open House,” para. 3).
Future Research

Much of the research related to nontraditional students and students with impairments tends to focus on the risk factors associated with these populations (Choy 2002; Levin, 2007). I propose a future research focus on the assets of nontraditional students and students with impairments. Within this assets-based framework, future research is needed that further explores the relationships and interactions between specific institutional characteristics and programming and the promotion of student resilience. Additionally, further research can investigate successful models for implementing universal design for learning in postsecondary settings.

Research in the field of resilience indicates that assets or protective factors are more influential and have greater impact on an individual’s life chances than risk factors (Benard, 2004) and transcend “ethnic, social class, geographical and historical boundaries” (Werner & Smith, 1992, p.202). These assets predict positive outcomes in a range of 50 to 80 percent of a high-risk population (Benard, 2004, p. 8). Researchers should create opportunities to learn from and with nontraditional college students, those who are resilient and thriving. If educators and higher education administrators better understand how the personal, social and community assets of students promote resilience in the face of challenges in their environment, institutions will be better able to remove barriers and promote practices and policies that contribute to the academic success of all learners.

Based on the findings in this study I recommend the following research studies:
• A study investigating the ways in which an individual’s model of disability (both their own disability and disability in general, stage of acceptance, and/or type of disability influences his or her ability to be resilient.

• A qualitative study (based on interview and observational or narrative data) investigating the relationship between faculty model of disability and teaching practices.

• A comparative (high touch campus vs. low touch campus) longitudinal study that utilizes mixed methodology (i.e., institutional survey, student data, and interviews) to investigate how a culture of high touch on college campuses influences persistence (measured by credits earned and degree completion) in nontraditional students.

• A study that investigates the personal, social, and community resources available to and utilized (and valued) by nontraditional college students differs by region or locale.

• A study that investigates which characteristics and practices of postsecondary offices of disability service contribute to persistence (e.g., staffing models, organizational structure or configuration, services, philosophy of providers etc.,) and retention of students with disabilities

The following related studies, while not directly suggested by the findings in this study, would extend and expand understanding of the concepts and ideas explored within this research study:
• A mixed methods study (based on survey and observational data) investigating the degree to which higher education institutions use or apply the principles of UD and UDL. The study could also identify and describe barriers to implementing UD in higher education settings.

• A study investigating the effectiveness of various models of professional development (e.g., workshop, book study, learning community) on UDL in affecting faculty attitudes and instructional practices.

**Personal Statement**

As stated early in Chapter 1, “how we frame, identify, and understand nontraditional learners reflects our ontological preferences, and shapes how we see the behaviors or experiences of these students” (Levin, 2007, p.21). The theoretical frameworks of resilience and thriving, the social model of disability, and the tenets of positive psychology functioned as lenses through which I approached the data analysis and thus, the recommendations in this chapter.

Throughout the research and particularly during the analysis, I reflected on my own personal assumptions, perceptions, and model of disability. What seemed at first to be a general sense of disconnect became clear during the analysis (specifically while writing the second case report); I realized I had written about the participants’ impairments as barriers. I was unconsciously employing the individual model of disability (which situates the disability within in the individual) and not the social model of disability (which differentiates between impairment and disability, construing disability as a limitation imposed my environmental, social, or cultural barriers).
Through a conscious and careful effort\(^80\) to clarify the interaction between impairment, resources (internal and external), and the challenges present in the environment a shift in my perception did occur. The process of reflection revealed my own underlying assumptions and models of disability that I realized I must reject and reformulate in order to move forward with an authentic analysis grounded in the social model of disability.

Within the social model of disability as a primary theoretical framing, the barriers shift to institutional and environmental factors (e.g., classroom lighting, accessible textbooks, design of instruction) and away from the characteristics of the individuals. This approach enabled a consideration of the strengths and personal assets that the participants were able to access and engage to be successful in college. A logical result of a focus on assets and strengths (and within the social model of disability where limitations are imposed by outside forces) is an advocacy perspective through which recommendations will center around removing barriers and increasing access.

\(^80\) Largely consisting of memo writing and peer debriefing.
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http://www.washington.edu/doit/Brochures/Academics/ud_post.html


Individuals with Disabilities Education Improvement Act of 2004, P.L. 108-446, 20 U.S.C 1400


Webster, D.D. (2004). Giving voice to students with disabilities who have successfully transitioned to college. Career Development for Exceptional Individuals, 27(2), 151-175.


Appendix A: Ohio University Consent Form

Ohio University Consent Form

Title of Research:
Perceptions of nontraditional college students with disabilities: Facilitators and constraints


You are being asked to participate in research. For you to be able to decide whether you want to participate in this project, you should understand what the project is about, as well as the possible risks and benefits in order to make an informed decision. This process is known as informed consent. This form describes the purpose, procedures, possible benefits, and risks. It also explains how your personal information will be used and protected. Once you have read this form and your questions about the study are answered, you will be asked to sign it. This will allow your participation in this study. You should receive a copy of this document to take with you.

Explanation of Study

- This study is being done to explore the services and supports that help or hinder nontraditional college students with disabilities succeed in college.
- If you agree to participate, you will be asked to answer questions about your experiences in college.
- You should not participate in this study if you are not currently or have not ever been enrolled in college. You must be registered with the Office of Disability Services at your postsecondary institution. You have been enrolled at an ABLE program prior to attending the postsecondary institution.
- Your participation in the study will last approximately 2 hours.

Risks and Discomforts

No risks or discomforts are anticipated, however you may decline to answer any question that you do not feel wish to answer. You may request to stop the interview at anytime.

Benefits

Increasing numbers of secondary students with disabilities identify postsecondary education as a transition goal. As a result, enrollment of students with disabilities in two- and four-year programs has continued to increase over time. Recent enrollment estimates range from 9.3 percent to as high as 17 percent. Despite these figures, young adults with disabilities still remain less likely to pursue postsecondary education when compared with individuals without disabilities. Postsecondary completion for students with disabilities is significantly lower than students without disabilities, and has decreased in recent years. Understanding the factors that contribute to or detract from the success of college students with disabilities is critical, as postsecondary institutions are struggling to support
increasing numbers of students with disabilities in the most effective manner. Limited funds and personnel restrict the time and resources that postsecondary Disability Service offices can contribute to this research.

**Confidentiality and Records**

Your study information will be kept confidential by not using any identifying information (name, student ID) throughout the process.

The interview recordings will be transferred from the digital data recorder to the laptop used solely by the PI on this project. No other individuals other than the principal investigator will have access to the transcripts. The original recordings will be destroyed within five years from the time of the interview. Transcribed version of the interviews will be saved on the hard drive of the laptop.

Additionally, while every effort will be made to keep your study-related information confidential, there may be circumstances where this information must be shared with:

* Federal agencies, for example the Office of Human Research Protections, whose responsibility is to protect human subjects in research;
* Representatives of Ohio University (OU), including the Institutional Review Board, a committee that oversees the research at OU;

**Contact Information**

If you have any questions regarding this study, please contact Sharon Reynolds reynols1@ohio.edu 740-593-0969

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740) 593-0664.

By signing below, you are agreeing that:

- you have read this consent form (or it has been read to you) and have been given the opportunity to ask questions and have them answered
- you have been informed of potential risks and they have been explained to your satisfaction.
- you understand Ohio University has no funds set aside for any injuries you might receive as a result of participating in this study
- you are 18 years of age or older
- your participation in this research is completely voluntary
- you may leave the study at any time. If you decide to stop participating in the study, there will be no penalty to you and you will not lose any benefits to which you are otherwise entitled.

Signature ___________________________ Date __________________
Printed Name ___________________________
Appendix B: Interview Topics - Students

Support Services

1. When did you register with the ODS?
2. Why did you choose to register?
3. Describe the process of getting registered with ODS.
4. What assistance has the Office of Disability services provided to you?
5. What aspect of support provided by the ODS has been most helpful?
6. What was lacking at the college you attended?
7. What supports do you have available to you in college?
   a. What supports do you use the most in college?
   b. What types of assistive technology do you use?
   c. How did you learn to use the technology?
8. Who has been instrumental in supporting you in college?

Challenges and Self-Advocacy

9. How has your disability impacted your college experience?
10. What challenges have you encountered in college?
11. What has enabled you to overcome these challenges?
12. How would you describe yourself as a learner?
13. Thinking about your role in advocating for yourself, how are things different at college?
14. How has the role of your parents changed?
15. What do you want to tell parents of incoming students with disabilities?
16. What do you want to tell incoming students with disabilities?

17. What else would you like to say?

18. What would you tell other students with disabilities who are thinking about entering college?
Appendix C: Interview Topics – Disability Service Providers

1. Describe the services and supports provided by your postsecondary institution for students with disabilities.

2. Describe the services and supports provided by your postsecondary institution for nontraditional students.

3. What information do you provide to new students? In what format is it provided (e.g., document, website, social media, lecture-based)

4. What information is shared with the students registered with your via your website or other electronic means?

5. What services and support are most valued by the students served by your office?

6. Describe the relationships the disability service personnel develop with students.
Appendix D: IRB Approval Document

The following research study has been approved by the Institutional Review Board at Ohio University for the period listed below. This review was conducted through an expedited review procedure as defined in the federal regulations as Category(ies): 7

Project Title: Non-traditional College Students with Disabilities: Perceptions of Facilitators and Constraints

Primary Investigator: Sharon Lynn Reynolds
Co-Investigator(s): Jerry Johnson
John Hitchcock

Faculty Advisor: (if applicable)

Department: Teacher Education, Stevens Literacy Center

Rebecca Cale, AAB, CIP
Office of Research Compliance

Approval Date: 12/2/10
Expiration Date: 12/1/11

This approval is valid until expiration date listed above. If you wish to continue beyond expiration date, you must submit a periodic review application and obtain approval prior to continuation.

Adverse events must be reported to the IRB promptly, within 5 working days of the occurrence.

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.