University of Wisconsin Milwaukee

UWM Digital Commons

Theses and Dissertations

August 2020

Adult Students' Perceptions of Tutoring as an Academic Support Tool

Jennifer Filz University of Wisconsin-Milwaukee

Follow this and additional works at: https://dc.uwm.edu/etd



Part of the Higher Education Administration Commons

Recommended Citation

Filz, Jennifer, "Adult Students' Perceptions of Tutoring as an Academic Support Tool" (2020). Theses and Dissertations. 2496.

https://dc.uwm.edu/etd/2496

This Dissertation is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UWM Digital Commons. For more information, please contact open-access@uwm.edu.

ADULT STUDENTS' PERCEPTIONS OF TUTORING AS AN ACADEMIC SUPPORT TOOL

by

Jen Filz

A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy in Urban Education

at

The University of Wisconsin-Milwaukee

August 2020

ABSTRACT

ADULT STUDENTS' PERCEPTIONS OF TUTORING AS AN ACADEMIC SUPPORT TOOL

by

Jen Filz

The University of Wisconsin-Milwaukee, 2020 Under the Supervision of Professor Simone C. O. Conceição

This qualitative study examined adult student perceptions of academic support services at an urban-service research university in the Midwest. While adult students often return to school to start or finish their degrees, the six-year graduation rate for students who enter college over the age of 20 is 12% less than those who enroll in college before the age of 20. Adults face situational, institutional, and dispositional barriers to graduation. This qualitative research study examined the perceptions of tutoring as an academic support tool of 13 adult students. Using Cultural Historical Activity as a theoretical framework, three major themes emerged from the study: (a) adult students' perception of tutoring in their academic success including their perception of tutoring as a lifeline for their success, (b) adult students' perceptions of community support which included communities both inside and outside of the university, and (c) the student's role in their academic success where study participants began to take control over their own learning paths. A discussion about the study's purpose, review of pertinent literature, data collection and analysis process. The study concludes with an examination of the findings including academic resources, tools used by the tutor, the role of the community and learner autonomy; offers implications for academic support professionals and university administrators; and proposes future research.

TABLE OF CONTENTS

ABSTRACT	ii
LIST OF FIGURES	vi
LIST OF TABLES	vii
ACKNOWLEDGMENTS	viii
CHAPTER 1: INTRODUCTION	
	_
Background of Problem	
Academic Readiness	
Student Engagement	
Statement of the Problem	
Purpose of the Study	
Research Questions	
Significance of the Study	
Definition of Terms	
Assumptions and Limitations	
Assumptions	
Limitations	
Summary	9
CHAPTER 2: LITERATURE REVIEW	11
Literature Review Methodology	
Barriers to Adult Student Success	12
Situational Barriers	13
Dispositional Barriers	16
Institutional Barriers	17
Online Student Barriers	19
Academic Success and Adult Students - Meeting the Need	20
Tutoring in College	22
Tutoring and Adult Students	22
Supplemental Instruction	
Theoretical Framework	28
Summary	32
CHAPTER 3: METHODOLOGY	34
Philosophical Framework	35
Research Questions Restated	
Participant Recruitment	
Sampling Rationale	
Data Collection Methods	
Data Storage and Confidentiality	
Anonymity, Privacy, and Informed Consent	
Quality Control	
Quanty Control	

Research Bias	43
Data Analysis	44
First-Cycle Coding	
Second-Cycle Coding	
Conclusion	
CHAPTER 4: FINDINGS	48
Adult Students Perception of Tutoring in Their Academic Success	48
Academic Support Resources	
Centralized tutoring services	
Tutoring as a lifeline	
Tutoring as a refresher	
Unsuccessful tutoring experiences	
Supplemental Instruction (SI)	
Tutoring offered by other departments	
Extra credit	
Exam reviews	
Test anxiety	
Practice test	
Online exam reviews	
Frequency of tutoring	
Tools Provided by the Tutor	
Repetition of material	
Practice with the material	
Asking and answering questions	
Adult Students' Perceptions of Community Support	
Friendships with Other Students	
Relationships Outside of the University	
Online Resources	
Student's Pathway to Academic Success	
Finding Academic Support	
Creating Their Path to Graduation	
Summary of Findings	
Summary of Findings	
CHAPTER 5: DISCUSSION	77
Discussion	78
Research Question One: Tools	79
Academic Resources	80
Tools Provided by the Tutor	
Research Question Two: The Role of Community	
Research Question Three	
Summary of Themes: Building a Culture of Learner Autonomy	89
Implications for Practice	
Implications for Tutors	91
Implications for Administrators	93

Conclusion	95
REFERENCES	
APPENDICES	
Appendix A: Recruitment Letter	112
Appendix B: Interview Guide	
Appendix C: Informed Consent	115
Jen Filz Curriculum Vitae	118

LIST OF FIGURES

Figure 2.1	Model of activity describing how tutoring and other components help adult students to persist. Adopted from Vygotsky's CHAT	31
Figure 5.1 Th	eoretical Framework Revisited	89

LIST OF TABLES

Table 3.1	Inclusion and Exclusion Criteria for the Study	38
Table 3.2	Participant Demographics	39
Table 3.3	Interview Questions Answering Research Questions	40
Table 3.4	Codes Across Interviews	46
Table 4.1	Summary of Academic Resources	49
Table 4.2	Summary of Tools Provided by the Tutor	62
Table 4.3	Summary of Informal Community Support	68
Table 4.4	Summary of Study Participants' Pathway to Academic Success	72

ACKNOWLEDGMENTS

Writing a dissertation is a massive undertaking and can never be completed alone. I would like to thank my adviser Simone Conceição for her patience, time, and guidance in helping me to develop into the scholar I am. I would also like to thank the rest of my committee: Cheryl Baldwin, Chris Lawson, and Liliana Mina. In addition, I would like to thank Nicole Oswald and Mary Knasinski for their support and helping to develop my passion for academic support. And finally, I would like to thank my family both biological and chosen for their support and encouragement through the years. As I learned through my research, community can help people to persist and complete projects that they never thought were possible.

CHAPTER 1: INTRODUCTION

As a child, my father worked as a computer-aided designer for a machine tool shop. My father was one of the smartest people I have ever met, the type of man who could fix his cars and build his own furniture. I know that my father had never graduated from a 4-year college, but I never really knew why. When I got older, and as factories started to close throughout the Midwest, my dad's job became less stable, and it affected the family's financial stability at times. My father always insisted that I go to college. It was not until I was in my twenties that I understood this insistence. It was then that my mom told me that my dad never got his degree because he could not pass Trigonometry. My father was a Vietnam veteran, a father of three, and worked full-time. Trying to juggle so many life responsibilities, he was never able to finish his degree. His story is the story of many adult students who attempt to return to school later in life. It is from my background that I have found my passion for trying to understand how adults persist in college.

During the time that my father was attending college, the late 1970s and early 1980s, colleges were facing increasing competition and began to enroll more nontraditional students like my father (Kinzie, Palmer, Hayek, Jacobs, & Cummings, 2004). However, these colleges did not provide the necessary support to help these students succeed. The trend of nontraditional students entering university has continued, and since the 1990s, the traditional path of enrolling in college immediately after high school and attending full-time has become the exception (Horn & Carroll, 1996).

A 2009 report projected that between 2000 and 2016, the percentage of students attending college between the ages of 18 and 24 would decrease by 1.2% while the percentage of students ages 25 to 35 would increase by 2.9% (Van Der Werf & Sabatier, 2009). However, despite their

increase in the student population, adult students are still being neglected and underserved by traditional universities (Chen, 2017). Adults are still not welcome on traditional college campuses, leading to

...de facto segregation. Adult students are funneled into community colleges, night schools (or their modern-day equivalents), distance learning institutions, and a variety of specialty degree-completion programs, accelerated programs, and otherwise adult-friendly programs that have cropped up across the United States. (Coulter & Mandell, 2012, p. 41)

Colleges and universities must become more intentional about addressing the needs of this population, if for no other reason than because these students have already invested considerable resources in college.

Background of Problem

While universities have been successful in recruiting adult students, retention of these students has been much less successful. While the six-year graduation rate for students who entered college at age 20 or younger is 50.2%, for students who enter between 20 and 24 that percentage decreases to 34.8%. Students who enter college at age 24 or older see a graduation rate of 37.8% (Shapiro et al., 2018). However, jobs created or vacated by retiring workers in the United States will increasingly require higher education. According to Carnevale, Smith, and Strohl (2010), there will be 46.8 million jobs created in the United States by 2018:

Of these 46.8 million jobs—some 63 percent—will require workers with at least some college education. About 33 percent will require a bachelor's degree or better, while 30 percent will require some college or a two-year associate degree. Only 36 percent will require workers with just a high school diploma or less (p. 13).

With the perfect storm of declining numbers of graduating high school students and increasing numbers of adult students, universities must change their academic cultures to better help these students to succeed. While universities have become more accommodating to diverse populations, these accommodations are still "distinctly youth-centric" (Chen, 2017, p. 3). Many adults first return to community colleges or two-year colleges that are often perceived as better serving non-traditional students. However, this is not always the case. Hagedorn (2015) classified community colleges into four categories based on the programs and services they provide and how accommodating they are to adult students. The classifications are described below.

Adult-ignored: For adults, these institutions provide limited access; they do not provide courses or services at times that are accessible to working adults, and when adults succeed, it is despite the institution.

Adult-added: Adult-added institutions do not consider adults in their recruitment or policymaking but may consider them after making policies. Student success and retention of adult students are not a priority, and these students may not feel welcome on campus. These institutions do not consider adult students to be a part of their main mission.

Adult-orientated: These institutions are focused on adult learners. According to Hagedorn (2015), no public institutions fit into this category, and any institutions that do are for-profit. While these institutions may have higher graduation rates than their non-profit counterparts, their graduates are more likely to be under- or unemployed.

Adult-accommodating: Adult-accommodating institutions offer adult-friendly services and accommodations. They recognize the diversity of their student body and the needs of nontraditional students. Services provided by these institutions may include:

- Daycare facilities
- Adult support networks
- Extended hours of operation

In these institutions, "access is more inviting, success is more possible, and retention is more likely" (Hagedorn, 2015, p. 316).

Adult student success may take a different form than success for traditional students because many adults are "formerly non-retained" (Hagedorn, 2015, p. 318) students. To support this population of adult students, universities must provide accommodations that support their unique needs and remove their barriers. These adult students entering or returning to college face two major barriers that they must overcome: (a) academic readiness and (b) engagement.

Academic Readiness

Academic readiness is an issue that affects students of all demographics at universities. There are two types of academic readiness that students must master to be successful at the college level. The first is students' academic preparedness to do college-level work. Many students come to college with a need to take remedial courses or courses that cover subject matter that they should have learned in high school. These courses do not count toward college credit, and so taking them can put students behind the track of graduating in four years before they even begin. At public four-year universities, 39.6% of all students took at least one remedial course, and 66% of students ages 24 or older were required to take at least one remedial course (Chen, 2016). The financial costs of remedial courses can be large; it costs students across the United States \$1.3 billion a year to take remedial courses (Jimenez, Sargrad, Morales, & Thompson, 2016), according to one estimate. The effects of remedial education vary by institution and student demographics. Despite the cost, some research has suggested that older

students placed into remediation also have more positive outcomes than their younger peers (Bettinger, Boatman, & Long, 2013). Current federal financial aid guidelines allow students use up to a year of financial aid to take remedial courses, but students must still meet satisfactory annual progress toward their degree to remain eligible for aid.

In addition to academic readiness, many adult students may lack the study skills to be successful in higher education. Since adult students often are dividing their time between family, work, and social obligations in addition to their studies, it is essential for them to learn those skills to be successful. According to MacKinnon-Slaney (1994), "relearning how to learn is central to success in the academic environment; memory skills, the SQ5R method [Survey, Question Read, Respond Record, Recite, Review], and mnemonic devices become part of the survival program" (p. 272). Providing programs that help students to improve both their academic and study skills may help to increase their persistence in the university.

Student Engagement

Student engagement "represents the time and effort students devote to activities that are empirically linked to desired outcomes of college *and* what institutions do to induce students to participate in these activities" (Kuh, 2009, p. 683). Student engagement is often measured using the National Survey of Student Engagement (NSSE), which has been administered since 2000. The survey has five benchmarks for what they have identified as effective educational practices. The five benchmarks are: (a) Level of Academic Challenge, (b) Active and Collaborative Learning, (c) Student-Faculty Interaction, (d) Enriching Educational Experiences, and (e) Supportive Campus Environment. The last benchmark, a Supportive Campus Environment, is the most related to tutoring, and it includes the condition of the "campus environment provides the support you need to help you succeed academically" (NSSE, 2010, p. 2).

Research has shown that adults and traditional-aged students score differently on the NSSE benchmarks with adults scoring significantly lower on 20 of the survey items (Price & Baker, 2012). Two studies have found that adult students score significantly higher when it comes to engagement with direct effort in courses (Price & Baker, 2012; Rose, Smith, Ross-Gordon, Schwartz & Hitchcock, 2013). With research showing that more engaged students are more likely to persist, this is good news for adult students who use tutoring or other programs designed to help them succeed academically.

Statement of the Problem

Adult students returning to college face unique barriers not faced by their traditional-aged student counterparts. These barriers fall into three broad categories: situational, dispositional, and institutional barriers (Cross, 1981). Examples of situational barriers include family, job, financial, and civic commitments. Dispositional barriers are intrapersonal. These barriers can include stress and motivation. Finally, institutional barriers are systematic barriers that exclude adults or make it difficult for them to navigate through their higher education successfully. While universities can provide some services to help students with their situational barriers, like providing financial aid, career counseling, and daycare services and counseling and coaching to help with dispositional barriers, breaking down institutional barriers are the easiest barriers for universities to address. But, breaking down institutional barriers may require colleges to invest considerable time and money to provide necessary services for adults.

At the same time, the amount of state funding universities receive is still \$7 billion dollars less than in 2008 when the Great Recession began (Mitchell, Leachman, Masterson, & Waxman, 2018). These reductions in funding have led universities to reduce courses, faculty, and services. As competition for students increases and budgets decrease, it is important that

universities not only attract students but also retain those students. While adult student retention has been well researched, how tutoring helps adult students to persist has been less well documented.

Purpose of the Study

Retention, persistence, and graduation rates are areas that colleges and universities continue to examine because of their direct impact on overall student success. Given the importance of the adult student population to higher education, the purpose of the study was to examine adult students' perceptions of tutoring as an academic support tool to help them succeed.

Research Questions

The study addressed the following research questions:

- 1. How does tutoring help adult undergraduate students to overcome the barriers they face in persisting in their studies?
- 2. How does the community help adult students persist?
- 3. What role do adult students play in their academic success?

Significance of the Study

Since public universities have many adult undergraduates enrolled either part- or fulltime, they are the ideal place to study how adult students use academic support. Urban public
universities attract many adult undergraduates due to geographic location. As more adults enter
higher education as undergraduates and competition for attracting these students increases, the
services offered by each university will become critical for the decision-making process of
prospective students. Understanding if tutoring is perceived as necessary and effective by adult
undergraduates will enable the academic services division within urban universities to plan and

design programs that meet the needs of all students. Gaining adult student perception of what interactions or tools generated by effective sessions can help to enhance tutor training.

Definition of Terms

Academic success: For this study, academic success is defined as achieving a C or better in a course.

Academic support services: The term academic support may refer to a wide variety of instructional methods, educational services, or school resources provided to students in the effort to help them accelerate their learning progress, catch up with their peers, meet learning standards, or generally succeed in school.

Student persistence: Student persistence is defined as the continual pursuit of a student in a degree program leading toward the completion of the program and therefore earning a college degree in the student's field of study. Persistence is often thought of as a student measure, while retention is thought of as an institutional measure. In other words, institutions retain, and students persist (Hagedorn, 2015).

Supplemental Instruction: Supplemental Instruction (SI) is an academic support model developed at the University of Missouri-Kansas City (n.d.) that uses peer-assisted study sessions to improve student retention within targeted historically difficult courses. The SI program provides peer support by having students who succeeded in these courses help others.

Tutoring: Tutoring is defined here as academic assistance that occurs outside of the classroom among peers. Often both the student receiving the tutoring and the tutor are undergraduate students, although academic tutoring may occur between graduate and undergraduate students, students at the same academic year, or students at different years.

Assumptions and Limitations

Assumptions

This study had three assumptions. One assumption was that adult students believe that tutoring had helped them to persist. Study participants could define and explain how tutoring helped them to persist in school. Secondly, it was assumed that adult participation in tutoring would produce common themes and experiences that would emerge through the interviews. It also assumed that there would be some shared experiences and themes that would emerge from the study. Finally, the strongest assumption was that tutoring influences persistence. If there was no effect, then the study would not provide any answers to the question of why adult students persist.

Limitations

The research also had five limitations. First, the study was limited to subjects who agreed to participate voluntarily. Second, the number of students surveyed was limited to the amount of time available to conduct the study. Third, students were not screened in any way to ensure there was a diversity of age, gender, or enrollment status. Fourth, study part participants self-defined themselves as having been successful. Finally, the results of this study may not be generalizable to other student populations because of the unique nature of urban universities, their student population, and the types of academic support services offered.

Summary

As the college population continues to change, colleges must be sure to gear their services towards their student populations. As universities continue to attract more adult students, they must ensure that they are providing services that meet the needs of this population. This chapter discussed the background and significance of the problem, provided the research

question, the significance of the study, the definition of terms, and the study's assumptions and limitations. In the next chapter, a literature review focusing on the barriers facing adult students, research on institutional supports that help adults to persist, research on the efficacy of tutoring and SI, and the theoretical framework are explored.

CHAPTER 2: LITERATURE REVIEW

Today's college population does not look like how it appears in movies and on television. The traditional path to a college degree (enrolling in college immediately after high school, attending as a full-time student, and graduating in four years) is the exception and not the rule. Even though adult students and other students who fit into the so-called nontraditional learner categories often make up a large percentage of the student population, they are still commonly referred to as nontraditional.

Because institutions of higher education are focused on traditional-aged students, the unique needs of adult students are not met. Adults who decide to enroll in higher education, face innumerable barriers to their success. In contrast to their more-traditional counterparts, nontraditional students often encounter situational, dispositional, and institutional barriers to persistence, and often must overcome these barriers with little or no support available to them from the school (Kilgore & Rice, 2003).

Literature Review Methodology

The purpose of this literature review was to inform the study and to refine the research questions. Since this study focused on adult student persistence, two central bodies of literature were explored. The first body of literature concerned the barriers that adult students face in college. Second, literature focusing on tutoring and its effect on adult students in higher education was studied. These two bodies of research were explored and analyzed to see what gaps existed in the literature.

The following keywords were chosen to find empirical studies: "adult students," "returning adult students" in combination with "higher education," and "barriers," "retention," and "persistence." Because adult students are often ignored in the literature, "nontraditional

students" was searched for along with the keywords listed above. To find literature regarding tutoring the following keywords were searched: "tutoring," "Supplemental Instruction," and "adult students." Online searches were conducted through the ProQuest Dissertation database, ERIC, and Google Scholar. The references within the articles were also used to find relevant research. Only research conducted within the United States was included in the literature review. Both qualitative and quantitative studies were included. Included in this literature review are peer-reviewed empirical studies conducted between 2007 and 2020 and seminal research related to persistence or tutoring.

In the next section, research on barriers to adult student success is presented, followed by a discussion on how institutional supports help adult students to succeed. The literature review then presents research on how tutoring and SI help adult students succeed. Finally, the theoretical framework is presented.

Barriers to Adult Student Success

The retention of adult students has long been researched. In 1986, Prather and Hand examined the retention of nontraditional students at a large state commuter university. Their research found that academic integration (measured by grade point average [GPA]) was the most significant indication of persistence. In the past few decades, as online and distance education has become more prevalent, research has focused on that area. Rovai (2003) developed a composite model, based on the work of Tinto (1997), and Bean and Metzner (1985), to determine the unique needs of distance education students. Rovai found that four factors influenced a student's persistence in distance education: a) characteristics before admission, b) skills before admission, c) external factors affecting the student after admission, and d) internal factors affecting the student after admission, the

barriers that adult students face when they return to school can be broken down into three categories: situational, dispositional, and institutional. These three categories are discussed next.

Situational Barriers

Cross (1981) described situational barriers as family, job, financial, and civic commitments. Two studies found that for the adult student participants involved in the research, the most common barrier that the students faced was time management (Deggs, 2011; Green, 2015). Time is of critical importance to adults who have a variety of responsibilities in their lives. Barriers related to adult students' family, job, and financial situations are discussed below.

An important factor related to persistence has been the support of family members (Chavis, 2014; Droege, 2007; Maroney, 2011). In Maroney's (2011) study, there was a significant difference in the amount of spousal support reported between adults who persisted to graduation and those who did not. While spousal support can be important for student persistence, women interviewed by Deutsch and Schmertz (2011) reported that the caretaking of children and grandchildren was the most significant stress in their life, but they also said that their family was their most significant source of financial, academic, and emotional support. Droege (2007) found similar results, with 53 of the study participants agreeing that parental obligations sometimes interfered with their schoolwork. In a study of 156 adult students enrolled at St. Louis University's School for Professional Studies, the role conflict that occurred between family and school provided the most significant stress (Giancola, Grawitch & Borchert, 2009). Markle (2015) also found that women students felt that they were stigmatized as parents both by other students and by faculty and that this created additional stress for them as students. Just like family, job-related commitments can either help adults to persist or be a barrier. Research regarding career and adult students is discussed next.

Twenty-one adult students enrolled in an online course were interviewed by Deggs (2011). These students identified that job-related barriers came both from a lack of support for their studies from their workplace and a lack of time because they were overwhelmed by their workplace responsibilities. Adults who felt that their work conflicted with their education were found to have lower persistence rates (Bergman, Gross, Berry & Shuck, 2014; Droege, 2007). The students interviewed by Genco (2007) reported that they worked multiple part-time jobs while also attending a community college. These students reported that their work was a barrier to them being successful in college. Gilardi and Guglielmetti (2011) found that adults who worked were much more likely to drop out of college than their traditional-aged counterparts, and adults who only held temporary positions were almost 14% more likely to drop out than those adults who held full-time, permanent positions.

While work and career can sometimes serve as a barrier for adult students, it can also serve as an internal motivator. Deutsch and Schmertz (2011) conducted focus groups with women who had returned to college. The women interviewed reported that returning to school was an inevitability in their lives partly because they had a desire for professional credentialing, had been denied promotions that they had seen go to men, or had discovered that they were underpaid compared to their male counterparts. Gill (2017) also found that adults found career promotion to be a motivator for them to return to college. Croft (2016) found that non-commissioned military officers who pursued their bachelor's degree cited both their supervisor and the enhanced promotion opportunities that a degree would afford them as reasons they decided to further their education.

Even though career advancement is one of the main reasons that adults return or choose to attend college, only 46% of students interviewed by Zimmer (2017) in a study of 1,800

college students, 1,000 traditional-aged and 800 nontraditional, were satisfied with the career preparation that was provided by their university. If adult students are returning to college to better their careers, universities are not providing them with the resources they need to achieve the career advancement they are seeking.

Finances are a barrier for all students because of financial aid restrictions and other monetary concerns. Green (2015) found that the cost of attendance was a significant factor in the persistence of adult students. Zimmer (2017) found that 90% of the study participants were concerned about cost and that 65% of students had chosen not to go to a school because of the cost. In addition, nontraditional students gave financial reasons as the number one reason they had dropped out of college previously. Campbell (2016) found that students with unmet financial needs were significantly less likely to pass a college-level math course than those who had their needs met. Similar findings were found by Bergman et al. (2014), who found that adults who received financial aid were more likely to persist. However, Kimmel, Gaylor, and Hayes (2016) found that adults who returned to school over the age of 35 were less likely to have financial stress over the cost of childcare.

To combat the financial stress of single parents, Louisiana, before Hurricane Katrina, ran a program called Opening Doors. This program paid single parents enrolled in community colleges up to \$1,000 each semester if they were enrolled at least half-time (six credits) and maintained a C-average. The results of the study showed that program participants were: a) more likely to enroll full-time, b) more likely to pass more courses, and c) were more likely to register for their second and third semesters (Brock & Richburg-Hayes, 2006). Giving adults the financial resources, they need while in college can help them to be successful and to persist. While situational barriers create significant obstacles for adult students to overcome, students

must also overcome the dispositional barriers that they may have. These barriers include stress and motivation to persist.

Dispositional Barriers

Cross (1981) described dispositional barriers as being intrapersonal or occurring within one's self or one's mind. An adult student's motivations for returning to school and finishing their degree; their self-efficacy, or beliefs in their ability to do so; and their stress levels all present significant barriers to persistence. As students begin to navigate the increase in roles and demands (such as from the situational barriers discussed earlier), they are more likely to experience high stress, anxiety, and depression (Carney-Compton & Tan, 2002). Some of this stress can come from feeling like they are expending resources that could be used elsewhere to meet their educational goals (Droege, 2007). Zimmer (2017) reported that 58% of the nontraditional students in his research felt stressed and that 76% felt that they were unbalanced in their life responsibilities. The good news is that while adult students report higher levels of stress, they were also more likely to use active stress methods, which include putting things in a broader perspective, organizing, and prioritizing (Forbus, Newhold, & Mehta, 2011). In addition to stress, adults may not have the motivation or self-efficacy to persist in their studies. While a career can serve as a powerful motivation for students and family can give adults the support they need to persist, not all adults have these in their lives.

Having the motivation to finish their degree is one of the most critical factors related to adult student persistence (Chavis, 2014; Green, 2015; Serowick, 2017). There are two types of motivation: intrinsic and extrinsic. Intrinsic motivation is the degree to which students perceive themselves to be participating in a learning task for reasons such as challenge, curiosity, and mastery (Pintrich, Smith, Garcia, & McKeachie, 1991). Extrinsically motivated students seek

approval and external signs of worth (Sansone & Smith, 2000). Taylor and House (2010) found that the two types of motivation reported most often by adult students were general intrinsic and extrinsic motivations, including the university and life experience and better career prospects. A lack of motivation can start before a student even begins class; Piland (2018) found that student veterans had difficulty finding the motivation necessary to enroll in college, but once coursework began, they were able to use the discipline they had learned in the military to succeed. Schmidt (2015) interviewed nontraditional students to find out how they stayed motivated to finish college as well as to see what barriers affected their persistence and found that self-motivation was a crucial factor in their persistence.

Students who persist are also more likely to believe in their academic abilities (Chavis, 2014). This belief in their ability is referred to as self-efficacy. Having a higher level of self-efficacy has been found to lead students to achieve higher grades and to persist at a higher rate than students with low self-efficacy (Robbins et al., 2004). Markle (2015) noted that women who considered withdrawing, but ultimately did not, demonstrated a "persist and that they saw symbolic meaning in their ability to persist and overcome barriers to graduate" (p. 12). In a study of persisters and nonpersisters at a vocational school, Brown (2008) found that the adults who dropped out had lower self-efficacy and believed that they were not in charge of their success. For adults attending college online, not only is academic self-efficacy essential but also their computer self-efficacy, or their belief that they have the skills necessary to complete their education at a distance (Jan, 2015; Kuo, Walker, Belland, & Schroeder, 2013).

Institutional Barriers

Institutional barriers are systematic barriers that exclude adults or make it difficult for them to navigate through their education successfully (Kilgore & Rice, 2003). These barriers

may include feeling disconnected from the university, faculty, and other students, or a lack of access to necessary services. Adult students often feel a sense of disconnection with the university, both from faculty and from younger students (Gill, 2017; Green, 2015; Kasworm, 2010; Maroney, 2011). However, when adults saw that they were not alone in the classroom and shared classes with other adult students, they reported that seeing other adults in the classroom as being helpful to their persistence (Maroney, 2011). Feelings of isolation were especially evident for rural online adult students (Peich, 2017), especially when students felt that there was also a lack of communication coming from faculty. Adults perceive that their campuses are less supportive of their academic pursuits than their traditional-aged counterparts (Rabourn, Shoup, & Brcklorenz, 2015). Adults who did persist often cited faculty and staff who made them feel welcome as an essential factor (Capps 2012). Other students have reported that their interactions with faculty were not always positive (Williams, 2017). However, Maroney (2011) found that while adults felt disconnected from the campus, their feelings of disconnection did not affect their persistence rates.

In addition to a sense of isolation and disconnection, sometimes there are policies and procedures in place that limit the participation of adult learners. These policies and procedures include the availability of faculty and a lack of night, weekend, and online courses (Hardin, 2008), as well as difficulty in dealing with admissions and advising staff (Kasworm, 2010). In the past few decades, the use of prior learning assessment has been advocated for to increase adult student graduation rates (Rust & Ikard, 2016). However, this practice is not widely used by institutions of higher education. Other institutional barriers faced by adult students include support services and class hours that do not meet their needs. Other examples include financial aid or daycare services (Duquaine-Watson, 2007). Interestingly, the use of library services,

which was found to be higher in retained students, were still accessed less often by adult students than their traditional-aged counterparts (Haddow, 2013), perhaps because of other barriers such as an understanding of the technology. While online programs have become popular with adult students by allowing them to work anytime and anywhere, they also create barriers that students attending class on-campus do not face.

Online Student Barriers

Deggs (2011) found that the number one academic barrier cited by his study participants was understanding and using technology, followed by the lack of face-to-face interaction with their instructors. One student reported they were afraid they might "misread something and fail to perform my assignments" (Deggs, 2011, pp. 1547-1548). Women enrolled in an online degree program in the Northeast reported that internet issues and less well-defined problems, such as knowledge of how university systems worked (such as email and chat), created barriers (Müller, 2008). Active duty military online students were found to suffer from internet connectivity issues when deployed and felt that faculty was not sympathetic to their situation (Neelands, 2014). For online students, the interaction between the learner and the content and the learner with faculty were the two most significant predictors of online course satisfaction (Kuo et al., 2013). This lack of engagement with course material can occur when students are required to take classes that are outside of their main subject area (Bolton & Gregory, 2015).

Conceição and Lehman (2016) found that online students consider institutional supports to be essential because they allowed them to complete their coursework easily. However, many times these institutional supports were unsatisfactory and did not contribute to their success (Newberry & DeLuca, 2014). One support that is instrumental in lowering online course attrition

rates is providing online students with access to an adviser who can offer individualized support (Gravel, 2012).

Despite the potential situational, dispositional, and institutional barriers to success that nontraditional students may encounter, unprecedented numbers of adults are deciding to enter higher education. Adult students present both challenges and opportunities to colleges and universities. Even though adult students would like to attend college, they are more likely to leave in their first year of post-secondary education than traditional-aged students (Engle & Tinto, 2008). While it may seem that helping adult students to persist is an enormous task for colleges to address, providing institutional supports that help meet the needs of this group is one step in the right direction.

Academic Success and Adult Students - Meeting the Need

While it may be nearly impossible for a university to change situational or dispositional barriers, it can change the institutional barriers that nontraditional students face. According to Comings (2007), persistence is comprised of two parts: intensity and duration. While the term *retention* defines the phenomenon of student completion from the program's point of view, *persistence* defines the phenomenon from the perspective of the student who follows through in meeting their educational goals. At many universities, the supports that are provided to help students are focused on students in their first or second year of study. If a student can be successful during this period, it is believed that they will have built the necessary skills to succeed in their higher-level studies.

A significant factor leading to persistence is academic grades. If students are not successful in their courses, they are less likely to continue their enrollment as a student.

Weissman (2010) reported a significant relationship between college academic performance and

persistence. Harpe and Kaniuka (2012) found that the first semester GPA has a significant impact on whether students persist within community colleges. Some colleges have found ways to support adult students. At Guilford College, where nearly half of the population is over the age of 23, they have developed strategic priorities to address the unique needs of adult learners within an integrated culture (Stripling, 2010). Its Gateway to Success Program, a grant-funded initiative supported by the Council of Independent Colleges and the Walmart Foundation, offers a one-credit course focused on building a framework for success for first-generation students. Guilford University has addressed the need for a customized orientation for adults that focuses on writing skills and has expanded its mentoring support services. Such efforts have been paying off. Persistence for adult learners from one semester to the next was 86%, as compared with 93% for traditional students (Brown, 2012). Interestingly, more than a quarter (27%) of adult students had a GPA between 3.0 and 3.5, compared to 21% for traditional students (Brown, 2012). If universities can adequately provide such services to adult students, they may be able to help them to persist (Dauer, 2015).

Weissman (2010) surveyed men considered at risk of attrition and found that teaching quality, the availability of a tutoring center, support personnel, and teaching credentials all played a part in the persistence of this group of students. In a small study at the University of Wisconsin-Stout, Droege (2007) found that 38% of study participants had a neutral response when asked if they were satisfied with the support services offered by the university. DePaul University created a writing workshop course that had an impact on adult student persistence by providing targeted and timely supports to the students (Cleary, 2011). Tutoring is a service offered on many college campuses. Student orientation programs and the residence halls are both important sites for students to meet and form bonds outside the classroom. Tinto (2012) believed

that support services could help those students who enter college underprepared to persist.

However, little research has been done that shows if the use of tutoring services leads to higher rates of retention or persistence. The next section looks at the impact of tutoring on students, student perceptions, and experiences with academic supports, and how these supports can help students to persist.

Tutoring in College

One important aspect of tutoring at the college level is the use of peer tutors. According to Duran and Monereo (2005), peer tutoring is cooperative learning between students working towards a common goal. The students often have a difference in power within their relationship. Duran and Monereo continue on to say," The difference of age between the components of the pair gives rise to tutoring known as cross-age, without doubt the most common type in school practices, due to the fact that it approaches the widespread conception that associates the tutor student with the figure of the teacher" (p. 181). While their experiment examined young students involved in tutoring relationships, Duran and Gauvain (1993) found that the most successful tutoring relationships took place between students of different ages, with the older student acting as the tutor. However, when examining tutoring between tutors (most of them traditional-aged college students) and adult students, this relationship is flipped. No research could be found that specifically looked at the success of tutoring relationships between traditional-aged tutors and adult students, but research has been done to show the effectiveness of tutoring.

Tutoring and Adult Students

There is very little literature that looks at the effect of tutoring on adult students. However, the formation of peer relationships has been shown to have a significant impact on adult student persistence (Laskey & Hetzel, 2011; Tinto, 1997). Tutoring has also been shown to

have a positive effect on the persistence of high-risk students. High-risk students who attended tutoring were found to have a higher GPA than their peers who did not participate, even when gender, ethnicity, or personality-type differences were controlled for (Laskey & Hetzel, 2011; Vance, 2016). According to Laskey and Hetzel (2011), when students are tutored on a one-to-one basis, they can ask questions when they do not understand the material or the assignment. Although students can meet with their instructors to ask questions, they often feel more comfortable asking a tutor since the tutor has no influence on their grades (Laskey & Hetzel, 2011, p. 39). For tutoring to be successful, programs must be used early in a student's college career (Gallard, Albritton, & Morgan, 2010; Grillo & Leist, 2013; Rheinheimer, Grace-Odeleye, Francois, & Kusorgbor, 2010). However, there is research that shows that students who earn low grades, especially at the beginning of their academic careers, are less likely to persist (Grillo & Leist, 2013).

As an academic support, tutoring not only helps students academically, but it can also help build their self-efficacy (Gibbons-Anderson, 2012). Self-efficacy is vital to adult student persistence (Bean & Metzner, 1985; Ross-Gordon & Brown-Haywood, 2000). However, self-efficacy tends to be lower for adult students, especially in difficult subjects such as math (Jameson & Fusco, 2014). The relationship between self-efficacy and tutoring has been examined at the elementary school level (Van Keer & Verhaeghe, 2005) and in traditional undergraduate students (Griffin & Griffin, 1998); however, no studies have explicitly examined adult students concerning tutoring and self-efficacy.

Many public universities have faced decreasing budgets in the last few decades. With professors retiring and not being replaced, class sizes have increased, especially in first- and second-year courses, which results in less direct faculty-student contact. Larger class sizes also

mean that instructors have less time to offer office hours due to a larger workload. Less contact with faculty has caused an increased demand for tutoring services (Topping, 1996). Tutoring can help address the decrease in faculty contact by teaching students how to learn more independently (Cleveland, 2008). A study by Grillo and Leist (2013) found that the more hours that a student used academic support services, the better the students did in the courses for which they received academic support. In their study, the higher GPA of the student, the more likely they were to graduate. Comparable results were found by Cooper (2010) and Rheinheimer et al. (2010), in that students who used the drop-in tutoring center were more likely to persist and to have a higher GPA. Tutoring has also been found to have a positive effect on at-risk students' retention and GPA (Laskey & Hetzel, 2011). This study found that students who were considered "at risk" who used tutoring services regularly (at least once a week) received higher grades, which led to retention. However, this study took place at a small private university, and twothirds of the students included in the sample were retained, so it may be hard to generalize to a larger population. Fowler and Boylan (2010) found similar results in a study of students at serious academic risk who were enrolled in the Pathways to Success Program. Students in this program were mandated to seek out tutoring if their performance fell below a grade of C on a single major assessment in English composition, pre-algebra, or introduction to algebra (Fowler & Boylan, 2010). The results of this study showed that the academic supports provided to program participants resulted in a statistically significant increase in GPA than their peers who did not participate in the program.

However, in slightly contradictory findings, Potolsky, Cohen, and Saylor (2003) found that tutoring only had a positive correlation on tutoring if used less than four times. Drop-in tutoring is offered at many universities because of its cost-effectiveness. Cooper (2010) found

that first-year students who visited the tutoring center more than 10 times in a quarter during their first year had statistically higher rates of persistence and were statistically more likely to be in good academic standing than students who did not visit the tutoring center. These results were particularly encouraging because many of these students were members of a minoritized group or first-generation students, two groups that are associated with lower student performance. In addition to traditional small-group or one-on-one tutoring, some colleges and universities offer a specialized form of tutoring called Supplemental Instruction (SI) for gateway courses.

Supplemental Instruction

Supplemental Instruction (SI) was developed in 1973 at the University of Missouri at Kansas City with the purpose to increase the performance and retention of students at high-risk classes. SI is based on four learning theories: a) behavioral learning, b) cognitive-developmental principles c) social interdependence principles and, d) interpretive-critical principles (Hurley, Jacobs & Gilbert, 2006) SI is designed to target historically difficult courses (defined by the university) and provide a preventative intervention to students. There are three primary goals of SI: a) to improve student grades in targeted courses, b) to reduce the attrition rate within those courses, and c) to increase the eventual graduation rates of students (Arendale, 2001). Four key roles are involved in SI. The first role is the SI supervisor, who is specially trained and certified by UMKC and whose responsibilities include identifying courses to target and contacting faculty members. Second is the faculty member who teaches the course; they are a crucial component of the process because SI is most effective when it is supported by faculty. They also may play a role in screening SI leaders. Third is the SI leader who attends classes, takes notes, and conduct SI sessions. Their job is to facilitate learning, not to reteach the material. Finally, the final crucial role is the participating students (Arendale, 2001).

Because SI targets historically difficult courses and sessions are open to all students, not just high-risk students, there is a reduced stigma to attending sessions (Arendale, 2001). Rather than being reactive, SI is a proactive program (Hurley et al., 2006). Courses are targeted for SI if they consistently have a 30% or higher rate of students receiving Ds, Fs, and withdrawals (DFWs). The focus of SI is not on the professor or the manner of teaching but rather the demanding course material (Hurley et al., 2006). The SI leader serves as a facilitator of learning, is paid to attend the class along with the students and leads supplemental learning sessions for students. They can facilitate both student learning and communication with the professor. The professor and SI leader sometimes work closely together to ensure student success in the course.

SI has been linked to student engagement (Ribera, BrckaLorenz, & Ribera, 2012; Wiggers, Rheysen, Ammerter, & Ponton, 2014) and a resource in which students engage in learning on many levels including cognitive, affective, and behavioral. In addition, students who participate in SI have higher self-reported perceptions of campus support and gains in social and personal development (Ribera et al., 2012). For students who belong to historically underrepresented groups in the sciences (minoritized, female, low socioeconomic status, and first-generation students), participation in SI groups can increase their sense of belonging in the classroom (Stanich, Pelch, Theobald, & Freeman, 2018). For students who enter college with a low GPA, defined in this study as a high school GPA of under 3.55 there is a statistically significant difference, of over two times greater, retention rates between students who attend SI and those who do not (Skoglund, Wall, & Kiene, 2018). In fact, for students who attend SI, there is an 11% increase in the probability of timely graduation (Bowles, McCoy, & Bates, 2008).

Because SI leaders are chosen based on their academic achievement, they can serve as peer models of good academic achievement engagement (Wiggers et al., 2014). Moore and

LeDee (2006) found that while the numerical grades of SI participators and nonparticipators were similar, those who attended SI earned fewer Ds and Fs than those who did not and came to office hours and turned in extra credit more often. Like Moore and LeDee, Ning and Downing (2010) researched how SI impacted what they termed "learning competence" and how it can lead to academic gains. According to Ning and Downing, learning competence is the study skills and knowledge construction that can be learned and developed. In their study of 430 business students at a university in Hong Kong, it was found that students who attended SI were more likely to perceive gains in those skills than those who did not participate in SI.

However, Oja (2012) found that while SI had a positive impact on participant's grades, it did not lead to higher persistence rates. In a study of 63 students in a course in which SI (called PASS at this university) was offered, Price, Lumpin, Seeman, and Bell (2012) found that "although PASS and non-PASS attendees began the semester performing similarly on the first quiz, PASS attendees scored higher on each of the remaining exams and significantly higher on three of the five" (p. 16). Similar results were found in a study of 2,400 students who took Psychology 100 between 2005 and 2007. While students who attended SI, sessions received 5% higher scores than those who did not, there was ultimately no effect on the student's timely graduation (Paabo, Brijmohan. Kluni, Evans-Tokaryk, & Childs, 2009). One study by Buchanan, Valentine, and Frizell (2019) did find that of the 5,274 who participated in their research, SI led to increased final grades and graduation rates for minority and nontraditional students. However, these student populations were small, and while the study did show correlation, the authors were unable to determine causality. In a study of a pilot SI program found that students who attended more than 10 SI sessions had a lower course grade than those who attended between four and nine times (Grizzard, 2019). In a study of 433 first-year students, Skoglund et al. (2018) found

that SI did have an impact on the retention rate of the students in their study even after controlling for differences in high school GPA.

Theoretical Framework

Cultural Historical Activity Theory (CHAT), a theory developed by Vygotsky (1978), provided the framework to research adult students' perceptions of how academic support services help them to persist. Vygotsky's work is most often associated with early childhood education, but, according to Rosser-Mims, Dawson, and Salitel (2017), the "work is relevant to higher education because it provides both a model and a framework for structuring learning" (p. 431). From a social-constructivist perspective, learning cannot be done individually but occurs through interactions with others. Littleton and Light (1999) pointed out that when people work on a problem together, they have more cognitive resources available. As such, much research has been done tying Vygotsky's work to effective tutoring. From CHAT, two key conceptual tools came about that are often used in learning: a) the Zone of Proximal Development and b) scaffolding (developed by Jerome Bruner based on the work of Vygotsky). The Zone of Proximal Development was defined by Vygotsky (1978) as:

...The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers. (p. 86)

According to Hedegaard (2015), the "underlying assumption behind the concept is that psychological development and instruction are socially embedded; to understand them, one must analyze the surrounding society and its social relations" (p. 227). In a tutoring session, the tutor serves as the guiding influence who works to help students solve problems and understand concepts. One of the ways that tutors try to empower their students to learn is through scaffolding. According to Vygotsky, the best learning happens in the area just beyond what the learner is capable of on their own (Clinton & Rieber, 2010). Wood, Bruner, and Ross (1976)

built upon these ideas and described the process of scaffolding that happens based on the interactions that occur between an adult and child in a tutoring session. They state:

if the social context is taken into account, it is usually treated as an instance of modeling and imitation. But the intervention of a tutor may involve much more than this. More often than not, it involves a kind of scaffolding process that enables a child or novice to solve a problem, carry out a task, or achieve a goal that would be beyond his unassisted efforts. (p. 90)

Rosser-Mims et al. (2017) researched the use of scaffolding in adult education. Because Vygotsky's cognitive and social development theory is aligned with the traditional andragogical practice of facilitation of learning, the recognition that the learner brings some knowledge and experience and developing a scaffolded plan for knowledge acquisition with the learner (Rosser-Mims et al., 2017, p. 432). Wood and Wood (1996) studied how the Zone of Proximal Development can be applied to tutoring. According to Wood and Wood, tutors should: a) provide instruction in the problem-solving context, b) provide an immediate response to learner errors, c) support successive approximations to competent performances by fading away, and d) provide reminders of the learning goal. While the authors were describing the basics of computermediated tutoring, the same rules may apply to in-person tutoring. Within the context of tutoring, the student reaches the next level of development through the interactions that occur in the tutoring sessions. To be able to do so requires the tutor to be aware of the developmental or academic level that their students are functioning (Hedegaard, 2005). The tutor can teach at the student's developmental level because during the semester, the tutor and tutee's relationship is ongoing, developmental, and reciprocal; it also motivates individuals to want to learn and grow cognitively (Chen & Liu, 2011). As the semester progresses, a student becomes more

comfortable working on their own. It allows the tutor to be able to work at the academic level of their students and to help them grow to the level they need to be at academically. While it is easy to view the Zone of Proximal Development as only a teaching tool to improve student learning, Wertsch and Tulviste (1994) argued that "it can be seen as having powerful implications for how one can change intermental, and hence intramental, functioning" (p. 550).

The CHAT model of an activity system that is continually evolving through collective learning actions in response to systemic contradictions enables multi-faceted analyses of the complex practices of professional work. The essential task of CHAT analysis is to grasp the systemic whole of an activity, not just its separate components (Foot, 2014).

The basic design used by Vygotsky to examine the relationship between the different components in the activity is a triangle. According to Koszalka and Wu (2004), "The CHAT paradigm argues that learning is a process of constant interaction with the environment and others. Knowledge is constructed by individual learners, building on existing historical experiences within the learners' context" (p. 493). Both adult student persistence and the reasons why tutoring and SI are effective are complex phenomena. While the traditional modality of teaching undergraduates is often large lectures, Lave and Wagner (2015) state that "learning is never simply a process of transfer or assimilation: learning, transformation, and change are always implicated in one another" (p. 155). As a student attends tutoring, the experience transforms them from a student who needs tutoring to succeed into a student who can achieve on their own. To try and explain how these phenomena interact, the following research shown in Figure 2.1 was developed. This model represents the theoretical framework used in this study. Adapted from CHAT, the model shows how tutoring helps adult students to persist.

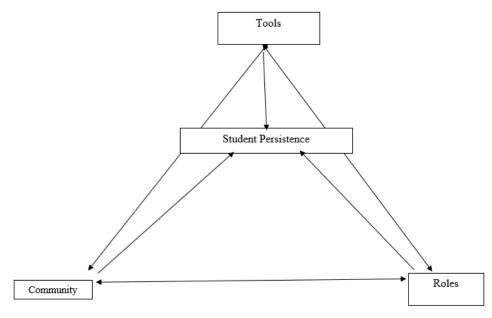


Figure 2.1 Model of activity describing how tutoring and other components help adult students to persist. Adopted from Vygotsky's CHAT.

The model consists of three elements that can help lead to student persistence—the first element, tools, is located at the top of the triangle. The tool being examined in this study is tutoring and what happens during the tutoring session. The tools that occur during tutoring can be programmatic (types of tutoring, incentives, support, etc.), activities that occur during the session (what the tutor and student do), and cultural (the tutor serving as an exemplar of proper student behavior and models that behavior for the student in their session).

The second element is community, which focuses on the community that is built within the tutoring group as well as the greater community support that an adult student might receive. The internal community is essential because "tutors and mentors play a role in teaching students by providing tools to the culture in which they find themselves, in this case, the postsecondary academic institution" (Messia, 2012, p. 23). The internal community is tied to the tools in the framework because "rather like travel guides and translators for travelers to different lands, tutors and mentors can model for students the practical and cognitive skills needed to succeed.

They have the experience to say; This is what you need to know. This is what's important" (Messia, 2012, p. 24). Students also may build a community with other students who attend the same tutoring session, and these friendships may impact the student's persistence.

Community support is also necessary because the support that they receive from family or friends can be either a barrier to or a factor in the student's persistence. Examining the role (if any) that the adult student's support group plays in their academic persistence or in encouraging them to attend tutoring may provide interesting insights.

Finally, the third element in the triangle are the roles that the adult student may take on during the session or in school. The goal of tutoring is to help students to learn how to learn independently. According to Reedy (2012):

Although student clients may come for assistance with a question about specific content, tutors and mentors must be prepared to help learners to locate answers to questions on their own. Breaking the cycle of dependency is difficult to achieve; however, when systematically removing support, tutors and mentors help learners to become more independent. This independence is necessary so that learners can recognize and internalize the realization that their abilities are adequate to move forward. (p. 52)

In tutoring, the goal is to transform social or jointly held cultural knowledge to individual knowledge and to develop an internalized capacity for activity so that external social regulation is no longer necessary (Sivan, 1986). To overcome the many barriers that they face, adult students must be taught both how to study and to understand the culture of higher education.

Summary

Adult students face many barriers in their pursuit of higher education including situational, institutional, and dispositional barriers. For universities, the easiest to address are institutional barriers. Tutoring and SI have been shown to help students succeed in their studies. While research has shown that tutoring is a successful academic intervention at the college level, very little of this research focused on the perceptions of adult students of how tutoring helps

them to succeed. To try and understand adult students' perception, the theoretical framework for this study was developed based on Vygotsky's Cultural Historical Activity Theory (CHAT). The framework was adapted to show how tutoring help adult students to persist. In Chapter 3, the methodology used for this study will be described.

CHAPTER 3: METHODOLOGY

To understand how adult students perceived tutoring for helping them to persist, I used a qualitative interpretive research method. According to Nordqvist, Hall, and Melin (2009), interpretive research comes to an understanding through the interpretation of meanings assigned to actions, events, and processes. The interpretation is made both by the actors (the research participants) and the researcher. A qualitative research method is used, according to Crotty (1998), when a problem or issue needs to be explored. This exploration is necessary because the variables cannot be easily measured, and there is a need to hear voices that may otherwise be silenced. To understand adult students' perceptions of tutoring through quantitative means, the study would have to rely on either student satisfaction with the services or on the grades of those students who attended tutoring. While it may be evident that students who use tutoring receive higher grades or are more likely to graduate on time, it does not provide a full explanation of why. Using either of these units of measurement would miss vital details of the relationships formed that can only be discovered through qualitative interviews, such as the types of interactions, resources, and tools they gain from tutoring that may help them to persist. Qualitative research enables researchers to understand the phenomenon experienced by subjects and distinguish shared patterns of behavior and beliefs (Denzin, 2010) by understanding the context in which the phenomenon took place (Patton, 2015). Chapter 3 details the philosophical framework, sampling strategy and rationale, data collection methods, data analysis procedures, and data quality checks used in the study.

Philosophical Framework

This study used a social constructivist framework. Social constructivism is an interpretive framework whereby individuals seek to understand their world and develop their own meanings that correspond to their experience (Crotty, 1998). Interpretivism "portrays a world in which reality is socially constructed, complex, and ever-changing. What is of importance to know, then, is how people interpret and make meaning of some object, event, action, perception, and so on" (Glesne, 2011, p. 9). Using an interpretive framework consists of observing, asking questions, and interacting with the participants in the study (Glesne, 2011). Social constructivism was an appropriate framework for this study because students were being asked to describe how tutoring helps them to persist. According to Crotty (1998), the social element does not assume social interactions with other people are the sole contributors to an individual's understanding of the world; instead, all interactions with any stimuli contribute to one's perspective. Thus, all meaningful reality, no matter the interaction, is socially constructed (Crotty, 1998). In this study, both the tools and the resources that were a part of the tutoring session were essential elements of social interaction.

In this study, I used an interpretive qualitative research methodology. According to Elliott and Timulak (2005), interpretive research methodology helps to answer the questions of why a phenomenon comes about and how it unfolds over time. Interpretive research was an appropriate methodology for this study because this study was looking at the interactions that occur that may lead a student to persist. To be courteous to all participants, interviews were scheduled in advance and at a time that was convenient for them.

Social constructivists are interested in the collective generation of meaning among people. Social constructivism includes the idea that there is no objective basis for knowledge

claims because knowledge is always a human construction. The emphasis is on the process of knowledge construction by the social group and the intersubjectivity established through the interactions of the group (Au, 1998). This process creates a culture that students must enter to succeed in college. Culture is a product of the way individuals learn to coordinate desirable and useful activities with others, and it is expressed in many ways, including through the actions, expectations, and beliefs of individual persons; physical elements, such as artifacts, tools, and the design of physical spaces; norms for interacting with others, both verbally and nonverbally; and beliefs and ways of looking at the world that are shared with others (National Academies of Sciences, Engineering, and Medicine, 2018). Adams (2006) described five main elements of social constructivism:

- 1. Focus on learning, not performance.
- 2. View learners as active co-constructors of meaning and knowledge.
- 3. Establish a teacher-pupil relationship built upon the idea of guidance, not instruction.
- 4. Seek to engage learners in tasks seen as ends in themselves and consequently as having implicit worth.
- 5. Promote assessment as an active process of uncovering and acknowledging shared understanding. (p. 247)

These five elements correspond with the elements of a good tutoring session. By using a social constructivist framework, I was able to understand the perceptions of the adult students as to how tutoring helped them to persist.

Research Questions Restated

The study addressed the following research questions:

- 1. How does tutoring help adult undergraduate students to overcome the barriers they face in persisting in their studies?
- 2. How does the community help adult students persist?
- 3. What role do adult students play in their academic success?

Participant Recruitment

To recruit students to participate in this study, the assistant director of tutoring services at the university emailed all adult students who used tutoring in either the Spring of 2018 or the Fall of 2018. A copy of the recruitment email can be found in Appendix A. These emails were sent out in November of 2018, January of 2019, and February of 2019. Interested students were asked to email me if they were willing to be interviewed for the research study. In all, 16 students responded, and 13 agreed to be interviewed. These interviews were completed between November 2018 and March 2019.

The number of interviews targeted for this study was between 12 and 20 adult students. This number was chosen in the hopes of achieving "rich and thick" data. This sample size, according to Dibley (2011), provides a lot of data that are layered, intricate, detailed, and nuanced. I used a semi-structured interview guide for the interviews (see Appendix B) which allowed for probing questions and extrapolation on areas that were not thought of when the interview guide was created. According to Patton (2015), using an interview guide "increases the comprehensiveness of the data and makes data collection somewhat systematic" (p. 438). All interviews were recorded using a voice recorder and then downloaded onto a password-protected computer. During the interview, I took notes using pen and paper and transcribed the interviews immediately after they were completed.

Sampling Rationale

Research participants were found through emailing all students who were eligible for the university's tutoring service. An email solicitation (see Appendix A) was sent out through the assistant director of tutoring services to recruit potential participants. Table 3.1 displays the inclusion and exclusion criteria for the study.

Table 3.1

Inclusion and Exclusion Criteria for the Study

Inclusion	Exclusion	Rationale
Enrolled in a bachelor's program at the participating university.	Enrolled in a graduate program. Auditing courses. Special University Student	This study is interested in the persistence of bachelor's degree-seeking students.
Over the age of 25 at the time of the study.	Under the age of 25.	In this study, an adult student is defined as over 25 years old.
Has used tutoring offered through the central tutoring center on campus at least three times.	Has not used tutoring services from the central tutoring center on campus.	Based on internal university research, it has been found that students must use tutoring three or more times for it to make a difference in their grades.
Used tutoring in Spring 2018	Has never used tutoring or used before Spring 2018	This study seeks to talk to students who used tutoring and have already persisted.

Data Collection Methods

I conducted in-person interviews with 13 participants to obtain information about how adult students used tutoring at the university, what other services they used on campus, and their perceptions of how these services influenced their persistence. Table 3.2 shows study participants' demographics of the research participants.

Table 3.2

Participant Demographics

Pseudonym	Age Range	Enrollment Status	Employment Status	In-Person/ Online Student	Family	Distance From Campus Under/Over 20 Miles
Alexis	40-49	Full time	Full time	Both	Daughter	Under
Andrew	25-29	Full time	Part-time	In-person	Single	Over
David	25-29	Full time	National Guard	Both	Single	Under
Greg	50-59	Full time	No	In-person	Married	Over
James	30-39	Full time	No	In-person	Married	Less
Kari	25-29	Full time	Part-time	Both	Single	Less
Katherine	25-29	Full time	No	Both	Lives with partner	Less
Kelly	25-29	Full time	Part-time	In-person	Child	Less
Kyle	25-29	Full time	Part-time	In-person	Single	Less
Luis	25-29	Full time	Summers only	In-person	Single	Over
Michael	30-39	Part-time	Part-time	In-person	Fiancé and Child	Over
Paul	50-59	Full time	Full time	In-person	Married with adult children	Less
Sara	30-39	Full time	Part-time	In-person	Single	Less

I used a semi-structured interview guide to ensure that the information that I was looking for was obtained. I incorporated both open-ended and more theoretically driven questions, eliciting data grounded in the experience as well as data guided by existing constructs in the particular discipline within which the research is being conducted (Galletta, 2013). Each interview question matched to both a component of the theoretical framework and a research question. Table 3.3 shows which interview questions answered the research questions.

Table 3.3

Interview Questions Answering Research Questions

Research Question	Interview Question
How does tutoring help adult undergraduate	Tell me how you learned about tutoring services?
students to overcome the barriers they face in persisting in their studies?	Tell me about a time when you have struggled in your course work and how tutoring helped you.
	Tell me how tutoring has helped you to succeed in your classes?
	How do you think going to tutoring affected your classwork? Or completion of assignments?
	Tell me about the first time you went to tutoring, why did you go? Was it the beginning of the semester? Partly through the semester?
	How often did you go to tutoring? And how did tutoring help you in your courses?
	Reflect on your first tutoring session- tell me the story of what happened?
	Tell me, what about tutoring has helped you the most as a student?
	Describe your favorite peer tutoring session; what techniques did they use in that session?
	If I went to a tutoring session with you, what would I see happening?
	Tell me about what activities happen in tutoring that are most helpful to you.
	How does the tutor explain things that you might not understand?
	How is your learning experience different in tutoring compared to class?
What role do adult students play in their academic success?	Reflect on your first tutoring session-tell me the story of what happened.
	What were you hoping to get out of going to tutoring?

Research Question	Interview Question			
	Did you go to SI or tutoring? If both were offered for your course, why did you choose the one you did?			
	Did you attend exam reviews? If so, why? What did you find helpful about them? Did you attend it online? Why did you choose to go in person or online?			
How does the community help adult students persist?	What was your relationship like with your tutor? How did your relationship change over the semester? If you had more than one tutor, how did your relationship with them differ?			
	What was your relationship like with the other students in your tutoring session? How did your relationship with them change over the semester?			

Data Storage and Confidentiality

Interviews were stored and backed up in several ways. First, all electronic data were stored on a password-protected laptop computer. Access to the laptop required a username and password. Hard copies of document drafts, notes, and correspondences were stored in a safe in my house.

The following steps further ensured data confidentiality.

- All data collected were de-identified. A unique pseudonym was given to each participant.
- A pseudonym list was created and kept separate from the corresponding data.
- All printed notes and information derived from the interviews were stored in a safe in my house, accessible only to me.
- All audio data were downloaded only onto the password-protected laptop.
- All recorded and transcribed data will be destroyed three years after the dissertation is published.

Anonymity, Privacy, and Informed Consent

To achieve anonymity, I de-identified study participants by assigning them pseudonyms. Also, any information that could identify the study participants was removed, including their major and the specific course for which they were receiving tutoring. Instead, the subject area was used when discussing the course that they received tutoring. In addition to preserving the anonymity of the study participants, the name of the tutor and the other students in the session were removed and replaced with merely [tutor]. The name of the institution of the study participants was also masked.

Study participants were presented with a clear description, the purpose, and the scope of the study. They were also informed of the strategies that would be implemented to maintain their privacy and how they could withdraw from the study at any time. A copy of the informed consent that all research participants signed can be found in Appendix C.

Quality Control

According to Maxwell (2013), there are two specific validity threats: bias and reactivity. To address these issues, the following methods were used: looking for disconfirming evidence or cases, member checking, and creating an audit trail that other researchers can use to replicate the data (Cresswell & Miller, 2000). To make sure that all data were valid, I met with my adviser and discussed the validity of the coding. Peer review and debriefing provide an external check of the research.

To address the validity threats each individual interview was reviewed and analyzed. A list of possible codes was created for each interview. After a list of the emerging codes was created, any disconfirming evidence was tagged with a memo and discussed with my adviser. Likewise, all codes were discussed and analyzed with my adviser and a fellow graduate student

to ensure that they were valid based on the interviews. Finally, a log of the coding process was created to allow any other researchers to see how the coding process was done.

Research Bias

This study was born out of my own life experiences. My father never graduated college, and I saw how the experience affected him. I also saw my eldest brother who took a 15-year break to get his bachelor's degree. I also worked for many years in a university tutoring center and met many returning adult students. Several of them would tell me their backgrounds, and it was their willingness to share their stories that inspired me to take on this research topic. I also would see many of them struggle to be successful in their courses, but also saw them consistently show up to tutoring and work with tutors. In addition, I was able to witness the relationships that were formed over a semester between tutors and the students that they tutored.

My interest in the research topic is based on my belief that learning never happens in isolation. It is only through the connections that humans make with each other that we can fully understand. These experiences have led me to two beliefs that influenced this study. First, I believe that universities must actively design and promote programs that adult students have access to that both address any academic deficiencies and help them feel connected to the university. Second, I believe tutoring is essential – not only to assist students academically but also to help build that social connection.

It was vital for me to evaluate and record these beliefs before conducting my research, and these beliefs were evaluated as I analyzed the data to ensure that I was not putting my own opinions over the voices of the study participants.

Data Analysis

Before data analysis began, I completed a thorough read of all the transcripts. Doing so allowed me to "develop tentative ideas about categories and relationships" (Maxwell, 2013, p. 105). I used a two-cycle coding methodology. The strategies employed in each cycle are described next.

First-Cycle Coding

During first-cycle coding, an "initial coding" methodology was used. According to Saldaña (2015), "initial coding breaks down qualitative data into discrete parts, closely examines them, and compares them for similarities and differences....Codes at this stage can be descriptive, conceptual or theoretical" (pp. 115-119). However, because the data came from interviews, descriptive coding was used sparingly, and instead, codes were derived from the "actual language of the interviews" (Saldaña, 2016, p. 77). All coding was done by hand on printed copies of the interview transcripts, using assorted colors to demonstrate the different codes found. After all initial coding was complete, an analytical memo was created with a process that Saldaña (2015) described as "critical" (p. 118). The first-cycle coding used a qualitative inductive analysis, which Patton (2015) described as "generating new concepts, explanations, results, and/or theories from the specific data of a qualitative study" (p. 541). Thomas (2006) described the process of qualitative inductive analysis as consisting of the following steps: a) preparation of raw data, b) a close reading of the text, c) creation of categories, d) overlapping coding and uncoded text, and e) continuing revision and refinement of category system.

The coding focused on both the actions that occurred during the session as well as the person undertaking the activities. After the first round of coding was completed, a list of

activities was created based on my findings. The codes were shared with a fellow graduate student who asked me for evidence of each code and we also discussed possible ways that the data could be interpreted. After meeting with my fellow graduate student, I conducted an analysis focused on how those actions affected the student's understanding of the topic being practiced during tutoring. First-cycle coding was organized using a matrix, tying the codes to the research questions for the study, and giving examples of the different themes found. After the matrix was created, I presented my findings to my adviser and we discussed my findings. Once we came to an agreement over what my data meant, I performed my second-cycle coding.

Second-Cycle Coding

In the second-cycle coding, a pattern coding methodology was used. Pattern coding "is a way of grouping those summaries [from first cycle coding] into a smaller number of categories, themes of concepts" (Saldaña, 2016, p. 236). In this cycle, coding was done in relation to the theoretical framework used, CHAT. A single matrix was created for each interview, and random numbers were assigned to each interview. These numbers were then put onto a chart with the emergent themes and the interviews that described the phenomena. Table 3.4 shows the table that was created. This table was not designed to try to quantify the data, but rather to see if there were any patterns in the codes created.

Table 3.4

Codes Across Interviews

Emergent Theme	Corresponding Interview(s)
Exam reviews: In-person	1,2,3,5,7,8,9,10,12,13
Exam reviews: On-line	3,5,7,8,12
Supplemental Instruction (SI)	1,2,3,4,5,7,9,10,12
Prepared materials	1,4,12
Self-efficacy	1,2,3,5
Questions	1,2,4,12
Repetition or a different explanation	1,2,3,6,7,8,10,12,13
Study time	1,8,9,10
Small group tutoring	2,5,6,7,9,13
Crutch	2,12
Extra credit	2,7,8,9
Practice with or discussion of topics	2,3,4,9,12,13
Walk-in tutoring	2,4,5
Frequency AT least once a week (or more)	1,2,3,5,6,9,10,11,12,13
Frequency- depends on the class	7,11
Using whiteboards (visualization)	3,4,8,9,11
Kahoot	3
PowerPoints	3
Make relevant to real life	3,5,6,12
Break down the steps- depth not breadth	3,5,7,12
Direct teaching	3,9,12
Homework	4,9
Better grade	4,8
Focus	4,6,12
D2L notification	5
University application	5
Lost friends returning to school	6
Wife audited courses	6
Kahn Academy	8
Quizlet	8
YouTube	8,11
Online quiz	8

After the table was created, themes were developed based on an analysis of the codes. According to Erlingsson and Brysiewicz (2013), codes with common points of reference, with a high degree of transferability, and through which ideas can be united throughout the study phenomenon can be transformed into a theme. Just like in my first cycle coding, these results were shared with a fellow graduate student, and we evaluated my first cycle codes, and the themes that I developed. After my list of themes was created, it was shared with my adviser. In addition to coming to an agreement about the themes, we also discussed how my themes fit into the theoretical framework used for the study.

Conclusion

This chapter outlined the methodology that was used to understand how adult students perceived tutoring helped them to persist. A qualitative approach was selected to allow participants to describe their personal experiences with tutoring. A sample of 13 adult students were interviewed. The intent of the in-person interviews was to identify themes in which persistence could be tied to the elements of the theoretical framework. The developed themes are discussed in Chapter 4.

CHAPTER 4: FINDINGS

The purpose of this qualitative interpretive analysis was to study the perceptions of adult students enrolled in a bachelor's degree program who used tutoring at a public four-year university in the Midwest. Data were collected through interviews with 13 participants who used tutoring provided by the centralized tutoring center on campus at least three times the previous semester. Participants were asked about their experiences with the centralized tutoring center and their perceptions of the services provided. Three major themes emerged from the study that answered the research questions: (a) adult students' perception of tutoring in their academic success, (b) adult students' perceptions of community support, and (c) the student's role in their academic success.

Adult Students Perception of Tutoring in Their Academic Success

The first research question for this study was: How does tutoring help adult undergraduate students to overcome the barriers they face in persisting in their undergraduate studies? These perceptions fell into two subthemes: academic support resources and the role of the tutor.

Academic Support Resources

Study participants were asked about the academic support resources offered by the university. Study participants identified: centralized services, Supplemental Instruction (SI), tutoring offered from other departments, extra credit, exam reviews, and frequency of tutoring as being beneficial to their academic success. Of the 13 students who were interviewed, five students had at least one unsuccessful tutoring experience. The resources that students used to persist were offered by the centralized tutoring service itself (SI, exam reviews, and frequent tutoring), they could be offered by another department in support of the centralized tutoring

services (extra credit offered by professors), or offered by another department (tutoring offered by other departments). Table 4.1 provides a summary of the academic resources study participants used.

Table 4.1

Summary of Academic Resources

Study Participant	Tutoring	Supplemental Instruction (SI)	Other Departmental Tutoring	Extra Credit	Exam Reviews	Frequency of Tutoring
Greg	Lifeline	Yes	Disability Center Private Tutor	No	In-Person	Weekly
Andrew	Refresher	No	No	No	In tutoring sessions	Weekly
Katherine	Lifeline	Yes	No	No	Yes Anxiety Practice Test	Weekly
Kelly	Both	Yes	Teaching Assistant	Yes	Online	Depends on class
James	Lifeline	Yes	Writing Center	Yes	In-person	Weekly
Alexis	Lifeline	Yes	Writing Center Departmental	No	Online Practice	Weekly
Luis	Refresher (Unsuccessful)	Yes	Departmental	Yes	Practice	Weekly
Sara	Lifeline	Yes	Departmental	No	Online Practice	Weekly
Kari	Refresher	No	No	No	No	Weekly
David	Lifeline	Yes	Departmental	No	Practice	Weekly
Paul	Refresher	No	No	No	No	Weekly
Michael	Lifeline (Unsuccessful)	Yes	No	Yes	Practice	Several times a week
Kyle	Refresher	Yes	Departmental	No	Practice	Weekly

Centralized tutoring services. All the study participants used tutoring offered by the university's centralized tutoring service. However, the reasons that the study participants attended tutoring varied dramatically. Seven participants felt that the tutoring they received from

these services was a lifeline, five went as a refresher or a chance to ensure that they would get a passing grade, and one had both experiences. All participants had at least one satisfactory tutoring experience from centralized services, but two study participants had experiences with tutoring that were not helpful.

Tutoring as a lifeline. A common perception by participants was tutoring as a lifeline. Sara described her struggles returning to college and how tutoring helped her to succeed:

[My biggest struggle] was balancing work and life. I had a boyfriend at the time, so just rebalancing everything and finding the time to study again. Basically, SI showed me that you must get out of the house and sit somewhere else and, if you can, collaborate with other people. But at least make the time. It helped me structure myself again. It was all that, the new responsibilities of adulthood plus it is harder to learn... so it just gets me focused. I used to be very self-focused, very self-motivated. I think I can get that back, but right now; I seem to be leaning on SI to see people who are self-motivated so that maybe I can get back to that place.

Alexis, who had attended the same university over 20 years ago, talked about the change in the institutional culture she had noticed. Her first time in school, Alexis needed a lifeline that the university did not offer. However, she found it when she returned almost 20 years later to the university. She said, "The university is a friendlier place now; there is more information... The first time I was here, I took Russian, and I was so overwhelmed in the class, not knowing what was going on, I just gave up."

In addition to study participants wanting to use tutoring to improve their academic skills, some participants sought out tutoring because they struggled with academic study skills such as time management and organization. As an adult student, Kari found that sitting down and reading was a struggle for her, finding it gave her headaches. Luis found that tutoring helped him to study for his tests and to organize his notes so that they were easy to comprehend. David found that he struggled with organization and time management as a returning adult student. When he was asked what his biggest struggle returning to school was, he said:

It would be organization for sure. One thing that I have an appreciation, for now, is all these people coming straight out of high school who can figure out how to juggle all of this. I need to do an hour studying for this and an hour studying for that, basically figuring out my schedule, and because it is different every semester, it usually takes me a month, sometimes even two, before I am like, okay, this is how I am working.

In addition to providing students a chance to study for the classes, tutoring also provided them a space where they could learn academic strategies such as organization, time management skills, or note-taking skills to increase their focus. These are strategies that students can use beyond the courses that they take throughout their academic careers. Tutoring can also help ease student anxiety about academics. Like many of the other study participants, Michael was very stressed and worried about passing his math class. He described how working with his tutor helped him to overcome his anxiety:

I was overwhelmed by the work and looked out on YouTube and Kahn Academy. Those sites did not have the human side of [studying]...I really work well with somebody walking me through problems. I did go into the opening tutoring sessions a couple of times, and I had mixed results, but then with [tutor name] it was amazing...it was gravy. I would walk in, and he was so confident. He just seemed like he had done all of this before. He was very comforting. Like, "Don't worry, we will figure it out."

The stories shared by Sara, Alexis, Kari, Luis, Kyle, and Michael show that tutoring can be more than just a place for them to review material. Tutoring can serve as a place to work with a person who can become a mentor of good academic skills and can help build their confidence in their academic abilities. As they gained confidence in their academic abilities, tutoring helped these students realize that they could be successful in a university setting. Alexis explained how her experiences with tutoring helped her to decide to return to college for another semester:

What people do not understand is when a student gets a good grade or passes a class, especially an older student, it gives you the motivation to keep going. Because you realize you can do this. When I found out I passed all my classes last semester, I was motivated to come back this semester. This semester I am not at C work anymore. I am at A/B work because I know that I can do A/B work if I go to tutoring if I get help... [School] really plays with your self-esteem, but just going to tutoring, being able to pass the class, then you do even better the next semester, and it gives you confidence. It is a self-esteem boost. It makes you feel like you belong here.

Providing students with academic resources such as tutoring is essential for adult students. However, some study participants who attended tutoring were not struggling academically but attended tutoring just for a refresher of the material they learned in class.

Tutoring as a refresher. While there may be a perception that students who attend tutoring do so because they are struggling in one or more of their classes, four of the study participants reported that they went to tutoring for courses in which they did well. Two study participants wanted to get high grades to get into graduate school. Two other participants wanted to take advantage of the services offered by the university. Andrew was one of the students who did not feel like he needed tutoring but went regardless. However, he gave credit to tutoring with helping him when he felt overwhelmed. He said:

I have had times when the material gets overwhelming in a sense, or there was a week when I did not look at the material. In that week, you forget everything, and then you go back to tutoring, and you are like, "What is this?" or "When did we talk about this?" But then, you get back in the groove, and you start seeing and connecting the pieces together. I guess it is a review.

While tutoring is an inclusive space where students are encouraged to admit their struggles, it can help even students who do not feel like they are struggling. For these students, it can serve as a review and a space to ensure that they have a solid understanding of the material.

Andrew felt that because he had a strong grasp of the material, he was able to engage more in his courses. He stated:

[Tutoring] has helped me with my grades and knowing the material better. I like having a greater mastery of the material. I feel like I am more comfortable being in class and understanding what the teacher is talking about and engaging in class.

Kyle, Andrew, Kelly, Kari, Paul, and Luis all went to tutoring even though they were not struggling academically with the courses they attended tutoring for. While all these study participants still were able to find tutoring to be helpful overall, there were times when they

either chose not to attend tutoring or chose to stop going because they did not find the specific support offered to be beneficial.

Unsuccessful tutoring experiences. While all the study participants had at least one positive tutoring experience through centralized tutoring services on campus, not all their experiences were positive. Both Michael and Luis reported that they quit attending tutoring for at least one of their courses. Michael found that his learning style did not match the teaching style of his tutor. While Michael credited tutoring for his math class for helping him to pass, he expressed frustration with the tutoring available for his science course:

[Tutoring] did not work for that class. I found that there were fewer hours offered, and I found that the [tutor] has even made mistakes on things, and it just did not help. I do better on my own; I have a different technique for studying for that class than what they do... Biology is more memorization instead of learning how to do a problem and doing exercises.

This sentiment was also expressed by Luis, who described an experience with tutoring that he felt was so unhelpful that he eventually stopped going. For Luis, he felt that the way that a tutor explains the material and their level of confidence can make or break the session. He said:

I think the tutor makes or breaks the tutoring. For my last semester science course, [tutor] seemed to kind of know what he was talking about. He would explain the material in a weird way that just did not make sense to me. It really did not help that much, but with math and my science course this semester, the tutors speak so concisely, and it is obvious they know what they are talking about. I can ask questions of them, and they answer with confidence.

For both Luis and Michael, their perception of the tutor was important in determining if tutoring was worth their time. Both Kari and Paul determined at the beginning of the semester to only attend tutoring for classes they knew they were going to struggle with the material. Adult students seem to self-select what support they feel will benefit them the most and will choose to begin or discontinue to use a service depending on its effectiveness in helping them to learn.

Autonomy is an important skill for students to have, and for adults with limited time, understanding what will help them to be successful is instrumental.

While the study participants did not feel they needed to go to tutoring, the refresher they received helped them to clarify information and helped them feel more engaged with their material, making it worth their time to attend. However, for the students who find their experience with a tutor not to be helpful, it is beneficial to offer access to a variety of different academic supports. Some of the different supports that were offered by the university were SI, tutoring offered by other departments, extra credit, exam reviews, and tutoring frequency. Study participants' perceptions of these supports are analyzed below.

Supplemental Instruction (SI). One of the most surprising findings from this study was that while 10 study participants identified that they attended SI sessions, they were not sure what the difference was between SI and traditional tutoring. The concept behind SI is to provide facilitated learning to small groups of students, led by a peer who has been successful in the course before. Of the 10 study participants who identified that they attended SI, only five study participants consistently attended SI sessions with other students. For the five participants who attended SI by themselves, they were not able to identify any real differences between tutoring and SI and chose whatever fitted their schedule best. Kelly even expressed happiness that she was the only student in her session. "I got lucky for my philosophy tutoring. It is one on one. So that is nice. In some cases, I feel like you really do need that." While study participants were not aware of the type of tutoring they had attended (small group or SI), after having attended SI, Kyle, David, and Sara expressed frustration that the university did not offer SI for more courses that they took.

Tutoring offered by other departments. In addition to using the tutoring offered from the centralized tutoring center, seven study participants used other tutoring or academic support services offered by the university. The services used were the writing center, tutoring offered by specific departments, and their Teaching Assistant (TA). Study participants' experience using these services varied as did their level of satisfaction with the help they received. Kelly had sought out her TA for extra help but felt that she was taking up too much of the TA's time with her questions. Other study participants felt uncomfortable using math help because they had difficulty identifying who the tutors were. David described the differences he perceived between the tutors he had from the centralized services and the walk-in tutors he used for his Physics class:

I noticed the tutoring in the physics building, and I am not trying to call anybody out or anything, but sometimes it is hard to ask questions because the tutors will be doing their own work. [Centralized tutoring services are] good because when you sit down at the math table, you can tell who the tutor is... The first couple of times I walked into the chemistry tutoring and the physics tutoring, I did not know who the tutor was in there. I feel like over in [centralized tutoring services], it is obvious... Just have a standard, you know. A way for them to show they are there, and maybe it should have been more obvious to me. It makes me uncomfortable.

Study participants also expressed frustration with the type of help that different centers offered to them. Both Alexis and James expressed frustration with what the tutors in the writing center were and were not willing to help. James said:

If I wanted tutoring from the writing center, I would basically be showing up with completed work and having them proofread by the tutor... But I am saying I cannot even start the paper...I showed up to two writing center appointments, and they told me that is not how this worked. You must [write the paper], and we are going to proofread it. We are going to talk you through it. But what I am saying is that I do not know how to start this. I need you to help me get this started. And, that is a hard thing to articulate to someone.

While some study participants had bad or frustrating experiences accessing services on campus, other students had positive experiences using services, and that convinced them to seek

out more help. For Sara, it was attending the tutoring that was offered by the chemistry department that convinced her to use tutoring offered by centralized services. She said:

Halfway through the semester, I made it to a chemistry SI session... Those are so helpful that I started going to the SI sessions for my math course, and it really helped... I knew about it; I just did not know how helpful it was. They talked about it all the time, and I was like, yeah, whatever. I must work; I have to do this and this.

Just like with centralized tutoring services, the experiences of the study participants were guided by their own needs. For James, he was not able to find the type of help he needed with his writing because he was not sure how to start the paper. For Sara, attending tutoring helped her to see how valuable the service was and helped to steer her learning path differently, from one where she learned on her own, to one where she learned in groups in tutoring. Until she experienced the value of tutoring for herself, she was not aware of the difference it could make. On-campus, some professors try to entice students to use tutoring by offering extra credit for attendance. Study participants' experiences with extra credit are analyzed below.

Extra credit. Some professors opt to offer extra credit to students who attend tutoring or SI sessions for their course. Four of the study participants received extra credit for attending tutoring. Three of them attributed the extra credit offering as to why they attended tutoring for that course. When asked why it enticed him to attend tutoring, James said:

I knew that [with the extra credit from going to SI] that I could write a worse paper... Many of my classes require me to do things on [Learning Management System], and that involved me opening my laptop, so if there is an opportunity for bonus points where I didn't have to do that, it was motivating. Then, I do not have to be concerned at the end of the semester because well, I have 10 to 15 points coming to me for doing something that helped me anyways.

As James pointed out, while going to tutoring or SI was an easy way to gain extra credit, it also had the bonus of helping him academically. However, Michael did not feel like the extra credit had affected his decision to attend tutoring at all. His decision to attend tutoring was because he was struggling with the course and needed the support. He perceived the extra credit

as a bonus. One interesting thing to note is that all three study participants who received extra credit also attended tutoring for classes where they did not receive extra credit. While the extra credit may have enticed them to go to tutoring for classes that they did not feel that they needed the extra support, the same study participants were already attending tutoring for other courses, and Kelly admitted that she only attended tutoring the minimal numbers of times she needed to receive the extra credit points. Extra credit was a resource used by all study participants who had it offered to them, just like exam reviews. Exam reviews are another resource that all the study participants used when available.

Exam reviews. The university where this study was conducted has a robust exam review initiative in which, for every course that offers SI, a formal exam review is held for every exam. The reviews consist of an in-person and online component to ensure access to resources for all students. Large numbers of students often attend these reviews. Eleven of the 13 study participants had attended reviews. Reviews were not offered for the courses that the other two study participants were taking. Reasons for why they attended the exam reviews ranged from anxiety over the tests to a belief that the reviews would closely follow the exam. Study participants who took courses with lots of graphs, equations, or problems (like math and physics) found the online exam reviews to be extremely helpful.

Test anxiety. When asked why they went to exam reviews, one of the reasons study participants identified was being nervous or anxious about the test. Because exams are often worth most, if not all, of a student's grade, study participants felt pressure to do well. They also felt that if the university was offering the service that they should take advantage of it. According to Katherine:

[I attend] because I fear the exams. Not even scared, I just want to make sure that I understand things correctly. I just view it as to why would I not go? Even if I am confident, I would just rather have it reiterated.

Like Katherine, James felt similarly, "I know the exams are weighted 40% of your grade, it is in my best interest to hear that material a bit more. Sometimes hearing things 3-5 times is better than once." Giving students the chance to prepare fully for their tests allowed them to feel more prepared than they did by just attending tutoring or SI. In courses that they already knew that they had some deficiencies, like math, this was especially helpful. Michael went to every review that was offered for his exams and explained why: "It was more review. It was a hard class, and I like math, but I am not strong in it." For adult students who often feel more of a time crunch when it comes to studying because of their other life obligations, reviews can be an especially useful study aid.

Practice test. Eight of the study participants also saw the exam reviews as a practice test. Many of the tutors would send the participants a study guide with practice questions beforehand, and they would go through the guide during the review. Study participants viewed this guide as a practice test and expressed gratitude for it. Katherine explained why the exam reviews helped her more than just going to SI:

In SI, we would go over the previous week's information that we covered in class. The exam reviews are more directed many times. The tutors will not see the exams, but they will meet with the professors who give them stuff to focus on. So, there is a narrower focus on what is going to be on the exam.

For Katherine, knowing that her tutor had met with her instructor before the review gave her confidence that the review would be helpful to her passing the test and would provide guidance in what she should study on her own. Alexis had even more confidence in her exam reviews because her professor would attend them:

The exam reviews mocked the test. Sometimes the professor would be in the exam review. During the reviews, the professor and the tutor would have these pow wows, and

she would be like I am going over this. I am going over that. You need to tell them this. You need to tell them that.

Luis found that the exam reviews for his Physics class were often more challenging than the exams themselves and used that to his advantage:

In physics, they will ask much harder questions than you would get on the exam, so if you can do those harder questions than you are prepared for the exam. For art and anatomy and physiology, I would go because I knew that sometimes [the instructor] would recycle questions from her last exam, so I would use that to my advantage.

For many of the study participants, the reviews became a part of their study routine, and knowing that professors met with the tutors provided them with confidence that the information covered would be helpful for them and would give them a pretest advantage. Providing exam reviews gave students another opportunity to choose what kind of support that would help them the most. While all the students who saw the exam reviews as a practice test also went to tutoring, they used the reviews to their advantage to know what they needed to study and to give them an idea of how well they may do on the exam itself. While all the study participants who attended exam, reviews found the in-person exam reviews to be of use, their perceptions varied when asked about online exam reviews.

Online exam reviews. While Michael and Greg found the online reviews to not be helpful, two study participants had a very different opinion. Both Alexis and Sara relied heavily on the online portion of the reviews to aid their study. They found rewinding and going through the problems repeatedly as the best part of the reviews. Alexis used the reviews both at home and in her class when they were doing a review there:

I would pull them [the archive] out in class while the professor was going over the review. I would pull up the online review, and everyone would gather around and as we worked through the problems people would say "rewind it."

Like Alexis, Sara also relied on rewinding the reviews to do the problems:

I look at the problems repeatedly. I watch them, go through them, and then I pause it [the archive], and try to work through them [the problems]. When I get to a spot where I can't go forward anymore, I will play it again, and then I will pause it again, and I will do that over several days and go over each problem.

Alexis and Sara used online reviews because of the repetition of the material. They went to SI for the courses that they used the archives regularly, were familiar with the way their tutor instructed, and attended the in-person portion of the exam reviews. They were using the archives as an additional study tool, which may explain why they found them helpful. Sara said, "It is like just using Kahn academy at that point, but I know [name of tutor]. So, I understand her voice and the way she teaches is a more personal experience than just watching an online lecture." Sara's comment shows that having that relationship with the tutor made her feel a sense of connection with the material.

Frequency of tutoring. Eleven of the 13 study participants attended tutoring for a course at least once a week, with the other two attending only when they felt that they needed extra help. Three of the study participants also expressed that they felt that the available times worked well with their schedules. Michael attended tutoring weekly and sought out his tutor at the walk-in tutoring table as well. Michael described the frequency that he attended tutoring as:

[I went] every week, every opportunity that I had to go I went. I was religious about it. I made it a part of my schedule, and I even went to extra supplemental sessions that [the tutor] worked with another group. I went anytime [the tutor] was helping.

Like Michael, David, Sara, and Luis saw tutoring almost as another class and added it to their schedules to ensure that it was a priority. Having set tutoring times allowed them to manage their study time more strategically. For both David and Luis, tutoring was so effective that they never even studied outside of tutoring for their courses. The next section addresses the tools provided by the tutor that students perceived as being valuable to their academic success.

Tools Provided by the Tutor

Within the tutoring session, it is the tutor's job to provide study skills to the students. Students perceive that the tools provided by the tutor as being beneficial to their academic success. A vital part of these tools is the interpersonal relationships built between the student and the tutor during the sessions. All study participants described their relationship with at least one of their tutors as good and expressed that it was obvious that their tutor cared about their academic success. Two study participants saw their tutors as a mentor whom they could look up to for support and as a model of good academic behavior, while one described the relationship as more of a big brother-big sister relationship. Forming an environment of trust and authenticity is important in tutoring because it allows students to perceive they are safe to ask questions and struggle with material.

Study participants perceived three tutoring tools as helping them to succeed academically: (a) repetition of material, (b) having the chance to practice the material they are studying, and (c) having the ability to ask and answer questions. Table 4.2 shows the tutoring tools study participants perceived to be helpful.

Table 4.2

Summary of Tools Provided by the Tutor

Study Participant	Repetition of Material	Practice with Material	Asking and Answering Questions
Greg	X	X	X
Andrew	X	X	NA
Katherine	X	X	X
Kelly	X	X	NA
James	X	X	X
Alexis	X	X	X
Luis	X	X	X
Sara	X	X	X
Kari	X	X	X
David	X	X	X
Paul	X	X	X
Michael	X	X	X
Kyle	X	X	X

Repetition of material. The most relevant perception about tutoring by study participants was the ability to hear material repeatedly. All the study participants thought that this repetition was helpful to their learning process. Study participants identified not being able to understand the professor, thinking that the course went too fast, and not being able to comprehend the concepts as reasons why hearing the tutor repeat material was helpful. Alexis, Michael, and Katherine all pointed out that in tutoring, the repetition of material gave them a depth that their professor was not able to provide in a large lecture. Alexis described the experience as "[My tutor] takes the hour and a half long class and in an hour goes over the entire class and makes you understand what you missed." Like Alexis, Greg felt that one of the most important parts of tutoring was the relationship he built with his tutor and the way his tutor explained the material. He said:

I love [my tutor] to death, it is just wonderful...sometimes just hearing it [the material] explained differently is helpful to me. Maybe the way the tutor explains it is different enough that I get it. They kind of fill in a couple of blanks based on their experience. They tell you what they have seen happen or what they think is important to know what you do not have to worry about as much. So, reiterating what the professor says...but with more individualized attention.

It seems that while study participants felt that they received an introduction to the material in class, they relied on tutoring to help them fully understand the concepts. Both Michael and Katherine felt that they had low math skills because of their high school academic backgrounds and because of the gap between when they graduated high school and began attending college. Both felt that it was in tutoring that they got the academic support that they needed. While neither blamed their professors for their struggles, they both expressed frustration with the perceived attitude that they should know the material already, and it should be a refresher. In contrast, Katherine felt that her tutor was willing to explain the material until she got it:

Usually, they just try to find a different way to explain the concept. With math, they will have you try to do one equation. If I tell them that I do not understand what they are talking about, they will try and find a different way to explain it. So instead of saying, you just clear the fractions. They will write out the steps of multiplication. I cannot do that in my head. Sometimes, even after that, I will not understand, and they will come up with yet another way to explain it to me.

Likewise, Michael also appreciated the repetition of math problems that he had in tutoring when asked to describe what helped. He stated:

Having more opportunities to do problems. In discussion and lecture, you do one problem, and you go through it. There is one example you have in the book, but if you don't catch it in the lecture-having [tutor name] do two different problems and then the problem you did in the lecture in front of you, and you can ask questions is great. It is a slower pace as well, and he walks you through that.

Allowing students to hear material repeatedly is one reason tutoring can serve as an effective resource. In addition to the repetition of material, study participants also felt that the practice they did in sessions was helpful.

Practice with the material. Study participants appreciated the chance to practice or work out problems in an environment with low stakes. This practice seemed to be used and appreciated in math courses. Michael, David, Sara, Katherine, and Alexis used tutoring for a mathematics course. While all identified that they went through practice questions in their lecture, all of them said that at most, they were able to go through one practice question. In tutoring, they would work on similar problems until everyone in their tutoring session understood the concept. Katherine talked about how the perceived low-stakes environment made her more comfortable practicing math in a group:

For math, [my tutor] will have us write on the board and have us do a problem, and while it is scary, it isn't scary like in front of a class because there are just a couple of you there and it is more of a learning experience. You know it is going to be fine if you do something wrong.

The low-stakes atmosphere of tutoring allowed the study participants an opportunity that they did not feel that they had in large lecture classes. Learning math is a developmental process (Taylor & Brooks, 1986), which requires practice and time, two things that may not be available in a traditional classroom setting. For adults, this practice time can help them to overcome some of the anxiety they may have about being a student.

Asking and answering questions. Study participants perceived questioning as occurring two ways in tutoring. First, they were able to ask questions of their tutors to understand material they were uncertain about. Students also perceived that their tutors would ask questions of them to ensure that they understood the material. Participants credited the questions they asked helped their learning process.

Four of the study participants perceived that tutoring helped them because it was a place that they could feel comfortable asking questions. Seven study participants admitted that they did not like asking questions during lectures and saved any questions they had about the material for

tutoring sessions. David felt that tutoring offered a better environment for him to ask questions because it was much smaller than his lecture:

I do not ask questions in lecture because there are 200 kids in it. I can guarantee that if I asked questions, others would have the same questions, but I do not do it. So, in tutoring, I like that I get the chance to ask questions in a low-key way...I think I like the open floor just to be able to ask questions. With fewer people, I felt way more comfortable to say wait. What did you do there?

Many universities use a large lecture format in their 100- and 200-level courses. Tutoring can help serve as a supplement to the lecture and give students a chance to ask their questions.

In addition to having the ability to ask questions of their tutors, six study participants also perceived that their tutors used questions to help guide their sessions. There were three different forms of questions identified: (a) asking leading questions to engage students with the learning, (b) using online technology to engage participants, and (c) asking students to describe their struggles.

Tutors used questions to tease answers out of their students. Two study participants identified this as one of the things that helped the most with their comprehension of the material. Sara said:

The best tutors do not tell you; they will tease answers out of you. They will ask [questions] ...And so, in the end, you realize that you knew all along. I am actively learning, especially when they tease it out of me. It builds up my confidence, and it helps me to remember things more rather than listening and thinking, that makes sense.

Sara's example shows how tutoring can engage students in their learning more than sitting in a large lecture course listening to a professor go through examples without their participation.

Like Sara, Michael's tutor also used questions to get students to understand the steps they needed to do to complete a math equation:

[The tutor] would lead [the sessions] but they would also ask questions of us students. Like does anyone know what the next step is? So, he would then give any student an opportunity to say things, if nobody said anything, then he would go forward, and he did it at a good pace. It was never uncomfortable.

Like Sara's tutor, Michael's tutor used these questions to invoke participation in his sessions.

While using questions in this way is important, it is just as important for tutors to ask questions of their students to see what they are struggling with in their courses.

Besides asking students questions in person, Katherine's tutor also used an online site to ask her students questions about sociology to gauge their level of knowledge and to help them prepare for upcoming exams. Katherine described the difference between doing problems on the board in front of other students like she did in her math tutoring and using Kahoot! (an online game and trivia site):

For sociology and anatomy, they will use Kahoots. I did not even know what that was, but it is cool because it makes you think quickly and try and test your knowledge without looking at your notes. It is a good learning tool... and my tutor sent me the link to the Kahoot so I could sit on my couch at home and do it again and again.

By bringing technology into their sessions, tutors can provide their students with an engaging learning experience in their sessions while also providing them with materials to help them study in the future. Tutors must ensure that they are meeting the needs of the students who use tutoring and can do so by asking questions.

Five study participants perceived that their tutors wanted to ensure that they were giving them the help that they truly needed, and so they would ask them to describe the struggles they were having in their courses. Two of the students who perceived that this was an important tool used by tutors to help them succeed were using tutoring for American Sign Language. Both Kari and Paul were in their first year of language studies and had come to the university with no background or knowledge of the language. Their tutors were deaf or hard of hearing, and so going to tutoring not only allowed them to study what they were learning in the classroom but also allowed them to communicate with a native speaker of the language. Kari's tutor for her

American Sign Language course would take the time to have conversations with her to help her improve her conversational skills:

[My tutor] asks me how I am doing with actual conversations with a deaf person, and I told him that it is not the greatest. So, he said, tell me about your family, tell me about your work, where do you live? We do a little conversation, like two minutes here or five minutes there.

These conversations led by her tutor helped Kari more than the information that the tutor may have prepared for their session because it was relevant to Kari's development as a student. Paul tutor would use a similar technique with him, asking him about the signs used to identify the ingredients on a hamburger. He said:

[My tutor] is a 20-year-old dude... It sounds kind of mundane, but the stuff you have when you eat a hamburger: ketchup, salt, mustard, and pepper. The sign for ketchup in our book is [cat and up], and he looked at that and shook his head. He used [hitting a ketchup bottle] and said, that is the only way I have ever seen it... [My tutor] may have a variation to that, and getting those variations is amazing- it really helps you when you are trying to understand someone else who might use some regional sign.

For both Kari and Paul, working closely with a tutor who has more practical knowledge of the language, it gave them more practice with their language skills and made the learning that they were doing in tutoring more relevant to their life and career.

In this section, I presented both the academic support resources and tools provided by the tutor that study participants perceived helped them to persist. In the next section, I present the community support, which study participants perceived helped them to persist in their studies.

Adult Students' Perceptions of Community Support

The second research question for this study was: How does their community help adult students persist? Study participants identified that informal communities of support that they created both inside and outside of the university helped them to persist.

Informal community support is the support that students receive that is not intentionally designed or initiated by the university. While it is not intentional on the part of the university, in

many cases, it is highly important to the success of the students. Community support can come from the friendships that students make in tutoring or class, from spouses, and friends. Study participants reported finding informal support from other students in their courses, their spouses, and from online resources. Table 4.3 provides a summary of informal community support.

Table 4.3

Summary of Informal Community Support

Study Participant	Friendships with Other Students	Outside Relationships	Online Supports
Greg	NA	NA	NA
Andrew	X	NA	NA
Katherine	NA	NA	X
Kelly	NA	NA	X
James	X	NA	X
Alexis	NA	X	NA
Luis	X	NA	X
Sara	X	X-bad	X
Kari	X	X	X
David	X	NA	NA
Paul	X	Good and Bad	NA
Michael	X	X	X
Kyle	X	NA	NA

Friendships with Other Students

Nine study participants attempted to create friendships with other students. On-campus friendships can help students gain access to resources that they may have missed in class. However, none of the study participants reported having made any close friendships at the university. Kyle, David, and Kari all tried to create outside study groups without success. Most of the study participants described the friends they had made as a study buddy or a classmate.

Michael stated that he made a good friendship with a fellow student in his tutoring sessions. However, he did not perceive that the friendship would ever extend beyond tutoring:

We were the hardcore bunch; we were really into it [SI]. There was one girl, whom I would send homework back and forth, and anything [my tutor] went over in tutoring. One time she missed class; I shared my notes with her...I saw her as just a study buddy. I have not really developed any friendships here at the university.

While it seems like tutoring would be a good place for students to meet others in their same major or with similar interests, many felt that as adult students, it was hard for them to do so. Kelly tried to become friends with the other students in tutoring. However, she found that the age difference between her and the other students, the fact that she does not drink, and the distance she lived from campus made it difficult to do so.

A lack of friendships may increase student isolation on campus. However, Alexis did not want to form friendships with other students. She said, "I am 40. I am old enough to be your momma. I am not going to hang out with you." Alexis saw herself as an adult who was old enough to be the mother of some of the students in her session. For her and other study participants, they relied on the lives they had already built outside of the university.

Relationships Outside of the University

Three study participants reported that they found inspiration to complete their studies from the relationships they had outside of the university. This inspiration came from seeing models who had also succeeded in school as adults and from partners who gave support and even helped them with their coursework. These outside relationships served as important sources of inspiration to help the participants to persist. Alexis was a full-time student who also worked full-time while being a single parent raising a 7-year-old. When asked how she did it, she said:

It is something you see in the Black community. As a Black woman, you do not have an option. You are told that you can do it. Just hold your head down and do it. Breathe through it... You see your girlfriends, my god sister did it, my cousin did it, and my best

friend did it. All of them were able to do it. They are not going to allow you to say you cannot do it, you can, and you will. I get that motivation from them.

For Alexis, it was the larger community that she belonged to that helped her see that she could succeed in college. Paul received support for his academic success from his wife, who would audit the classes he was taking to help him study for his exams. This support was especially important for him because he "didn't want to be the creepy guy talking to the 20-year-old girls." At the same time, Paul was feeling isolated on campus; he also began to feel isolated from his friends. He described his relationship with his friends like this:

I have had a lot of friends during my work career, but I reached this point where I just figured out that all the friends, I have had for 20 years? They are jerks... So, I have pretty much put down all my old friends. Like, I am sorry, guys, bye, see you. And so now I am here. I think I have three friends at school. They are all like 20-year-old girls. It has just been a total reboot on my friends' space. So that is weird, luckily my wife is my best friend.

Paul's feelings of isolation on the campus and from his old friends had led him to consider dropping out of school, but he received support from professors who advocated for him to remain in school because his field needed more men in it. Paul also found support from his wife, who would audit the courses that Paul was taking for credit. His wife became his study partner and a resource that he could turn to as his personal life shifted.

Online Resources

In addition to human relationships, four study participants turned to online resources for academic support. After struggling to connect with his physics tutor, Luis decided to stop attending tutoring. Instead, he turned to a variety of online resources to help him study, including online quizzes that he found on Quizlet and Kahn Academy. Kari and Michael turned to YouTube to find help with their courses, and Michael also used math help websites and Kahn Academy for help but found that working with a tutor helped him much more than these sites did. While study participants used these resources to get extra help or as a place to practice math,

most did not see them as a replacement for tutoring. However, for adult students who may live too far away from campus or are unavailable during the offered tutoring hours, these sites may offer them some academic support.

For study participants, community has a variety of meanings. Their communities consisted of relationships that they formed within the university, relationships outside of the university, and online resources. For each of these categories of community, experiences varied. Some study participants found positive relationships while others struggled with identity. However, 12 of the 13 study participants were able to identify at least one community relationship that impacted their persistence. Study participants also identified the pathways they took as a student as being important to their success as a student.

Student's Pathway to Academic Success

The third research question was: What role do adult students play in their academic success? The study participants took on the role of the autonomous learner. They practiced their autonomy by advocating for academic support and creating their path to graduation. Table 4.4 shows how study participants used their autonomy to persist.

Table 4.4

Summary of Study Participants' Pathway to Academic Success

Study Participant	Finding Academic Support	Creating Own Path to Graduation
Greg	X	NA
Andrew	NA	NA
Katherine	X	X
Kelly	X	NA
James	X	X
Alexis	X	NA
Luis	NA	NA
Sara	X	X
Kari	X	X
David	NA	X
Paul	NA	NA
Michael	X	NA
Kyle	X	NA

Finding Academic Support

Nine of the study participants faced situations in which their courses did not have tutoring or other support services offered. Often in these cases, participants advocated for their needs to have them met.

One barrier that study participants faced in their academic life was that tutoring was not available for every course they take. When asked, three study participants commented that they assumed that tutoring would always be available. David had assumed that SI would be available for his math course and then came to find out that it was not. While he decided to drop the course, other study participants do the legwork necessary to find academic support for such courses, like Greg. Greg found that tutoring was not available for one of his computer courses.

At the beginning of the semester, knowing that he was going to struggle in the course, he went looking for someone to help:

There was no tutoring [for my computer course], and I went over there [to the tutoring center], and they looked at me like I was an alien. Like, no, we do not do that here. Go here [instead]. So, I went to this other office instead, and they did not tutor this course either. It just so happens that I was sitting there, and someone overheard my conversation, and [another student] said they could help me out. But I did all the legwork myself... I did rattle a few bones and said that this needs to change because this is hard stuff. It is difficult, and if you have never done it before, you get thrown into this thing where it is learning a new language, and the teacher does his best, but it isn't even remotely enough.

Greg's story conveys how hard it could be for the study participants to find support. The process led some study participants to feel frustrated, like James, who could not find the support he needed for his English course:

When I was still in English 100, I was willing to hire a tutor because I could not get an answer out of the university about where I could get help. The professor was very compassionate about everything and directed me to the writing center. But I had already gone to the writing center and had been told that there is no tutoring available for English 101...Eventually, I just dropped the course.

The two study participants whose stories are noted earlier, self-identified as having a disability along with David. All three study participants were willing to take on the role of finding the support that they felt they needed in order to succeed, but two (David and James) still faced barriers that caused them to drop the course. The determination of the participants to pass shines through in Alexis' story. She was determined to pass and made sure that she received the support she felt she was entitled to:

I am determined to get my degree, so I am very nosy. I need to pass math, and it was my goal to pass so I would listen to conversations, and I heard about the third floor [math tutoring offered by the department]. And I went up there and asked [about tutoring] ... And then I asked my instructor.... and she was like if I am not in my office, go here and ask for this... I refuse to fail; it is determination, and if I can't get it by looking at it and if I can't get it from the instructor and I have to pay back all this money, somebody's going to teach me how to do it. I refuse to pay back a student loan for something that I do not understand.

Alexis, like the other study participants, wanted to graduate. She understood that as an adult student, she needed support to be successful. While Alexis found the university offered the support that she needed, other study participants had to look outside of institutional channels to find the help that they needed. Three study participants also encouraged the other students in their courses to go to tutoring and were perplexed at how few students took advantage of the available services. These study participants were willing to find academic support and advocated for themselves with departments to find it.

Creating Their Path to Graduation

Of the 13 study participants, 12 were full-time students. The definition of a full course load at this university is 12 credits. While a student may be considered full-time at 12 credits, many institutions recommend that students take 15 credits to graduate in four years (Attewell & Monaghan, 2016). Two of the study participants chose to take less than 15 credits, one participant had changed his enrollment status from full- to part-time, and one participant had begun their academic journey as a part-time student before switching to full-time.

Five of the study participants had also transferred directly from 2- or 4-year universities. Of the five participants who had transferred directly from another university, only two came to the university with an Associate's degree, while Luis, who had gone to a community college, described the process of getting an Associate's as "not worth it." There are a multitude of decisions that adult students must make as they create their path to graduation.

Study participants have a variety of reasons for making these decisions, as David's story demonstrates. David is a National Guard member and was hoping to go on active duty:

I [was] not in too much of a rush when I first got here, I was like I want to get this as fast as I can, but now, I knock it out 12 credits at a time. That is a comfortable pace for me because I did take an extra class last semester, and I dropped it because I would always forget about it.

James, a military veteran, had similar sentiments:

It is a boring math class. Enough things are going on in my life where it was like, well, I will just try it again later. With having military benefits, I know that I do not have to tell mom I failed my classes. It is just Uncle Sam, and he is flipping the bill, so if it takes me three tries, it takes me three tries. It only hurts me. Sometimes, it is hard to maintain interest in school when the dollar amount is not affecting me.

While the experiences of David and James may differ from other students who are paying out of pocket for their academics, their stories do demonstrate some of the reasons that study participants made the academic decisions they did.

Katherine and Greg also had to make decisions about what to do in courses that they were failing. Instead of dropping these courses, both study participants chose to continue in the course. For Katherine to pass the class and to be able to move on to a credit-bearing math course, she had to get a C in the class. Having been homeschooled and out of school for over seven years, she found herself to be woefully underprepared to take a math course in college, even a remedial one. She said:

I am taking Math 98 [again]. I took it last semester and did not fail it but didn't pass the course with a C [grade]. I got a C-minus, so that was sad. I blame it on the fact that I was homeschooled until eighth grade, and then I went to an alternative high school, and the sciences were not a huge focus...I went to tutoring all last semester, and it just wasn't enough, this time around, I am currently at an A for the semester.

Greg faced a situation where, despite attending tutoring regularly, he was still failing one of the courses in his major. When asked what he was planning on doing about the situation, Greg said:

I am getting an F in the class despite the tutoring. I will probably end up with a D, so I have four As and then an F. I asked the professor why we had to memorize the formulas. I can look them up anywhere. I need to understand how to use them... I do not need this course for my career, so I don't care about it. So, I am making the best of it. If I must retake it, I will take it online.

The experiences of the study participants demonstrate some of the ways in which they took their learning into their own hands and ensure that the university is working for them. It

may seem paradoxical to discuss dropping or failing courses to persist, but for these students, it worked.

Summary of Findings

In this chapter, three major themes were presented that emerged from the study and answered the research questions: (a) adult students' perception of tutoring in their academic success, (b) adult students' perceptions of community support, and (c) the student's role in their academic success. The next chapter will analyze the findings, address study implications for practice, and offer directions for future research.

CHAPTER 5: DISCUSSION

This qualitative interpretive study sought to understand adult students' perceptions of how academic support services helped them to persist. Through interviews, study participants were given a chance to describe tools that they used to persist. The context for this study was a public four-year university in the Midwest where study participants used tutoring that was provided by a centralized tutoring center and by individual departments.

Adult student perceptions of how tutoring and other academic resources help them to persist have been under-researched. But as student populations move from those of the traditional 18-22-year-old demographics to an older population, this information will be vital for universities to understand. With the lack of studies in this area, there is a need for more research into how adults perceive tutoring helps them to persist. This chapter presents a discussion of the findings, resulting implications for faculty and administrators, and recommendations for future research.

Adult student persistence is a complex phenomenon. Adult students face many barriers that traditional-aged students do not. This study looked at three factors that may help increase adult student persistence. These factors were: a) tools, b) community, and c) roles. Tools were examined through the lens of tutoring. The tools included the academic supports study participants felt were helpful and why they were or were not helpful. In addition, tools included what support practices occur during the session the study participants felt helped them the most. The community was examined through the influences outside of tutoring that helped study participants to persist both other students at the university and their support systems outside of the university. Finally, the role that study participants take on themselves was examined, how that role helped them to persist and why this was important. To explain how these three

elements, interact and helped study participants increase their self-confidence and self- efficacy which helped increased their ability to persist, the theoretical framework presented in chapter 2 was used to guide this research study. While the sample size for this study was small, it builds on and adds to the body of research that attempts to explain adult student persistence.

The theoretical framework developed for this study was based on the work of Lev Vygotsky. The research questions were designed with the belief that tutoring (the tool) would help adult students to develop a community of learners at the university, and that they would take on the role of "learner." CHAT centers on three core ideas: 1) humans act collectively, learn by doing, and communicate in and via their actions; 2) humans make, employ, and adapt tools of all kinds to learn and communicate; and 3) community is central to the process of making and interpreting meaning—and thus to all forms of learning, communicating, and acting (Foot, 2014). The interview questions were designed with the belief that tutoring (the tool) would help adult students to develop a community of learners at the university and that the roles played during the session all played a vital part in student persistence. Each research question for the study attempted to answer the role the element of the framework plays in adult student persistence. A discussion of the findings is presented below.

Discussion

Each research question was answered, and themes were identified based on the interview analysis. After analyzing the interviews, two types of tools were found that helped the study participants to succeed in their courses. The first tool was the academic services that were provided by the university. These tools included tutoring and Supplemental Instruction offered by the centralized tutoring center as well as the extra credit that students may have received for

attending sessions and the exam reviews that were held by their tutors. In addition, study participants accessed department tutors and their TA's for more support.

Study participants described the actions and support practices that took place during their sessions and how they helped them to be academically successful. Support practices that study participants felt were the most helpful included the repetition of material, asking and answering questions and having the opportunity to practice the material with their tutor. These practices were an element of both sessions that were provided by centralized services and also departmental tutors.

Study participants stated that they received support from the outside community including their spouses. Study participants identified that they had attempted to make outside study groups with other students at the university but that their attempts had been unsuccessful. While some study participants professed that they did not care about the other students in their tutoring sessions, the actions that they took, by sharing resources and texting them information told another story.

Finally, study participants took on the role of autonomous learner and took control over how they studied, the number of credits they took, and in finding necessary academic support. A discussion of the findings is presented below.

Research Question One: Tools

The first research question was: How does tutoring help adult undergraduate students to overcome the barriers they face in persisting in their studies? Two themes were identified that answered this research question a) academic resources and b) support tools provided by the tutor.

Academic Resources

Study participants came from a wide variety of backgrounds. They ranged in age from their mid-20s to their 50s and came to the university and tutoring with a variety of goals that they wished to accomplish. Some of the study participants had been out of school for over 20 years while others had transferred from local two-year colleges, or other universities. Three of the study participants were hoping to continue the graduate school while the rest were planning on returning to workforce after receiving their bachelor's degree. From the interviews, two subthemes emerged related to the tools that study participants experienced in tutoring. The first theme was academic resources. Study participants used tutoring for different reasons (as a lifeline or as a refresher), and all 13 study participants credited tutoring with helping them to succeed academically. According to Markle (2015), a higher-grade point average positively influences adult student persistence. While not all study participants were passing all their courses, they self-identified as persisting in their studies. And, the study participants who had been unsuccessful in their courses, expressed confidence in their success the second time around. When asked about the courses they were not passing, all study participants claimed that with the help of tutoring they believed they would be successful. These study participants were confident that they would be able to access the necessary support that they needed to succeed. This confidence is needed because many students who repeat courses fail to ever earn their credentials (Van Campen, Sowers, & Strother, 2013).

While all the study participants had at least one successful tutoring experience, three participants also described experiences with tutoring that they found to be non-successful. In addition, two of the study participants, self-selected not to use tutoring for certain classes even though they knew it was available. This self-selection of seeking help shows how adults can

make decisions based on their own learning needs. All the study participants sought out help for the coursework. Research has shown that students with higher self-efficacy are more likely to seek help when struggling (Ryan, Gheen, & Midgely, 1998). While students who do not believe that they can be successful in their courses may see their struggle as proof that they will not succeed academically; students who believe that they can succeed may be more likely to seek out the help that they need. Seeking learning assistance is also more prevalent in students who can view seeking help as a learning strategy instead of a dependency behavior (Karabenick & Knapp, 1991). When asked how they found out about the availability of tutoring for their course, all study participants identified being told by either the tutor, or their instructor who encouraged them to attend. Perhaps, creating a system that encourages students to use tutoring proactively instead of reactively empowers students who may not have high self-efficacy to seek out the help that they need.

Study participants also reported that tutoring helped them to build their self-confidence and their self-efficacy. Three study participants mentioned that their self-confidence increased because tutoring helped them to study better by teaching them how to take and organize notes in a more effective manner. Academic study skills have been found to be fundamental to academic success (Crede & Kuncel, 2008; Gettinger & Seibert, 2002). Understanding how tutors can implement the teaching of these skills into a tutoring session may help universities to build more effective tutoring programs for adult students.

Study participants also identified tutoring as helping to increase their self-efficacy as it relates to their ability to succeed in school. Two of the study participants used tutoring specifically for their math course. Schoolcraft, Schneider, and Onwuegbuzie (2014) found that the number one reason given by faculty for why they placed a student in a developmental math

course was a time delay since completing a previous mathematics course. Being placed in a developmental math course may decrease adult's self-efficacy and beliefs that they will be able to succeed in college. Jameson and Fusco (2014) found that adult learners had significantly lower levels of math self-efficacy, but not differing levels of anxiety or concept than traditional students. Eleven of the thirteen study participants attended exam reviews for their courses. All the study participants reported that these reviews helped them to feel that they were better prepared to pass their tests, and that going to the reviews helped to reduce the anxiety they had. If tutoring can build adult students' sense of self-efficacy, it may be able to help these students to succeed. Working with a higher skilled peer was one of the biggest assets mentioned by the participants. Study participants also stated that tutoring had helped them to believe that they would succeed in college. An example of how tutoring helps build self-efficacy can be seen in how Alexis believed that as she began to succeed in her courses, she was motivated to continue in her studies. While she had been considering not returning, the grades that she received in her courses gave her the motivation to return for another semester. Likewise, Kim had been struggling in her science course. After seeing how much attending tutoring helps her, she was motivated to not only continue going to tutoring but also became an advocate for other students to attend as well.

A lack of self-confidence can be a barrier to adult student success. Like the women in Markle's (2015) study, Alexis was able to find the will to persist despite the many obstacles that she faced such as being a full-time employee, and a single mother. Study participants identified that they accessed a variety of different academic supports offered by the university. A discussion and analysis of the supports used next.

Study participants accessed support both from the centralized tutoring center and tutoring or other academic support provided by individual departments. Tutoring offered through a centralized tutoring system is more successful in helping developmental education students than services provided through noncentralized systems (Boylan, Bliss, & Bonham, 1997). Boylan et al found that students at four-year institutions participating in centralized developmental programs had higher first-term GPAs and higher cumulative GPAs than those participating in decentralized programs. Students participating in centralized programs were also more likely to pass developmental courses in English at two-year institutions and in mathematics at four-year institutions. There was no difference in rates of retention for those students participating in centralized or decentralized programs at four-year institutions. The study participants seemed to like having a diversity of services offered. No study participants mentioned a preference for tutoring over Supplemental Instruction or tutoring offered by the departments because there was no overlap between the tutoring offered by the centralized services and the tutoring offered by individual departments. Still, some study participants did mention the training differences between the department and centralized support tutors regarding the training and atmosphere surrounding tutoring offered by departmental tutors. According to Mohr (1991), most of the literature on tutor training agrees that the following topics should be covered in training sessions: a) tutoring techniques, study and questioning skills, b) other services available at the university, and c) needs of special populations suck as international students, differently abled students and adults.

Study participants also used a variety of academic resources to increase their understanding, including tutoring provided by other departments, their teaching assistants, and private tutoring. Ten of the thirteen study participants went to Supplemental Instruction (SI), but

most did not know the difference between small group tutoring and SI. No research has shown whether it is important for students to understand the difference between SI and tutoring but this research does add to the body of literature regarding the effectiveness of SI.

Tools Provided by the Tutor

Three subthemes emerged from the interviews regarding the tools that were provided by the tutors during the sessions. For this study, tools are defined as study skills and physical objects that tutors used during their sessions. When they were asked about the tools that they were provided, study participants did not focus on the physical objects that they were provided, but rather on the study skills that occurred. All the study participants identified repetition and practice with the material that occurred during their session as being helpful. Eleven of the thirteen study participants also identified asking and answering questions as being essential to making tutoring valuable.

Study participants repeatedly spoke about the importance of having space where they could ask questions. An environment where students can ask, and answer questions can be seen in the theories of Jerome Bruner's Scaffolding theory and the work of Lev Vygotsky's Zone of Proximal Development (ZPD). According to Vygotsky's ideas, the best learning happens in the area just beyond what the learner is capable of on his or her own (Clinton & Rieber, 2010). Wood, Bruner, and Ross (1976) built upon these ideas and described the process of scaffolding that happens based on the interactions that occur between an adult and child in a tutoring session.

If the social context is taken into account, it is usually treated as an instance of modeling and imitation. But the intervention of a tutor may involve much more than this. More often than not, it involves a kind of "scaffolding" process that enables a child or novice to solve a problem, carry out a task, or achieve a goal which would be beyond his unassisted efforts (p. 90).

Rosser-Mims, Dawson, and Saltiel (2017) tied the idea of scaffolding to adult education.

Because Vygotsky's cognitive and social development theory is aligned with the traditional

andrological practice of facilitation of learning. Facilitated learning recognizes that the learner brings s knowledge and experience to the table and then the tutor develops a scaffolded plan for knowledge acquisition with the learner Wood and Wood (1996) studied how the Zone of Proximal Development can be applied to tutoring. According to Wood & Wood, tutors should:

(a) provide instruction in the problem-solving context, (b) provide an immediate response to learner errors, (c) support successive approximations to competent performances by fading away, and (d) provide reminders of the learning goal. While the they described the basics of computer-mediated tutoring, the same rules may apply to in-person tutoring. Within the context of tutoring, the student reaches their new level of development through the interactions that occur in the tutoring sessions. To be able to do so, it requires that the tutor be aware of the developmental or academic level that their students are working at (Hedegaard, 2005).

Scaffolding is an outgrowth of Vygotsky's ideas that are of interest and value to academic support personnel searching for positive ways to help students learn. While Vygotsky's research focused on the learning and language development of children, certain aspects of his thought can be illuminating and useful in a tutorial setting to help adult students learn as well. Scaffolding is a support strategy that may be employed in collaboration between a tutor and a student at whatever age or grade level that students might be. Valkenburg (2010) explains the critical role that tutors play in student's mathematics learning:

Often, students have difficulty learning the technical jargon for a class. It is very important that they learn such terminology, but it is just as important to remember that many do not arrive in class predisposed to learning that terminology. An association must be intentionally made. During a tutoring session, whether using scaffolding or not, tutors should translate material into language that students can understand, followed by a restatement of the same material in more technical terms. (p. 36)

Study participants perceived that this repetition of material was one of the ways that tutoring helped them to succeed. Michael perceived that his tutor was able to break down hard math

concepts into easier to understand concepts. By serving as a translator, tutors can help adult students learn the necessary material. In addition to this vital role, tutors must be able to make a relationship with the students that come to their sessions. Forming relationships may be hard for tutors because some students may only come to sessions when they need help and not consistently.

All study participants perceived that their tutor cared about them and their academic success, which is backed up by research by Ray (2012). In Ray's research adult student's perception of care by faculty and other university staff was vital to adult student success. While Ray's research primarily had to do with the attitudes displayed by faculty and full-time staff, it has substantial implications for the work that tutors do. If adult learners feel that staff and faculty show that student success is important to them helps students to succeed, it can be assumed that a tutor who works weekly alongside the student should display the same concern for the students' success. Marx, Wolf, and Howard (2016) the greater perceived closeness between the tutor and the tuttee and the lower the level of conflict, the more tutees indicated that the tutor advanced their skills. individual skill development Getting support from people who they perceive they are close to, also shows how a community can impact adult persistence.

Research Question Two: The Role of Community

The second research question was: How does the community help adult students persist? The study participants reported that their community came from within the university, and existing relationships outside of the university. Study participants identified that they drew strength from their communities and received encouragement to finish their studies. Encouragement from home has been found to have a positive impact on persistence (Bergman, Gross, Berry, & Shuck, 2014).

The importance of community has been studied extensively, especially within the context of online education (Dawson, 2006; Lehman & Conceição, 2014; McInnerney & Roberts, 2004) and has been found to have a positive correlation to persistence (Skahill, 2002). Adult student participation in learning communities has been studied and been positively linked to student engagement (Zhao & Kuh, 2004). However, no research has examined the role of the communities of practice that are created during a tutoring session. These interactions and communities are essential and should be studied further. Three study participants identified that they had trouble interacting with other students in their sessions or at the university because of the age differences that existed between them. But despite this perception, the same study participants who identified that they were not comfortable socializing with younger students also identified ways in which they worked with the same students.

Many adult educators advocate that a university provides access to resources at times that are convenient for adult students. However, not a single study participant had any complaints about the accessibility of tutoring, despite most sessions being offered between 9:00 am and 5:00 pm from Monday to Friday. The reason that most study participants may have found access to tutoring to be acceptable is that 12 of the 13 study participants were attending school full-time, and all had classes on campus. In studies that have more part-time or online student participants, their feelings on access may differ significantly.

Interestingly, study participants did identify a preference for small or one-on-one tutoring sessions instead of small groups because they felt they were able to get more attention from their tutors. While students may prefer one-on-one tutoring small group (Gosser & Ross, 1998) and Supplemental Instruction (Hansen & Shelley, 2003), they have both been found to be effective forms of academic support.

Research Question Three

The third research question was: What role do adult students play in their academic success? Ten of the study participants identified autonomy that they had taken over their learning and academic achievement. According to Derrick and Carr (2013)"autonomous learning is the process in which the learner makes an intentional decision to assume the responsibility for a learning situation (p. 11)."

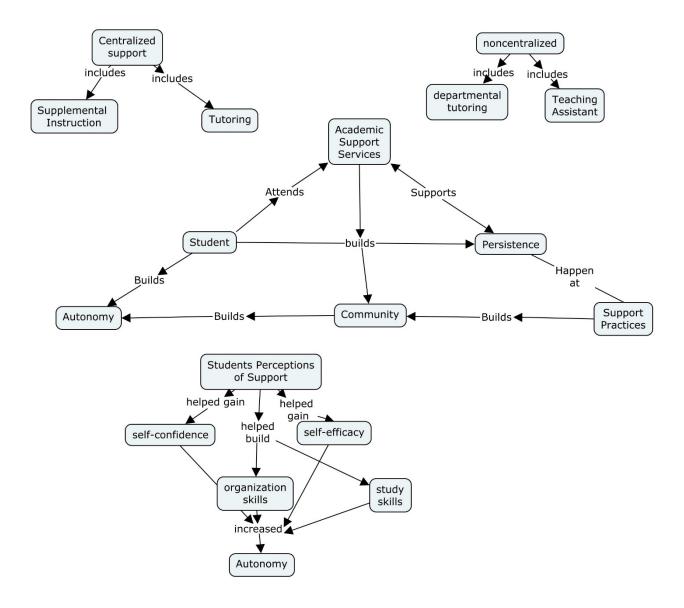
Learner autonomy has been widely studied within three broad fields of education. The first is foreign language acquisition (Kocak, 2003; Lee, 1998), which focuses on how students find the motivation to learn a second language. Second, classroom teaching (Guay, Ratellem, & Chanal, 2008; Osbourne & Jones, 2011; Reeve, 2006) focuses mostly on classroom teachers in the K-12 school arena and, finally, online education (Floyd & Casey Powell, 2004). Floyd and Casey Powell developed an Inclusive Student Service Process model for online education. Their model consists of five phases of support to help students succeed. One of the models' phases is the Learner Support Phase. During the learner support phase, students learn self-development strategies so that they can accept responsibility for developing their own skills. Critical support services during this phase are academic advising, instructional support and tutoring, library and bookstore services, disability services, and networking. Yen and Liu (2009) found that blended learning programs and counseling can help build learner autonomy, which have predicted community college course grades. An interesting note is that Holder (2007) found that within the context of online education, more autonomous learners were less likely to persist. The different roles that autonomy plays in online versus in-person education may say more about the nature of online education than the needs of students to take control of the direction of their education.

Tutors can help build students' self-reliance and learner autonomy through the use of specific techniques, including allowing students to ask questions and having the students provide their own description of the concept or problems that are being worked on in tutoring (Mcbride, 1995). Also, cooperative learning, which is the cornerstone of both small group and Supplemental Instruction, has been found to help students have higher levels of academic achievement and that students who study together learn more than those who study individually (Slavin, 1983). With the guidance of a trained tutor leading these group study sessions, the academic achievement should be higher for those to attend tutoring.

Summary of Themes: Building a Culture of Learner Autonomy

The revised theoretical framework shows how the three parts of the framework interact to increase student persistence.

Figure 5.1 Theoretical Framework Revisited



At the top of the triangle are academic support tools. Academic support and persistence support each other, when students use tutoring and other academic support, they begin to feel that they are more likely to persist and students who feel they will persist and continue to use academic support services. In addition, academic support services enable students to take control over their learning experience.

The support practices that occur during the session also help build persistence. As students learn study skills and work with other students, they begin to build a community on campus. This community can also create learner autonomy.

Vygotsky's theory the Zone of Proximal Development can explain how the efficacy built by support practices and community can help support autonomy. The Zone of Proximal Development is often used to explain child learning development. My study shows the connection between the efficacy developed in tutoring and learner autonomy. Vygotsky believed that development is not merely facilitated by social interaction but that social interactions fundamentally shape and transform the way we think (Cole & Wertsch, 1996). As adults begin to see they are succeeding in their course, this changes the way they think, and students start to believe that they are capable of success. This belief helps students to persist.

Implications for Practice

This research sought to understand adult students' perceptions of tutoring as an academic support tool. While it became clear that the study participants felt that tutoring had contributed to their academic success, it is not clear that tutors and administrators understand how vital adult students perceive this service. There are three practical implications for tutors that emerged from the research. Those implications were: 1) the need to understand barriers faced by adult students,2) training in skills to help adult students build their autonomy, and 3) information for how tutoring can help adult students feel more included on campus such as the resources available on campus.

Implications for Tutors

There are three implications for tutors that emerged from this research. First, it is important for tutors to understand the needs of adult students. Training them to understand the

barriers faced by adult students may help them to be able to better relate to the non-traditional aged students who come to their sessions. While tutors do not control the training they receive from on-campus tutoring programs, it is vital that this information be presented to tutors as universities continue to become more diverse.

The second implication for tutors is helping students to become more autonomous learners. Study participants perceived that tutoring was effective for them because tutoring provided them a safe place to ask questions about information that they found challenging and a place where they could get material repeated. Study participants also found that they learned good study skills while attending tutoring. Tutoring seemed to help these students to gain self-efficacy and take control of their own learning paths. This is important because tutoring is often focused on the first two years of coursework, or 100 and 200 level courses. A few study participants expressed their disappointment at discovering that tutoring was not available for upper level coursework. Murphy (2007) found that within the context of second language distance learning, the process of learner autonomy is often mediated through contact with a tutor. While many tutors may perceive that their job is to simply reteach material that students learn in class, their role in helping students learn how to learn may be even more important.

Finally, it is important that tutors understand how tutoring can help adult students to feel more included in the campus. This can happen in two ways, first and most obviously because as adult students begin to be more successful in their coursework, they begin to believe that they do belong in college. Secondly, Sandoval-Lucero, Maes, and Klingsmith (2014) found that campus engagement and support provides students with an important source of social capital which can lead to student persistence. It is important for tutors to understand the important role they play in building student relationships and engagement.

Implications for Administrators

There are three implications for administrators at college campuses. First, for administrators of learning centers is the need to provide tutor training. It is important for tutors to be trained in the needs of the adult students who may come to use their services. Adult learners have different needs than traditional aged students. They have often been out of school for many years and may need extra support. It is important to train tutors about these needs so that they can try and create sessions that are inclusive to the needs of adults. While the point of tutoring is to help build autonomous learners who have the academic skills to succeed without tutoring, Roscoe and Chi (2007) found that tutors often focus more on delivering knowledge rather than developing it. Working with trained tutors has been found to have a positive impact on course grades (Boylan, Bliss, & Bonham, 1997). To see results, tutors should be trained in shared decision-making processes with their students (Pomerance, 1990). A case study comparing learning center and departmental tutors (with the learning center tutors receiving more training) found that these tutors were better at invoking higher-level thinking out of their students (Bailey, 2010). Allen and Clarke (2007) found that the learning of subject-specific study skills led to confidence growth in adult students. While training tutors in pedagogical practices to improve their success is one aspect of training, there is also a need to train tutors in working with adults. Because adults come to college with unique barriers (Cross, 1981), tutors must be prepared to understand these barriers and how this may affect their learning. While traditional-aged students may be going to school full time, and this has it as their sole focus, many adults are facing competing needs for their time

The second implication is the obligation to offer proactive academic support services.

Twelve of the thirteen study participants had attended tutoring since the beginning of the

semester. Providing services to students before they begin to struggle academically may help students to persist by building their confidence. None of the students interviewed were forced to go to tutoring by a professor or adviser but went because they either felt they had a deficit in their academic preparedness for the coursework or because they wanted to enhance their learning. Supplemental Instruction is based around the idea of erasing the stigma surrounding remediation (Martin & Arendale, 1992). Tutoring that allows for mixed abilities groups will enable students of lower abilities to benefit not only from the guidance of their tutor but also the other students in their group.

Finally, this study shows the need to advertise and promote services to adult students. Three of the study participants mentioned that they were not aware of tutoring and that they had to seek out services on their own. While these adults were willing to do the leg work to find the support, they felt they needed, other students may not be able to. Ensuring that all students are aware of available services is a university's obligation to its students.

Future Research

Findings from this study serve as a platform for future research. This study did not attempt to segregate students based on their financial aid, parental, marital enrollment, gender, or age status (beyond the definition of an adult student). However, these important differences may show differences in attitudes towards working with tutors.

All study participants defined themselves as having persisted; however, most still had at least two more years of coursework before they would graduate. As many universities only provide tutoring for courses in the first two years, research should be conducted to see if adults who attend tutoring are more likely to graduate than those who do not. In addition, a quantitative

analysis that looked at the grades that students received in the courses they went to tutoring for and class that they did not may show the effectiveness of tutoring.

Study participants reported using services provided by both the centralized tutoring center and noncentralized services. Research into why students chose to use one service over another may help universities to provide services that truly support the academic needs of adult learners. Quantitative research that compares the final grades of students who used centralized tutoring to those who used decentralized services may show which tutoring is more effective.

A mixed-methods study of students' self-efficacy at the beginning and end of the semester (quantitative) and their perceptions of how they believe they will do in the class (qualitative) can provide more evidence that tutoring helps adults to become more autonomous. Finally, study participants attended either Supplemental Instruction or small group tutoring or both types of tutoring. A final area of research would be to compare the persistence and grade points of adult students who attended the different types of tutoring for the same class. The participants in this study were not able to differentiate between small group tutoring and Supplemental Instruction and chose to go to the support that best fit their schedule. However, a quantitative study of the final grades of students who only participated in small-group tutoring compared to students who attended Supplemental Instruction could show which form of tutoring is more effective.

Conclusion

As a researcher, conducting this study became a very personal journey for me. Having grown up in a family whose economic security was affected by my father's lack of a college degree it was heartening to see adults who were determined to succeed, and the impact that tutoring had on their experiences in college. As I struggled to write my dissertation and

sometimes thought about giving up, I often came back to the irony of not completing a dissertation about adult student persistence. The stories that my study participants were willing to share with me gave me the strength to continue the often-tedious research journey that I had begun. The adults who agreed to participate in my study, let me into their lives and shared stories of their struggles, and persistence. And it was my privilege to be able to share their stories and add to the body of research that will hopefully make college easier for other adults in the future.

REFERENCES

- Adams, P. (2006). Exploring social constructivism: Theories and practicalities. *Education*, 34(3), 243-257. https://doi.org/10.1080/03004270600898893
- Allan, J., & Clarke, K. (2007). Nurturing Supportive Learning Environments in Higher Education through the Teaching of Study Skills: To Embed or Not to Embed?. International Journal of Teaching and Learning in Higher Education, 19(1), 64-76.
- Arendale, D. (2001). Supplemental Instruction (SI): Review of research concerning the effectiveness of SI from The University of Missouri-Kansas City and other institutions from across the United States. In S. Mioduski & G. Enright (Eds.), *Proceedings of the 17th and 18th Annual Institutes for Learning Assistance Professionals: 1996 and 1997* (pp. 1-25). Tucson: University Learning Center, University of Arizona.
- Attewell, P., & Monaghan, D. (2016). How many credits should an undergraduate take? *Research in Higher Education*, *57*(6), 682-713. https://doi.org/https://doi.org/10.1007/s11162-015-9401-z
- Au, K. H. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of Literacy Research*, 30(2), 297-319. https://doi.org/10.1080/10862969809548000
- Bailey, G. K. (2010). Tutoring strategies: A case study comparing learning center tutors and academic department tutors. The University of North Carolina at Greensboro.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, *55*(4), 485-540. https://doi.org/10.3102/00346543055004485
- Bettinger, E. P., Boatman, A., & Long, B. T. (2013). Student supports: Developmental education and other academic programs. *The Future of Children*, 23(1), 93-115. https://doi.org/10.1353/foc.2013.0003
- Bergman, M., Gross, J. P., Berry, M., & Shuck, B. (2014). If life happened but a degree didn't: Examining factors that impact adult student persistence. *The Journal of Continuing Higher Education*, 62(2), 90-101. https://doi.org/10.1080/07377363.2014.915445
- Bolton, E. C., & Gregory, S. (2015). Minimizing attrition in online degree courses. *Journal of Educators Online*, 12(1), n1. Retrieved from https://www.thejeo.com/archive/2015_12_1/boton_gregory

- Bowles, T. J., McCoy, A. C., & Bates, S. C. (2008). The effect of Supplemental Instruction on timely graduation. *College Student Journal*, 42(30), 853-859. Retrieved from https://www.questia.com/library/journal/1G1-182975279/the-effect-of-supplemental-instruction-on-timely-graduation
- Boylan, H. R., Bliss, L. B., & Bonham, B. S. (1997). Program components and their relationship to student performance. Journal of Developmental Education, 20, 2-9.
- Brock, T., & Richburg-Hayes, L. (2006). *Paying for persistence: Early results of a Louisiana scholarship program for low-income parents attending community college*. New York, NY: MDRC. Retrieved from https://eric.ed.gov/?id=ED491719
- Brown, J. M. (2008). The influence of coping styles on the persistence decisions among adult students at a two-year vocational college (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (3331370).
- Brown, P. (2012). *Degree attainment for adult learners*. Washington, DC: American Council on Education.
- Bruner, J. S. (1966). Toward a theory of instruction. Cambridge, MA: Harvard University Press.
- Buchanan, E. M., Valentine, K. D., & Frizell, M. L. (2019). Supplemental Instruction: Understanding academic assistance in underrepresented groups. *The Journal of Experimental Education*, 87(2), 288-298. https://doi.org/10.1080/00220973.2017.1421517
- Campbell, E. B. (2016). The remedial math process: Age and other factors affecting attrition among students in community colleges (Doctoral dissertation). Retrieved from University of New Orleans Theses and Dissertations. (2248).
- Capps, R. (2012). Supporting adult-student persistence in community colleges. *Change: The Magazine of Higher Learning*, 44(2), 38-44. https://doi.org/10.1080/00091383.2012.655218
- Carnevale, A. P., Smith, N., & Strohl, J. (2010, June). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved from https://cew.georgetown.edu/cew-reports/help-wanted/
- Carney-Crompton, S., & Tan, J. (2002). Support systems, psychological functioning, and academic performance of nontraditional female students. *Adult Education Quarterly*, 52(2), 140-154. https://doi.org/10.1177/0741713602052002005
- Chavis, C. R. (2014). Factors promoting success of nontraditional black female students in higher education (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (1553436034).

- Chen, C., & Liu, C. C. (2011). A case study of peer tutoring program in higher education. *Research in Higher Education Journal*, 11, 1-10. Retrieved from http://aabri.com/manuscripts/11757.pdf
- Chen, J. C. (2017). Nontraditional adult learners: The neglected diversity in postsecondary education. *SAGE Open*, 7(1). https://doi.org/10.1177/2158244017697161
- Chen, X. (2016). Remedial coursetaking at U.S. public 2- and 4-year institutions: Scope, experiences, and outcomes (NCES 2016-405). Washington, DC: National Center for Education Statistics. Retrieved from https://files.eric.ed.gov/fulltext/ED568682.pdf
- Chenail, R. J. (2011). Ten steps for conceptualizing and conducting qualitative research studies in a pragmatically curious manner. *The Qualitative Report*, 16(6), 1715-1730. Retrieved from https://nsuworks.nova.edu/tqr/vol16/iss6/13
- Cleary, M. N. (2011). How Antonio graduated on out of here: Improving the success of adult students with an individualized writing course. *Journal of Basic Writing*, 30(1), 34-63. Retrieved from https://eric.ed.gov/?id=EJ944153
- Cleveland, J. P. (2008, December 19). What Socrates would say to undergraduate tutors. *Chronicle of Higher Education*. Retrieved from https://www.chronicle.com/article/What-Socrates-Would-Say-to/18857
- Clinton, G., & Rieber, L. P. (2010). The studio experience at the University of Georgia: An example of constructionist learning for adults. *Educational Technology Research and Development*, 58(6), 755-780. https://doi.org/10.1007/s11423-010-9165-2
- Cole, M., & Wertsch, J. V. (1996). Beyond the individual-social antinomy in discussions of Piaget and Vygotsky. Human development, 39(5), 250-256.
- Comings, J. P. (2007). Persistence: Helping adult education students reach their goals. *Review of Adult Learning and Literacy*, 7(2), 23-46. Retrieved from https://lincs.ed.gov/professional-development/resource-collections/profile-265
- Conceição, S. C., & Lehman, R. M. (2016). Students' perceptions about online support services: Institutional, instructional, and self-care implications. *International Journal on E-Learning*, 15(4), 433-443. Retrieved from http://www.learntechlib.org/p/130344/
- Cooper, E. (2010). Tutoring center effectiveness: The effect of drop-in tutoring. *Journal of College Reading and Learning*, 40(2), 21-34. https://doi.org/10.1080/10790195.2010.10850328
- Coulter, X., & Mandell, A. (2012). Adult higher education: Are we moving in the wrong direction? *The Journal of Continuing Higher Education*, 60(1), 40-42. https://doi.org/10.1080/07377363.2012.649133
- Credé, M., & Kuncel, N. R. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. Perspectives on psychological science, 3(6), 425-453.

- Croft, R. (2016). The influence of spousal support on Air Force Senior Noncommissioned Officers' pursuit of a Bachelor's degree: A hermeneutic phenomenological study (Doctoral dissertation). Retrieved from Doctoral Dissertations and Projects. (1307).
- Cross, K. P. (1981). Adults as learners: Increasing participation and facilitating learning. San Francisco, CA: Jossey-Bass.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* Thousand Oaks, CA: SAGE.
- Dauer, R. A. (2015). Help wanted: An analysis of the influence of student support programs upon the academic success of nontraditional students (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (1733669888).
- Dawson, S. (2006). A study of the relationship between student communication interaction and sense of community. The Internet and Higher Education, 9(3), 153-162.
- Deggs, D. (2011). Contextualizing the perceived barriers of adult learners in an accelerated undergraduate degree program. *Qualitative Report*, 16(6), 1540-1553. Retrieved from http://www.nova.edu/ssss/QR/QR16-6/deggs.pdf
- Denzin, N. K. (2010). Moments, mixed methods, and paradigm dialogs. *Qualitative Inquiry*, 16(6), 419-427. https://doi.org/10.1177/1077800410364608
- Derrick, M. G., & Carr, P. B. (2003). Facilitating and understanding autonomy in adult learners. New Horizons in Adult Education and Human Resource Development, 17(2), 4-10.
- Deutsch, N. L., & Schmertz, B. (2011). "Starting from ground zero": Constraints and experiences of adult women returning to College. *The Review of Higher Education*, 34(3), 477-504. https://doi.org/10.1353/rhe.2011.0002
- Dibley, L. (2011). Analyzing narrative data using McCormack's lenses. *Nurse Researcher*, *18*(3), 13-19. https://doi.org/10.7748/nr2011.04.18.3.13.c8458
- Drake, R. G. (2011). Why should faculty be involved in supplemental instruction?. College Teaching, 59(4), 135-141.
- Droege, K. M. (2007). *Nontraditional students' perceptions of student support services at the University of Wisconsin-Stout* (Unpublished doctoral dissertation). University of Wisconsin-Stout, Menomonie.
- Duquaine-Watson, J. M. (2007). "Pretty darned cold": Single mother students and the community college climate in post-welfare reform America. *Equity & Excellence in Education*, 40(3), 229-240. https://doi.org/10.1080/10665680701334785
- Duran, R., & Gauvain, M. (1993). The role of age versus expertise in peer collaboration during joint planning. Journal of Experimental Child Psychology, 55, 227–242.

- Duran, D., & Monereo, C. (2005). Styles and sequences of cooperative interaction in fixed and reciprocal peer tutoring. *Learning and Instruction*, 15(3), 179-199.
- Elliott, R., & Timulak, L. (2005). Descriptive and interpretive approaches to qualitative research. In J. Miles & P. Gilbert (Eds.), *A handbook of research methods for clinical and health psychology* (pp. 147-159). New York, NY: Oxford University Press.
- Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first-generation students. Washington, DC: The Pell Institute.
- Erlingsson, C., & Brysiewicz, P. (2013). Orientation among multiple truths: An introduction to qualitative research. *African Journal of Emergency Medicine*, *3*(2), 92-99. https://doi.org/10.1016/j.afjem.2012.04.005
- Floyd, Deborah L., and Deborah Casey-Powell. "New roles for student support services in distance learning." New directions for community colleges 2004.128 (2004): 55-64.
- Foot, K. A. (2014). Cultural-historical activity theory: Exploring a theory to inform practice and research. *Journal of Human Behavior in the Social Environment, 24*(3), 329-347. https://doi.org/10.1080/10911359.2013.831011
- Forbus, P., Newbold, J. J., & Mehta, S. S. (2011). A study of non-traditional and traditional students in terms of their time management behaviors, stress factors, and coping strategies. *Academy of Educational Leadership Journal*, 15(S1). https://www.questia.com/library/journal/1G1-273616190/a-study-of-non-traditional-and-traditional-students
- Fowler, P. R., & Boylan, H. R. (2010). Increasing student success and retention: A multidimensional approach. *Journal of Developmental Education*, *34*(2), 2-10. Retrieved from https://www.jstor.org/stable/42775357
- Gallard, A. J., Albritton, F., & Morgan, M. W. (2010). A comprehensive cost/benefit model: Developmental student success impact. *Journal of Developmental Education*, 34(1), 10-12, 14, 16, 18, 25. Retrieved from https://www.jstor.org/stable/42775934
- Galletta, A. (2013). Mastering the semi-structured interview and beyond: From research design to analysis and publication. New York: New York University Press.
- Genco, J. T. (2007). Adult re-entry students: Experiences preceding entry into a rural Appalachian community college. *Inquiry*, 12(1), 47-61. Retrieved from https://files.eric.ed.gov/fulltext/EJ833905.pdf
- Gettinger, M., & Seibert, J. K. (2002). Contributions of study skills to academic competence. School Psychology Review, 31(3), 350-365.
- Giancola, J. K., Grawitch, M. J., & Borchert, D. (2009). Dealing with the stress of college: A model for adult students. *Adult Education Quarterly*, *59*(3), 246-263. https://doi.org/10.1177/0741713609331479

- Gibbons-Anderson, J. L. (2012). Academic support and student success: An examination of the efficacy of an interdisciplinary student success center at a California community college (Doctoral dissertation). Retrieved from ProQuest Theses and Dissertations. (3542035).
- Gilardi, S., & Guglielmetti, C. (2011). University life of non-traditional students: Engagement styles and impact on attrition. *Journal of Higher Education*, 82(1), 33-53. https://doi.org/10.1353/jhe.2011.0005
- Gill, P. M. (2017). The power of perseverance: A qualitative study of factors that impact adult student persistence to graduation (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (1948879924).
- Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). London, UK: Pearson.
- Gosser, D. K., & Roth, V. (1998). The workshop chemistry project: Peer-led team-learning. Journal of Chemical Education, 75(2), 185.
- Gravel, C. A. (2012). Student-advisor interaction in undergraduate online degree programs: A factor in student retention. *NACADA Journal*, *32*(2), 56-67. https://doi.org/10.12930/0271-9517-32.2.56
- Green, N. A. (2015). Finish the game: A study of adult student persistence in bachelor's programs (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (1709262346).
- Griffin, M. M., & Griffin, B. W. (1998). An investigation of the effects of reciprocal peer tutoring on achievement, self-efficacy, and test anxiety. *Contemporary Educational Psychology*, 23(3), 298-311. https://doi.org/10.1006/ceps.1998.0971
- Grillo, M. C., & Leist, C. W. (2013). Academic support as a predictor of retention to graduation: New insights on the role of tutoring, learning assistance, and Supplemental Instruction. *Journal of College Student Retention: Research, Theory & Practice, 15*(3), 387-408. https://doi.org/10.2190/cs.15.3.e
- Grizzard, J. (2019). The impact of Supplemental Instruction in higher education. Retrieved from: http://hdl.handle.net/10211.3/211235
- Haddow, G. (2013). Academic library use and student retention: A quantitative analysis. *Library & Information Science Research*, *35*(2), 127-136. https://doi.org/10.1016/j.lisr.2012.12.002
- Hagedorn, L. S. (2015). Engaging returning adult learners in community colleges. In S. R. Harper & S. J. Quaye (Eds.), *Student engagement in higher education: Theoretical perspectives and practical approached for diverse populations* (2nd ed., pp. 307-322). New York, NY: Routledge.

- Halcrow, C. L. (2004). The perceived function and effectiveness of a math learning center. The University of North Dakota.
- Hardin, C. J. (2008). Adult students in higher education: A portrait of transitions. *New Directions for Higher Education*, 2008(144), 49-57. https://doi.org/10.1002/he.325
- Harpe, J. M. & Kaniuka, T. (2012). An analysis on retention among traditional and non-traditional students in select North Carolina community colleges. In T. Hicks & A. Pitre (Eds.), *Research studies in higher education: Educating multicultural college students* (pp. 249-270). Lanham, MD: University Press of America.
- Hedegaard, M. (2005). The zone of proximal development as basis for instruction. In H. Daniels (Ed.), *An introduction to Vygotsky* (pp. 227-251). New York, NY: Routledge.
- Hensen, K. A., & Shelley, M. C. (2003). The impact of supplemental instruction: Results from a large, public, midwestern university. Journal of College Student Development, 44(2), 250-259.
- Holder, B. (2007). An investigation of hope, academics, environment, and motivation as predictors of persistence in higher education online programs. The Internet and higher education, 10(4), 245-260
- Holloway, I., & Biley, F. C. (2011). Being a qualitative researcher. *Qualitative Health Research*, 21(7), 968-975. https://doi.org/10.1177/1049732310395607
- Horn, L. J., & Carroll, C. D. (1996). *Nontraditional undergraduates: Trends in enrollment from* 1986 to 1992 and persistence and attainment among 1989-1990 beginning postsecondary students (NCES 97-578). Washington, DC: National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs/97578.pdf
- Hurley, M., Jacobs, G., & Gilbert, M. (2006). The basic SI model. *New Directions for Teaching and Learning*, 2006(106), 11-22. https://doi.org/10.1002/tl.229
- Jameson, M. M., & Fusco, B. R. (2014). Math anxiety, math self-concept, and math self-efficacy in adult learners compared to traditional undergraduate students. *Adult Education Quarterly*, 64(4), 306-322. https://doi.org/10.1177/0741713614541461
- Jan, S. K. (2015). The relationships between academic self-efficacy, computer self-efficacy, prior experience, and satisfaction with online learning. *American Journal of Distance Education*, 29(1), 30-40. https://doi.org/10.1080/08923647.2015.994366
- Jimenez, L., Sargrad, S., Morales, J., & Thompson, M. (2016, September). *Remedial education: The cost of catching up.* Washington, DC: American Center for Progress. Retrieved from https://cdn.americanprogress.org/wp-content/uploads/2016/09/12082503/CostOfCatchingUp-report.pdf

- Karabenick, S. A., & Knapp, J. R. (1991). Relationship of academic help seeking to the use of learning strategies and other instrumental achievement behavior in college students. Journal of educational psychology, 83(2), 221.
- Kasworm, C. E. (2010). Adult learners in a research university: Negotiating undergraduate student identity. *Adult Education Quarterly*, 60(2), 143-160. https://doi.org/10.1177/0741713609336110
- Kilgore, D., & Rice, P. J. (2003). New directions for inquiry and practice. *New Directions for Student Services*, 2003(102), 89-92. https://doi.org/10.1002/ss.93
- Kimmel, S. B., Gaylor, K. P., & Hayes, J. B. (2016). Age differences among adult learners:

 Motivations and barriers to higher education. *Academy of Business Research Journal, 4*, 18-44. Retrieved from https://www.researchgate.net/publication/313967210_Age_Differences_among_Adult_L earners_Motivations_and_Barriers_to_Higher_Education
- Kinzie, J., Palmer, M., Hayek, J., Jacobs, S. A., & Cummings, H. (2004, September). Fifty years of college choice: Social, political, and institutional influences on the decision-making process. *Lumina Foundation for Education New Agenda Series*, *5*(3). Retrieved from https://www.luminafoundation.org/files/publications/Hossler.pdf
- Koçak, A. (2003). A study on learners' readiness for autonomous learning of English as a foreign language (Doctoral dissertation, METU).
- Koszalka, T. A., & Wu, C-P. (2004). A Cultural-Historical Activity Theory [CHAT] analysis of technology integration: Case study of two teachers. Washington, DC: Association for Educational Communications and Technology.
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683-706. https://doi.org/10.1353/csd.0.0099
- Kuo, Y. C., Walker, A. E., Belland, B. R., & Schroder, K. E. (2013). A predictive study of student satisfaction in online education programs. *The International Review of Research in Open and Distributed Learning*, 14(1), 16-39. https://doi.org/10.19173/irrodl.v14i1.1338
- Laskey, M. L., & Hetzel, C. J. (2011). Investigating factors related to retention of at-risk college students. *Learning Assistance Review*, 16(1), 31-43. Retrieved from https://eric.ed.gov/?id=EJ919577
- Lave, J., & Wenger, E. (2005). Practice, person, social world. In H. Daniels (Ed.), *An introduction to Vygotsky* (pp. 149-156). New York, NY: Routledge.
- Lehman, R. M., & Conceição, S. C. (2013). Motivating and retaining online students: Research-based strategies that work. John Wiley & Sons.

- Lee, I. (1998). Supporting greater autonomy in language learning.
- Littleton, K., & Light, P. (1999). *Learning with computers: Analysing productive interaction*. London, UK: Routledge.
- MacKinnon-Slaney, F. (1994). The adult persistence in learning model: A road map to counseling services for adult learners. *Journal of Counseling & Development*, 72(3), 268-275. https://doi.org/10.1002/j.1556-6676.1994.tb00933.x
- Markle, G. (2015). Factors influencing persistence among nontraditional university students. *Adult Education Quarterly*, 65(3), 267-285. https://doi.org/10.1177/0741713615583085
- Maroney, B. R. (2011). Exploring nontraditional adult undergraduate student persistence and non-persistence in higher education: A stress and coping model approach (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (3433448).
- Martin, D. C., & Arendale, D. R. (1992). Supplemental Instruction: Improving first-year student success in high risk courses. National Resource Center for The First Year Experience.
- Marx, J., Wolf, M. G., & Howard, K. (2016). A Spoonful of Success: Undergraduate Tutor-Tutee Interactions and Performance. Learning Assistance Review, 21(2), 85-108.
- McBride, P. (1995). Tutor Training Activities To Improve Student Self-Reliance.
- McInnerney, J. M., & Roberts, T. S. (2004). Online learning: Social interaction and the creation of a sense of community. Journal of Educational Technology & Society, 7(3), 73-81.
- Messia, J. (2012). Modeling self-regulation: Vygotsky and Bloom. In K. Agee & R. Hodges (Eds.), *Handbook for training peer tutors and mentors* (pp. 51–53). Oak Creek, WI: College Reading and Learning Association.
- Mitchell, M., Leachman, M., Masterson, K., & Waxman, S. (2018, October 4). *Unkept promises:* State cuts to higher education threaten access and equity. Washington, DC: Center on Budget and Policy Priorities. Retrieved from https://www.cbpp.org/research/state-budget-and-tax/unkept-promises-state-cuts-to-higher-education-threaten-access-and
- Mohr, E. (1991). A Study of Peer Tutor Training Programs: A League Report.
- Moore, R., & LeDee, O. (2006). Supplemental instruction and the performance of developmental education students in an introductory biology course. *Journal of College Reading and Learning*, *36*(2), 9-20. https://doi.org/10.1080/10790195.2006.10850184
- Müller, T. (2008). Persistence of women in online degree-completion programs. *The International Review of Research in Open and Distributed Learning*, 9(2). https://doi.org/10.19173/irrodl.v9i2.455

- Murphy, Linda (2007). Supporting learner autonomy: theory and practice in a distance learning context. In: Gardner, David ed. Learner Autonomy 10: Integration and support. Authentik books for language teachers, 10.
- Dublin, Ireland: Authentik Language Learning Resources Ltd, pp. 72–92.
- National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: The National Academies Press. https://doi.org/10.17226/24783
- National Survey of Student Engagement. (2010). *Benchmarks of effective educational practice*. Bloomington, IN: Indiana University Center for Postsecondary Research. Retrieved from http://nsse.indiana.edu/pdf/nsse benchmarks.pdf
- Neelands, M. L. (2014). Active-duty military online student retention and factors leading to attrition: A qualitative study (Unpublished doctoral dissertation). University of Phoenix, Phoenix, AZ.
- Newberry, R., & DeLuca, C. (2014). Building a foundation for success through student services for online learners. *Online Learning*, 17(4), 25-40. https://olj.onlinelearningconsortium.org/index.php/olj/article/view/385/58
- Ning, K. H., & Downing, K. (2010, December). The impact of supplemental instruction on learning competence and academic performance. Studies in Higher Education, 35, 921-939. https://doi.org/10.1080/03075070903390786
- Nordqvist, M., Hall, A., & Melin, L. (2009). Qualitative research on family businesses: The relevance and usefulness of the interpretive approach. *Journal of Management & Organization*, 15(3), 294-308. https://doi.org/10.5172/jmo.2009.15.3.294
- Oja, M. (2012). Supplemental instruction improves grades but not persistence. *College Student Journal*, 46(2), 344-350. Retrieved from https://www.questia.com/library/journal/1G1-297135952/supplemental-instruction-improves-grades-but-not-persistence
- Osborne, J. W., & Jones, B. D. (2011). Identification with academics and motivation to achieve in school: How the structure of the self influences academic outcomes. Educational Psychology Review, 23(1), 131-158.
- Paabo, M. V., Brijmohan, A., Klubi, T., Evans-Tokaryk, T., & Childs, R. A. (2019). Participation in peer-led supplemental instruction groups, academic performance, and time to graduation. *Journal of College Student Retention: Research, Theory & Practice*. Advance online publication. https://doi.org/10.1177/1521025119826287
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: SAGE.

- Peich, A. (2017). Figuring it out on their own: How rural adult online students negotiate barriers to learning online (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (10260217).
- Piland, K. N. (2018). Exploring retention from the perceptions of student veterans enrolled in community college (Doctoral dissertation). Retrieved from The University of Toledo Digital Repository. (1885).
- Pintrich, P. R., Smith, D. A., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ)*. Ann Arbor: University of Michigan, National Center for Research to Improve Postsecondary Teaching and Learning.
- Pomerance, A. (1990). A Collaborative Adult Literacy Training Workshop for Tutors and Students: The Student-Tutor Orientation.
- Potolsky, A., Cohen, J., & Saylor, C. (2003). Academic performance of nursing students: Do prerequisite grades and tutoring make a difference? *Nursing Education Perspectives*, 24(5), 246-250. Retrieved from https://journals.lww.com/neponline/Abstract/2003/09000/Academic_Performance_of_Nursing_Students__Do.8.aspx
- Prather, J. E., & Hand, C. A. (1986). *Retention of nontraditional students*. Paper presented at the annual meeting of the Southern Association for Institutional Research, Pipestem, WV.
- Price, J., Lumpkin, A. G., Seemann, E. A., & Bell, D. C. (2012). Evaluating the impact of supplemental instruction on short-and long-term retention of course content. *Journal of College Reading and Learning*, 42(2), 8-26. https://doi.org/10.1080/10790195.2012.10850352
- Price, K., & Baker, S. N. (2012). Measuring students' engagement on college campuses: Is the NSSE an appropriate measure of adult students' engagement? *Journal of Continuing Higher Education*, 60(1), 20-32. https://doi.org/10.1080/07377363.2012.649127
- Rabourn, K. E., Shoup, R., & BrckaLorenz, A. (2015, May 19). *Barriers in returning to learning: Engagement and support of adult learners* [PowerPoint slides]. http://cpr.indiana.edu/uploads/AIR 2015 Rabourn et al slides.pdf
- Ray, S. L. (2012). Perceptions of institutional policies and practices from the perspectives of underrepresented adult learners (Order No. 3528277). Available from ProQuest Dissertations & Theses Global. (1052514843). Retrieved from https://ezproxy.lib.uwm.edu/login?url=https://search-proquest-com.ezproxy.lib.uwm.edu/docview/1052514843?accountid=15078
- Reedy, D. (2012). Andragogy and self-directed learning. In K. Agee & R. Hodges (Eds.), Handbook for training peer tutors and mentors (pp. 51-53). Oak Creek, WI: College Reading and Learning Association.

- Reichwein, L., Schneider, C., & Onwuegbuzie, A. (2014). Instructors perceptions about student success and placement in developmental mathematics courses. The Community College Enterprise, 20(1), 67-84.
- Rheinheimer, D. C., Grace-Odeleye, B., Francois, G. E., & Kusorgbor, C. (2010). Tutoring: A support strategy for at-risk students. *Learning Assistance Review, 15*(1), 23-34. Retrieved from https://nclca.wildapricot.org/resources/Documents/Publications/TLAR/Issues/15_1.pdf
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, *130*(2), 261-288. https://doi.org/10.1037/0033-2909.130.2.261
- Roscoe, R. D., & Chi, M. T. (2007). Understanding tutor learning: Knowledge-building and knowledge-telling in peer tutors' explanations and questions. Review of educational research, 77(4), 534-574.
- Rose, A. D., Smith, M. C., Ross-Gordon, J., Schwartz, J., & Hitchcock, A. D. (2013). *Terms of engagement: Adults' experiences in higher education*. Paper presented at the Adult Education Research Conference, St. Louis, MO. Retrieved from https://newprairiepress.org/aerc/2013/papers/41
- Ross-Gordon, J., & Brown-Haywood, F. (2000). Keys to college success, as seen through the eyes of African American adult students. *The Journal of Continuing Higher Education*, 48(3), 14-23. https://doi.org/10.1080/07377366.2000.10400410
- Rosser-Mims, D., Dawson, G., & Saltiel, I. M. (2017). Vygotsky's influence on adult and higher education. In V. X. Wang (Ed.), *Theory and practice of adult and higher education* (pp. 423-438). Charlotte, NC: Information Age Publishing.
- Ribera, A. K., BrckaLorenz, A., & Ribera, T. (2012, June). *Exploring the fringe benefits of Supplemental Instruction*. Paper presented at the Association for Institutional Research, New Orleans, LA. Retrieved from http://cpr.indiana.edu/uploads/AIR%202012%20(SI%20Final).pdf
- Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. *The Internet and Higher Education*, 6(1), 1-16. https://doi.org/10.1016/s1096-7516(02)00158-6
- Russo-Gleicher, R. (2013). Qualitative insights into faculty use of student support services with online students at risk: Implications for student retention. Journal of Educators Online, 10(1), 1-32.
- Rust, D. Z., & Ikard, W. L. (2016). Prior learning assessment portfolio completion: Improved outcomes at a public institution. *The Journal of Continuing Higher Education*, 64(2), 94-100. https://doi.org/10.1080/07377363.2016.1177871

- Ryan, A. M., Gheen, M. H., & Midgley, C. (1998). Why do some students avoid asking for help? An examination of the interplay among students' academic efficacy, teachers' social—emotional role, and the classroom goal structure. Journal of educational psychology, 90(3), 528.
- Saldaña, J. (2016). The coding manual for qualitative researchers. Thousand Oaks, CA: SAGE.
- Sandoval-Lucero, E., Maes, J., & Klingsmith, L. (2014). African American and Latina (o) community college students' social capital and student success. College Student Journal, 48(3), 522-533.
- Sansone, C., & Smith, J. L. (2000). Interest and self-regulation: The relation between having to and wanting to. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 341-372). San Diego, CA: Academic Press.
- Schmidt, T. L. (2015). A phenomenological examination of nontraditional student insight on retention at a university (Unpublished doctoral dissertation). Grand Canyon University, Phoenix, AZ
- Serowick, J. A. (2017). A phenomenological description of Bachelor's degree completion for returning adult students (Unpublished doctoral dissertation). Indiana University of Pennsylvania, Indiana, PA.
- Shapiro, D., Dundar, A., Huie, F., Wakhungu, P. K., Bhimdiwala, A., & Wilson, S. E. (2018). *Completing college: A national view of student completion rates – Fall 2012 cohort* (Signature Report No. 16). Herndon, VA: National Student Clearinghouse Research Center. Retrieved from https://nscresearchcenter.org/wp-content/uploads/SignatureReport16.pdf
- Sivan, E. (1986). Motivation in social constructivist theory. *Educational Psychologist*, 21(3), 209-233. https://doi.org/10.1207/s15326985ep2103_4
- Skahill, M. P. (2002). The role of social support network in college persistence among freshman students. Journal of College Student Retention: Research, Theory & Practice, 4(1), 39-52.
- Skoglund, K., Wall, T. J., & Kiene, D. (2018, Spring). Impact of Supplemental Instruction participation on college freshman retention. *The Learning Assistance Review, 23*(1), 115-135. Retrieved from https://files.eric.ed.gov/fulltext/EJ1170114.pdf
- Slavin, R. E. (1983). When does cooperative learning increase student achievement?. Psychological Bulletin, 94(3), 429.
- Stanich, C. A., Pelch, M. A., Theobald, E. J., & Freeman, S. (2018). A new approach to supplementary instruction narrows achievement and affect gaps for underrepresented minorities, first-generation students, and women. *Chemistry Education Research and Practice*, 19(3), 846-866. https://doi.org/10.1039/c8rp00044a

- Stripling, J. (2010, December 7). Guilford grows up. *Inside Higher Ed*. Retrieved from https://www.insidehighered.com/news/2010/12/07/guilford-grows
- Taylor, J., & House, B. (2010). An exploration of identity, motivations, and concerns of nontraditional students at different stages of higher education. *Psychology Teaching Review*, *16*(1), 46-57. Retrieved from https://files.eric.ed.gov/fulltext/EJ891116.pdf
- Taylor, L., & Brooks, K. (1986). Building math confidence by overcoming anxiety: From theory to practice. *Adult Literacy and Basic Education*, 10(1), 1-5. Retrieved from https://files.eric.ed.gov/fulltext/ED272741.pdf
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237-246. https://doi.org/10.1177/1098214005283748
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education*, 68(6), 599-623.
- Tinto, V. (2012). Enhancing student success: Taking the classroom success seriously. Student Success, 3(1), 1-8. https://doi.org/10.1080/00221546.1997.11779003
- Topping, K. J. (1996). The effectiveness of peer tutoring in further and higher education: A typology and review of the literature. *Higher Education*, 32(3), 321-345. https://doi.org/10.1007/bf00138870
- University of Missouri-Kansas City. (n.d.). What is Supplemental Instruction? Retrieved from https://info.umkc.edu/si/
- Van Campen, J., Sowers, N., & Strother, S. (2013). Community College Pathways: 2012-2013 Descriptive Report. Carnegie Foundation for the Advancement of Teaching.
- Van Der Werf, M., & Sabatier, G. (2009, June). *The college of 2020: Students*. Washington, DC: Chronicle Research Services. Retrieved from http://www.jsu.edu/redballoon/docs/college2020-dl.pdf
- Van Keer, H., & Verhaeghe, J. P. (2005). Effects of explicit reading strategies instruction and peer tutoring on second and fifth graders' reading comprehension and self-efficacy perceptions. *The Journal of Experimental Education*, 73(4), 291-329. https://doi.org/10.3200/jexe.73.4.291-329
- Vance, L. K. (2016). Best practices in tutoring services and the impact of required tutoring on high-risk students (Unpublished doctoral dissertation). Eastern Kentucky University, Richmond.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

- Weissman, E. J. (2010). A study of the academic and life factors that contribute to attrition of male adult at-risk students attending for-profit degree-granting institutions (Unpublished doctoral dissertation). Capella University, Minneapolis, MN.
- Wertsch, J. V., & Tulviste, P. (1994). Lev Semyonovich Vygotsky and contemporary developmental psychology. In R. D. Parke, P. A. Ornstein, J. J. Rieser, & C. Zahn-Waxler (Eds.), *A century of developmental psychology* (pp. 333-355). Washington, DC: American Psychological Association. https://doi.org/10.1037/10155-026
- Wiggers, N. R., Rheysen, R., Ammeter, T., & Ponton, M. K. (2014, November). SI's role in promoting engagement in academics. *Supplemental Instructional Journal*, 1(1), 72-89. Retrieved from https://info.umkc.edu/si/wp-content/uploads/2015/09/siJVolumeOne.IssueOne.ConferenceProceedings.pdf
- Williams, B. V. (2007). Nontraditional female students' perceptions of factors influencing retention in a New England community college (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (304720750).
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem-solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100. https://doi.org/10.1111/j.1469-7610.1976.tb00381.x
- Wood, D., & Wood, H. (1996). Vygotsky, tutoring, and learning. Oxford Review of Education, 22(1), 5-16. https://doi.org/10.1080/0305498960220101.
- Yen, C. J., & Liu, S. (2009). Learner autonomy as a predictor of course success and final grades in community college online courses. Journal of Educational Computing Research, 41(3),
- Zerger, S., Clark-Unite, C., & Smith, L. (2006). How Supplemental Instruction benefits faculty, administration, and institutions. New Directions for Teaching and Learning, 2006(106), 63-72. 347-367.
- Zhao, C. M., & Kuh, G. D. (2004). Adding value: Learning communities and student engagement. Research in higher education, 45(2), 115-138.
- Zimmer, C. (2017). Achieving success for non-traditional students: Exploring the changing face of today's student population. New York, NY: Barnes & Noble College Insights. Retrieved from https://next.bncollege.com/wp-content/uploads/2017/01/Achieving-Success-for-Non-Traditional-Students-01-11-17.pdf

APPENDICES

Appendix A: Recruitment Letter

Greetings.

My name is Jen Filz, and I am a graduate student in the Urban Education Doctoral Program at the University of Wisconsin-Milwaukee. I am conducting research on how adult students use tutoring. I am emailing you to ask if you would like to participate in an interview that will take between 60-90 minutes. I am looking for participants who are:

- Over the age of 25
- Enrolled in a bachelor's degree program at [Midwest University] (non-degree students are not eligible)
- Used tutoring through [Academic Support Services] at least three times in Spring 2018 OR Fall 2018
- Willing to be interviewed for 60-90 minutes about their experiences using tutoring either in person or using zoom video conferencing.

Participation is completely voluntary, and your answers will be anonymous.

If you have any questions or would like to participate in the study, please do not hesitate to contact me at jmfilz@uwm.edu.

Thank you for your time.

Jen Filz Doctoral Student

Appendix B: Interview Guide

Interview Location:		
INTERVIEW QUESTIONS		
Section 1	Student background	
1.	Tell me how you learned about tutoring services?	
2.	Why did you decide to participate in tutoring?	
3.	How many classes have you used tutoring for? Can you please name them and the approximate number of times you have gone?	
4.	How often do you participate?	
5.	Do you consider going to tutoring to be a part of your course schedule?	
6.	Do you look to see if tutoring is available for a particular course before signing up?	

Section 2: How does tutoring help adult students to persist?

9. How far do you live from campus?

8. Do you have a family?

7. Are you an online student? Full-time or part-time?

Participant Pseudonym:

Date: Time:

- 1. Tell me about why you returned to school.
- 2. What was your biggest struggle returning to school?

10. Are you receiving extra credit for attending tutoring?

- 3. Reflect on your first tutoring session-tell me the story of what happened.
- 4. Tell me about a time when you have struggled in your course work and how tutoring helped you.
- 5. Tell me how tutoring has helped you to succeed in your classes
- 6. What were you hoping to get out of going to tutoring?

- 7. How do you think going to tutoring affected your classwork? Or completion of assignments
- 8. Tell me about the first time you went to tutoring, why did you go? Was it the beginning of the semester? Partly through the semester?
- 9. How often did you go to tutoring? And how did tutoring help you in your courses?
- 10. Reflect on your first tutoring session- tell me the story of what happened?

Section 3: How do adult students experience tools, community, and roles?

- 1. Tell me, what about tutoring has helped you the most as a student?
- 2. Describe your favorite peer tutoring session; what techniques did they use in that session?
- 3. If I went to a tutoring session with you, what would I see happening?
- 4. Did you go to SI or tutoring? If both were offered for your course, why did you choose the one you did?
- 5. What did you think tutoring was going to be like?
- 6. What was your relationship like with your tutor? How did your relationship change over the course of the semester? If you had more than one tutor, how did your relationship with them differ?
- 7. What was your relationship like with the other students in your tutoring session? Ho did your relationship with them change over the course of the semester?
- 8. Tell me about what activities happen in tutoring that are most helpful to you.
- 9. How does the tutor explain things that you might not understand?
- 10. How is your learning experience different in tutoring compared to class?
- 11. Did you attend exam reviews? If so, why? What did you find helpful about them? Did you attend it online? Why did you choose to go in person or online?
- 12. How satisfied are you with tutoring services? What could be improved?
- 13. How has attending tutoring affected your greater university experience?

Appendix C: Informed Consent

Study title	Adult Students' Perception of Tutoring as an Academic Support Tool		
Researcher[s]	Jen Filz/Doctoral Student Urban Education/School of Education		
	Simone C. O. Conceição, Professor & Department Chair - Adult,		
	Continuing, and Higher Education Administration		

We're inviting you to participate in a research study. Participation is completely voluntary. If you agree to participate now, you can always change your mind later. There are no negative consequences, whatever you decide.

What is the purpose of this study?

The purpose of this study is to determine how tutoring can help adult students to persist.

What will I do?

You'll be interviewed about your experiences using on-campus tutoring. The total interview time will be between 60 and 90 minutes

Risks

Possible risks	How we're minimizing these risks	
Some questions may be very personal or upsetting	You can skip any questions you don't want to answer.	
Breach of confidentiality (your data being seen by someone who shouldn't have access to it)	 All identifying information is removed and replaced with a study pseudonym. All electronic data will be stored on a password-protected, encrypted computer. All paper data will be stored in a locked filing cabinet. Identifying will be kept information separate from your research data, but I will be able to link it to you by using a study ID. I will destroy this link after I finish collecting and analyzing the data. 	

There may be risks we don't know about yet. Throughout the study, we'll tell you if we learn anything that might affect your decision to participate.

Other Study Information

Possible benefits	There are no direct benefits for the individuals; however, colleges and universities will benefit from the study because they will learn how adult students benefit from tutoring and how they can tailor tutoring to meet their needs. In addition, other adult students may benefit because universities will have a greater knowledge of their needs.
Estimated number of participants	12-18 students
How long will it take?	60-90 minutes
Costs	None
Compensation	None
Recordings	I will record you. The recordings will be used in order to create an accurate transcription of the interview. The recording is necessary to this research. If you do not want to be recorded, you should not be in this study. All recordings will be deleted after the transcriptions are completed.

Confidentiality and Data Security

We'll collect the following identifying information for the research:

Your name

Where will data be stored?	On a password-protected computer
How long will it be kept?	December 2020

Who can see my data?	Why?	Type of data	
The researcher	To analyze the data and	Recordings/transcriptions of	
	conduct the study	interviews	
The IRB (Institutional Review	To ensure we're	Recordings/transcriptions of	
Board) at UWM	following laws and	interviews	
The Office for Human	ethical guidelines		
Research Protections (OHRP)			
or other federal agencies			
Anyone (public)	If we share our findings	De-identified (no names, birthdate,	
	in publications or	address, etc.)	
	presentations	• If we quote you, we'll use a	
		pseudonym (fake name)	

Contact information:

For questions about the	Jen Filz	414-795-9746 or
research		jmfilz@uwm.edu
For questions about your	IRB (Institutional Review	414-229-3173 /
rights as a research	Board; provides ethics	<u>irbinfo@uwm.edu</u>
participant	oversight)	
For complaints or problems	Jen Filz	414-795-9746 or
		jmfilz@uwm.edu
	IRB	414-229-3173 /
		irbinfo@uwm.edu

Signatures	
If you have had all your questions answered and would like to participate in the lines below. Remember, your participation is completely voluntary, and y withdraw from the study at any time.	,
Name of Participant (print)	
Signature of Participant	Date

Jen Filz Curriculum Vitae

EDUCATION

Winona State University, Winona, MN

Degree: B.S., Secondary Social Studies Education, 2005

University of Wisconsin-Milwaukee, Milwaukee, WI

Degree: M.S., Administrative Leadership, 2013

University of Wisconsin-Milwaukee, Milwaukee, WI

Degree: Ph.D., Urban Education, Expected: August 2020

Dissertation Title: Adult Students' Perception of Tutoring as an Academic Support Tool

EMPLOYMENT HISTORY

Instructional Designer

The University of Wisconsin-Madison, Division of Extension November 2018-Present

- Work with Subject Matter Experts to design courses related to conservation including content, storyboards, and interactive activities
- Design courses developed to be delivered online
- Participate in conversations regarding course design and delivery
- Apply instructional design theories, practices and methods including ADDIE method and Agile design
- Created course evaluation to garner feedback from authentic users in order to redesign the current training course

Research Assistant

UW-Milwaukee DETA Research Center June 2017-November 2018

- Assisted with the creation of a research database related to online education
- Assisted on various qualitative research projects including coding of interviews
- Conducted literature reviews for upcoming research studies

Graduate Assistant, Technology Resources

UW-Milwaukee, Panther Academic Support Services January 2014-May 2018

- Trained tutors in the use of PASS' online tutoring platform- Blackboard Collaborate and use of Smartboards
- Coordinated all online tutoring sessions during the semester
- Coordinated all exam reviews, over 200 per semester

- Maintained communication with students about PASS services
- Managed all PASS' D2L sites.
- Designed a new departmental website on WordPress.
- Coordinated and ran online orientations for Panther Math Prep program (summers 2014 and 2015)
- Presented on PASS services at Transfer and Adult Student Orientations, New Student Orientation Parent Talks and New Student Orientation Meet and Greets

Intern, Instructional Curriculum Designer

Metso Minerals Industries Inc June 2013-January 2014

- Updated instructional materials for Metso machines
- Worked with the curriculum team and engineers to ensure that materials were up to date

PRAXIS Facilitator

Education Resource Center Coordinator

UW-Milwaukee, Education Resource Center February 2012-May 2013

- Coordinated services of the education resource center for the Office of Academic Services in the School of Education.
- Updated student transcripts with test scores, coordinated schedules with other student workers, answer student questions about School of Education testing requirements
- Ensured the website is updated with pertinent information and run reports.
- Responsible for facilitating monthly program orientations for the Praxis I and Praxis II tests
- Responsible for facilitating monthly program orientations for the Praxis I and Praxis II.
- Facilitated an e-mail study cycle to program participants and ensuring program participants take advantage of available resources.

Instructional Design Intern

Wisconsin Lutheran College January 2013-May 2013

- Worked with Business faculty to create online courses for the online Certified Financial Planning program.
- Created interactive videos on course content
- Designed course sites in Moodle LMS site

PUBLICATIONS AND PRESENTATIONS

- 2020: AAACE: Adult Students' Perception of Tutoring as an Academic Support Tool
- 2017: Wisconsin College Learning Center Association: Creating an Online Walk-In Tutoring Program
- 2016: Wisconsin Learning Assistance Network (WLAN) annual conference, UW-Stevens Point, co-presented: "Running a Successful Online Tutoring Program-Strategies, Hints, and Suggestions.
- 2015: Distance Teaching and Learning annual conference, Madison WI, co-presented: STRATEGIES FOR IMPLEMENTING ONLINE STUDENT SUPPORT SERVICES
- National College Learning Center Association (NCLCA) annual conference, Milwaukee WI: Co-presented: NCLCA 2014 Frank L. Christ Outstanding Learning Center Award Winner Presentation"

- National College Learning Center Association (NCLCA) annual conference, Milwaukee WI: Co-presented: The Magic of Multi-modal Student Support: Constructivist Theory Constructing Great Learning Centers
- Wisconsin Learning Assistance Network (WLAN) annual conference, UW-Oshkosh: Copresented: Using Online/Blended Academic Support and Technologies in College Learning Centers

PROFESSIONAL MEMBERSHIPS AND SERVICE

- Wisconsin College Learning Center Association (formerly WLAN), 2015-2018
- American Association of Adult and Continuing Educators member, 2018-