

ABSTRACT

Ready but Not Able: A Case Study of the Experiences of Three Adult Learners Repeatedly Enrolled in High School Equivalency Preparation Courses

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Adult learners enrolled in adult basic education (ABE) classes at community colleges who were hesitant to take high school equivalency (HSE) exams prevented themselves from progressing to college, new career opportunities, or achieving their academic goals. This narrative case study explored three students' educational experiences and unwillingness to take a particular HSE test, the GED, after completing at least 40 hours of preparation classes. The GED Testing Service (GEDTS), which provides the only entryway to taking the test, must move beyond offering excellent academic instruction and study guidance. The GEDTS must adopt strategies to connect with and help the test-averse students finally earn their credentials.

The three women in this study navigated many roles at once—learners, caregivers, employees—all while being thrust back into the classroom setting, which was an environment that ended negatively at least 20 years ago. This qualitative study described former middle and high school dropouts who experienced the conflicting choices of taking preparation courses but never attempting any test subsections. Data

collection included interviews and the Immunity to Change map-making exercise (Kegan & Lahey, 2009) of three adult learners with descriptive details. This case study used a narrative form that interpreted the reality of the phenomenon, building upon existing literature through an interpretive framework of Kegan's (1982, 1994, 2000) constructive-developmental theory of adult development and the individual process of transformative learning.

The results showed why the adult learners simultaneously attempted to move forward with academic progression but halted their forward movement by never testing. The three participants of this study were equally or more committed to protecting themselves from their underlying fears as much as they were determined to earn their high school credentials; they were unable to take the test because of the assumed harm it would bring. Accordingly, the GEDTS should utilize the study's findings and incorporate non-academic supports to create success paths for students. Additionally, adult educators across the country should use these Texas community college study results to understand the reluctance of ABE students to move forward with their goals. The potential benefits for the country's entire workforce are virtually limitless.

Keywords: Adult basic education, adult learners, high school equivalency, GED, adult development, immunity to change

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Ready but Not Able: A Case Study of the Experiences of Three Adult Learners
Repeatedly Enrolled in High School Equivalency Preparation Courses

by

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A Dissertation

Approved by the Department of Curriculum and Instruction

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Submitted to the Graduate Faculty of
Baylor University in Partial Fulfillment of the
Requirements for the Degree
of
Doctor of Education

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December 2021

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ACKNOWLEDGMENTS

I want to thank Dr. Cooper, my cohort, my husband, and my children. You have all given me guidance, shown me grace, and smothered me in love.

DEDICATION

To the generous, brave, and gracious participants, thank you. You are my inspiration.

CHAPTER ONE

Introduction to the Problem of Practice

Introduction

In 2019, Valerie enrolled in the adult basic education (ABE) mathematics course, where I prepared adult learners to pass the GED and finally earn their high school credentials many years after dropping out of formal schooling. When we met, Valerie had taken eight high school equivalency (HSE) preparation classes from two community college adult education programs at four campuses between 2006 and 2019. She had to take the next iteration of the tests of adult basic education (TABE) to enroll in my course, which was the 15th time she had taken a section of that test (Texas Educating Adults Management System, 2019). However, after 13 years of diligent coursework, hundreds of hours of studying, and regular class attendance, Valerie had never attempted a single section of any HSE subtests.

Grant-funded ABE programs have helped participants like Valerie move forward in their educational or employment plans through no-cost preparation classes across the state of Texas (Texas Higher Education Coordinating Board, 2016). In 2019, thousands of adult learners enrolled in adult education courses through the Texas Workforce Commission; fewer than 1,000 students earned their certificates of high school credentials (Texas Educating Adults Management System, 2021). This study explored why so few ABE students earned their credentials because of their reluctance to test. I intended to highlight and understand the imbalance between what adult learners said they

wanted—to receive their credentials—and what they did not do—complete the required step of taking the tests.

Statement of the Problem

Most students entered ABE programs to receive their credentials because they strongly desired to move forward with their goals (Texas Educating Adults Management System, 2021). They wanted to go back and achieve the milestone they missed. It was imperative to find a solution to the academic crisis to support this unique population.

In the United States, an astonishing 27 million adults were living and working without high school diplomas (United States Census Bureau, 2017). After earning the HSE credentials, 43% of students enrolled in college programs within six years of receiving the high school credential (Lee, n.d.). This statistic aligned with the adult learners who reported their intentions to enroll in certification or associates degree programs when they matriculated into ABE programs (Texas Educating Adults Management System, 2019). Adults without their credentials could not take the next step towards their academic aspirations.

The HSE problem concerned all American citizens because K–12 dropouts have been a financial burden. Young women who dropped out of formal school because of pregnancy experienced a higher likelihood of going on welfare and an increased the chance of having children who dropped out of high school because of adolescent pregnancy (Diaz & Fiel, 2016). Students who dropped out before high school graduation were more likely to spend time in prison, especially in Texas (Jefferson, 2012). Jefferson (2012) considered Texas classrooms with extreme detention and expulsion problems part of a direct channel from K–12 classrooms to prisons because more than 80% of adults in

Texas prisons never graduated high school. As a result, taxpayers have carried the financial weight caused by low graduation rates (Lemon & Watson, 2011).

The Houston-Galveston Area Council (HGAC) Consortium Grant, one example of many state agencies that supported adult learners, provided ABE classes at community colleges in 13 Texas counties (Workforce Solutions, n.d.). In 2019, the HGAC spent \$301,444,198 providing multiple human services, including ABE programs with one goal: “Ensure an educated workforce” (Texas Workforce Commission, 2019, p. 49). I found it very compelling that there was no mention of HSE programs or specific education plans.

Overall, there was a significant discrepancy in the ratio of the number of students who earned their credentials every year and the number of adult students who did not have high school certificates. In Texas in 2018, for example, 39,797 adults earned the GED (Villanueva, 2018); 222 adult learners earned the alternative HiSET credentials (Educational Testing Service, 2018). Simultaneously, the U.S. Census reported that Texas had 3.5 million residents with no high school credentials (American Fact Finder, 2017).

In Academic Year 2018–2019, 706 of 18,982 students who enrolled in at least one HGAC course earned their GEDs in one of the grant-funded Texas ABE programs, a distressing 3.72% success rate (Texas Educating Adults Management System, 2019). Remarkably, the problem was not testing failure. For example, in 2013, roughly 816,000 people took the GED test in the United States (National Center for Education Statistics, 2015). Of those, a majority of approximately 560,000 earned the GED, which was about a 69% pass rate (Mulhere, 2015). Nationwide, 300,540 people took the GED with a 79%

pass rate (Gewertz, 2018). Thus, students consistently passed the examinations, and the low earned rate was primarily because they never took the tests.

Adult educators should understand why their students have been hesitant to take the tests. Specifically, the GED Testing Service (GEDTS) needed to know about the thousands of adult learners who have wanted to earn the credential but have not yet registered through GED.com, which was the only way to begin the test-taking process (GED Testing Service, 2021b). The GEDTS President and her team were unaware of the thousands of Texas students who had taken preparation courses but did not and could not test because they had never taken the first step of creating accounts at GED.com (V. Greene, personal communication, 19 February 2021).

The GEDTS could enact nationwide increases in earned credentials if they could understand the students' resistance to taking the test and implement changes to connect with the adult learners' needs. In the future, the vast majority of credential-seeking students will most likely never attempt the necessary examinations unless adult educators understand the adult learner experience. This study provided a new way of addressing the low HSE success rate, giving a voice to those unknown adult learners. This focused case study yielded evidence to offer a path of understanding for the GEDTS and how they could plan to connect with their learners. From passing all of the test subsections to transferring to four-year universities to moving up the corporate ladder, most ABE students have little chance of ever completing their educational goals if adult educators and the GEDTS do not make changes.

Purpose of the Study

I wanted to understand and explain why some HSE-seeking students simultaneously repeated the pattern of demonstrating forward momentum with preparation classes but then stopped their progression by avoiding taking the test. I focused on the reluctance to take any subsections of the examination, specifically looking at adult learners who had completed HSE-preparation courses and expressly stated they each had the goal of earning the GED. Adult education professionals who understand the reluctance to take the test could help students recognize and overcome academic worries and help them achieve their goals.

This study examined why adult learners chose to stay in the academic system and re-enroll in preparation courses without taking the test. I used the case study to investigate two research questions to gain a new understanding of the HSE students' lived experiences (Creswell & Creswell, 2018).

1. What were the academic and personal experiences of GED students who completed at least 40 hours of GED preparation courses but had never taken the GED?
2. What, if any, were the competing commitments that contributed to students' decisions to continue to take preparation courses while maintaining their reluctance to take any subtests of the GED?

The results will first reveal this unique student population to the GEDTS team and describe the learners' experiences. Second, the findings will provide evidence for the need to move beyond technical solutions to student obstacles; this study will uncover the transformative barriers that have prevented adult learners from taking the test. Most importantly, the results of this study will make a difference for students, like Valerie, who still have no credentials after many years of hard work.

Theoretical Framework

I applied Kegan's (1982, 1994, 2000) constructive-developmental framework to guide the research questions and design to understand the essence of the HSE-seeking student's reality. I used the lens of adult development to view the students' academic and life circumstances and their ways of meaning-making. I wanted to identify what was potentially holding students back from taking the examinations and to understand their resistance to moving forward with their goals by uncovering their psychological maturity and their long-held beliefs.

Kegan (1982) described five stages of adult development and mental capacity. In 1994, over a four-year longitudinal study, Kegan determined most adults made meaning in the third, the *socialized*, or fourth, the *self-authoring*, state or perspective of the mind. Therefore, I focused on those two orders of mind and the progression of mental complexity between the two when using the constructive-developmental viewpoint on this study of the HSE student experience.

Students in the socialized stage of knowing received self-worth from the validation from others. The ways other people perceived them became their internal conditions of being. Often, people in the socialized perspective experienced conflicts with others as the greatest threats to their sense of self, their loyalties, and their ways of making sense in the world (Drago-Severson, 2011; Kegan, 1982).

Adult learners with a self-authoring mind placed far less importance on societal or cultural expectations. Instead, they had autonomy of self, guided by their internal systems of authority. The most significant threats to their sense of self were losses of personal integrity or giving up ownership of their ways of making meaning (Drago-Severson, 2011; Kegan, 1982).

I expected the students to experience the beginning stages of transformational learning by connecting their unique meaning-making from previous and current academic experiences (Kegan, 2000). Mezirow (1991) said that part of adult development was reframing how one saw the world. When people held things subjectively, the subject ruled them (Kegan, 1994). I used this framework to guide the data collection and analysis because I was curious to see if I could help students identify the underlying worries that drove their academic decisions—the choices that prevented them from testing.

Research Design and Methods

I used the qualitative case study research design and collected data from three female adult learners. They had taken at least 40 hours of ABE program courses through the local Texas community college, where I have taught foundational mathematics classes. Each of the three women confirmed she wanted to earn the GED. A qualitative study was best suited for the research because it explored the students' stories to understand their experiences (Hancock et al., 2007). The reality was different for each student. Ontological beliefs were what people believed to be real (Creswell & Poth, 2018), so I embraced the participants' multiple realities through their voices and stories.

I collected data in five stages, answering two research questions. The primary question investigated the students' experiences of taking classes but not the test. I collected qualitative data from an introductory phone call, a preliminary meeting, and the first two columns of the immunity to change map (Kegan & Lahey, 2009). I gathered data for the secondary question, which identified competing obligations, through the third and fourth columns of the map, potential tests of assumptions, and their motivational images. That process showed the adult learners how and why they had prevented

themselves from taking the GED. I assessed all five stages of data collection using narrative coding and themes (Saldaña, 2016).

Definition of Key Terms

Adult Basic Education (ABE) Programs: grant-funded programs often offered at community colleges across the United States to adult learners seeking HSE credentials or foundational academic content.

Adult Learners: students who dropped out of K–12 schooling and intended to earn diplomas through alternative credential tests.

Alternative High School Credential Tests: the examinations used to measure HSE for students who dropped out before high school graduation, including the GED, HiSET, TASC, NEDP.

Constructive-Developmental Theory: the theory of adult development that has concentrated on understanding how people have made meaning in their lives, focusing on their developmental capacities and transformative learning (Kegan, 1982, 1994, 2000).

Developmental Courses: non-credited college courses typically required as prerequisites when students' college placement exam scores fell below pre-determined scores.

Developmental Students: college students enrolled in non-credited, remedial courses to prepare them for courses with college credit.

GED: a nationally recognized test used to assess K–12 academic competencies; the predominant HSE test used in this case study, consisting of four subtests: mathematical reasoning, science, social studies, and language arts.

GED Testing Service (GEDTS): the business that provides the official GED test; their mission is “focused on helping adults gain their high school equivalency diploma and change their lives for the better” (GED Testing Service, 2021b, “Mission Statement” section).

High School Equivalency Test (HiSET): a test used to assess K–12 academic competencies in various states; the test is no longer valid in Texas (Educational Testing Service, 2021).

Immunity to Change (ITC) Map: a tool used to uncover underlying or hidden competing commitments that worked, often subconsciously, against someone’s stated goal (Kegan & Lahey, 2009).

National External Diploma Program (NEDP): a nationally recognized test used to assess K–12 academic competencies.

Stopout: an adult learner’s temporary withdrawal from an academic program with the intention to re-enroll in the future.

Subject-Object Interview: a qualitative tool used to help a person uncover self-identity and authority (Lahey et al., 2011).

Tests of Adult Basic Education (TABE): the grant-required tests students took to enroll in Texas ABE courses; the tests assessed the students’ academic skills (Tests of Adult Basic Education, 2020; Texas Educating Adults Management System, 2019).

Test Assessing Secondary Completion (TASC): a nationally recognized test used to assess K–12 academic competencies.

Texas Workforce Commission (TWC): the group that provided funding to adult learners in Texas for academic instruction to produce an educated workforce.

Conclusion

With the abundant adult learning services offered, one might have argued that HSE students have already received ample opportunities to succeed in ABE programs provided by community colleges. However, data showed that these students rarely earned their high school credentials or accomplished their educational goals (Texas Educating Adults Management System, 2019). There was no clear explanation of why adults took advantage of the test preparation services available and then halted their progress by not testing for the HSE credentials. Chapter Two provided a literature review to fully describe the adult learning population, the empirical research around HSE adult development, and transformative learning through the framework of understanding adult learners' experiences.

CHAPTER TWO

Literature Review

Introduction

Previous researchers have used the constructive-developmental theory (Kegan, 1982, 1994, 2000) to study high school dropout prevention (Nikolaou, 2015) and the K–12 dropout experience within a diploma program cohort (Drago-Severson, 2011). In addition, one study identified the complex and interwoven reasons students dropped out of high school (McDermott et al., 2018). However, there was little literature or data about why so few adult basic education (ABE) students have earned their credentials.

Therefore, before collecting the students' individual stories, this chapter reviewed foundational and current research to provide the groundwork while identifying the previously explored areas and any existing literature gaps (Creswell & Poth, 2018). I organized the chapter with a review of the current research about adults seeking their high school equivalency (HSE) credentials and related populations, the stages of adult development related to adult learners, and literature about transformative learning.

Understanding the HSE Student Population at an ABE Program

Even with innovative and curious leaders at institutions like Columbia University's Teachers College Community College Research Center (CCRC), there was limited research examining the factors that impacted the students who repeatedly fell short in their educational plans (Bailey et al., 2015; Bruno, 2015). Too often, education programs have reacted to low success rates with technical fixes like additional funding or

new leadership (Coalition on Adult Basic Education, 2021). Instead, they needed first to understand the students' needs and why the learners were taking specific actions, or in this case, inaction.

Additionally, merely helping students achieve their high school credentials was not enough to securely ensure future success. A team of researchers conducted a longitudinal study of more than 30,000 students and found that earning the credentials did not prevent long-term marijuana use and cigarette smoking any more than dropouts who never went back to earn their credentials (Reingle Gonzalez et al., 2016). According to these various studies, earning the HSE credentials did not guarantee academic or workforce progression; it had to be the first step of a plan.

Unfortunately, Heckman et al. (2014) found that those who ultimately earned their HSEs did not become equivalent to high school graduates after finally receiving their credentials. Furthermore, students who dropped out had a significantly higher probability of going to prison and abusing drugs even after earning their certificates. From divorce rates to military achievement to nearly all social constructs, the HSE graduates' outcomes were no better than high school dropouts. However, one distinct advantage was the likelihood of increased lifetime earnings (Heckman et al., 2014).

One example of a program that found great accomplishment in moving students beyond earning their credentials was the College of The Mainland (COM) in Texas City. Workforce Solutions awarded COM the 2016 College Integration Award for its Career Pathways program, which treated the HSE as a stepping stone in the path of their students' futures (College of the Mainland, 2020). Their ABE students found success because the program did not treat passing the HSE as "the end of the road" (R. Mora,

personal communication, February 11, 2020). The GED Testing Service (GEDTS) should connect with innovative ABE programs like COM to help change the predicted outcome for their learners with their nationwide reach. Thus, they could create a shift in adult learning education. The next level of understanding this population was identifying who they were, their successes and failures, and the barriers they faced.

The In-between Population

Adult students fell in the middle of much of the research. They were wedged in the median of studies attempting to reduce high school dropout rates and undergraduates in developmental courses struggling to complete their degrees. Researchers had not thoroughly focused on the HSE-seeking population regarding the tests, so the review of the current literature uncovered several studies about related populations. There was ample information about children and standardized testing and traditional college students with test anxiety but little about this unique population of adult learners. Wagner et al. (2006) declared that “an eighteen-year-old who is not college-ready today has effectively been sentenced to a lifetime of marginal employment and second-class citizenship” (p. 5). Since this was the case for a student with a diploma, a high school dropout’s life sentence was more extreme.

In 2018, the Center for Public Policy Priorities revealed that Texas placed last in the country for the state with the number of citizens aged 25 and older who did not have high school credentials (Villanueva, 2018). The Houston Chronicle (“Failing Grade,” 2018) reported only one of every six Texans had high school certificates of some sort. Texas provided test preparation courses across the state for eligible students to attend at no cost. Theoretically, all Texas residents who have dropped out of high school have had

the opportunity to receive free education and preparation to earn their high school certificates. Still, the data showed that most did not utilize the services or take the test (Texas Educating Adults Management System, 2019).

When identifying the HSE adult learner, Merriam and Bierema (2014) said that instead of defining what it was to be an adult, they said it was necessary to understand how adults' lives impacted their learning. Historically, people spent years in school, completed it, and then went to work for the rest of their lives. The term *students* was so often connected primarily to children and young adults that adult students who went back to school were called *non-traditional* (Merriam & Bierema, 2014).

Kenner and Weinerman (2011) described non-traditional adult learners as more than 25 years old with “financial independence, full-time employment, dependents, and part-time enrollment” (p. 88). These factors were also valid for HSE students. Additionally, May-Varas (2015) found it challenging to define the term *adult learner* because much of the student population fell under the broad umbrella of adults. Although May-Varas (2015) studied high school graduates, the findings overlapped with all adult learners' common characteristic: significant responsibility.

The biggest hurdle to finding relevant literature about HSE students was the lack of information concerning this particular population of adult, back-to-school students preparing for equivalency examinations. Some researchers studied HSE students enrolled in ABE programs, like Grossman's 2012 dissertation. Grossman (2012) conducted a phenomenology of six adult learners to explore the gap between the number of adults living in Iowa without their high school credentials compared to the number of students enrolled in preparation programs. Grossman (2012) reported low test-taking percentages

but did not investigate why the students did not test. Instead, she wanted to identify the students' motivation to enroll in ABE programs after dropping out of formal schooling, referring to their return to basic education classrooms as their second chance.

Interestingly, Grossman (2012) studied the student population who made their decisions to go back to school because they were influenced, negatively or positively, by other people's opinions and pressures.

According to the National Student Clearinghouse Research Center (2017), approximately 13% of students who started at community colleges in 2010 completed a degree at a four-year institution within six years. For part-time students, which typically included non-traditional students aged 25 and older, that number dropped to a mere 0.5% of the original cohort. These were dismal results, especially compared to the 54.8% completion rate from the research center's report investigating the percentage of first-time students who had earned any kind of degree over six years (Shapiro et al., 2017).

Bailey et al. (2009) studied developmental education and its inefficiencies to learn about college students who began their undergraduate journeys in developmental courses. Bailey et al. (2009) reported fewer than a third of developmental mathematics students ever completed the course program; the reality behind those numbers was even more alarming because the completion rate represented 44% of students that enrolled in any type of developmental mathematics class (Bailey et al., 2009). Additionally, and equally troublesome, the few students who completed developmental courses did not return for the following class sequence. The study indicated that remedial students need more than content and called for an entire overhaul and a new approach to thinking about developmental education in colleges altogether. The statistics were for underprepared

students who had already earned their high school credentials but were not ready for college-level academics (Bailey et al., 2009).

I reviewed research about similar populations because the students were on parallel academic journeys. The students needed remedial work, and they were not earning college credits in their courses. Nevertheless, they had the desire to achieve academic goals, and there was something, or several things, preventing them from completing their course requirements. Incredibly, Cho (2011) found that students who entered into college under a remedial program exited without ever enrolling in the next course after failing or withdrawing from a course, which was analogous to the reluctance of HSE students to move forward with their next step of taking the test.

Bailey et al. (2010) continued their work and published a quantitative study of student academic and attendance records. They reported that not enough research has identified how students moved forward in developmental education stages. This lack of information indicated the need to incorporate more qualitative research into developmental students, regardless of their HSE status.

Furthermore, the CCRC at Columbia University devoted significant investigation to community colleges' developmental education. Even students who successfully graduated from high school struggled with demanding college academics. For example, Bailey et al. (2015) found that two-thirds of students who entered community colleges with their high school diplomas were unprepared for their colleges' rigorous academics. They investigated how colleges could redesign their developmental courses for better student results (Community College Research Center, 2019). Similarly, a recent study by Edgecombe and Bickerstaff (2018) proposed three educational reforms to understand

how to help students who were academically unprepared for their next steps in life. Without this understanding, educational leaders may never implement innovative problem-solving solutions.

Many students have shown developmental gains because of programs' responses to the CCRC research. As a direct result, corequisite courses gained popularity among remedial course programs across Texas community colleges (Community College Research Center, 2019). Logue et al. (2019) studied corequisite mathematics remediation. They ran a quasi-experimental analysis of their study that followed students enrolled simultaneously in support classes alongside their required academic courses. They wanted to see the results over three years after innovating the traditional prerequisite remedial courses. The students demonstrated significant improvement in individual grades, course passing, and graduation rates (Logue et al., 2019).

Similarly, the Dana Center at the University of Texas-Austin initiated alternative programs to the traditional developmental mathematics course sequences called Statway and Quantway. The programs increased earned credits, decreased dropouts, and students reported discovering a surprising fondness of mathematics (Silva & White, 2013). Remarkably, the students gained overlapping positive effects on other subjects and subsequent academic work, which could potentially work in HSE-preparation classes, while simultaneously saving billions of dollars in lost earnings potential by keeping students in school (Bailey et al., 2010; Silva & White, 2013). However, research showed high school graduates that were theoretically ready for college academics were often unprepared and struggled. Therefore, ABE programs must have applied even more effort

to understanding the needs for success for the adults who had not yet earned their high school credentials to keep them enrolled.

HSE Successes and Hidden HSE Fails

Under one grant-funded Texas program, ABE students were the approximately 20,000 adult learners enrolled in at least one HSE-preparation course every academic year. The Texas Workforce Commission funded the classes for students to enroll in college courses or to compete in industrial certification programs (Strategic Plan for Adult Education and Literacy FY 2016 Progress Report, 2016). The primary goal listed for the HSE program was the target enrollment numbers; the mentions of college courses and workforce readiness assumed previously earned HSE credentials. Though, fewer than 4% typically earned their credentials, so there was a disconnect from the program's mission to the expected results. The next step was to look at why the remaining 96% of adults never earned the credentials. From the graduate spotlights on GED.com (GED Testing Service, 2021a) to books about going from the GED to Harvard University (Wolfe & Wolfe, 2020), most information available about the HSE only presented the success stories. There was little understanding of the thousands who did not make it.

One GED article described a successful student who said he never believed he could pass the GED; it took "11 years to finally get the courage to get my GED" ("I Thought I Could Never Pass," 2020, para. 1). HSE searches yielded titles like "Self-made man who took two years of night GED-preparation courses at his local community college" (Tortola, 2009). Unfortunately, people tended to keep their fails to themselves, so studying these students was often left up to curious advocates for this population.

One researcher explored the lack of earned credentials from an ABE program. Leedy (2013) designed a quantitative study using mailed surveys in eastern Kentucky to see what happened to students after dropping from their community college ABE programs. Leedy (2013) used the data to determine why some students who could enroll did not and why some students enrolled but never finished the program. Leedy (2013) initiated an attempt to reduce obstacles that prevented students from earning the HSE.

Leedy (2013) referred to the participants as adults who were left behind after dropping out of K–12. She saw that ABE programs had given them another chance to succeed. Very similar to the purpose of this study’s quest for understanding, Leedy (2013) wondered why there was such disparity between how many students initially enrolled in courses and the number of students who ultimately receive their credentials.

The research found, similar to Texas’s low HSE attainment, that none of Kentucky’s 120 counties met the goals for ABE student enrollment. Her research explained that it was “difficult, if not impossible, to meet the [Kentucky Adult Education’s 2.4%] GED attainment goal” (Leedy, 2013, p. 37). Forty-six percent of Leedy’s (2013) respondents described the primary reason for dropping the program was from a combined choice of “lack of confidence and/or overwhelmed by workload expectations” (p. 42). Unfortunately, linking the two distinctly different options to one answer choice was a critical error in clearly identifying the primary reason students stopped out or quit the program before they earned their credentials.

Hurdles to Success

Leedy (2013) intended to identify barriers for adult learners. HSE students not only faced the pressures of adult life while trying to achieve their goals, but they had to

navigate various obstacles, as well (Rothes et al., 2017). Students often reported they received no support from family and friends and felt pressure from their jobs. ABE programs did not create financial burdens by collecting tuition from students. However, those adults missed out on earnings opportunities while in classes or studying (Bailey et al., 2009). Additionally, they may also have had to juggle hostile inner critics, which often played a factor in completing their academic goals (Jameson & Fusco, 2014).

An ABE program could have solved students' technical barriers and objections to participation with support and resources. For example, Leedy (2013) found two primary obstacles HSE students often encountered: lack of transportation and child care. The HGAC, as one program example, overcame those two impediments with discounted or free bus fare (Fares, 2020) and low-cost child care on many campuses (Childcare services to all CTE students, 2019). Students and administrators were often able to solve technical barriers with additional funding. However, the current literature lacked an understanding of how students valued, or did not value, unlimited access to no-cost classes.

Researchers also found that non-traditional adult students needed community to thrive. Uyder (2010) observed students going through drastic life changes and emphasized the need to organize cohorts to “create opportunities for both academic and social community” (p. 21). Uyder (2010) said it was essential for higher education schools to support students by implementing specially designed programs. When learners found comfort in communities with peers and teachers, the adults ultimately found gains in their self-efficacy and felt less alone in that new life transition (McDonald, 2013). Additionally, Drago-Severson et al. (2001) found from their research that “the interpersonal relationships that peers developed in the cohort made a critical difference to

their academic learning, emotional and psychological well-being, and ability to broaden their perspectives” (para. 1). HSE teachers could have prioritized creating small communities of learning to engage and encourage their students.

May-Varas (2015) categorized student hindrances as situational barriers, institutional barriers, and dispositional barriers. The present case study described technical barriers as objections because, perhaps, the real hurdles to overcome were the students’ underlying hidden competing commitments. Although many students have had the motivation to earn their credentials, they may also have subconsciously held just as firmly to opposing goals (Kegan & Lahey, 2001).

The GEDTS should explore using various methods to encourage self-confidence and decrease anxiety. The GEDTS should bring learners together to incorporate fostering a feeling of community within the learning environment. However, getting to the bottom of understanding why a student experienced low self-perception was the most critical component to increasing an adult learner’s self-confidence. Therefore, in the next section, I have looked at four pieces of adult learners’ personal development regarding their roles as ABE students.

Stages of Self-Development for the HSE Population

Regardless of why an adult went back to school—to complete high school, earn an advanced degree, learn a new skill, or achieve a lifelong goal—every adult has had the benefit of lived experience. To encourage and engage students, teachers should have understood their learners, meaning why and how they came to make meaning in the educational space. Merriam et al. (2007) found that an adult’s prior experience with education is the “single best predictor of participation” as an adult student (p. 9). Since

education has often led to more education, the relatively few adult learners who had dropped out of high school should have been admired and respected for defying the odds. Adult learners came to class with trepidation because they often had not been in school for years; they needed to use their life skills and wealth of life experience that they brought to increase their self-confidence.

Many adult learners' stories discussed the students' lack of choices or perceived lack of options surrounding the final decision to leave high school. For example, many students claimed their high schools kicked them out, they quit due to unplanned pregnancies, or their schools did not allow them to come back because they aged out, despite wanting to stay (Merriam et al., 2007). Perhaps students have resisted taking the HSE tests as a way to exhibit control over their academic careers for the first time in a formal school environment. To better understand how they were making sense in their roles as students, I have highlighted how resilience, meaning-making, big assumptions, and disequilibrium have played significant roles in an adult learner's personal growth.

Resilience of Adult Learners

Fortunately, researchers have written articles and studies about adult motivation and academic persistence in higher education; unfortunately, researchers typically wrote those studies about students who had graduated high school or had already earned their credentials and enrolled in college. Wilson (2006) reported on a project to close the gap between students who had previously been successful in ABE programs and moved on to undergraduate courses. Wilson (2006) referred to adult learners as *second chance* adults who needed additional support above and beyond what typical, traditional students required. Wilson (2006) explained the difficulties these learners have had to overcome,

describing their worries as “insurmountable—fear, inadequate academic preparation, lack of information about college and academia’s expectations, lack of confidence” (p. 25). Because of the tremendous number of obstacles adult learners faced and overcame, Rivera (2008) called adult learners courageous.

Knowles et al. (2014) said that most adult learners returned to education because of a change in life, usually to fill an immediate need. However, the researchers astutely noted that even when adults were fully responsible in their daily lives, they often regressed to a childhood schooling mentality, nearly demanding to sit and be taught by the teacher. HSE instructors needed to be keenly aware of the motivators for their students to provide specific support. When the teacher did not follow an andragogy philosophy, HSE students quickly reverted to their elementary school training (Knowles et al., 2014). That pedagogical style left little room for adult transformation.

Chase (1987) developed a mixed methods study to understand why adults enrolled in ABE programs to improve enrollment for future courses. While Chase’s 1987 research appeared outdated, it was not obsolete. It was relevant because it identified the same student population as the present case study and demonstrated some of the same student struggles that have not changed between then and now. Chase (1987) assumed ABE students had the common goal of earning their credentials, a critical connection to the present study of students who said they wanted their equivalent diplomas. Subsequently, ABE programs within community colleges have operated under the assumption that students enrolled in classes because they wished to receive their credentials (Texas Educating Adults Management System, 2019). During the interview

process of the present case study, a critical component was uncovering the exact reasons why students enrolled in multiple HSE-preparation courses.

In a study of students with GED test success, May-Varas (2015) prepared a qualitative study of six GED students after taking and passing at least three of the test's four sections. He investigated the collective factors that ultimately contributed to their success. May-Varas (2015) found that most successful students had commonalities like supportive family environments, good health, and health insurance. Similarly, the present research built upon May-Varas's 2015 study of six individual stories of students who found their success through others' support and knowing their end goals. Inversely, I studied three students who were seemingly stalled in the cycle of taking classes; I intended to uncover what was preventing them from testing.

Regarding student motivation to stay with a program, Nakajima et al. (2012) discovered that students who had higher cumulative grades were twice as likely to remain in college. In addition, they predicted student persistence if a student had a high GPA combined with specific goals. Unfortunately, ABE programs did not assign grades to students in GED courses; those classes were treated as pass or fail.

Nakajima et al. (2012) also found that positive student-faculty connections resulted in adult learner persistence. The researchers concluded that all of the variables of student barriers, responsibilities, and self-efficacy were connected; there was not a single solution to the problem (Nakajima et al., 2012). Even without a lack of clarity around why students enrolled and re-enrolled without testing, students consistently displayed examples of persistence.

Gasiewski (2009) reported stories of 18–24-year-old youth participants, who were students who kept trying to earn the GED for years and ultimately earned their credentials. Gasiewski (2009) developed a qualitative study examining the learned experience of 30 students who enrolled in HSE programs after dropping out of high school for what she called re-entry into the education system. The students ultimately found success from the culture of support they received from their peers and the classroom teachers within their particular ABE program.

Rivera (2008) said the key to adults achieving the next milestone was student resilience. Although it seemed like a logical predictor of program completion, the data disagreed. Adult learners were exceptionally determined, and the current research would not be possible if there were not an abundance of resilient students. However, even with significant fortitude and grit, adult learners found relatively little academic accomplishment. Yeager and Dweck (2012) argued for the importance of valuing the resilience students exhibited when life's challenges caused them to pause their educational goals. Those studies only heightened the need for a study of HSE-preparation students in particular.

Adult learners often lacked support while carrying the burden of responsibility for others. While facing all of those obstacles, however, they found their way to the classroom, which was only one phase of a long line of anxiety-inducing steps to the HSE examination subsections. Adult learners have had to overcome varying stress: anxiety from returning to school, overcoming obstacles, learning the material, and fearing the test. Through all of the hurdles, students continued to return to ABE programs; the

problem was not a lack of persistence. I argued that the key was helping students understand their choices.

Adult Learners' Ways of Meaning-Making

Jameson (2019) conducted a qualitative study of five adult women working in undergraduate studies to precisely understand their shared experiences. The students each identified as having mathematics anxiety. The interviews resulted in five themes that worried the women, but the primary concern was the length of time that passed since they had been in a formal school setting. Their mean age was 34 years old. Those women had created a socialized perception about age and education. Their ways of knowing had become dictated by social constructs. Drago-Severson (2011) said adult development occurred when the person was able to look at the messages from the outside world and appreciate how that understanding increased their mental complexity.

Most HSE students focused on closing the mathematics gap (Texas Educating Adults Management, 2019). With that foundational void came the way they saw themselves: students with low self-efficacy. Merriam and Bierema (2014) said that adult educators had to “create the readiness for learning through [experiential] instructional techniques” (p. 52). The GEDTS should help improve this by connecting mathematics concepts with students’ real-world problem-solving.

Similarly, McDonald (2013) studied adult learners with low mathematics self-efficacy. She found she could help the students achieve their academic goals by using her methodical teaching combined with highly valuing students’ lived experiences. Her students said they improved their fundamental knowledge of mathematical concepts they had struggled with for years; students overcame long-held negative attitudes towards

academics. They changed their core beliefs that they could ever understand foundational mathematical concepts (McDonald, 2013).

The data showed that students lacked confidence in themselves (Bujack, 2012); ABE educators needed to create more confidence-building opportunities for their populations. For example, an adult learner described her self-doubt around her ability to pass the HSE: “It all came down to a mental block for me. I was so worried I wasn’t smart enough” (A. Vance, personal communication, July 21, 2019). In their research, Merriam et al. (2007) found that women, in particular, decided whether or not to go back to complete their educations based on their feelings of self-worth.

ABE program directors explained the best technique to improve student retention was to increase student self-confidence (Leedy, 2013). A majority of women explained how they held on to “negative self-beliefs including lack of self-efficacy, learned helplessness, and a self-perception as ‘stupid’” (Jameson, 2019, p. 231). Snider (2010) and Drago-Severson (2011) found success in increasing students’ self-esteem when the teachers created peer working groups, which gave the students space to validate their life skills in various ways. With support, adults were able to mature through understanding their experiences; they grew their ways of knowing in their worlds (Drago-Severson, 2011).

Bauger et al. (2021) used Kegan’s (1994) research as the framework for their quantitative study to answer questions about psychological maturity. They wanted to see if they could identify a connection between the socialized and self-authoring minds and aspects of life, especially the desire for authenticity. The study was not directly related to understanding HSE-seeking students; however, their use of the theory and connection to

happiness and more complex thinking were worth noting. Some students may have enrolled repeatedly merely because they enjoyed it; they found comfort in attending classes with no commitment. In contrast, some adult learners could have taken preparation courses for more meaningful reasons like improving their overall well-being and purpose in life (Bauger et al., 2021).

Bujack (2012) developed a quantitative study to determine if students' self-reported self-efficacy could predict their perseverance to complete their credentials through ABE programs. Bujack (2012) focused the non-experimental study on determining if the reason students earned their HSE credentials was directly related to their level of self-efficacy. Bujack (2012) explained the importance of having high school credentials from potential lifetime earnings to the demands of modern life. She wanted to know if the primary explanation for no credentials was due to the dropout rate from their ABE programs. Inversely, I tried to understand why students stayed in ABE programs for many years and still never received their credentials.

When students felt supported, many continued in their programs. Leedy (2013) found when students quit GED-preparation programs feeling as though they had failed, there was “a closing of the doors to opportunities and an opening of the doors to frustration” (p. 19). Various studies showed that adult learners made meaning through relationships, their support systems of teachers, family, and friends. Several student success stories repeated the importance of other people in students' lives.

However, there were few examples of how the individual students valued going back to school and how they made sense of it in their minds. Mezirow (1991) said learners should have evaluated their assumptions about their academic experiences with

critical self-reflection. In the literature review, there were many participant interviews with reflection on who helped students find success, including stories of what kept students motivated. However, there was scant self-reflection commentary about how they created meaning in the process, signifying minimal movement from the socialized order of mind (Kegan, 1994).

Similarly, Lemon and Watson (2011) conducted a quantitative study of 175 high school students studying dropout prevention of those at risk. Those students were not so dissimilar that the research was not necessary; they were metaphorically the HSE-preparation population that had been living the same parallel track. Essentially, the primary difference was the level of responsibilities of adult life; both communities faced significant stress.

Lemon and Watson (2011) concluded that students at risk for leaving high school needed time to learn how to include the idea of academic success, in whatever form that took, into their unique set of values. They said students had to “bridge individual meaning-making processes concerning life, goals, self, and others with high school graduation” (Lemon & Watson, 2011, p. 21). Mezirow (1991) said the role of “adult educators is to help learners look critically at their beliefs and behaviors, not only as these appear at the moment but in the context of their history (and purpose) and consequences in the learners’ lives” (p. 197–198). Mezirow (1991) explored how adults made sense of their experiences. Part of teaching adult learners should have been providing support to help students who were going through the anxiety-ridden process of adult education to understand the essence of their meaning-making systems for themselves.

The students who have failed to earn their HSE credentials appeared to be a forgotten group inside a marginalized group. Snider's 2010 qualitative study of GED passers found commonalities. Snider (2010) uncovered repeated similar circumstances of "signs from their childhood that contributed to their decision to drop out" (p. 88), which were critical for students to identify in themselves. However, Snider (2010) did not go deep enough. For example, Snider (2010) should have respectfully investigated what it meant when two students described being their own worst enemies. Also, one participant said, "I just decided one day just to go [back to school]" (p. 95). If Snider (2010) would have followed through with the question to explore why that student decided to go back, it may have provided more insight to that participant and the ABE community.

Kenner and Weinerman (2011) offered suggestions for honoring learners' experiences when entering the collegiate classroom in their qualitative study of andragogy and adults with their GEDs. They highlighted one distinct feature of adult students: adults did not like change. Instead, they found success independently by creatively and elegantly navigating the world of work and family with an informal, personalized theory of living successful lives. Kenner and Weinerman (2011) encouraged developmental teachers to connect academic learning with their students' careers and lives outside of the college setting.

Big Assumptions Held by Adult Learners

Kegan and Lahey (2001) explained assumptions as truths people have been committed to holding. These truths may not have been facts; they may have only felt legitimate. Additionally, Mezirow (1991) said that learning had taken place after critically reflecting on assumptions, and van Manen (2014) said, "the lived experiences

that we never revisited may nevertheless leave latent and powerful consequences on our present and future being and becoming” (p. 30). By identifying their assumptions or truths, adult learners were finally about to see their actions in context. As a result, they began to make appropriate, actionable decisions that would move them one step closer to their goals.

Adult learning transformation began with self-reflection and may have led to self-discovery. Willans and Seary (2007) found that adult learners, with teacher guidance, uncovered the origin of negative assumptions they had been holding. Most notably, the adults identified “assumptions related specifically to perceptions of intelligence, the fear of being ridiculed and hurt, and a perceived inability to succeed in a formal learning context” (Willans & Seary, 2007, p. 435). Willans and Seary (2007) found that the students felt liberated, having released the hold from their assumptions. Gould (1978) also described how a teacher could guide students to test their underlying beliefs through reflective discussions. HSE instructors could have modeled this process for their students who reported the same worries.

Snyder’s 2011 case study followed three women who abruptly changed career paths to become teachers. The women experienced “unexpected levels of fear, anxiety, and shame in response to new learning” (Snyder, 2011, p. 242). One student described feeling “much more scared and intimidated than I expected” (Snyder, 2011, p. 255) but was finally able to build her confidence by receiving significant support from her professor. Snyder (2011) found that the women ultimately went through a transformation and experienced the most growth after developing their personal philosophies of teaching throughout their programs. By creating a similar space for personal growth, HSE

instructors have had the opportunity to help students build self-confidence and encourage their students to go on transformative journeys (Snyder, 2011).

Exploring the psychological development topic of andragogy, Gould (1978) said that as adults developed, they began to see themselves as the drivers of their choices. Mezirow (1991) noted that “as adult learners, we are caught in our own histories” (p. 1). They slowly let go of the previously held beliefs of others. After abruptly dropping out of formal school, HSE students were immediately catapulted into adulthood without the time for transition. As a result, they often did not have the space to discover and evolve their beliefs and attitudes. With encouragement, HSE teachers could have helped them begin to navigate their lives, which could have led to self-directed learning.

HSE teachers should not have merely taught the test; they needed to guide students towards self-directed learning and the ability to transfer knowledge into real-world problems. Teachers must have created space for reflection for their students. Mezirow (1991) said that “reflection is the central dynamic involved in problem-solving” (p. 116). By creating a classroom culture built on critical thinking, HSE teachers could have encouraged transformational change (Merriam & Bierema, 2014). The GEDTS should consider how to help their learners overcome their fears and unwillingness to move forward.

Teachers needed to create environments conducive to being open for students to critically look at themselves as learners, as many researchers discussed the importance of student self-reflection. Teachers should have remembered that reflection was not the same thing as contemplation because, as Mezirow (1991) said, “all reflection involves a critique” (p. 15). Teachers could have worked one-on-one with students using Socratic

dialogue or devoted a short period of every class for students to write answers to reflective prompts. Just like the way mathematics instructors taught their students to round numbers by looking at the available information to decide, adult learners chose whether to stay the same or developmentally round up.

Many students came to the ABE classroom with negative feelings and anxiety about their previous academic experiences. Therefore, using the subject-object approach to understand how they have made sense of their adult learning lives would be one catalyst to move them to take the test. Bridwell (2012) reported the results from using subject-object interviews (Lahey et al., 2011) in a qualitative study of six women studying for their HSE credentials. Some of the participants experienced changes in their perceptions and increased the complexities of their thinking. In addition, some of those changes increased their ways of knowing in unexpected ways, which led to learning new ways of how they viewed their roles in the world (Bridwell, 2012).

Transformative Learning of the HSE Population

Kegan and Lahey (2001, 2009) created the Immunity to Change (ITC) map to use as a tool to work beyond technical adjustments. They wanted to explore the divide between what people said they wanted and what people did. Kegan et al. (2016) published a book to teach the ITC map-making process through the lens of losing weight. At first glance, one might have assumed that weight loss and the GED were unrelated. However, one of the hallmarks of the ITC is that “technical fixes can’t resolve adaptive challenges” (Kegan et al., 2016, p. 12). ABE programs and students who have made incorrect assumptions have habitually tried to solve the low HSE success rates with

practical improvements (Coalition on Adult Basic Education, 2021) when they needed to create opportunities for transformative learning.

Additionally, Bridwell (2012) found that some participants used transformative learning in other experiences in their daily lives. There was a disconnect between adult development studies that have historically focused on more academically privileged students and the adult students typically served by ABE programs. Bridwell (2012) used the study in an attempt to fill the research gap. Through three sets of interviews with women, Bridwell (2012) shed light on their transformative growth and meaning-making. Bridwell (2012) emphasized the need to give the process time to grow within a safe environment. The present qualitative study of HSE students built on Bridwell's 2012 study by connecting adult learners with adult development to understand the individual and shared experiences.

Many HSE students often began personal transformations with disorienting dilemmas (Mezirow, 1991). From the student who secretly came to class because of her abusive spouse to the illiterate father who asked me to teach him how to read books to his son, all of my students have had unique catalysts that caused them to take action. If and when students were willing to share their stories, HSE needed to know their students' dilemmas. When HSE students entered the class for the first course or the 20th iteration, HSE teachers needed to provide a supportive environment of respect, no matter where the learners were in their developmental paths. Kegan (1994) said teachers could "foster the person's psychological evolution" (p. 43). Just as the students were getting to know themselves as learners, HSE teachers needed to know their students.

Beyond knowing their students' goals, the teachers should also have recognized their students' attitudes. "The findings support that adult education learners need more than skill acquisition to be successful in transitioning to post-secondary education" (Humphreys, 2018, p. v). Teachers should have been open to understanding where the individual students were on their transformational bridges to help them move forward. Trained HSE coaches could help students carefully examine their unique value systems and life choices, including the consequences of their actions (Mezirow, 1991). The GEDTS has the opportunity to provide more guidance to anxious students. The final section of the literature review presented how students found mental balance, the distinctions of academic anxiety, and the role of mathematics to adult learners.

Disequilibrium Led to a New Equilibrium

Howell (2006) used Kegan's (1982, 1994) constructive-developmental theory and Kegan and Lahey's (2001) tool for uncovering hidden competing commitments with a group of educational leaders. Howell (2006) found that the qualitative data collection helped the participants identify the "contradictions between their commitments, fears and assumptions and to raise their awareness of their overall meaning-making" (p. 4). They had previously made sense of their roles in their worlds; after discovering their hidden commitments, they started to consider how that would help them find new, multifaceted ways of being.

Coughlin (2015) wrote about her ITC map-making techniques with coaching clients. She described a composite participant as unable to manage the responsibilities of life, which would continue until the end of her life, if she did not receive help to develop a more complex way of making meaning about her role. Coughlin (2015) provided the

necessary support her client needed to grow her level of meaning-making towards a more self-authoring mindset. Similarly, the GEDTS could help students create a new equilibrium with additional non-academic supports like the ITC map.

Accordingly, transformative barriers have been malleable problems that, potentially, could be overcome with adequate support. Students have had to bend and adjust to work around the everyday hurdles that came with the consequence of dropping out of high school, constantly balancing and rebalancing both their responsibilities and their meaning-making. For example, Osgood-Treston (2001) reiterated that adult learners had to navigate “school with outside responsibilities and their flexibility in attaining personal goals within the context of educational and institutional goals” (p. 120). When students were inflexible and unable to adjust with adjunct teachers working for grant-funded programs, those students most likely struggled with success, got frustrated, and stopped out or dropped out (Fairfax, 2018).

Additionally, students and teachers found transformative barriers emotionally negative and draining. The teachers struggled to understand their students’ psychological impediments like self-confidence and self-esteem (Jameson, 2019). Bennett (2016) conducted a mixed methods study of 350 surveyed ABE students who had never received high school diplomas or HSE credentials. Bennett (2016) was interested in discovering the perceptions and overall negative or positive attitudes her participants had about ABE programs. Remarkably, although the participants were the exact group who would benefit from ABE programs and recognized the benefit of earning their credentials, they had negative opinions about ABE. Generally, the culture was hopelessness. The adult learners

had unreceptive attitudes to the very programs specifically designed to help uplift their population, which resulted in student educational anxiety (Bennett, 2016).

Distinctions of Academic Anxiety

Academic stress was high for adult learners before they even started the first day of school, from worry about classroom performance, perceptions of peer attitudes, test anxiety, or nervousness about being criticized in front of others (Rivera, 2008). When students initially entered ABE programs to enroll in HSE courses, they were immediately thrust into examination rooms to take the 100-question tests of adult basic education (TABE). The TABE website explained the tests made it easier for teachers and administrators to evaluate each adult learner's academic skills level for program qualifications and eligibility (Tests of Adult Basic Education, 2020).

For example, Blinn College (2018) explained the path to credentials in three steps: fill out paperwork, take the TABE, take a course. However, there was no mention of how to take or sign up for the official HSE. Additionally, no available research showed a correlation between taking the TABE and achieving HSE success. Adult educators should investigate the potentially detrimental effect of requiring ABE students to take the TABE repeatedly without encouraging them to take the HSE.

In 2013, Datta conducted a qualitative study about test anxiety to see if there were detriments to students who were intellectually disabled. Datta (2013) reported that anxiety around testing in K–12 schools increased but did not report any link between text anxiety and dropping out. The final result was that stress and worry were higher for intellectually disabled K–12 students. While the study demonstrated the connection, the research needed to move one step further to see if there had been a correlation with

student dropout rates. When students entered ABE programs, they had the option to self-report any disabilities. However, because many students dropped out of school so young, some parents, teachers, and doctors may have missed or misdiagnosed some intellectual disabilities. It would be worth researching the special education needs within the HSE population, especially concerning the connection to earning credentials.

Foster et al. (1999) designed a qualitative study about test anxiety and test results with teacher-education students who could not pass mandated state tests. While that population was different from the HSE-preparation students, there were similarities: adult learners struggling to pass a test while enrolled in a test preparation course. The most distinct difference was that the students preparing to become teachers were repeatedly unable to meet the test's minimum requirements. Additionally, Foster et al. (1999) found high test anxiety in their qualitative study of six participants. Beyond expected test preparation techniques, the teacher-education students' professors acted as coaches and focused on student goals, intrinsic motivation, and study plans. They incorporated new techniques about relaxation and stress reduction. The study resulted in showing a significant increase in scores for six of the eight students.

Adult students did not rely solely on teachers' pedagogical practice to fill them with knowledge. Learners brought expertise to the classroom with their life experiences. Kenner and Weinerman (2011) pointed out that non-traditional students were "likely to have a gap in their academic development process" (p. 90); they suggested that educators connect the worldly knowledge non-traditional students bring. Furthermore, their shared experiences provided value to other students, which helped build self-confidence, especially with mathematics (Jameson & Fusco, 2014).

Mathematics as a Gateway Instead of the Gatekeeper

Some students enrolled in ABE courses because they were English language learners and needed to learn English before taking the HSE. However, most students reported the mathematical reasoning section of the GED as the reason why they had not yet earned their high school credentials (Silva & White, 2013). For example, many HSE students declared themselves as “not math people” and held tightly to that belief, which was a possible hypothesis for why they were reluctant to test (Peters & Hobaugh, 2018). Silva and White (2013) found that 50% of older, non-traditional students dropped developmental mathematics at the beginning of the course because they held the fixed mindset that they did not have the required intelligence. The researchers asked five women what their university could do to best support their mathematics anxiety. The students wanted tailored instruction in developmental mathematics and concepts presented at a slower pace with more detailed steps (Jameson, 2019).

Research showed that many adults who were knowledgeable in basic calculation skills still avoided any mathematics because of their anxiety combined with their low confidence in their mathematical abilities (Jameson & Fusco, 2014). “If the students bring negative memories of early school years to the university classroom and don’t distinguish between old and new experiences, they may reflexively respond negatively to certain cues or situations” (Rivera, 2008, p. 33). For instance, Biff, a student preparing for the GED, said, “I was most nervous about math” (personal communication, July 22, 2019). Many ABE programs have not offered courses for the HSE social studies or science subsections because the students saw the mathematics test as the pinnacle of difficulty.

Grigg et al. (2007) compiled information from the 2005 Nation's Report Card of 12th-Grade Mathematics that reported fewer than 25% of those seniors received a "proficient" rating in mathematics skills. With school emphasis on results like these and after at least 13 years of schooling, some students seemed, figuratively, to throw up their hands and declare they were simply not good at any mathematics. However, Grigg et al. (2007) also reported that more than 60% of high school seniors received a "basic" or above rating. For clarification,

Demonstrating the ability to use the Pythagorean Theorem to determine the length of a hypotenuse is an example of the skills and knowledge associated with performance at the Basic level. An example of the knowledge and skills associated with the Proficient level is using trigonometric ratios to determine length. (Grigg et al., 2007, p. 1)

In the typical ABE classroom, students self-reported their worries about not being ready for the mathematics section as the biggest hindrance to taking the HSE. Students felt convinced that once they conquered that piece, they had essentially earned their credentials. However, I have found success using an academic coaching approach with a significant increase in students' numbers taking the mathematical reasoning section after completing the basic HSE course.

However, few students went on to take another section of the test even after successfully passing the mathematical reasoning section. There was a connection with mathematics anxiety, but there was something more profound than the fear of math (Jameson & Fusco, 2014; Watts, 2011). Perhaps students held on to what Kegan and Lahey (2001) called an immunity to change. In 2014, Gall interviewed students from ABE classes, including an 81-year-old student who still told stories about negative mathematics experiences in elementary school. The student ultimately dropped out of the

HSE course because he became frustrated with studying for the mathematical reasoning section. Gall (2014) reported that participants' self-confidence levels either stayed the same or increased after HSE preparation, focusing the study on students who ultimately earned their credentials. Those students credited the staff and ABE programs as contributing to their success. Gall (2014) reported that students without high school diplomas had significantly lower college graduation rates when they started through community colleges. Therefore, the GEDTS should encourage learners to apply directly to four-year colleges.

Gall's (2014) report would have been more valuable and thorough if it included the percentages of students who failed to earn their credentials. Gall (2014) pointed out an interesting aspect of the ABE program and the failure to create consistency between programs at different colleges; although, uniformity most likely would not have improved any results. Gall's 2014 primary finding was that students' self-perceptions were essential to older adult students, which was critical for ABE programs to have recognized, honored, and nurtured. ABE programs needed to incorporate ways to increase self-confidence while decreasing self-doubt and mathematics anxiety.

Watts (2011) wrote a quantitative dissertation study about community college and high school students with no mention of HSE students. However, the study was significant to review and report; the author pointed out the missing research for undergraduate students in developmental courses and the relationship of their mathematics anxiety and mathematics efficacy to mathematical performance prediction. Nevertheless, there was still a gap for HSE students, specifically. Watts (2011) provided quantitative research about developmental students by identifying the connections

between mathematical performance, mathematics anxiety, mathematics self-efficacy, gender, and age among students.

The most important result was that self-efficacy surrounding mathematics was the only predictor of success in mathematics courses. If students predicted low or high scores based on their self-efficacy, they were correct. Watts (2011) concluded future researchers must identify possible relationships between positive and negative feelings of mathematics progress in students entering college who require remedial help. Additionally, Watts (2011) discovered a result that would probably cover all adult learners: students brought their academic histories to the classroom. Their experiences either helped or hindered their learning.

Interestingly, Watts (2011) offered a valuable discovery in her research; she found a connection between anxiety in mathematics and other types of academic stress, including anxiety around test-taking.

The results showed that math anxiety slows down performance, decreases the accuracy in solving math problems, and disrupts the working memory processes. The study also found that students with fewer math classes completed, both high school and college, had a higher math anxiety level when performing math computations, and the math anxiety level increased when the computations became more difficult. (Watts, 2011, p. 17)

Cordes wrote a 2014 dissertation that questioned the shared experience of students who could not complete or pass developmental mathematics courses. Cordes (2014) discovered tragic findings of collective “isolation,” “self-doubt and negative attitudes towards developmental math,” “success clouded by the inability to progress,” and a “fixed mindset” (Cordes, 2014, p. 128). Cordes’s 2014 research emphasized the need for understanding the reluctance to progress, which often started with mathematics.

Ryan and Fitzmaurice (2017) used a mixed methods process with surveys and interviews about the stories of their lives, which provided a somewhat unique perspective because other researcher analyzed mathematics anxiety studies using quantitative techniques. Ryan and Fitzmaurice (2017) found that “in spite of their experiences with mathematics, mature students demonstrate a persistence—and even a resilience—in respect of their engagement with mathematics” (p. 49). Teachers should have emphasized the strength and resilience their students possessed in all academic areas. Ultimately, the study concluded that students increased their mathematics confidence with support from their teachers and peers. Critically speaking, the analysis was thorough, but it would have benefitted a more extensive section of the academic community to further explore the individual stories or to have drawn from a larger sample for the statistical analysis.

Jameson and Fusco (2014) and Luttenberger et al. (2018) researched the possibility of preventing mathematics anxiety altogether because of how damaging it has been to students’ overall academic success. Both sets of researchers reported no clear explanation for why some people have such high mathematics anxiety. Still, they did discover, in general, people with lower self-perception and mathematics self-efficacy had higher levels of mathematics anxiety. Luttenberger et al. (2018) put it succinctly: “the higher one’s math anxiety, the lower one’s math learning, mastery, and motivation” (p. 314). Furthermore, some adult students had low self-confidence and were principally concerned with how traditional college students perceived their academic performance in the classroom (Jameson & Fusco, 2014), which contributed to their anxiety. On the other hand, when teachers taught mathematics using realistic solutions, they increased their learners’ confidence and decreased academic uneasiness (Jameson & Fusco, 2014).

Bruno (2015) created a study that sought to determine if mathematics and test anxiety caused dropouts for high schools. Bruno (2015) surveyed and interviewed the students and found that female participants showed more anxiety than men. Two of the 15 participants said they had both high test and mathematics anxiety. Finally, Bruno (2015) displayed a wide variety of answers about why they dropped out of high school. These three intriguing findings could have been the basis for additional research to the current HSE study because those students were all high school dropouts.

Again, Bruno's (2015) study was indirectly related but provided essential knowledge for the present HSE case study. Bruno's 2015 study thoroughly researched mathematics anxiety in high school dropouts. The HSE population's essential connection was when Bruno (2015) asked why those students went back to earn their credentials. "An overall theme emerged from the interviews, which illustrated that the study participants focused on the outcomes of earning a GED as their motivation for going back to school" (Bruno, 2015, p. 13). The students' desire to earn their credentials was their motivation, yet few ABE students ever took the test. Bruno (2015) found the participants did not drop because of anxiety; there was no significant difference in overall stress between those dropouts and graduated high school students.

One final qualitative study described students who successfully earned their HSE credentials through an ABE program. Humphreys (2018) found that ABE students were, overall, pleased with the environments and cultures of their HSE classrooms, which contradicted Bennett's (2016) findings. While the participants in Humphrey's 2018 study said their mathematics anxiety weighed heavily on their levels of self-efficacy, the students felt comfortable continuing to make plans to move forward in their careers in the

ABE program environments. That study was another example of stories about students after they achieved HSE success. Conversely, I intended to understand how students had become so comfortable within their programs that they could not take the next step forward.

Conclusion

The literature review provided the necessary background of the student population, the stages of personal development among HSE students, and how transformative learning has played a part in ABE programs to begin to understand the problem of so few earned high school credentials for adult learners. Low HSE success rates have negatively impacted everyone: American citizens, taxpayers, educational leaders, teachers, and adult learners. Considering the significant number of Americans—millions—who have not earned their high school credentials, it was surprising how little research there was about the HSE adult learner's reality.

The purpose of this case study was to use the lens of the constructive-developmental framework (Bridwell, 2012; Kegan, 1982, 1994, 2000; McCauley et al., 2006) to examine how adult learners' experiences have prevented them from taking any subsections of the HSE test. The literature review revealed a missing understanding of the lived experience of student reluctance; the literature needed discerning inquiries, interviews, and research-based solutions, so HSE student success could become less about instruction and more about intention. The following chapter detailed the methodology behind the research questions about the student HSE experience and any underlying commitments that kept them from taking the test.

CHAPTER THREE

Methodology

Introduction: Research Questions

The first chapter of the current problem of practice showed that most students seeking their high school equivalency (HSE) credentials entered adult basic education (ABE) classrooms with determination but exited without certificates of completion (Texas Educating Adults Management System, 2019). The second chapter identified the student population, the role of adult development, and transformative learning for adult learners. This chapter articulated the methodology and research design used to understand the essence of each participant's reluctance to test using the constructive-developmental framework (Creswell & Plano-Clark, 2018).

Two research questions guided the methodology.

1. What were experiences of GED students who completed at least 40 hours of GED preparation courses but had never taken any subsections of the GED?
2. What, if any, were the hidden competing commitments that contributed to the HSE students' decisions to continue to move forward with preparation courses without taking the GED?

I used the research questions to understand the students' ways of making meaning as adult learners who simultaneously repeated the incongruous pattern of progressing forward by taking preparation classes while holding back by delaying the test. I used a narrative multiple case study, intentionally choosing three similar students from the same ABE program with distinctive experiences related to the two research questions (Creswell, 2013).

Researcher Perspective and Positionality

I was interested in why adult learners made contradictory choices and behaved in ways that worked against their goals, so I framed my perspective through my role as a GED instructor. The first time I had a student come to my mathematics class who told me she had been working on her GED for more than 20 years, I thought it was an anomaly. However, my second 20-year student caused me to jump into action with research. Having experienced ABE only from a teacher's perspective, I learned the culture from an HSE-student standpoint as much as was feasible (Bergin, 2018).

I was connected to this case study because I have always been fascinated by educational psychology and human behavior. In graduate school, I studied adult development with Professor Kegan for one year, focusing on Kegan and Lahey's (2009) Immunity to Change (ITC) map-making technique of personal or professional reflection. I chose to continue this research to investigate my intrigue (Bergin, 2018; Englander, 2012). My relationship with this particular research led me to get certified in facilitating the process. I continued additional training with Professors Kegan and Lahey at the 2019 in-person Minds at Work ITC Facilitator's Workshop and the 2021 online Adult Development Assessment Workshop: The Subject-Object Interview (Minds at Work, n.d.). I have also successfully guided life coaching business clients towards identifying the obstacles or resistance to achieving their goals using the ITC map-making technique. I wanted to use that significant facilitation practice to guide my investigation of understanding the student experience and how HSE-hopeful students have made sense of their lives (Creswell & Creswell, 2018; Merriam & Tisdell, 2016).

In the HSE classroom, I have taught with a constructivist lens; I have tried my best to honor the culture, backgrounds, and personal circumstances students used to make

meaning within our space together (Creswell & Creswell, 2018). I knew that many adult learners returned to school with negative academic histories, primarily their worries in mathematics. As a GED mathematics instructor, I concurred with Jones who said, “I see the world through math-colored glasses” (TEDx Talks, 2018, 2:30). I was confident that every student who entered my ABE classroom would find success with mathematics.

When I taught my first HSE course, 32 adults regularly attended my mathematical reasoning class. Though each student had a different timeline and unique post-HSE plans, on the first day of class, nearly every student stated the same goal: earn the GED as soon as possible. Over nine weeks, the students and I celebrated together, cheering their ability to learn rapidly and apply complex concepts; some students surged from third-grade basic operations skills to demonstrate their comprehension of algebraic equations and geometry. Arrogantly, I marveled at my teaching skills and, in several cases, the newfound joy for learning I helped bring to their academic lives.

Regrettably, merely one student took the GED mathematics test section, much to my dismay after such a productive course. I realized I had failed my students. I knew I had to reevaluate my way of helping my students achieve their goals; I needed to understand their experience.

Parallel to some of my students, I also balanced an internal push and pull as the teacher and classroom leader. I wanted to connect with them by acknowledging that I was neither more intelligent nor more motivated than they were. The difference between us was that school was a safe space for me growing up in a world of chaos, so I had the opportunity to excel academically.

Simultaneously, I knew because of my privilege, education, and role as the authority figure, I may have portrayed the “White saviour complex” (Straubhaar, 2015) to the primarily non-White students (Bergson-Shilcock, 2019; Coalition on Adult Basic Education, 2021). Milner (2007) said, “dangers may emerge that researchers can see or cannot see and that they cannot anticipate, predict, or expect in the research process” (p. 388) when studying communities of students of color. Above all, I never wanted to exploit or cause emotional stress to the HSE students; I conducted this study to benefit the participants and future students.

Although I did not think I was superior to my students, my bias was that I felt I should be the ally and advocate for them and for all the marginalized student populations I have taught, tutored, and coached throughout my life. I wanted to give a voice to those who may have felt they were unable to be heard. Instead of saving—a disservice to the adult learners—I planned to use this study to embolden adult learners. Thus, I learned another way to empower current and future students to discover the academic autonomy of their educations.

Theoretical Framework

I applied the theoretical constructive-developmental framework (Kegan, 1982, 1994, 2000) to guide the research design. The theory of adult development has focused on understanding how people made meaning in their lives by focusing on transformative learning (Kegan, 2000). I used that framework to lead every step of the design plan: the research questions, the five layers of participant interactions, and the data analysis.

Using qualitative tools helped the individual participants understand their particular conflict of the desire to earn their credentials but the aversion to taking the test.

The constructive-developmental framework provided the necessary structure to know how students made sense of their experiences. Kegan (1982, 1994) said that those who remain in the socialized frame of mind have often taken on society's expectations. However, those who were able to take ownership through a self-authorship perspective felt more of an internal authority. This framework provided a foundation to help the students uncover what prevented them from testing.

In 2001, Kegan and Lahey defined a type of protective system that all people have used to navigate their participation in the world; they said people have unknowingly created systems that maintained the separation between the things they say they wanted to do and what they were able to do. In subsequent work, Kegan and Lahey (2009) described that system as figuratively pressing the gas and brake pedals simultaneously. They named their tool for uncovering the hidden competing commitments the ITC map. I first developed the research questions from Kegan's theoretical framework to uncover each participant's ways of meaning-making in the specific context of preparing for the HSE. Then, I used the resource created by Kegan and Lahey (2001, 2009) to determine why students were accelerating and braking simultaneously; I wanted to know why they were ready but not able.

I also used the constructive-developmental framework to guide the data collection from three HSE students who had previously completed formal preparation classes but had not taken the test. I created a five-step plan of qualitative data collection to understand how the participants had previously reconciled their choices to prepare for but not take any subsections of the GED. I designed a combination of interview questions, the ITC map-making steps, and visual data to help create a complete picture of the

students' ways of making meaning in their academic lives. I then analyzed the data using the constructive-developmental theory and evaluated the data that demonstrated where each student was in her adult development.

Research Design and Rationale

I selected a narrative multiple case study to tell the stories and allow the adults to reflect on their pursuits of the GED (Creswell, 2013). Therefore, I wrote three sections with sub-categories to consider how adult learners experienced lengthy HSE preparations without taking the test. The first section explained my positionality, the constructive-developmental framework, and the rationale for the case study design. The second section described the site selection and participant sampling, the data collection, and the data analysis procedures. Finally, the third section detailed the ethical considerations, limitations, and delimitations of the study.

I used the research questions to guide the literature review, which formed the argument to conduct this investigation. The study led to the case study design, which directed the methodology for data collection and analysis (Creswell & Creswell, 2018). I intended to discover how people gave meaning to experiences in their lives using the design layers most compatible with interviewing and qualitative data collection (van Manen, 2014). I used the ITC map to help students see what they were subject to and help them potentially start the transition to a self-authoring frame of mind.

I chose the case study design because I wanted answers to the research questions (Creswell & Plano-Clark, 2018). I conducted the study in four layers (Crotty, 1998) with a constructivist worldview (Creswell & Creswell, 2018). I then applied the constructive-developmental theory as the research framework and used a case study as the design. I

planned to discover the essence of the experience of three students who had taken HSE-preparation courses but never followed through by taking the examination (Bergin, 2018). I wanted to understand the context of what was preventing students from taking any sections of the test. Therefore, I explored the participants' feelings and personal truths through interviews (Merriam & Tisdell, 2016).

Other studies have shown the potential for therapeutic benefits this type of research can create. Specifically, in their qualitative study of risky behavior, Bourne and Robson (2015) illustrated "how being interviewed about prior behavior can facilitate a sense-making process and might provide some degree of cathartic benefit" (p. 105). Throughout the process, I ensured a safe, comfortable, and trusting environment for my participants to reflect on their personal histories related to their educations.

I spoke with participants who had completed at least 40 hours in at least one preparation course without ever testing. I spent much of our interview time listening carefully and asking follow-up questions so "fresh insights and new information [could] emerge" (Merriam & Tisdell, 2016, p. 111). I used one-to-one interviews with open-ended, semi-structured questions, which were best suited for collecting the qualitative data (Creswell & Creswell, 2018; Merriam & Tisdell, 2016).

Through interviews, I studied the three students to learn how they have made meaning as adult learners. Specifically, I asked how their experiences guided their choices to stay in the HSE-preparation programs without testing (Merriam & Tisdell, 2016). By engaging through meaningful, reflective questions, I wanted the participants to feel as though they were the assistant researchers. Together, we uncovered their understanding of the academic choices they made, specifically their contradictory actions.

Site Selection and Participant Sampling

The participants and I first met through phone calls for the initial introductions. Then, we held the interviews via online video conferencing. The virtual format helped us avoid any COVID-19 restrictions or potential transportation restraints. The online meetings allowed the students to participate in the interviews where they wanted for comfort or convenience. One student participated from her place of work; two were in their homes.

I also used purposeful sampling to find the participants (Creswell & Plano-Clark, 2018). The students in the present study had previously attended in-person and online courses offered at the same community college ABE program where I have taught for three years. Part of my purposive sampling rationale was to meet with students who may have been frustrated or even confused by their inability to progress, especially over many years. Therefore, I created a similar reassuring environment within the interview setting, starting with the introductory calls, using my experience as a teacher of students with academic anxiety.

Before engaging with the participants, I bracketed my position (Creswell & Poth, 2018). I suspended my preconceived notions about their HSE experiences to realize the meaning of their lived experiences through them. However, I knew the participants may have entered this study with academic anxiety, so I created a positive experience and a motivational message (Pappas & Jerman, 2015). Through this process, they may have overcome their reluctance to take the HSE test.

I based this case study research on the expectation that there would be the aspect of a shared experience (Merriam & Tisdell, 2016). Consequently, I first requested and received approval to check the database to find men and women who had previously

completed at least 40 hours of HSE coursework but had no record of taking any section of the HSE (Texas Educating Adults Management System, 2021). Ultimately, I connected with three women who met the criteria and wanted to contribute to the study.

Data Collection Procedures

I collected data, guided by the research questions, in two sections and five steps outlined here for transferability (Creswell & Poth, 2018; Merriam & Tisdell, 2016). I addressed the first research question of understanding the student experience through the first two data collection steps plus the first two ITC map columns. Next, I addressed the second research question of identifying students’ competing commitments that prevented them from taking the HSE exam through the second two columns and the final two data collection points. Figure 3.1 offers a visual diagram of the data collection steps.

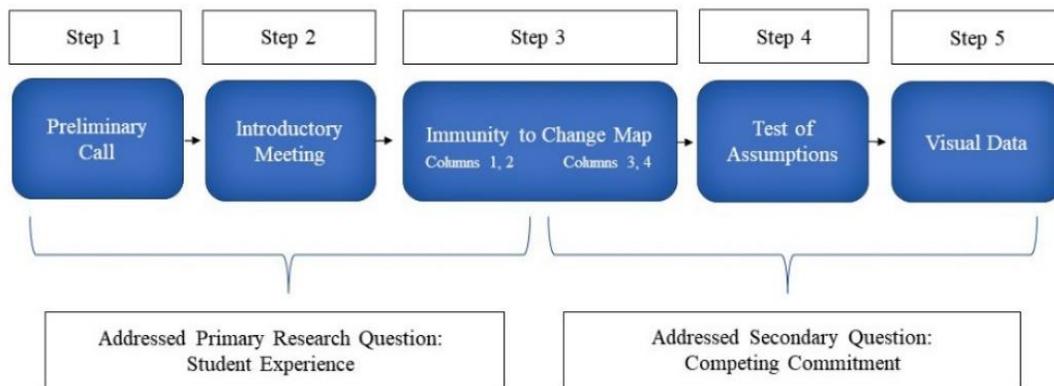


Figure 3.1. Data collection in five steps addressing two research questions.

I received IRB approval and confirmation from the ABE program director and then searched the program database to find HSE teachers and their course rosters. I looked at four teachers’ respective rosters, working back from Spring 2021 classes through Spring 2019. I went through approximately 200 students’ class information to

find those who had never taken any sections but had accumulated at least 40 hours (Texas Educating Adults Management System, 2021); I compiled a list of 77 names and contact information. I kept a running table with updated notes about any contact I made; for example, I left several voicemail messages. I started with the long list of prospective students, but not because I believed that a more extensive qualitative sampling would have produced a more generalizable result for all HSE students (Englander, 2012). Instead, I wanted to ensure I left room for students who decided to withdraw from the study at any point for any reason. Additionally, I did not anticipate how difficult it would be to find participants, so I kept returning to the list.

First, I made preliminary phone calls to find the participants over four months. Unfortunately, many telephone numbers were no longer in service, and zero students responded to the voicemail messages I left. Five students said they were interested but never responded to the scheduled online meetings or follow-up phone call attempts. One student gladly participated, but she was not a good fit because she expected to take the test the day after our preliminary phone call. One student and I started with the data collection process, but she rescheduled four times and never responded to any subsequent phone calls. Eventually, I connected with one former student and two women I had never met; those three served as the participants for the data collection. The three adult learners I connected with had chosen to progress by taking classes while figuratively stopping that momentum by not taking the test—participants with congruent experiences to my research questions (Englander, 2012). See Appendix A for the preliminary call sample script.

Second, I conducted the introductory meetings for approximately 15 minutes each. Two interviewees and I met online; the remaining participant and I spoke on the phone. Each conversation was unique and slightly varied based on each student's individual questions and our rapport. My former student and I reconnected immediately, and the two new students and I initiated our research partnership. I did not record the conversation with the phone call participant; however, I took notes on my laptop as she responded and asked questions. Review Appendix B for a complete list of the open-ended, structured questions used in the introductory meetings.

I engaged in the preliminary calls and introductory meetings to begin the data collection for the first research question. Additionally, I used those two opportunities to ensure that the identified adult learners wanted to proceed. I established trust with the participants by explaining the research questions and their roles as interviewees. I also confirmed each participant's age, gender, race or ethnicity, and last completed formal school grade and answered each participant's questions about the upcoming interview session. I also collected initial feedback about their relationships with the HSE examination. See Appendix C, Table C.1, for the three participants' demographics and initial responses to my question about taking any subsections of the test. Furthermore, two participants and I conducted the introductory meetings online to work out the technical components before the one-hour interviews. I repeated the same question protocol with each participant (Creswell & Poth, 2018). See Appendix D and Table D.1 for the interview schedule.

Englander (2012) advocated that researchers provide time between meetings; he argued against the objection that the participants would overthink the topic before the

interviews. I wanted the participants to consider the matter beforehand because of the research questions' reflective nature. Moreover, I held the short preparatory meetings to ensure the participants felt that they could leave the research project if they no longer felt safe with the sensitive subject of exploring their life choices. Researchers have found that their ITC participants were willing to uncover their uncomfortable revelations if they were confident the researchers would safeguard any disclosures (Kegan & Lahey, 2001). Consequently, I ensured the participants felt comfortable sharing their information but reminded them they could withdraw at any point. Likewise, I provided the opportunity for participants to have a chance to ask any questions about the consent form; see Appendix E to review the form.

Third, I collected descriptive data through one-on-one interviews and individual ITC maps. I interviewed the participants through video conferences to observe their behaviors as they went through each stage of the ITC map (Creswell & Creswell, 2018). I began the qualitative interview by asking exactly about the phenomenon (Englander, 2012). I led with the following initial question: Would you please tell me about the experience of what it was like to regularly attend and complete at least 40 hours of a preparation class?

I then used guided interviews with carefully considered questions with room for flexibility in the natural flow of conversation (Shavelson & Towne, 2002). Next, I walked the students through each column of the ITC map, ensuring each interview included the same pre-planned questions to tease out common themes and achieve saturation in the data (Creswell & Poth, 2018). See Appendix F for the complete list of questions and the

ITC map-making and test of assumptions procedures. Each interview lasted approximately one hour. See Appendix G, Figures G.1–G.3, for each participant’s map.

Fourth, the participants and I created example tests for the assumptions they uncovered through the fourth columns of their ITC maps (Kegan & Lahey, 2009). The students later decided independently if they wanted to carry out the safe and conservative tests we created together, generate different tests, or run no tests to challenge the previous truths they had been subject to, which we uncovered through our interviews (Kegan & Lahey, 2009).

For the fifth and final step, I asked each student to share an image of a representation of her motivation towards her GED goals to serve as visual data collection (Bergin, 2018; Creswell & Plano-Clark, 2018; Englander, 2012; Saldaña, 2016).

Unfortunately, COVID-19 restrictions moved our meetings online, so each student discussed her motivational item during the interviews. One participant described her use of uplifting notes, the second participant showed me a sign hanging in her living room, and the third participant described visual motivation from text messages.

Data Analysis Procedures

I prepared the data by organizing each participant’s information after each point of data collection. I organized the preliminary phone calls to ensure the students met the criteria and were intrigued about participating in the study. Then, I managed the data from the meetings and interviews. Following the data collection, I kept each participant’s five stages of data collection exceptionally organized with digital folders.

I knew the collected data might surpass what I thought I already knew about this phenomenon (Englander, 2012). I ensured validity with member checking, triangulation

with five data sources, reporting disconfirming evidence, and peer review (Creswell & Plano-Clark, 2018). I analyzed each set of the five data groups through five steps: preparation, review, analysis, representation, and interpretation. I analyzed the data starting with framework analysis, moved to thematic analysis, which then led to cross case analysis. I wanted to understand each participant's ways of making meaning regarding the pursuit of their high school credentials. I organized, used open coding (Creswell & Plano-Clark, 2018), interpreted the data using categories (Creswell & Creswell, 2018), and followed the data analysis spiral (Creswell & Poth, 2018).

I then read the transcription of each set of data to get a clear idea of each participant's significant points. I started analyzing the data beginning with the first read-through to edit the transcription; I simplified and condensed the data and wrote notes from each interaction to prepare for initial coding. I started by looking for themes from the students' responses and coded the data (Hancock et al., 2007). During the second read-through, I started hand-coding with axial coding, assigning colors and letters to each of the five themes and subcategories (Creswell & Plano-Clark, 2018). I formatted the data by hand, using notes to highlight categories. I created a qualitative codebook unique to the project with colors, bolded text, and abbreviations. See Appendix H, Figure H.1, for a small sample of a transcribed and coded interview.

During the final integration, I analyzed the data through the lens of the theoretical framework to create a broad perspective of how the three women had been making sense of the experiences as students hoping to earn their GEDs (Creswell & Plano-Clark, 2018). Throughout, I focused on the transferability and confirmability of this case study (Merriam & Tisdell, 2016). Through my discerning questions, recorded interviews, and

strict attention to detail, I ensured that any qualitative researcher could replicate the process.

I used codes from the themes to describe the emotional state of each participant. For example, some students responded with a defensive explanation of barriers that had prevented them from taking more classes. I used the coding process based on the primary and secondary research questions and the theoretical framework, not just showing them what they knew but how they knew it. The qualitative approach helped identify subthemes developed from the preliminary calls, introductory meetings, ITC maps, assumptions, and visual data (Creswell & Plano-Clark, 2018). See Table 3.1 for a sample ITC map.

Table 3.1

Data Analysis: Participant Map Example

HSE-related commitment	Behaviors working against	Competing commitment	Assumption
I am committed to getting better at attending my GED classes.	I often skip classes.	I am committed to not feeling dumb in front of other students.	I assume that people will think I am not good enough to be there.

Data Trustworthiness and Authenticity

Through the lens of the constructive-developmental framework, I described the data in themes and categories. I used quotes from the individual ITC maps and interviews to offer evidence of their various experiences. As part of my research accountability process to present a valid and reliable study, I presented my research so any scrupulous qualitative researcher could simulate it and requested feedback from a peer group for confirmation (Creswell & Plano-Clark, 2018). To ensure dependability, I assessed the

themes from all data. I examined the findings from the first half of the data collection concerning the primary research question about the student experience. I interpreted the results from the second half of the data collection in congruence with the secondary research question of uncovering competing student commitments.

Shavelson and Towne (2002) explained the importance of transparency and the link between collecting data and providing evidence of accuracy. They said, “social and natural sciences...should disclose research to encourage professional scrutiny and critique” (Shavelson & Towne, 2002, p. 3). I ensured credibility by emailing the students copies of their ITC maps (Creswell & Plano-Clark, 2018).

To ensure validity as we moved through the interviews, the participants watched in real-time as I drew their ITC maps on an online whiteboard through my shared screen. Before writing in each column, I would often say, “If I understand you correctly,” or “Let me make sure I understand what you mean.” Then, after I wrote dialogue or data in each step, I would confirm by asking, “Does that feel true to you?” or “Does that look correct to you?” When the participants concurred, we moved forward.

Ethical Considerations

Following guidance from researchers Creswell and Creswell (2018), I ethically evaluated each step of collecting and analyzing data. During the planning stage, I completed the Baylor University IRB and gained clearance through the participants’ community college IRB. Additionally, I received permission from the ABE Program Director and Houston-Galveston Area Council Executive Director to identify participants through historically archived data (Texas Educating Adults Management System, 2019). Concerning my participants, I determined how the research benefitted the students I

interviewed. As for benefits to future students, this research could shape ABE programs to create two tracks: one for students who want to take no-pressure adult education classes and one for students who wish to earn their HSE credentials.

While collecting research, I kept my commitment to my participants at the forefront. Kegan and Lahey (2001) explained the importance of guiding people through the immunity map with sensitivity. Some participants challenged assumptions they have held since they dropped out of school, so I prudently navigated their stories with care.

Kegan (Thorson, 2020) also highlighted the importance of coaching participants who have wanted to identify what could have been holding them back. He said that if researchers pushed too hard with people who were very securely within the socialized mind, they could react negatively. With that in mind, I only moved forward with participants interested in understanding why they had not yet tested. I wholeheartedly agree with Hostetler's (2005) approach to good qualitative research: "Our ultimate aim as researchers and educators is to serve people's well-being" (p. 16). I honored the participants' well-being by safeguarding their anonymity, using video-recorded interviews, and providing thoughtful and meaningful questions that positively impacted the reflection of their academic lives.

Limitations and Delimitations

I set the boundaries and criteria for the participants to create an in-depth analysis of the specific student experiences. For example, I could have included students who had completed fewer than 40 hours, which may have incorporated a wider variety of voices. The study's limitations outside of my control were the students who dropped out of the research for the following technical reasons: no childcare, COVID-19 quarantine

restrictions, lack of electronic devices, and unexpected job changes. Additionally, if I had more time, I would have conducted an explanatory sequential mixed methods design to sort the quantitative data set and then proceed with the qualitative protocols (Creswell & Plano-Clark, 2018).

Hundreds of ABE program students have enrolled in HSE classes only to stopout after fewer than 10 hours of participation; those students were not counted as active participants (Texas Educating Adults Management System, 2021). I intentionally chose to include students who had completed at least 40 hours because those hours represented commitment, motivation, and the program allowance to enroll in the next iteration of the course, despite never testing. Also, I purposely excluded students who had attempted at least one subsection of the test. I wanted to investigate and understand the experience of students who had never tried taking the official test in any capacity. The research questions helped identify the students who met the necessary criteria for this study (Creswell & Creswell, 2018).

Conclusion

I collaborated with three participants and created five sets of data collection to answer two questions. I conducted this qualitative case study through a constructive-developmental lens to uncover what was happening instead of how often something occurred (Hancock et al., 2007). The students and I explored the primary question of the essence of their HSE-seeking experience. We then worked on the secondary point together to discover their hidden commitments preventing them from their goals. The flexibility of a qualitative study opened the doors for a richer experience for me as the researcher, the three adult learners, and any future students who might benefit from the

outcome of the anticipated discovery of understanding (Creswell & Poth, 2018). This case study contributed to students' available support from teachers, counselors, and unlimited no-cost courses by looking at research questions through specific data collection and procedures in partnership with three adult learners. Chapter Four described the results and implications of the data collection and analysis to benefit all HSE students through the GEDTS.

CHAPTER FOUR

Results and Implications

Introduction

This case study explored the experiences of three adult basic education (ABE) students with the pseudonyms Connie, Alexia, and Eve. The three women, aged from the late 30s to early 50s, have collectively completed nearly 600 hours through 14 GED preparation courses in adult education programs at their community colleges. These numbers did not include any independent, informal work through self-guided books, one-on-one tutoring, or any other attempts they did not disclose. They have all put in considerable time, energy, and sacrifice towards earning the GED. However, they have never tried to take any sections of the examination.

The three adult learners have spent a significant amount of time in their lives working on their collective academic goal of earning their high school equivalency (HSE) credentials. However, they were living in their separate, unique contradictions. Interestingly, the students continuously moved ahead by taking classes, studying, or finding new adult education programs; however, they had created internal systems that guaranteed any forward momentum would never happen despite all of that movement. They unknowingly designed their inertia towards the GED.

The methodology used qualitative data collection (Kegan & Lahey, 2009) to examine the experiences of adult learners through the constructive-developmental framework (Kegan, 1982, 1994, 2000) and two research questions. The primary research question guiding this study was, what was the experience of adult learners who had

completed HSE-preparation courses but had never attempted any sections of the test? The second research question was, what, if any, were the underlying commitments and assumptions that the participants were unconsciously holding?

The findings identified two points. First, adult learners have gone through their lives since dropping out of school with the additional anxiety of not having earned their credentials, contributing to the stress of their daily lives and responsibilities (Pappas & Jerman, 2015). Second, the students who did not attempt the test when first identified as ready by their programs or teachers will most likely *never* take the examination without a catalyst for changing their internal protective systems.

This chapter unfolded in three parts: results, discussion, and implications. The results section formed most of the data analysis with four elements, starting with Connie's, Alexia's, and Eve's individual experiences and ending with the three adult learners' cross case analysis. Within each participant's section, I described five parts. First, I presented each woman's story, explaining how she has navigated working on the GED. Second, I analyzed her experience as an adult learner through the preliminary call, the introductory meeting, and the first two columns of her Immunity to Change (ITC) map to answer the first research question. Third, I answered the second research question through her underlying competing commitments from the final two columns of the map and her motivational image. Fourth, I explained the test of assumptions each participant and I created. Fifth, I explored her stage of adult development through the lens of the constructive-developmental framework. See Table 4.1 for a visual diagram of the data analysis.

Table 4.1

Data Analysis in Five Steps Addressing Two Research Questions

Steps	Data analysis
1	Participant’s HSE-related story
2	Experience as an HSE student
3	Competing commitment(s)
4	Test of assumptions
5	Theoretical framework: Stage of adult development

Results

I chose to interpret my work with the adult learners based on the theoretical framework and my role as a GED teacher and coach. These three women shared their beautifully complex stories, so I did not intend to distill their lives down to five points. Instead, I presented the analysis of each woman’s data collection in a storyline to paint a picture of each. The purpose of this study was to identify potential implications and future use, so I culled their descriptive accounts to learn from their experiences.

The final section of this chapter provided space for the discussion and implications of this study. The discussion section reviewed the study’s relevance, the interpretation of findings, the connection to the literature review, the contribution to current literature, and future research, illuminating how students have remained in the repeating cycle of taking preparation courses. The implications of this case study revealed findings for students, teachers, and the GED Testing Service (GEDTS).

Connie

Connie and I first met when she attended an in-person GED mathematics course I taught through a grant-funded adult education program. My class was her third HSE

course; she completed 120 hours of formal course work over two decades. Connie dropped out between the 11th and 12th grades and was in her late 30s when we met.

Initially, Connie often seemed stressed and got flustered when she did not know how to work problems, constantly and furiously flipping through pages of her notes for the answers to appear. However, I watched her confidence slowly grow from someone who never offered a solution out loud to a more confident student who finally moved to the front row and occasionally provided answers. I gently encouraged her to plan to take the official mathematics section—or any section—of the GED to assess her skill level throughout our class meetings, but she reminded me that she was not yet ready. Nevertheless, based on my experience, I felt confident that, at a minimum, she would benefit from receiving tailored feedback to prove to her how close she was to passing. Quietly, I thought she was highly likely to pass it after seeing her significant improvement.

At the end of our preparation course together, she politely resisted my final attempt to persuade her to take the test and reassured me that she would take it as soon as she was ready. Unfortunately, she never took it. When I was looking for participants for this study, I reached out to Connie. I wanted to check on her progress and see if she would be interested in exploring her meaning-making experience.

I was curious to explore Connie's experience as an adult learner to understand better what it was like to work so hard in classes, only never to take the test. I called Connie for the initial step of data collection to ask her if she would consider participating. I was emphatic that she should not feel any pressure to join because she had been my

student. She was excited and seemed to look forward to telling me her story. See Table 4.2 for Connie’s HSE-preparation experience for nearly 20 years.

Table 4.2

Data Analysis: Connie’s Test Preparation History

HSE-preparation class, hours, and age	Did the class prepare you?	Why did you not take the examination?
Community College X Teacher A 40 hours completed Age: 20	Yes	The teacher was “patient” and “really good,” but “[my son] was always sick inside of the hospital or something.” “The more [mathematics] I kept forgetting, the more I was like, ‘Oh, I don’t think I’m ready.’”
Community College Y Teacher B 40 hours completed Age: 28	No	The class was “frustrating,” and the teacher was “impatient.” “It seemed like [the teacher] didn’t really want to be there.”
Community College Z Teacher C 40 hours completed Age: late 30s	Yes	“I don’t feel like I’m ready.”

Experience: Test intentions. I wanted to know Connie’s initial self-predictions when she took the three ABE courses. I asked if she had entered those classes thinking she would take the examination at the end or wait and see. In the first two classes she took, she said she began them thinking, “Hopefully, I can take it...hopefully, I’m not struggling in class. If I am [struggling], then maybe I’ll take it...but if I’m not [struggling], then I would have the confidence and be like, ‘Okay, I can do this.’” She struggled to provide a clear answer.

Connie took her third preparation course with me; she said going into it that she thought to herself, “I know I’m going to pass it; I just gotta focus on it.” This was surprising to me. During the course, she and I had worked together so much with extra tutoring. At the same time, she was so resistant to talk about signing up for the test, so I had incorrectly assumed that she ever had any intention to take the test in the first place. But, during our interview, she said she had entered that class with confidence that she would pass it. We reflected on our first day of class together when she told me emphatically that she planned to get her GED in two months or less. She entered with all of the necessary confidence, she put in the work and grew in her capabilities, but she left with nothing to show for it. She was ready but not able.

Throughout our data collection conversations, I found out that Connie’s experience as a student was always secondary to her responsibilities in life. Connie has been figuratively treading water since she quit high school. While trying to keep her head above water, she held her responsibilities even higher to protect them. She was shielding her two children from an unsafe father, reminding me of “the problems that I have in regards to home and my personal things.” She led the daily operations of her father’s business, repeatedly saying that she handled everything at work.

She took on the responsibility of her father’s health care as well. She said,

I’m just running around ragged.... I’m finishing this, but in the same time I’m finishing this, I’m finishing this other stuff. And so it’s just so overwhelming...when I get home at night, I’m just—my brain doesn’t shut off either.... “Okay, I didn’t get to do this. You know, I didn’t get to do that. So I gotta do this tomorrow.”

Connie vacillated back and forth between blaming technical barriers outside of her control and chastising herself. She told me how she could not find a quiet place to study

after the library closed because of COVID-19. Connie believed that once she could get organized, or “If I could just get myself to focus,” she could move forward. She told me about having to help her children with their online schooling but then admonished herself for not focusing. “So, it’s just all these, all these thoughts, and I just need them to shut up. If there was a switch [to turn off the worry], I would use it.” She seemed unsure of herself and lacked the confidence to figure out how to decrease her worry and increase her self-assurance.

She went on. “You know, like I know in the back of my head...like I know I want to get a GED...this will open up more doors for me.” She described how she felt about her preparation classes. “I get so discouraged because I get so motivated after our tutoring on Tuesdays and then it’s, you know, then I start thinking about everything else.” I could hear the stress in her voice and see it on her face as she described the constant flurry of activity that never offered any forward progression.

I had a clear picture, but I wanted to make sure we identified behaviors to help answer the first research question of understanding her experience. I asked her to think about the times she chose to be so hard on herself. She could have congratulated herself on the enormous number of tasks she had completed that day; instead, she scolded herself. I asked her about her the specific behaviors she was doing. She said, “I cry...and I pray, I pray a lot, [but] that negativity that kind of starts setting in.” Even in quiet moments of prayer, she was conflicted.

She was also unknowingly holding on to the guilt of dropping out after the 11th grade. “You know, I felt, always felt guilty, not finishing high school when I had just one more year.” When I asked her about what happened when she gave herself time and

space to think about GED school work, she said, “I get, uh...start having anxiety. Um, that’s my biggest thing is, uh, I have real bad anxiety already. Um, so when I [get distracted by others], I lose my focus.” She struggled with a constant push and pull of responsibilities with work and family and her need to prepare for the test. I asked her about what it felt like when she would give herself time to study. She said, “I start worrying...if I have that phone off just for a split minute or something—it’s just a fear of something happening,” and then she would immediately feel guilty for not studying. Understandably, Connie was highly stressed.

Underlying commitment and assumption: “I’m not enough.” In the second column of behaviors, Connie quickly listed her actions that worked directly against her GED goal. We next identified her underlying worries. I asked her to imagine that she had an hour to herself to work on her school work. Imagine she had the kids taken care of and someone else had the business office covered. I asked her, “As you imagine that, what is the distressing feeling that comes up?”

She paused thoughtfully and then bravely said, “Fear.” She went on to describe her inner monologue, “Like, ‘Am I really, really doing this? Am I really getting it done?’” I encouraged her to tell me more, visualizing sitting down to study with a sharpened pencil and no possibility of interruptions. I asked her to tell me how that would feel. Her voice quietly cracked with emotion, and she said, “Like I’m not good enough or smart enough to understand what I’m learning or trying to learn.” That was the moment that she found what she had been unconsciously holding.

I kindly pointed to her map and showed her how that worry had turned into an equally strong commitment goal. Yes, she had been committed to earning her GED.

However, simultaneously, she was just as committed to never feeling that terrible anguish that she was not smart enough. Therefore, it made perfect sense that, on the one hand, she had taken classes and done the work to help her achieve her goal while, at the same time, she made space for and welcomed all of the distractions in her life. Her immunity designed those family and work responsibilities; they protected her from what subconsciously felt like the life-threatening worry that she was incapable of learning.

Connie used sticky notes with handwritten motivational quotes to have a visual reminder every time she looked in the mirror. One message said, “Stand strong with my head up”—ready. At the same time, her internal monologue contradicted it with the internal assumption she had been living with: “I assume that I am not good enough or smart enough”—not able. After learning about Connie’s underlying worries and competing commitment to protect herself, I understood her contradiction. She planned to take the test but would never attempt it because it would potentially place her in the dangerous position of feeling that discomfort of not being good enough. Connie repeatedly demonstrated that she was eager to move forward; however, her mental immune system had created a rather ingenious method never to let that happen.

Test of assumptions: Say it out loud. I checked in with Connie to see how she was absorbing the realization of her conflicting internal forces. She said that it felt different, “because now it was written down—just looking at it, it’s like I’m a sad person.” Unfortunately, she immediately went to a negative perspective, but Connie lived with a rather cruel and harsh view of herself for, perhaps, at least 20 years. If Connie wanted to dive deeper into her understanding of how her life experiences had helped form her

meaning-making, she could have explored a biography of those truths (Kegan & Lahey, 2009).

Connie and I talked about the next step of testing her assumptions. We used her underlying commitment to identify a belief she had to have been living with to make her worries necessary. We labeled it, “I assume that I am not smart enough or good enough.” Naming the assumption created the space to begin moving it to object since she had been subject to it for so long.

I asked Connie if she could give herself some grace now that she had seen her subconscious assumptions. She said, “Honestly, I’ll probably still be hard on myself.” She said she could not trust her feelings. For example, she immediately returned to the assumption about herself. Connie said that she would first think that she should try harder when she would struggle with mathematics. Then, her internal critical voice would say, “No, you’re just not smart. You’re just not getting it.” She had been living with the inner monologue for years, so it was going to take time to change it.

After I wrote her assumption in the final column, I asked her if it felt true that she had been unknowingly living by that *truth*. She said it did. I explained that some people were able to see how they had been operating under incorrect assumptions; they could see that once it was on paper. So, I gently suggested that maybe she had been living with an inaccurate truth. She quickly disagreed. She said her assumption was correct; Connie firmly believed she was not good enough.

I suggested we create a modest test for Connie to run to collect data on her truth. Kegan and Lahey (2009) provided guidance for creating safe tests of assumptions. I suggested that Connie physically say out loud to herself in a private space, “I am smart.”

If she were feeling courageous a second time, perhaps she could speak into a mirror. I asked her how she thought it would feel to say that sentence out loud. Heartbreakingly, she said that it would feel like a lie; however, she said she would think about trying it and then spend some time reflecting on that experience.

Framework: Transitioning stage of development. The final data analysis was making a hypothesis on Connie's stage of adult development, based on Kegan's (1982, 1994, 2000) constructive-developmental framework. While I coded a significant number of references to the third order of mind, the socialized mind, Connie's map showed that her worries were driven by her own desire to do well, not by other people or society, which pushed her towards self-authoring. Interestingly, she devoted so much time to put others' needs before her own goals, but she realized that she was making those choices for herself.

During our interviews, Connie did make a more socialized comment, "I feel like I'm not getting it...everyone else around me is," but she immediately followed that by saying she did not want to compare herself to others. Also, there were times throughout when she placed blame on others like her children, her father, her teachers, and even her brain: "the problem is that my brain is just all over the place." She was balancing conflicting demands from others and often felt that she would never get everything done. However, although we uncovered the idea that she had been protecting herself from feeling her underlying commitment, she made several remarks about personal reflection when it came to her confidence. I could see she was in a state of transition, slowly awakening from Stage 3 to Stage 4.

Connie's story was one of anxiety. She said "guilt" or "worry" five times throughout our interviews. I asked her to tell me more. "It's having that guilt of something that I know that I can accomplish, but I just didn't find the motivation to do it, you know...like maybe I wasn't good enough to do the test." She was not suffering from guilt because she had let others down; Connie was disappointed in herself, and she was ashamed. Instead, she seemed to be making meaning from a more self-authoring place when she said, "This is my time, and this is what I'm going to do, and this is what I'm going to accomplish." Through helping her identify and uncover her worries, Connie started the process to move those anxieties to object.

Each morning, Connie would head out into the world, ready to take on the day's challenges after seeing her handwritten, motivational reminders like, "God is with you always" and "Every day is a blessed day!" However, she was unconsciously and simultaneously operating under the assumption that "I am not good enough," which held her back from GED progress. So, she went through her days treading water. Coughlin (2015) said her participant would burst from the anxiety of trying to navigate more than she was mentally capable of handling, which described and aligned with Connie's state of being.

Connie had been waiting for the right time. When her kids were young, she waited for them to become old enough to go to school so she could take classes. When she had a class with a teacher that was not helpful, she waited for the next one. When COVID-19 shut down face-to-face teaching, she resisted the online class version because, "I feel like I learn better when I'm in person." She was always waiting to feel ready; she had too many distractions with her kids, was in an abusive marriage, worked full-time for

her father's business, and made herself responsible for her father's health and safety. Similarly, Howell (2006) said of her participants that they always found a way to reason the balance and justify the internal disequilibrium of taking and releasing responsibility.

When Connie and I walked through her map together, we learned that she placed others' needs before her own, so I was not surprised that she was one of the few students who agreed to work with me. I was left wondering if she had not started the journey thinking she was not "good enough," if she would have participated. After some time reflecting on her self-worth, I wonder if she would sacrifice as much of her precious time for others. I felt so incredibly fortunate that I had the opportunity to honor Connie by correcting my own misconceptions about why she had not taken the test. Until I knew her story, I was working with an incomplete understanding as her teacher. Sharing that experience with her prepared me for the next participant, a woman I had never had in class.

Alexia

I first found Alexia's name when I searched the database for potential participants. I was intrigued by her statistics. After attending nearly 94 hours in two classes, she made gains in every tested area. She had increased her functional educational level from "ABE Beginning Basic Education" to "ABE Intermediate Low" in mathematics and "ABE Intermediate High" in reading (Texas Educating Adults Management System, 2021). She had completed seven hours of pre- and post-testing to participate in ABE classes. The numbers seemed to indicate that she was motivated and had progressed through the program very quickly. Therefore, I was left wondering why she was seemingly unwilling to attempt any of the GED test subsections.

When Alexia and I spoke during our preliminary call, I discovered a woman who had been deeply hurt from the trauma of illegally moving to the United States in the middle of sixth grade. Her parents kept her hidden at home and denied Alexia the chance to go to school; they were fearful of deportation and wanted to protect their daughter.

Alexia taught herself how to read and write English, moved out, and went on to work and raise three children. However, she had lived those four decades in between in so much mental anguish. Alexia told me, “I have cried so many nights because I never had the opportunity [to go to school]” within the first few minutes of speaking. She said the lack of education had been a “burden on my shoulders” throughout her life. See Table 4.3 for Alexia’s history with test preparation courses.

Table 4.3

Data Analysis: Alexia’s Test Preparation History

HSE-preparation class, hours, and term	Did the class prepare you?	Why did you not take the examination?
Teacher A 51 hours completed Summer 2020	Yes	“The teacher was great, but I’m gonna need more than one or two classes.”
Teacher B 42.75 hours completed Fall 2020	Yes	I will take as many classes as I can “until I feel that I’m prepared.”

When Alexia and I met for the introductory meeting, I reminded her that we could stop the recording and her participation at any time. I was concerned about the process upsetting her because she had gotten so emotional during our initial phone call. I wanted to make sure she knew my intent to help students; I especially did not want to add to any anxiety about the topic of the GED. Instead, she said, “You have no idea how excited

I've been since we spoke yesterday. It's wonderful," so I felt reassured that she was comfortable.

I wanted to know more about her connection between the classes and the test, so I asked her about her plan to take the test when she first enrolled. Interestingly, she was not ready to talk about the test. She wanted to tell me about her experience in the classes, which was a critical piece of analysis. She entered the first class with the feeling that the test was a million miles away. She said she was terrified and said she wanted to quit after the first day because she told herself she would never be able to learn the basic mathematical operations.

Instead, she found the inner strength for a personal pep talk; she remembered telling herself, "No, I'm going to do this. I'm sure it's going to be overwhelming." As the classes continued, she said she felt more comfortable, was very excited to learn, and "loved it." She realized that she had been harder on herself than necessary and that she surprised herself with her comprehension level.

Keeping my primary research question in mind, I asked Alexia to tell me if she considered taking the test after finishing her first preparation course. She said, "I was optimistic," but that her knowledge gap was too scary, and she knew she needed several classes. She intended to continue enrolling in preparation classes through the adult education program as long as necessary. Her plan to take any sections of the GED was that she would take it when she felt ready. I interpreted that to mean the readiness feeling would show up within a preparation course with her teacher's guidance.

I asked her to tell me more about her experience to understand the connection between her history and the role she had recently had as a student. Now that her children

were adults, she said she decided to “give it a try.” She thought to herself, “Let me see if I have a chance to do this.” I watched her tell me about this idea of new possibility, and her face lit up. In the next breath, however, she immediately went back to her negative backstory. Her face shifted, and she said with such melancholy, “It’s just been heartbreaking for me, the opportunity that I was denied of having a career and giving my children a better life than myself.” She said, “I cry myself to sleep all the time because I feel, I feel like I’m nobody.” Alexia was in her mid-50s when we met. She held onto anger and harbored resentment towards her parents for 40 years after they made her come to the United States and never allowed her to enroll in school.

As we ended that call, Alexia said she “went to bed and slept with a smile from ear to ear” because she had never received an opportunity like that before. While I was so happy to help and could feel her positive energy through her smile and body language on the screen, I knew that the last comment about giving her an opportunity foreshadowed what would come up in her map during our next meeting.

Experience: Lifelong “pity party.” Before Alexia and I met for the one-hour interview, I watched the recording from the previous session to make sure I had gotten a clear sense of her experience. In that recording, she reminisced about her missed childhood.

I was inside watching, you know, looking outside my door, the window as I was growing up, watching all these kids getting out of the bus and everything, and I was at home doing nothing. It’s just—it killed me. And I, you know, I wanted to learn. I want to learn.

Alexia went through many periods of sadness and self-pity about not having her GED, and I was left wondering how the negative memories of that missed opportunity had

affected her life. She said she often asked herself, “Why do I get myself into this pity party?” Consequently, after watching the video, I entered the following conversation optimistically; I thought I could help her plan a path forward.

Although I had predetermined at least one commitment goal for all the participants as “I am committed to earning my GED,” I confirmed that the goal felt valid to her before we continued. She said, “Definitely the GED.” Additionally, we added what she would get better at to her first column (Kegan & Lahey, 2009). She added a second commitment goal of getting better at filling in the missing knowledge she never received as a child.

Next, we discussed the behaviors she had been doing to work against her GED goal. She immediately criticized herself by telling me that she had not taken any initiative, but I gently encouraged her to recall specific actions she had chosen instead of studying. With a lot of insight, she told me, “I get discouraged, and I just do something that’s more comforting, like watching TV.” Then, she immediately chastised herself to say that if she “really wanted this bad enough,” she would be more disciplined. I asked her to give herself some grace. The point of the exercise was not to make her feel as though she had not been working hard.

Underlying commitment and assumption: Motivated not to feel discouraged. I introduced the third column and asked Alexia to think about an opposite behavior: instead of sitting down to watch television, sitting down at the desk to study from her GED book. I asked her to tell me what worry would start to creep in if she imagined doing that. She answered so bravely.

My fear. I guess I put it in my mind that I'm not gonna understand what I'm reading, and then I'm just gonna be confusing myself more. And I would get more discouraged by, you know, trying to read the book and understand it myself and not knowing where to even begin. So that discourages me.

I then asked Alexia a hypothetical question: What if I took away all of the courses and teachers and said, "You have to figure out how to learn the mathematics on your own." She had an immediate visceral reaction with, "I'm going to say, 'I don't even know where to start. I can't do it. I'm going to just automatically turn myself off. No. I can't do it because I don't know where to begin.'" She struggled to imagine an invented scenario; her self-efficacy was exceptionally low.

As she spoke, I started typing into her list of worries, "I will feel confused; I will get discouraged; I won't know where to start; I can't do it." I asked her if those felt true to her deepest worries. She said they did and wanted to add, "I am not able to take ownership." Much to my surprise and delight, I had just witnessed her first step towards self-authoring.

I then reframed her worry as the competing commitment of "I am committed to not feeling confused, discouraged, or unable to do the work." I drew arrows to show the connection between columns 1 and 3 and asked her if she could see how she had been working in exact opposition to her primary goal. She said, "That absolutely makes sense. When you see it like that, written down in front of [me]—that is exactly what I'm doing." I watched her think about what we just uncovered. She said, "Yes, I get up one day...all pumped up. I'm going to do it! And then the minute I pick up the book, I do exactly what I just told you about." Seeing her worries in writing helped her begin to understand the academic choices she had made as an adult.

Alexia said she saw exactly how she had not taken any personal responsibility, but she still did not understand how she could get discouraged after just a few pages of academic work. I suggested that we had just uncovered precisely why she had that pattern; she was protecting herself. She was preventing having to feel the discomfort—the horrible feeling of being confused and extraordinarily discouraged. In response, her body and mind had created a marvelous immune system to protect her from feeling that way. She thought quietly for a moment and shared a substantial realization.

Something else that you just said, “protecting myself.” For all this time, I have been blaming my parents, my family, my older siblings for not fighting for me and my education, but I’m now at the age that I know, “Okay, that happened.” But I have the opportunity to do it now. And like you said, um, I feel like I’m trying to protect me and my own accountability. I keep pointing the finger at them because that helps me not to feel so bad about it.

I explained that after seeing she had been blaming her family, she might find that she would like to release that truth moving forward. Additionally, I reminded her that there were no right or wrong answers. The point was to uncover what had previously been below the surface. She might find herself reverting to her 40-year-old truth and continue to blame others moving forward, but it would probably stop being her default setting.

While she thoughtfully internalized that new idea, I worked on the assumptions column. I asked her if the opposite of her commitment were true, what would be terrible about that? She said that if she could not stay in her “pity party” and blame other people, she would fear that she would discourage herself. She had been acting under the assumption that “If I feel discouraged at all, I will *never* be able to do it.” Together, we saw that she had assumed, for years, that she would never pass the test, never accomplish her goals, and ultimately give up.

Test of assumptions: Start with one page. We then discussed potential tests so Alexia could gather data about her big assumption. I suggested a possible test to sit down with the GED book and read one page, despite feeling confused or discouraged. She liked that idea. In the past, she thought it would only count as a worthwhile effort if she went to an extreme, studying for hours. I told her that I wanted her to pay close attention to the internal thoughts and feelings when those usual thoughts crept in while she was reading. Then, I suggested that she could work on some reflective writing about that experience.

Interestingly, she circled back to the point that in the past, she never felt as though she were doing enough or pushing herself hard enough, which always led to frustration and giving up altogether. We agreed that running the test of her assumptions would be an excellent place to continue the work if she chose. I wanted to write her assumption as a team, so she could begin to feel that ownership. I hoped she would feel empowered to move forward on her own. She said, “It’s very, very clear what my old habits were, what my comfort zone is in, and the things that I need to work harder on to be able to move forward and stop pushing the gas and the brakes.” Alexia displayed great insight after such a short amount of time.

Framework analysis: Nearly self-authoring. When I coded the complete set of Alexia’s data, I hypothesized she had been making meaning in the transition from the socialized order of mind to the next stage of development. I witnessed Alexia start to move towards self-authoring; as we were creating her map together, she could visualize how she had not taken ownership of her education and academic goals. Howell (2006) said her participants also “enacted behaviors that directly countered their intended goals”

(p. 3). Alexia could now see why she had made specific choices. She was moving the blame she had held for so long from subject to object.

At the start of our work together, Alexia had not been comfortable talking about taking the test. Approximately 90 minutes later, before we finished our final call, I asked her again if she would think about taking the GED examination. She did not simply say that she would think about it; she said, “I want to tackle the one that scares me the most. I want to tackle that one first because I know that if I pass that one, that’s going to encourage me even more.” Before our work together, I am confident she would never have considered taking the test until an outside authority told her.

Another bit of evidence of her transition from the socialized mind to self-authoring stage was the choice of questions she asked during our interview. At one point, she was no longer asking me for answers. She was questioning herself. I was able to sit and listen as she navigated the new space she was finding and wedging between what was previously subject—her anger.

Alexia questioned, in a self-authoring way, “How am I able to take ownership in other areas of my life?” Her history had developmentally stunted Alexia in one area of her life around academics; however, she noticed that she had been very successful in other parts of her life. She created different pieces of herself with her roles at work, as a mother, and as a student. She was headed towards self-authoring because she was able to move forward in the parts she chose. Yet, unconsciously, she could not move forward as her academic self because she was still wearing a protective armor of resentment.

Alexia demonstrated exceptional insight when she identified her hidden blame for her family; she finally realized and then bravely admitted, “It makes me feel better to still

point fingers.” She had been gripping the resentment towards her family but was courageous enough to look at the role she played in not moving forward. Alexia was able to change the narrative that had been holding her from subject to object (Kegan, 1982, 1994, 2000). She seemed liberated with that realization and sat up straighter and taller. She was ready to take the lead in her education, which was very different from the study’s final participant.

Eve

Eve and I met over the phone when I called to gauge her interest in participating. At that point, Eve’s journey to earn her GED included 381.5 hours over nine preparation courses and more than two decades. However, she had taken eight iterations of the tests of adult basic education (TABE), so she was willing to do what was necessary to keep taking classes.

She dropped out of school her senior year at 19 years old and was in her early 40s when we talked. Eve moved to the United States after living in Africa. She immediately started working and put school on the back burner. Her primary language was Mina; at school, she spoke French. Eve was fluent in her third language, English, but severely lacked confidence in her language usage. See Table 4.4 for Eve’s test preparation history.

Table 4.4

Data Analysis: Eve’s Test Preparation History

HSE-preparation courses	Did the classes prepare you?	Why did you not take the examination?
9 classes Various adult education programs at community colleges 381.5 hours	Yes	Language barrier Not enough time “I get bored” “I get tired” “I don’t know”

Experience: Language barrier and no time. My primary research question was trying to understand Eve's experience of completing nearly 400 hours of preparation work but never attempting any section of the test. She gave most of her answers with a bit of an ambivalent shrug and said things like, "I try to read, but every time I read it, I get bored" and "I get tired" from studying. She said, "For some reason, I don't know if I get bored. I just, I really wanna, you know, get over it just like, I don't know how to do it." Eve was kind and interested and seemed happy to participate. However, after more than 20 years of effort, she seemed deflated.

Eve had lived with the story of working on getting the GED for such a significant portion of her life that I think she lost sight of why she was doing it. I attributed her vague and scattered answers to Eve not having a plan of her own. I asked her what she wanted to do after she earned the GED, and she said, "get a better job, you know, and be much more educated." She did not have a clear plan of how she would use the credentials in the future.

Throughout our time together, she rarely said "*my* GED." Instead, she typically said "*the* GED" and used the second-person perspective, as in "you need it to move forward." She seemingly had very little personal connection to the classes or the test. At the same time, when I asked her if she planned to take another course, she gave an emphatic, "Yes, yes." She had no intention of discontinuing her pattern of taking classes repeatedly.

We met again and began working on her ITC map, and I confirmed if "I am committed to earning my GED" felt true to her. She added that she was also committed to focusing on herself. I had incorrectly interpreted her responses from the previous call, or

she may have taken some time to reflect between our meetings; she was more confident. When I asked her to remind me again of her *why*, she said she wanted to earn an associate's degree to work as a dental hygienist. She also told me about her daughters and that she "wanted it for them, but I want that for myself." I asked her to tell me more. She said that because her girls were older, she wanted to take the time to care for herself. It was important to her because she wanted "something better in order for me to help them out." Eve was still vague, but she was starting to formulate a plan.

We moved to the second column, and I asked her to identify any behaviors preventing her from achieving her goals. She struggled at first because she simply did not have the time to study around working six days a week and household responsibilities. She started to list her activities like cooking and then quickly summarized with self-criticism and said, "I just need to organize myself." I did not want her to dwell on the negative, so we moved on to the third column to uncover any hidden competing commitments.

Underlying commitment and assumption: Committed to never failing. I asked Eve to imagine doing the opposite behaviors of what we listed in the second column. What bad feelings came up? What was distressing? She explained that she would get bored and frustrated when she would not know how to do the work. She got frustrated with herself when she felt she could not express what she meant. "I need to understand it, and if I don't understand it—it just, I don't know. I don't know how to say the feeling. I'm just not happy, you know." Eve continued to struggle to articulate what she wanted or how she felt.

We struggled to understand each other, so I offered her an anecdote as an example of what I meant. She then said, “I feel like I should understand it, you know? It shouldn’t be hard for me to understand. So why...am I not getting it?” She went on, “Why am I not smart enough to get it. You know, why is it hard?” She was getting frustrated, and I smiled and joked and asked, “Wait, was it supposed to be easy?” She said, “Yes!” We laughed, and she relaxed again.

She had formed the idea that she was somehow wrong because she was the only one who could not learn the material. I wanted to make sure I was very clear on her meaning. I asked her if the dreaded feeling she was trying to avoid was that she was different from the rest of the HSE community and the academics were uniquely hard for her. She said it was, particularly with language arts and grammar.

However, she put the brakes on our forward progress when she said, “I think I can get it. I just don’t have the base for the reading part. I could do the math.” I asked if she had taken the mathematics section of the GED. She said she had not because she still did not understand algebra, geometry, slope, or formulas.

I was not communicating very well and tried a different approach. I asked her to close her eyes and imagine that she and I had worked together, and I had already taught her all of those mathematical concepts. Then, I had her sign up to take the test. She said that would feel great: “If I understand it, I will go take it.” Then, I told her to imagine no teachers were available, but she could teach herself using online videos and books. She said, “That’s what the problem is. I don’t see myself that I can do that. I need help with that.” Eve was struggling with self-confidence, which made her seem unfocused.

I asked if her inner monologue would be, “Okay, let’s do this,” or something more like, “There’s no way I could teach myself.” Interestingly, she said, “No, there’s a way. There is a way. Like I said, if other people can do it, I think I can too,” which contradicted the worry she told me only a few minutes earlier. I interpreted her responses, again, to mean that she did not know what she thought or wanted. I felt as though she were trying to tell me what she thought I wanted to hear, which was another sign of making meaning from the socialized mind (Kegan & Lahey, 2009).

She then returned to the familiarity of her inner critic to suggest maybe she was just not motivated enough. I gently pushed back and said she was probably more motivated than most. She had been working so hard for more than 20 years. I suggested that she was benefitting from something, protecting herself from feeling something terrible. And then she very bravely said, “I guess being scared—scared I’m going to fail.” I gently asked her what would be so dreadful about failing. She said she would let other people down and laughed nervously. I asked her to tell me about that idea. She said if she failed the test, she would be letting down her kids and her husband. I asked her if she would be letting herself down, and she said she did not think so, but she would be very unhappy.

After that breakthrough, we were able to complete her list of worries and write a competing commitment. “I’m committed to feeling happy and not failing.” She said that felt true to her. She said, “I feel like I should be able to pass as soon as I go. I just don’t want to fail it.” I said, “Of course!” I showed her that if she had an equal commitment to never failing, it was rather wise of her never to take the test. She had been working against and in complete opposition to earning the GED, which led to her assumption. I

asked and confirmed if it felt correct that she had been operating under the assumption that if she took the test, she would fail, and that would make her unhappy.

Test of assumptions: Conversation. I told Eve that taking a section of the GED would not be a modest test to run and reassured her that I would not make her take it, which made her exhale in relief and laughter. I hoped Eve would help me create an idea for a test of her assumptions, but she was content to have me suggest some to her. I asked if she could see how she may have been operating under that assumption, without even realizing it. If Eve subconsciously thought that she would disappoint the people she loved the most down if she failed the examination, then, of course, she would never take it. I looked at her list of assumptions and asked her if she would consider a conversation.

Perhaps she could run a test with one of her loved ones. I asked if she could talk one-on-one with her daughter, saying something like, “I’m thinking about taking the test without even studying for it, so I may get a low score. What would you feel about that?” I wanted Eve to think about collecting data to confirm or disprove her *truth*. She said she liked that idea and would try it.

Framework analysis: Securely socialized. Eve had been making meaning in the socialized mind. She showed no signs of change in personal development throughout our interaction. I discovered she was content with taking classes over and over again with no plan ever to take the test. I found it especially intriguing that her underlying commitment was about what others thought about her. She only enrolled in classes to make others happy; she was not receiving any joy because it filled one of her ambitions. Again, I saw someone who was going through the motions. I got the impression that she was tired of

the narrative of being a GED student and just wanted it to happen overnight and go away magically.

When I asked her if she had any small item, picture, or trinket that she used as visual motivation, she said she had nothing. Then, she said, “My younger sister motivates me. She sends me texts that say, ‘Have you studied today?’ When I look at my phone and see that text, that is my motivation.” The other people in her life seemed to push her: her teachers, her sister, her family members, which aligned with the socialized mind of being driven by one’s culture or societal influences (Kegan, 1982, 1994, 2000); she had no internal, self-authoring guidance.

I told her I had found a lot of success with my students because I lovingly guided them through the hard work of uncovering what was holding them back. She later told me that she thought to herself when I first called, “Yes! I liked it because when you called me at first, I was like, ‘Oh, okay. I think she’s nice,’” but she continued to participate because she felt she needed someone to do the pushing for her. Because Eve was so solidly in the socialized order of consciousness, I think she participated because I was a teacher at her school; I was an authority figure to her. Similarly, when I asked when she planned to take the next preparation course, she said, “I was waiting for somebody to call me, but no one ever [contacted] me for classes.” Again, she waited for someone else to tell her the next step.

At first, I heard one bit of information that showed any movement outside of the socialized stage. Eve commented that it was time for her to take care of herself because her daughters were older. However, after watching the recording and thoroughly analyzing the transcripts, she merely reiterated what other people have told her to do,

probably to keep her motivated to continue. She was held subject to other people's approval and input, an indicator of the socialized mind. She could not envision any autonomy for herself.

Out of the three case study participants, Eve was the only one who provided several instances of disconfirming evidence. First, she was the only one who seemed to get frustrated with the process at times, which was the opposite of other research (Howell, 2006) and my personal experience using these interview questions. Second, Kegan and Lahey (2009) found that adult development and psychological maturity typically increased with age. Interestingly, if I had not known Eve was in her 40s, I would have assumed she was a very young adult or still a teenager. I used a lot of humor while balancing respect for her vulnerability, making it the most enjoyable interview. Third, she told me several times that she had "no problem" with mathematics, which was opposite to the research I found regarding mathematics anxiety and the adult learner population (Jameson, 2019; Peters & Hobaugh, 2018; Watts, 2011).

Nonetheless, I was exceptionally grateful for Eve's participation because her interview was unique in a way I had never experienced; it will be the most useful when designing for future work with HSE-seeking adult learners. Similarly, Grossman (2012) interviewed participants who also made their academic decisions based on what other influential people, both positive and negative, in their lives thought. Eve plateaued at socialized mind, but I wondered if our time together started the transition to a more complex way of making meaning.

Cross Case Thematic Analysis

I read each participant’s transcripts, looking for emerging themes across the five data analysis steps. As broad topics like guilt or fear came up, I looked for those same themes throughout all three participants’ data for cross case thematic analysis. I found the commonalities between the women’s experiences to answer the first research question about their experiences. Many components in their lives were *hard*, and different pieces of their lives were *not enough*. Additionally, I found disparities in the underlying emotions that had held them back, which answered the second question about their competing commitments. See Table 4.5 for the cross case data analysis.

Table 4.5

Cross Case Data Analysis

Participant	Story	Question 1: Experience	Question 2: Commitment	Framework	Test of assumptions
Connie	20 years of sporadic test preparation; guilt, anxiety	Responsible for everyone and everything	Motivated to never feeling incapable or unworthy	Transitioning away from socialized	Say out loud, “I am smart enough.”
Alexia	40 years of resentment and blame	Lifelong “pity party” and blame	Motivated to never feeling discouraged	Nearly self-authoring	Read one page of the GED book.
Eve	Nine continuous courses; language barrier	Comparison to others	Motivated to never letting others down by never failing	Fully socialized	Ask one daughter, “What if I don’t pass?”

Commonality: Hard. The idea of things in their lives being hard came up with each woman, which confirmed research from the literature review. Students who failed to complete high school, usually the first task an adolescent accomplished that was both very long and often difficult, typically never went on to achieve any notable goals ever (Heckman et al., 2014). They missed out on that experience during their formative years.

The women in this case study confirmed that research; they had myriad comments on how hard things were when trying to accomplish their goals.

Connie talked about “days that are hard” and said “it’s not easy” juggling all of her responsibilities. She said that “the class was hard” and “the problem is hard” when talking about her school work. She commented twice that her job is “hard” and “very hard.” Likewise, Alexia, who was transitioning toward a self-authoring mind, connected how hard things were about herself. She said, “I work hard” when she described her job compared to her school work, which she then said, “I need to work harder.” Then, she mentioned her work ethic and said, “I work as hard as I can when I wake up motivated.” At the end of our time together, though, she spoke less about how demanding the outside pressures were. Instead, she began demonstrating how she would make her own decisions (Drago-Severson, 2011). In contrast, Eve’s socialized mind focused on what others were doing. For example, she dwelled on how much harder it was for her to learn grammar compared to everyone else. Eve said it was “hard for me” when talking about language arts; she said “it was hard” seven times when talking about academics.

Commonality: Not enough. Connie questioned the idea of enough from her perspective while just starting the transition from the socialized mind and taking the first steps toward self-authoring. She wondered if she was “good enough” six times. Then, she described not being “confident enough,” “smart enough,” “strong enough,” or “competent enough.” Connie’s comments confirmed Bujack’s (2012) study about self-efficacy; that study found that students with the lowest academic self-efficacy were least likely to accomplish their educational goals.

Alexia also told me about things being enough of something, as well. She thought about “wanting [her goal] bad enough.” She said she was worried she would “discourage myself enough” to cause failure. Then, she was self-critical and said, “I didn’t push myself enough,” “I wasn’t doing enough,” and was worried about “not going to do enough.” This aligned with the research; Merriam et al. (2007) found that women, in particular, struggled with the concept of not good enough, and Bruno (2015) discovered that women demonstrated more anxiety than men.

Conversely, Eve only made one mention of enough, but it was compelling. We discussed a worry that she was not “smart enough.” She quickly said she knew she was smart, but it did not feel authentic; it felt like I was in a conversation she has had before with people who cared about her and were disheartened when they heard her talk about herself negatively (Drago-Severson, 2011). I did not push her to go back to it.

Disparities: Motivation. I asked the women if I could collect visual images as another form of data collection related to their experience with motivation for their academic work. They had very different answers. Connie used sticky notes with scriptures and positive affirmations. She said she was “surrounding myself with positivity.” I asked how the words contributed to her motivation. She said they “pump me up for a second” when she looked at them on her bathroom mirror every morning.

Next, Alexia showed me the sign that gave her motivation. It was a large wooden sign in the most prominent spot in the house with one word on it: love. During our online meetings, she positioned her body so it was always in the background of her screen. In contrast, Eve said she had no visual reminders, no trinkets, and nothing that motivated her. Later, she told me that her sister often sent text messages asking about the GED. She

said her sister kept her motivated by regularly sending those messages. This small piece of data, the visual data collection, still came from outside of herself, indicating Eve's reliance on extrinsic motivation.

Disparities: Guilt, anger, and fear. The three women formed unique underlying commitments and assumptions. Connie experienced guilt, Alexia held anger, and Eve felt fear. They were all at different stages of adult development; the two women who did not stretch as much in their development both had the perspective of "If I could just fix this one thing," things would be better (Kegan et al., 2016). At nearly the self-authoring stage, Alexia never mentioned the idea that life would be better if she finally improved one thing; instead, she uncovered the anger she had been harboring.

Connie said, "the GED has been weighing a lot on my shoulders, you know, because that is something I want to accomplish." She also had the idea that if she could be better and just get focused, she could achieve her goal. She said she could not get her brain to focus, and she felt guilty. Eve remarked, "If I could just get myself organized and get over the 'bad habit' of getting distracted," she assumed schoolwork would be more accessible, which was an attempt to find a technical fix and mask her underlying fear that she would disappoint her family if she failed the test.

Discussion

I addressed the students' repeating patterns and actions delicately and with kindness. Kegan and Lahey (2001) said if people desired to connect deeply with changes they wanted, they needed to recognize the reasons preventing them from ever enacting change. For example, when Eve maintained a commitment to keeping a tight grip on the big assumption that she could never pass the test, it was rather pragmatic that she never

signed up to take it. She experienced a “distinct, separate reality, with a logic, a consistency, an integrity all its own” (Kegan, 1982, p. 28). Kegan and Lahey (2001) would probably argue that the reluctance to test was an elegant way to provide self-protection to preserve that tightly held assumption. See Table 4.6 for the results of the hours of preparation with the pre- and post-participation perspectives from the students.

Table 4.6

Qualitative Data Collection: Mindsets With Participation

Participant	Number of classes	Completed hours	Pre-participation perspective	Post-participation perspective
Connie	3	120	Positive: excited	Positive: hopeful
Alexia	2	93.75	Positive: extremely hopeful	Positive: astonished
Eve	9	381.5	Positive: interested	Neutral: indifferent

I discovered disconfirming evidence from Bujack’s 2012 study, which found more completed hours within an ABE program resulted more often in an earned GED. In the present study, Eve had taken substantially more hours than the others. However, she was the least likely to make forward progress because she was comfortable with taking the same class over and over again. Eve’s identity as a student was that she would continue to take courses to pursue the GED while waiting to feel ready finally. She was not yet able to discern her role as the author of her academic future. Therefore, with Eve, my conclusion is that she will never take the official GED test unless she receives additional non-academic support to start the move toward self-authorship plus has the intrinsic desire to do so.

This process especially helped the women who were ready to grow developmentally, Connie and Alexia. They began to understand how they had created the

very systems that held them in place (Kegan & Lahey, 2001, 2009). Alexia said, “It’s so clear. I can’t tell you how fantastic this is because [now] I can totally see... exactly what I’m doing and why,” concerning her academic goals. I wanted to help the women identify the disconnect of what they said—“I am committed to earning my GED”—and what they were doing—not taking the test (Kegan & Lahey, 2001, 2009). This appreciation for what had been holding them back was the key to help them finally move forward.

The participants in this study confirmed several studies in the existing literature. For example, Connie said she would “start having anxiety” at the mere mention of test preparation. Foster et al. (1999) researched students with significant test anxiety but found they had success with supports beyond academic content. Similarly, Alexia said she was “scared to death” when she first signed up for classes after 44 years away from school, confirming Snyder’s 2011 research about women who were fearful of significant changes in their learning.

I intended to help each participant uncover the fears that had been holding her back. I asked the students to potentially reexamine how they had come to understand themselves and the world (Kegan, 2000). The women had been holding onto assumptions for so long that those *truths* had become part of their identities (Wagner et al., 2006). Walking the women through their immunity maps allowed them to see, perhaps for the first time, what had been holding them. Instead of unknowingly being led by unknown assumptions, they could now hold those beliefs as objects (Kegan, 1994). Alexia, most likely, would have continued to harbor the anger and resentment that started in childhood and impacted her entire academic life. She was able to take off the symbolic protective shield she had been wearing, which no teacher could have penetrated.

Kegan et al. (2016) emphasized that people have demonstrated considerable strength in protecting themselves. The participants in this study all created internal systems to protect themselves from their fears and worries, which caused them to participate in the exact behaviors that prevented them from taking the GED test sections (Kegan et al., 2016). I helped them see their strengths with the aid of the ITC tool; Connie and Alexia, notably, experienced transformative growth in their meaning-making. (Bridwell, 2012).

Grossman (2012) wondered why students had dropped out from formal school, and Bujack (2012) wanted to know why so many ABE students did not persist and dropped from their HSE programs. I contributed to the knowledge base by investigating what had been keeping the students enrolled in their ABE programs for so long. I found that the current study helped the women highlight how elegant their systems were; their minds created internal protective strategies to keep them from feeling their worst worries or losses to their sense of self (Kegan & Lahey, 2009).

I predetermined that one of the commitment goals would be “I am committed to earning the GED” for each participant for this study. That goal was not a good fit for some adult learners I contacted, so they were not included in the research. For example, I had a student that did not want to get her credentials. The GED could feel like too much pressure as a commitment, so I would not suggest teachers or programs use a predetermined commitment goal because they are, most likely, all intertwined (Kegan & Lahey, 2009). If a teacher walked her students through this process and allowed them to choose any commitment goals they had a strong desire to get better at, they would most likely benefit academically, as well.

There was such high pressure about getting the credentials; it would be intriguing to conduct future research using the same HSE-seeking population and work through ITC maps unrelated to academics. Then, see if the participants change their behaviors around taking sections of the test. Additionally, ABE programs rarely denied access to preparation classes, even when students had dropped previous courses, stopped out, or had not taken the required TABE. I asked a Texas community college ABE representative if the program had ever banned any adult learners after poor attendance. She said, “We will never turn them away. We will always take them back” (V. Ortiz, personal communication, 3 October 2019). Additional research could determine if providing unlimited classes was, in fact, detrimental to students’ self-efficacy and success.

Bujack’s 2012 study uncovered a favorable link between preparation hours and earned GEDs. However, her study participants were primarily White men. The participants in the present study were women of color. Kegan (Thorson, 2020) recently described the limitations of staying in the stage of the socialized mind and how necessary it was to provide the opportunity for people to leave behind the limits of that stage of adult development. He said this was particularly true for anyone living in a marginalized group, like Alexia, who moved to this country against her will. He said, “If you are a person of color in a White privileging world...there’s a way in which you are disadvantaged by the prevailing narrative in the culture in which you live” (Thorson, 2020, 51:08). He said that disenfranchised groups often reverted to the lower edges of their ways of making meaning. Additional quantitative and mixed methods studies with similar research questions could add significant data about the differences between

various groups of ABE students. That data could provide more information about where students were in their adult development to create tailored support systems.

Some adult education programs have viewed students as coming in underprepared. They said their learners had “a gap in their academic development process” (Kenner & Weinerman, 2011, p. 90). Through the results of the present case study, I concluded that students did not need fixing. Bujack (2012) said ABE students needed more time to earn their credentials. However, I found three examples of students who had received ample time; they did not have the internal capacity to move forward because of their equally strong underlying commitments. I found that students did not need more technical barriers removed; they needed to grow in their mental complexities to shift their internal transformative barriers.

Grossman (2012) interviewed six adult learners to offer their perspective of why they returned to classrooms to receive their HSE credentials. I wanted to add to that research to understand why they became stuck in the revolving door of adult education programs. Bujack (2012) maintained that students did not remain enrolled in ABE programs long enough to earn their credentials. While that may be true for many students, I argued that for many more students there was no plan to ever stop taking HSE classes; they would never take the test.

This section looked at the results, conclusions, and connections to previous studies. This case study of three students was relevant to the millions of adult learners who were simultaneously ready but unable to earn their HSE credentials. Connie, Alexia, and Eve were experiencing the stresses of life, resentment of the past, and comparison to others while working as students (Coughlin, 2015). At the same time, their unconscious

assumptions held their underlying fears and worries of worthiness, hopelessness, and failure. I wanted to help them uncover the commitments they did not even realize they had (Kegan & Lahey, 2001, 2009).

Implications

This research presented a new way to approach problem-solving within ABE programs using Kegan's (1982, 1994, 2000) constructive-developmental framework in adult development. Instead of technical fixes, this method went deeper to find the transformative practices of honoring the students' reluctance to test for their credentials. As a result, adult education organizations could have a new direction to help uplift students out of their academic holding patterns towards their future pursuits. I have suggested that the GEDTS use its considerable nationwide reach to enact adult educational change.

This study implied severe repercussions for hopeful adult education programs and learners waiting to feel ready. Future students firmly seated in the socialized stage of development, taking repeated preparation classes, will most likely never take the test. However, programs like the GEDTS have the opportunity to provide space for GED-seeking students to grow developmentally. Once students' worldviews can become more complex (Coughlin, 2015), they would have the ability to develop more sophisticated ways of making meaning (Kegan, 1982, 1994, 2000).

The implications from this case study could help future ABE students. Take Connie, for example. She entered my classroom knowing she would pass the test in a matter of weeks. She convinced me, and we worked hard to improve her mathematics skills, filling in with hours of extra tutoring outside of class. Unfortunately, Connie did

not take the test, and no one involved had anything to show for the resources, time, and effort put in. Low self-efficacy was a powerful deterrent to student success (Bujack, 2012; Jameson & Fusco, 2014; Watts, 2011). Adult educators must move student confidence to a top priority.

Drago-Severson (2011) argued that ABE programs should tailor their developmental diversity. Additionally, Bujack (2012) suggested adult programs should identify the students with low self-efficacy at the time of enrollment to provide more support. I concurred and concluded that adult educators must know the levels of adult development to help their students create space for psychological growth. For example, I learned that Connie, Alexia, and Eve were functioning with far different ways of making meaning while all being held back by their underlying fears. I would teach the same mathematics content to them; however, I would incorporate new and unique supports to help them evolve their adult development (Kegan, 1994).

I found only one instance of one class not preparing a student. Connie said she had a bad experience with one teacher who was not very helpful. Otherwise, all the women said every other class they mentioned had prepared them to take the test. Alexia said she planned to take as many courses as needed. Not one student from this study said she needed to wait for a better class with a more knowledgeable teacher. Instead, they all essentially told themselves, “I just need more time and one more class to feel ready.”

The GEDTS has the reach and potential scale to positively increase the number of GED examinations taken. They need to see that when students are equally or more committed to not failing the test as much as they are determined to earn the GED, it could help educators understand why their students rarely take any sections of the test and

reduce their stress about how to help their students. Additionally, they could incorporate educational psychology curriculum into their GED courses. Grant-funded adult education programs could use these findings to consider adjusting their curriculum. Additionally, stand-alone charity organizations could find significant improvements by incorporating some of these ideas into their curriculums.

Finally, the most significant implications were the results from working with Eve. She signed the consent form and happily participated. Additionally; she has initiated communication with me several times with updates about her plans to study since we last met, so she had a positive experience working with me. However, she started to get frustrated when we walked through her ITC map. Kegan (Thorson, 2020) said that participants who remained firmly in the socialized perspective potentially saw supports to their development as threats to their very being, which explained Eve's frustration. As a teacher and coach, I saw that she had taken hundreds of hours of coursework and incorrectly assumed she would benefit from uncovering what had been holding her back. Instead, I now know that she was very comfortable taking repeated classes. She was unable to take the test because of her underlying commitments. At the same time, she was content with maintaining the status quo.

Bauger et al. (2021) compared self-authorship to autonomy, similar to Ryan and Deci's (2000) self-determination theory. Eve, who was securely in the socialized mind, seemed ambivalent. She was content with continuously taking classes but she seemed somewhat lost in her personal meaning. I never got the impression that she had any intrinsic motivation to fulfill her ambition. The way she talked about her ambitions aligned with the Bauger et al. (2021) findings that an increased psychological maturity

predicted someone's overall well-being and happiness. Eve mentioned feeling unhappy about still not having her GED but would also feel unhappy if she failed the test.

Kegan (Thorson, 2020) said that if an educator or coach, for example, pushed someone who was not developmentally ready to move from the comfort of the socialized mind, the person would react. For example, I communicated with a student about potentially participating in the present case study. When he read the consent form, he sent me an abrupt email and canceled our scheduled meeting. He said, "I really don't want other students to know my reason for not taking the GED test" (Luis, personal communication, March 3, 2021). He viewed my potential support as a threat to his self-identity. Therefore, using ITC should not become a perfunctory tool used at an ABE program orientation. However, it should be used, with care and training, with students who express a desire to understand their choices or find themselves often saying or thinking, "If I could just get better at this one thing, everything would be better."

Conclusion and Summary

Despite counseling from academic advisors, available tutoring, and instructor intervention, HSE-seeking students entered their ABE classrooms with determination but exited without credentials. Students, theoretically, should have achieved their goals and moved on to the next step in life, work, or school. However, those students rarely found achievement (Texas Educating Adults Management System, 2019). This urgently important qualitative study provided evidence to elevate a marginalized population by looking at student reluctance to take the HSE test. A literature review revealed a gap in the research for this specific student population.

The findings from this case study of three ABE adult learners identified two points. First, adult learners have gone through their lives since dropping out of formal K–12 schooling with the additional anxiety of not having earned their credentials. One student’s experience significantly added to her daily stress, the second student’s experience was simultaneously scary and exciting, and the third student’s ABE experience had become monotonous. Second, the students who did not attempt the test when first identified as ready by their programs or teachers will most likely never take the examination without a catalyst for changing their psychological immune systems.

This case study investigated the opposite forces of movement and immobilization; the three women were ready but not able. Perhaps the most meaningful future research would be to follow up with the three participants to see how they have mentally developed and if the ITC interviews changed their ways of making meaning. However, as the sole provider and initial entryway to passing the test, the GEDTS should utilize these findings. By connecting with the learners’ developmental needs, the GEDTS could provide the most extensive impact on the millions of adult learners who do not have their high school credentials.

CHAPTER FIVE

Distribution of Findings

Executive Summary

In 2019, nearly 19,000 students enrolled in high school equivalency (HSE) preparation courses under one Texas grant-funded program. Yet, at the end of that year, only 706 students earned their credentials after completing all subtests of an HSE examination (Texas Educating Adults Management System, 2019). In response, federal and state agencies have provided adult basic education (ABE) programs designed to educate the workforce (Texas Workforce Commission, 2019). These programs, often housed at local community colleges, helped adult learners earn HSE credentials by offering foundational academic content, primarily with mathematics and literacy skills (Texas Workforce Commission, 2019).

Introduction

The problem was not that students failed the HSE test but that they rarely took any test sections. Adults like the students presented in this case study, for example, have completed multiple mathematics courses in preparation for HSE examinations. Their teachers and their tests of adult basic education scores said they were ready to take the official tests to earn their credentials. However, the adult learners continued to delay taking the examinations. Some students have taken preparation courses on and off for decades (Texas Educating Adults Management System, 2021). The cycle of starting a

new class with the intention and goal to earn the credentials, only never to take the test, had become a ritual for some.

The literature review revealed a gap in understanding how adult learners experienced the cycle of taking repeated courses and why those students were reluctant to take any test sections. The problem was that many adult learners did not realize they needed to close the distance between what they said and what they did. They entered into adult education spaces saying they wanted to earn high school credentials. Simultaneously, they, unknowingly, could not take any sections of any official examinations required to receive the equivalent diplomas. I hoped to identify ways to support this student population, starting with establishing their ways of making meaning and then helping to increase their mental complexity (Howell, 2006). I wanted to tell the stories of the students to demonstrate the need for non-academic supports.

Overview of Data Collection and Analysis Procedures

I used the case study as the methodology to look at how three specific examples could serve as a model to scale up to help thousands of other adult learners. First, I used Kegan's (1982, 1994, 2000) constructive-developmental theory as the framework and then Kegan and Lahey's (2009) Immunity to Change (ITC) map as the tool for the qualitative data collection. Then, I analyzed the three participants' interviews to identify where the students were in their adult development and why they chose not to move forward with testing.

I conducted this research to add to the missing piece of the existing literature about this population. Then, I used the interviews to identify the mismatch between what students needed and what they were receiving through two guiding research questions.

The primary question asked about the student experience of completing preparation classes but never taking the exam. The secondary question identified the competing commitments of the participants, which kept them from taking the test for credentials.

I collected data in five steps to answer the two research questions. First, I analyzed the qualitative data through the lens of the framework because I wanted to understand the students’ experience and how they made meaning while hoping to earn their high school credentials. Then, I used open coding (Creswell & Plano-Clark, 2018) and categories (Creswell & Creswell, 2018) through the data analysis spiral (Creswell & Poth, 2018). Finally, I used thematic and cross case analysis to find commonalities and disparities between the three adults to contribute to the adult education profession.

Summary of Key Findings

First, the data revealed the experience of HSE students. They were adult learners who had spent decades fretting over not having their high school credentials and the missed opportunities in their lives because of it. The participants did not spend time telling me about their wishes for better content or the lack of experienced teachers. Instead, they all talked about the themes of self-doubt, resentment towards others, and insecurity. See Table 5.1 for what prevented students from testing.

Table 5.1

Key Findings: Blame of Self and Others

Participant	What was holding the student back from progressing?
Connie	Self-doubt: “You’re just not smart...you’re just not getting it.”
Alexia	Anger: “It’s just been heartbreaking for me, the opportunity that I was denied of having a career.”
Eve	Comparison to others and insecurity: “It shouldn’t be hard for me to understand; it’s easy for some people—why am I not smart enough to get it?”

The data showed that the women blamed themselves and their histories or negatively compared themselves to others. All three women had been out of formal school for more than 20 years without once attempting to take the official test. However, they all said they were committed to earning their high school credentials. Interestingly, two of the three women did not have accounts at GED.com before working with me, so they were not close to taking the test required to receive those credentials.

Many agencies have advocated for better ABE teaching. A GED Testing Service (GEDTS) staff member said, “It’s all about the content” (Greene et al., 2021), and Wagner et al. (2006) presented “strengthening instruction” as one of the core ideas for transforming schools. However, the qualitative data in this study disagree. The data found that the students were happy with and felt prepared by nearly every teacher and class. For example, Connie said most of her teachers understood and supported her. Also, they worked outside of class to help her get caught up; however, she still did not take the test.

Second, the data showed that teachers and programs asked students to perform what they were developmentally unable to do (Kegan & Lahey, 2009). Alexia, for example, for 44 years, had never been able to pinpoint why she could not close the gap between what she said she wanted and what she could do. She had not realized that she was trying to prevent the worry that “I would get so discouraged that I’m just going to assume that I’m never going to pass it, that I’m never going to accomplish my goal and my desire and completely give up.” She had an underlying assumption that she would never achieve her goal.

However, Alexia talked about how beneficial the ITC interview had been for her.

It’s clear. I can’t tell you how fantastic this is because I can totally see as we’re talking and see what you’re writing now, exactly what I’m doing and why. You

know, I would have otherwise not ever—sometimes you just have to see things in paper and in front of you in black and white, that doesn't make sense if you sometimes by yourself.... But I'm seeing it here in black and white, *why*. So, this is great. This is just absolutely great.

She started to move what had previously held her to see it and hold it objectively. This process worked particularly well for her because she had already begun her transition towards a self-authoring mind (Kegan, 1982, 1994, 2000).

The data also uncovered that the same process might not have the same impact for someone firmly within the socialized order of consciousness, like Eve (Kegan, 1982, 1994, 2000). Students like Eve who feel very secure and comfortable taking classes without taking any sections of the HSE examination will most likely never take any test sections. However, the ITC interview could help adult educators understand their students' ways of making meaning and potentially stimulate the first steps towards more complex thinking.

Informed Recommendations

More students could benefit from additional support like coaching or mentoring after hearing the stories of these women and what they uncovered about their underlying roadblocks. Therefore, I propose that the GEDTS incorporate a coaching program as part of the resources they offer to significantly increase the number of adults who earn their equivalent diplomas. The coaching would uncover their hidden competing commitments and bridge the disconnect between student assumptions and reality.

First, the GEDTS must connect with students like Connie, Alexia, and Eve to understand their experiences. Second, the GEDTS needs to communicate with students to understand their hidden barriers. Therefore, I recommend the GEDTS change its professional policy to include coaching when students register at GED.com to “bolster

student recruitment, retention, and graduation” (Pappas & Jerman, 2015, p. 2). The coaching curriculum should include an ITC map-making interview as a developmental foundation, and the coach should assess where the student falls on the adult development spectrum.

Many students in this population have been wishfully thinking about earning their high school credentials for years. This program would aim to help them finally complete their goal and move on to their next dream. Additional non-academic supports like interviewing would likely increase the number of students who take the test and lead to more earned high school credentials.

Findings Distribution Proposal

While there are various HSE examination options, the women in this study prepared to take the GED. When students want to take any subsection, they must register at GED.com. The GEDTS currently provides a generous number of tools to support adults who wish to earn their high school credentials (GED Testing Service, 2021b). However, they are currently unable to see the vast numbers of students who have never registered with them. My target audience is the GEDTS President and her team.

Target Audience

ABE programs have dedicated many resources to provide classes to adult learners; their mission is to provide an educated workforce. Simultaneously, the students who take those classes have the goal of earning their high school credentials. Those two groups have different intentions. I created this study with the GEDTS in mind because the GEDTS team wants to evolve for their learners (GED Testing Service, 2021b).

I introduced this case study with an anecdote about a student and the multiple classes and hundreds of hours of classwork she had completed without ever attempting to take any sections of the GED. Before she came to my class, she had never registered for an account at GED.com; she had never looked at the website. Since the GEDTS does not know about the students who have never created accounts at GED.com, the testing service team needs a liaison to identify the adult learners they do not know about yet.

HSE students earn the GED through the GEDTS and their accounts at GED.com no matter their preparation method. The best way to create disruptive change with the most compelling results is through the GEDTS leadership team. The GEDTS could first create a tailored program for this study's particular population—students with significant preparation without testing—and then scale out to all HSE students. The GEDTS should use the stories of these women to understand their learners, identify how they can help struggling students most, and help those who register at GED.com but never test (Greene et al., 2021).

Proposed Distribution Method and Venue

I have spoken with the GEDTS President and told her about the many students her team could not help because they only know about the students who enter into the GED.com system. She invited me to prepare a 30-minute presentation of my findings for the Senior Director of Marketing and the Director of Marketing. I intend to provide an overview of this case study to the GEDTS team through the live presentation with an accompanying PowerPoint slide of the executive summary.

Distribution Materials

The GEDTS is committed to understanding who their learners are and what those adults require to succeed in earning their high school credentials (Greene et al., 2021). Therefore, in my presentation to the GEDTS team, I will first describe how I propose they engage with this study in two parts. First, they need a plan to find and connect with the students they are unable to see. Then, the GEDTS must learn about the population of students who are ready but unable to take the test.

Next, I will present the need for this study. I intended to understand the student experience and uncover what was holding adults back from taking the test. This study was necessary because so few students in ABE programs earn their GEDs every year. Once the GEDTS can find this specific population of GED-seeking adults, they can appreciate their experience and reluctance to test. I will explain that the literature review revealed little existing information about students who want their credentials but are developmentally unable to move forward. Finally, I will conclude the presentation by emphasizing how many students want to earn their GEDs and how the GEDTS has the opportunity to help thousands, if not millions, of adults. I will encourage the three team members to ask questions, provide feedback, or tell me what additional research they would like.

Adult education advocacy groups have presented strong arguments for increased funding for adult learners (Pursley & Arthur, 2014). Community college ABE programs have provided no-cost classes to support adults with a high cost to taxpayers. I presented information from Texas, but this is a nationwide dilemma. More than 10 years ago, “Strong American Schools” (2008) reported that community colleges spent

approximately \$2 billion annually on classes designed for remedial students, which included those seeking HSE credentials. In 2013, U.S. educational agencies spent roughly \$3 billion on adult education (McCarthy & McCann, 2014). The GEDTS could help significantly increase the number of earned GEDs so ABE programs could use funding more efficiently and help many more people in their communities.

Conclusion

This study investigated and honored students' ways of making meaning through collaboration between the participants and my role as the researcher (Kenner & Weinerman, 2011). I have presented a different approach to helping the GEDTS support their adult learners' efforts to earn their credentials beyond technical fixes (Pappas & Jerman, 2015). Ultimately, this research could provide insight for anyone who wanted to help these students achieve education successes. This research was not a blueprint to merely improve HSE pass rates for students like Connie, Alexia, and Eve; it was a proposal for understanding the adult learner experience.

APPENDICES

APPENDIX A

Preliminary Call Sample Script

I have created the following script to represent the primary participant collection. Participants gave their responses between the numbered items.

1. Hi! May I speak with Participant 1? My name is Andrea Bacle. I teach GED courses at your college. Do you have a few minutes to talk about your experience with taking GED classes?

2. Thank you. I am also a student at Baylor University and am conducting research about students enrolled in the ABE program. I am interviewing students who have completed at least 40 hours in one or more GED classes but have not yet taken any sections of the test.

3. Let me emphasize that this is not a judgment about your progress with taking classes. This is for my study to help my current and future students move forward. In my experience, all the people I have worked with using the same interview steps have enjoyed the process and have used it as an opportunity to make academic progress.

4. Please do not feel obligated to participate. Also, if you start this process, you may stop at any point. In my records, I see that you have completed XX hours but you have not yet taken any sections of the test. Is that correct?

5. I am conducting a study about the GED student experience with taking classes but deciding not to take the test. It would involve meeting twice: a short preliminary meeting for about 15 minutes and a one-hour online interview. Please feel free think about it. I am happy to call again when it is convenient for you.

6. If you are interested in participating, would you like to go ahead and schedule the first online meeting?

7. Thank you for your time. Do you have any questions you would like me to answer now? I look forward to meeting you!

APPENDIX B

Introductory Meeting Questions

I have created the following steps and questions to serve as another check of criteria from the participants and maintain congruity with the data collection design plan. After the participant and I asked questions, I guided the students through the consent form. Participants gave their responses between the numbered items.

1. Thank you for meeting with me. I enjoyed our phone call and have been looking forward to meeting with you again! Let me explain the plan for today, and then I will answer any questions you may have. This meeting should only take 15 minutes. First, I want to confirm your age, gender, race, and the last year of school you completed. Then, I will go over my research questions, your role as the participant, and then go through the consent form. What questions may I answer for you at this point?

2. My primary research question is about understanding GED student experience for those who have completed at least 40 hours of GED-preparation courses but have never taken any official sections of the GED. According to our records, you have completed about XX hours of GED-preparation courses since XXXX. Collectively, please tell me about those classes in the context of the test. How did they—or how did they not—prepare you for the GED test?

3. Why do you think you have never taken the test?

4. Thinking back to when you were enrolled in a course, did you plan on taking the test? Why or why not?

5. My secondary question is finding out if any competing commitments contributed to students' decisions to continue to take preparation courses but not test. This will be our focus in the next meeting, and this is where you will take an active role. I will coach you through a four-step interview process. The interview will investigate your GED-preparation experiences, specifically why you have continued to remain in the space of taking classes but not take the test. Please remember there is no obligation to move forward with this process. Are you still comfortable with participating in the interview next week? If so, do you have any questions?

6. Next, let's go through the consent form together. I will email a copy immediately after this meeting for you to sign and return.

7. Finally, in addition to your interview, I would like to photograph something that represents your personality or your goals related to your GED progress, if you consent. For example, do you have a tattoo, a handwritten motto, a keychain, or a trinket you use as motivation or a reminder of your goals? If so, please bring it with you to our interview. We will talk about it, and I will take a photograph or screenshot of it.

APPENDIX C

Table C.1

Qualitative Data Collection: Introductory Meetings

Participant	Age	Race or ethnicity	Completed grade	Did the HSE classes prepare you?	Why have you never tested?	Did you intend to test when you enrolled in each class?
Connie	Late 30s	Latina	11th	Yes	“Not ready”	Yes; “Hopefully, I can take it.”
Alexia	Mid-50s	Latina	6th	Yes	“Haven’t felt ready”	No; “I’m gonna need more classes.”
Eve	Early 40s	Black	11th	Yes	“For some reason, I give up”	Yes; “I told myself that if I sign up for another class, I’ll take it.”

APPENDIX D

Table D.1

Site Meetings and Schedule

Participant	Preliminary call: phone	Introductory meeting	ITC map-making and test of assumptions: online
Connie	Feb 3	Feb 9: online	Feb 11
Alexia	Feb 11	Feb 12: online	Mar 4
Eve	Feb 11	Feb 17: phone	Feb 25

APPENDIX E

Consent Form

INFORMED CONSENT

Ready but Not Able: A Case Study of the Experiences of Three Adult Learners Repeatedly Enrolled in High School Equivalency Preparation Courses

Introduction and Purpose

I am seeking understanding of adult learners' contradictory academic choices, specifically students who have completed at least 40 hours of GED-preparation courses but have chosen to never take the test.

Procedures

I will collect descriptive data to analyze by conducting one-on-one interviews of current ABE students as my primary data source. The data will be kept anonymous using pseudonyms and composites so the reader will get a sense of you as a student but have no way of identifying you (e.g., "the participant is a mother in her mid-30s, etc.). The interviews conducted through Zoom will be video recorded, so I can transcribe and analyze the data. You are under no obligation to participate, and if at any point would like to stop or feel uncomfortable with being recorded, we will stop the interviewing and that data would be destroyed. If you consent, I will be the only person with access to the raw data, which will be electronically locked in a password-secured drive.

After this preliminary meeting, we will meet to walk through a one-hour semi-structured interview process to potentially uncover any hidden commitments to success.

Potential Risks

Although I have had three years of practice and certified training with this interview process and have only had positive outcomes with participants, there is a potential for emotional distress for you as the participant. However, I am confident that I will minimize this risk based on my experience working with nearly every student population over the past 20 years.

Potential Benefits

Most likely, you will complete the interviews with a better understanding of your academic choices. Your participation could potentially contribute to helping future students.

Compensation

Participants will not receive compensation for their participation in this study.

Voluntary Participation

Participation in this research is entirely voluntary. You may withdraw at any time without consequence. No amount of participation will have any connection with your standing within the ABE program. If you would like to withdraw your data after we complete the interviews, please contact Andrea Bacle at 508.768.5808 or andrea_bacle1@baylor.edu.

Confidentiality

Research records will be kept confidential, consistent with federal and state regulations. While I will know your identity, no one else will have access to the raw data, which will be maintained in a password-protected database. To protect your privacy, any identifiable information will be removed from study documents and replaced with a pseudonym for all publication of results. Transcripts of the raw data will be securely kept indefinitely.

IRB Approval Statement

The Institutional Review Board (IRB) for the protection of human participants at Baylor University and the ABE community college have approved this research study. If you have any questions or concerns about your rights and would like to contact someone other than the researcher, you may contact the Baylor University IRB Administrator, April Swindell, at april_swindell@baylor.edu.

Consent Form

I will retain the electronically signed copies of the consent form.

Investigator Statement

“I certify that I have explained the research study to the participant and that the individual understands the nature and purpose, the possible risks, and the potential benefits associated with taking part in this research study. Any questions that have been raised by the participant have been answered.”

Andrea Bacle
Student Researcher and Doctoral Candidate

Date

508.768.5808
andrea_bacle1@baylor.edu

Participant Agreement and Photography Release

By signing below, “I verify that I am at least 18 years old and consent to participation in this qualitative research study understanding the GED student experience. I hereby authorize Andrea Bacle to publish photographs taken of me or my likeness for use in the problem of practice dissertation.”

Participant signature

Date

APPENDIX F

Immunity Map and Big Assumptions Interview

I have adapted the following questions from the Immunity to Change (ITC) Facilitator's Workshop presented by Minds at Work. I attended the three-day in-person training on facilitating the ITC map-making process from September 18–20, 2019, in Boston, Massachusetts. I wrote the answers in an online whiteboard for the students as we discussed each column. The following questions are a sample script for the third and fourth steps of data collection. Participants responded between each numbered question.

Opening Questions

1. Good morning. Thank you for meeting last week and today. If you do not have any questions, let's start right away with my first question: Would you please explain with as much detail as you can the experience of what it was like to regularly attend and complete XX hours of a preparation class but ultimately decide not to test for the GED?
2. I see that you have an item to show me that represents your goals or motivation. Thank you for bringing it with you. Would you please tell me about it and what it means to you or how it represents your motivation or goals?
3. Thank you for sharing. May I photograph it or take a screenshot of your item?

Immunity to Change Map

1. Now, let's transition to the change process using this four-column worksheet. First, let's talk about change. Have you ever met someone who had the same New Year's

resolution year after year? Can you think of any examples of people in your life who have struggled with something they wanted to change for a long time?

2. There have been doctors who have told their patients, “If you don’t change a certain behavior, like your diet, you will die!” And those people still don’t change. Can we acknowledge that change is hard?

3. Why do you think people have such difficulty making changes even when they are highly motivated?

4. Instead of us calling those people unmotivated—I think preventing death would be a great motivator!—or lacking self-discipline, let’s reframe the idea of change in a new way.

Column 1: Academic Commitment

1. Let’s look at this related to behaviors. You have demonstrated your academic commitment to enrolling in ABE classes and your continued effort to complete GED classes. How does the idea that change is hard relate to your GED experience?

2. If you could improve one thing that would make the most difference in helping you achieve your goal of earning the GED, what would that be?

3. What is your goal regarding the GED? Is your goal to earn the GED? If you could get better at one big thing that would make the biggest difference to you, what would it be? In column 1, please write your specific improvement goal that would help you get closer to your goals. Write “I am committed to _____.”

4. We will include “I am committed to earning the GED,” if that is true for you. But, if you have written the goal as an outcome, what would you need to get better at to make the GED goal happen?

5. If you have framed it negatively—it will be tempting to write “Stop being late to class”—what do you need to improve instead?

6. Does this commitment feel true to you? Does it feel important to you—at least a four or five out of five? Before moving forward, do you feel strongly committed to this goal?

7. Example: I am committed to being a good student.

Column 2: Doing or Not Doing

1. Next, let’s look at the behaviors. What actions are you taking that work against this goal? Or, what are you not doing that is working against that goal?

2. In the second column, I want you to start listing and identifying behaviors, not emotions. If you are focusing on an emotion, when you felt frustrated or scared, what did you do? If we could watch a video of the last few weeks of your life, what actions would we see you taking that work against your commitment goal?

3. List as many as you’d like in the column.

4. Example:

a. I come to class late.

b. I play on Facebook on my phone in class.

Column 3: Hidden Competing Commitments

1. Look at your list of actions and withhold judgment of yourself. It is very tempting after listing so many “bad behaviors” to have negative self-talk. Instead, I want you to look at the list and imagine doing the opposite of each one of those behaviors.

What worries or negative feelings come to mind when you think about not doing those actions anymore?

2. In the top half of the third column, I want you to write your worries that come to mind. What is the worst thing that would happen if you imagined doing the opposite of each of second column actions?

3. Example:

a. I worry I will look like a nerd.

b. I worry that my friends will think I don't care about them anymore.

4. Looking at the most dreadful worry, I want you to turn your fear into a new commitment statement by writing the commitment *not* to let that worry happen. Every good worry leads to a hidden commitment. Write, "I am also committed to not _____."

5. Write a new commitment for each worry that now makes the behaviors in the second column make sense. The new third column commitments should be in tension with the first column commitments.

6. Example: I am also committed to not moving on to college without my friends.

7. Do you see the way the first and third columns are at odds with each other, competing against each other? You have created quite a lovely system to produce the very behaviors you don't want to do.

8. On one hand, you are pressing the gas by committing to _____; on the other hand, you are hitting the brakes by committing to _____. What happens when we press the gas and brake at the same time? This is the immune system of the mind. Your mental immune system is trying to help you—to protect you. Do you recognize that you have created an elegant system of self-protection?

9. Example: Aha! I am just as equally committed to being a good student as I am to staying in the same life, in the same place with my friends. I don't want to change it.

Column 4: Big Assumptions

1. While our immune systems have creatively protected us, sometimes they are flat out wrong. We must uncover our assumptions, and then we can carefully test them. Before that, let's look at the *truths* you might currently believe. Working from your commitments in the third column, what beliefs could you be holding? These may not actually be true, but you are acting as though they are.

2. What must you be assuming that makes your hidden competing commitments not only make sense, but absolutely necessary?

3. In the final column, let's write "if/then" statements for each hidden competing commitment that connects to fear or feels very powerful to you. "If (the opposite of a hidden commitment), then this (very bad thing will happen)." Rationally, you may know that these are not true; however, you have been moving through the world as if they were.

4. Example: If I move on and go to college without my friends—who are my only family—they will hate me and never talk to me again, and I won't have anyone in my life that I care about.

Test of Assumptions

1. This is the final step we will work on today. You will have to decide for yourself if you would like to conduct it or not.

2. The point of testing an assumption is to get information about a truth you have been holding—the point is not to try to cancel this truth or to try to immediately fix it.

You should consider testing the assumption that feels the strongest to you, meaning it would have the biggest change in your life if you were to discover it is not as true as you previously thought.

3. As you design your first test and contemplate running it, it might be helpful to imagine you were coaching someone else through this process. What would recommend to someone with the same or similar assumptions?

4. Let's create some example safe tests you could consider.

5. After running a test, you should reflect on the results. Will you write in a journal? Will you consult with a trusted mentor or friend? People often find success in different ways after running their tests. Some hold onto their truths—though many have lessened their level of accuracy—and some ultimately release their assumptions completely. Neither is correct; you must decide what is most impactful for you.

6. That ends our time for today. Thank you for your thoughtful consideration and participation in each step. I will take a picture and email a copy of your map to you following this meeting. May I answer any questions for you?

APPENDIX G

Participant ITC Maps

Connie's ITC Map

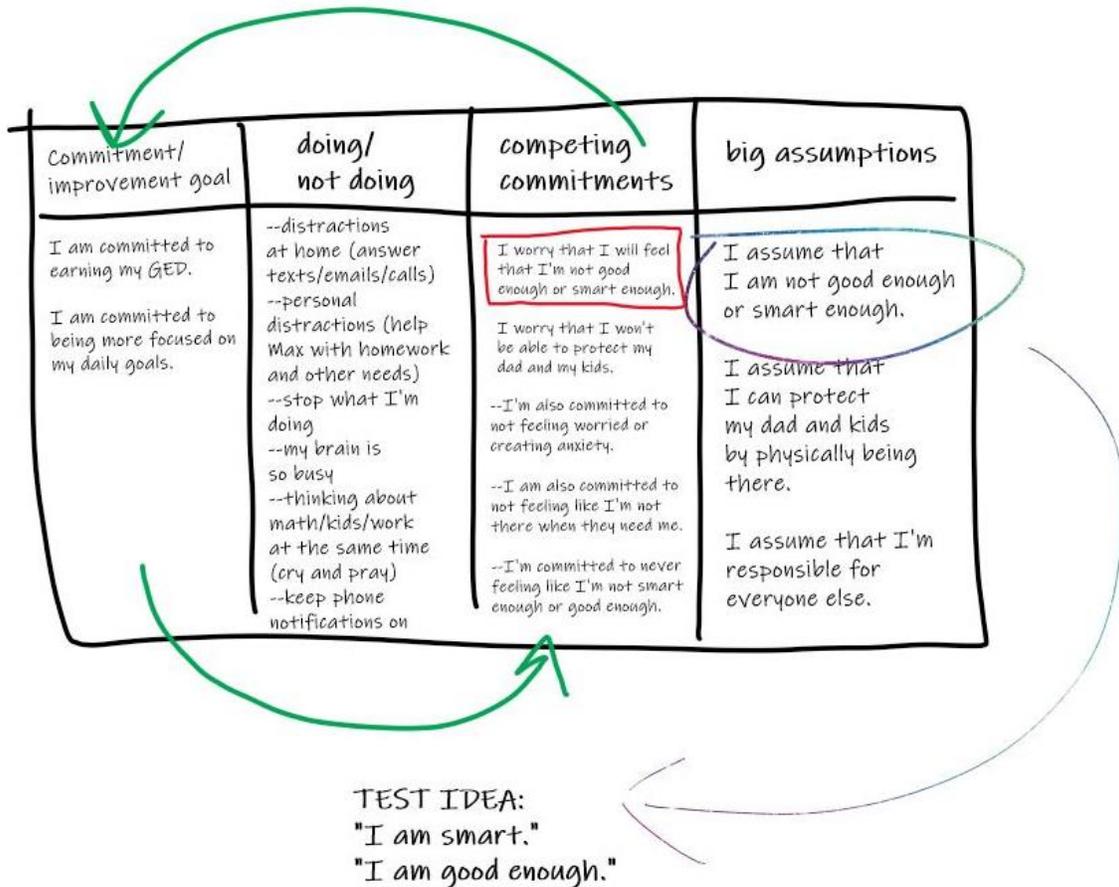


Figure G.1. Connie's ITC map adapted from Kegan and Lahey (2009).

Alexia's ITC Map

commitment or improvement goal	doing/not doing	competing commitments	big assumptions
<p>I am committed to earning the GED.</p> <p>I am committed to fill in the missing knowledge.</p>	<p>--not reading the book</p> <p>--watching tv</p> <p>--not contacting LSC to sign up for class</p>	<p>--I will feel confused</p> <p>--I will get discouraged</p> <p>--I won't know where to start</p> <p>--I can't do it</p> <p>--I am not able to take ownership</p> <p>I am committed to not feeling confused, discouraged, or able to do the work.</p>	<p>I assume that if I feel discouraged at all, I will NEVER be able to do it.</p> <p>I assume that if I am unable to stay in my pity party, I won't be able to blame others anymore.</p> <p>If I feel confused, I will have to give up.</p>

Possible test: Read 1 page of the GED book.

Figure G.2. Alexia's ITC map adapted from Kegan and Lahey (2009).

Eve's ITC Map

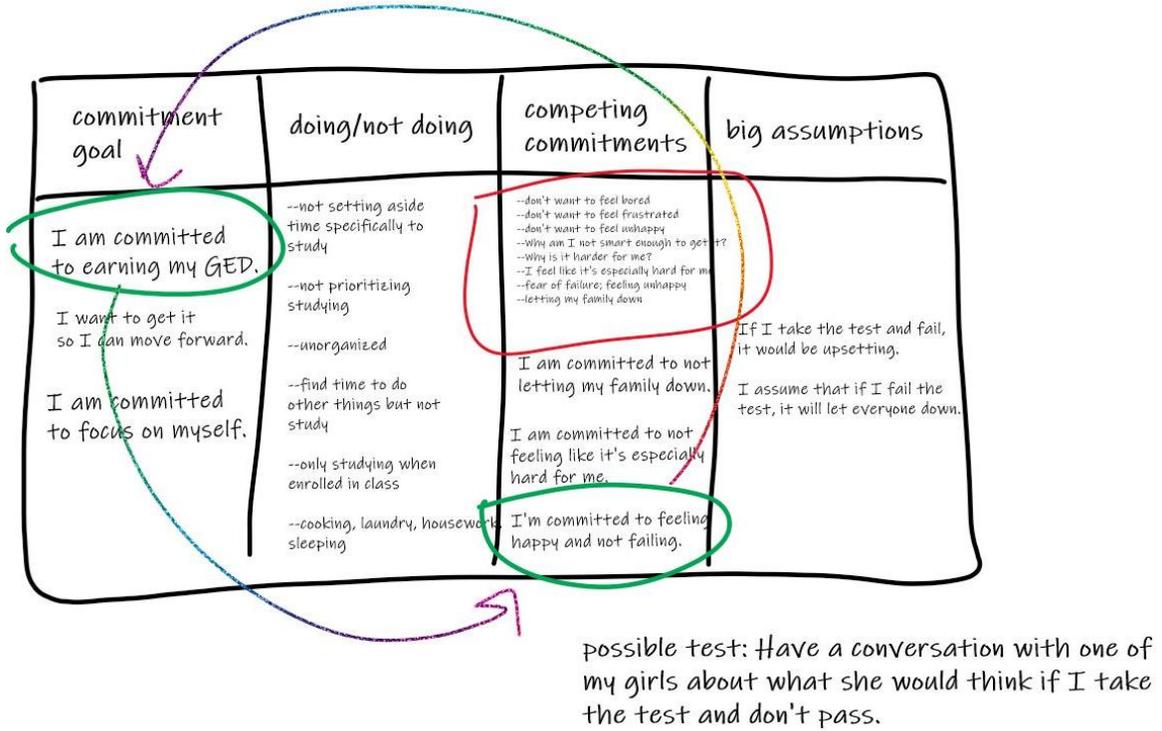


Figure G.3. Eve's ITC map adapted from Kegan and Lahey (2009).

APPENDIX H

Sample Coding

Connie (00:11:47):
It's cutting my time or making sure that I have time during the afternoon. You know, um, my schedule, my dad is real flexible, so, um, you know, it's what truly is, is, you know, the problems that I have in regards to home and my personal things, um, **it affects me to be able to be like, "Okay, this is what I need to do,"** You know, **like I know in the back of my head, like I know I want to get a GED, I want to get this done. I, you know, this is, this will open up more doors for me.** Um, but it's the life situation like, "Okay, I have—I'm going through this." **I have to figure out finances,** I have to figure out how to pay for this. I have, you know, so that has a lot to do with me, really sitting down and [getting focused]. You know what? **I get so discouraged because I get so motivated, you know, after our tutoring on Tuesdays and then it's, you know, then I start thinking about everything else.** So, like, I need to find a way to help my brain to function to what I need to decide to do here and leave everything else kind of like on the side, you know, but I've always been a very emotional person. So, I think my brain just keeps going and going and going a million times.

Connie (00:13:30):
And that's **the problem is that my brain is just all over the place,** You know, here, **I'm thinking about a math problem and here I'm thinking about work and here I'm thinking about my kids** and you know, the situations aren't going through. And so, it's like, **how do you just shut that off to focus on this?**

Andrea (00:13:52):
Right, right. Okay. I think that, it feels very clear to me when I hear you say, "I really just want to be able to focus." And then at the same time I hear that inside of your brain and you're like, "Okay, I've got this, I've got this. This is—it's just all driving me crazy a little bit in there." And so that makes sense to me. How could you possibly focus on fractions if you've got 10 other things that you're worried about simultaneously? Okay, good. Okay. So, let me ask you this. So, let's say, what about this goal of wanting to get better at being focused? Does that feel true to you? Does that feel like something you've been

Andrea Bacle
3

Andrea Bacle
G

Andrea Bacle
D

Andrea Bacle
3; example of hitting the gas and brakes at the same time.

Andrea Bacle
3

Andrea Bacle
D

Andrea Bacle
D
She's thinking, "If I could just..."

Figure H.1. Sample coding.

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